

---

# A review of the frog genus *Philautus* Gistel, 1848 (Amphibia, Anura, Ranidae, Rhacophorinae)

---

Franky Bossuyt\* and Alain Dubois\*\*

\* Free University of Brussels, Biology Department, Unit of Ecology and Systematics, Pleinlaan 2, 1050 Brussels, Belgium.

\*\* Laboratoire des Reptiles et Amphibiens, Muséum national d'Histoire naturelle, 25 rue Cuvier, 75005 Paris, France.

## Abstract

This paper is devoted to a review of the specific taxonomy of the frog genus *Philautus* Gistel, 1848. From 1822 to 1999, 177 nominal species were either described as members of this genus, or of other genera but subsequently referred to this genus. We tried to review the available information on the taxonomic status of these 177 names and the status of their name-bearing types. As a result of this review, 143 types are known to be extant, including 19 lectotypes and 8 neotypes designated and/or described in the present paper. In conclusion of this preliminary analysis, we provisionally distribute these 177 names in 84 valid species names in the genus *Philautus*, 37 invalid synonyms of the latter names, and 56 nominal species now referred to other genera. These results are highly provisional, both at specific and supra-specific levels. Additional works, using various characters and methods, will be necessary to confirm or reject the validity of a number of these species, and many additional species clearly remain to be discovered and described in the whole range of this genus. At supraspecific level, the taxonomy we use (a single genus *Philautus* with three subgenera) is also highly provisional, as the generic taxonomy of the whole subfamily Rhacophorinae is in strong need of revision. The present work will provide clear nomenclatural bases for future works on the phylogeny and taxonomy of this difficult group.

## Contents

Abbreviations .....	2
Introduction .....	3
Historical summary of the taxonomy of the genus <i>Philautus</i> Gistel, 1848 .....	3
Familial taxonomy .....	3
Generic taxonomy .....	4
Specific taxonomy .....	7
Provisional supraspecific taxonomy of the genus <i>Philautus</i> Gistel, 1848 .....	7
Provisional subgenera .....	7
Species excluded from the genus <i>Philautus</i> .....	8
Methodology followed in the list of nominal species .....	8
Chronological commented list of available and unavailable scientific species-group names for frogs originally referred to the genera <i>Ixalus</i> Duméril & Bibron, 1841 or <i>Philautus</i> Gistel, 1848, and/or subsequently referred to these genera .....	12
Description of type-specimens .....	62
List of currently recognized taxa and synonyms for frogs of the genus <i>Philautus</i> Gistel, 1848 .....	84
Conclusion .....	92
Acknowledgements .....	96
Literature cited .....	97
Index to scientific names .....	102

## Abbreviations

### Measurements

*nm.* Measurement not taken on this specimen.

#### Body

SVL. Snout-vent length.

#### Head

EL. Eye length.

EN. Distance from anterior corner of eye to nostril.

HL. Head length (from posterior corner of mandible to tip of snout).

HW. Head width, at the angle of jaws.

IBE. Distance between posterior corner of eyes.

IFE. Distance between anterior corner of eyes.

IN. Internarial distance.

IUE. Minimum distance between upper eyelids.

MBE. Distance from posterior corner of mandible to posterior corner of eye.

MFE. Distance from posterior corner of mandible to anterior corner of eye.

MN. Distance from posterior corner of mandible to nostril.

NS. Distance from nostril to tip of snout.

SL. Distance from anterior corner of eye to tip of snout.

TYD. Maximum tympanum diameter.

TYE. Distance between tympanum and posterior corner of eye.

UEW. Maximum width of upper eyelid.

#### Forelimb

fd1 to fd4. Width of disk of fingers 1 to 4.

FLL. Forelimb length (from elbow to base of outer palmar tubercle).

fw1 to fw4. Width of fingers 1 to 4.

HAL. Hand length (from base of outer palmar tubercle to tip of third finger).

TFL. Third finger length (from base of first subarticular tubercle).

#### Hindlimb

FFTF. Distance from maximum incurvation of web between fourth and fifth toe to tip of fourth toe, toes being spread.

FL. Femur length (from vent to knee).

FOL. Foot length (from base of inner metatarsal tubercle to tip of fourth toe).

FTL. Fourth toe length (from base of first subarticular tubercle).

IMT. Length of inner metatarsal tubercle.

ITL. Inner toe length.

MTFF. Distance from distal edge of metatarsal tubercle to maximum incurvation of web between fourth and fifth toe, toes being spread.

MTTF. Distance from distal edge of metatarsal tubercle to maximum incurvation of web between third and fourth toe, toes being spread.

td1 to td5. Width of disk of toes 1 to 5.

TFOL. Length of tarsus and foot (from base of tarsus to tip of fourth toe).

TFTF. Distance from maximum incurvation of web between third and fourth toe to tip of fourth toe, toes being spread.

TL. Tibia length.

TW. Maximum tibia width.

tw1 to tw5. Width of toes 1 to 5.

### Collection numbers, persons and museums

*cnu.* Collection number(s) unknown.

*ex.* Original collection or collection number, now changed.

AD. Alain Dubois.

FB. Franky Bossuyt.

ANSP. Academy of Natural Sciences, Philadelphia, Pennsylvania, USA.

BMNH. Natural History Museum, London, United Kingdom.

BNHS. Bombay Natural History Society, Bombay, Maharashtra, India.

CAS. California Academy of Sciences, San Francisco, California, USA.

CAS-SU. Stanford University collection, California Academy of Sciences, San Francisco, California, USA.

CCB. Central College, Bangalore, Karnataka, India.

CIB. Chengdu Institute of Biology, Academia Sinica, Chengdu, Sichuan, China.

CM. Carnegie Museum, Pittsburgh, Pennsylvania, USA.

EHT. Edward H. Taylor collection.

FMNH. Field Museum of Natural History, Chicago, Illinois, USA.

IRSNB. Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium.

KIZ. Kunming Institute of Zoology, Academia Sinica, Kunming, Yunnan, China.

KM. Muzeum Przyrodnicze Uniwersytetu Jagiellonskiego, Kraków, Poland.

LZUH. Laboratoire de Zoologie, Université de Hanoi, Vietnam.

MAS. Malcolm A. Smith collection.

MCZ. Museum of Comparative Zoology, Cambridge, Massachusetts, USA.

MNHN. Muséum National d'Histoire Naturelle, Paris, France.

MSNG. Museo Civico di Storia Naturale Giacomo Doria, Genova, Italy.

NHMB. Naturhistorisches Museum, Basel, Switzerland.

NMW. Naturhistorisches Museum, Wien, Austria.

NTUM. National Taiwan University, Taipei, Taiwan.

- PBS - Philippine Bureau of Science, Philippines.  
 RMNH. Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands.  
 SMF. Forschungsinstitut und Natur-Museum Senckenberg, Frankfurt-am-Main, Germany.  
 USNM. National Museum of Natural History, Washington, DC, USA.  
 YU. Yunnan University, Kunming, China.  
 ZMA. Zoologisch Museum, Universiteit van Amsterdam, Netherlands.  
 ZMB. Zoologisches Museum, Berlin, Germany.  
 ZSIC. Zoological Survey of India, Calcutta, West Bengal, India.  
 ZSIM. Zoological Survey of India, Madras, Tamil Nadu, India.  
 ZSIS. Zoological Survey of India, Shillong, Meghalaya, India.

### Introduction

Anyone who has spent some nights in forested areas of South or South-East Asia during the rainy season will have had the opportunity to hear the euphonious tinkle of some of the tiny brown or green tree-frogs, that often call perched on the branches or leaves of bushes or small trees, sometimes quite far from any body of free water where they could possibly lay their eggs: most of these frogs are currently referred to the genus *Philautus* Gistel, 1848 (Ranidae, Rhacophorinae), which is characterized by the aerial direct development of eggs into froglets, without going through an aquatic tadpole stage. Although these frogs have been known to zoologists since 1822, and although almost 180 nominal species have been described, the taxonomy of this group is, for several reasons, still in a preliminary stage. First of all, these frogs are small, and as such they are more difficult to study (both in the field and in the laboratory) and have attracted less attention than larger frog species, which are quite numerous in the Oriental Region. Second, in many species of this group, intraspecific variability, particularly in coloration, is unusually high for anurans. As a result of this variability, external morphology and coloration alone may be a misleading guide for specific taxonomy, and other characters, such as those derived from bioacoustic analysis or molecular studies, may prove useful: however, until now, very few studies have been carried out using such non-morphological methods (see e.g.: Dring, 1987; Malkmus & Riede, 1996a-b). In the course of our studies on frogs of South and South-East Asia, we have undertaken a study of the *Philautus* species occurring in several regions (India, Himalaya, Indochina, China), and we have been struck by the poor state of alpha-taxonomy in this group. As a first step, we have considered it

necessary to review the nomenclatural history of all nominal taxa once referred to this genus, in order to provide a sound basis for further morphological, anatomical, morphometric, bioacoustic and molecular studies of these frogs. This will be particularly useful in regions where numerous species of this group remain to be described, as seems to be particularly the case in Sri Lanka (Pethiyagoda & Manamendra-Arachchi, 1998). This paper is devoted to the detailed presentation of the results of this work. We stress that this is largely a *nomenclatural review* of the genus *Philautus*, not a *taxonomic revision*, a much-needed work still far from being possible for the time being. However, since nomenclature is not completely independent of taxonomy, we had to address various taxonomic problems in the course of this nomenclatural review; we also provide a few distributional, historical and other pieces of information, when available: these may be useful to future workers on this genus. In order to stabilize definitely the use of several problematic names or of names based on syntypes, we designate and describe below a number of neotypes and lectotypes. For all nomenclatural matters, we strictly follow the rules of the current edition of the *International Code of Zoological Nomenclature* (Anonymous, 1999; cited below as 'the Code').

### Historical summary of the taxonomy of the genus *Philautus* Gistel, 1848

#### Familial taxonomy

Since the work of Stejneger (1905), the name *Philautus* Gistel, 1848 has been applied to a frog genus considered by all authors to be closely related to the genera *Rhacophorus* Kuhl & Van Hasselt, 1822, *Polypedates* Tschudi, 1838 and *Chirixalus* Boulenger, 1893. These mostly Oriental tree-frogs have long been placed in a family of their own, known first as Polypedatidae Günther, 1858 and later, because of *Polypedates* being then considered a synonym of *Rhacophorus*, as Rhacophoridae Hoffman, 1932 (Liem, 1970; Dubois, 1981, 1984a, 1999c; Frost, 1985). However, Laurent (1951, 1986) considered that this group did not deserve familial rank, and downgraded it to the rank of a subfamily Rhacophorinae of the family Ranidae. He was followed by Dubois (1987a, 1992), and we here adopt this taxonomy: for this reason, in the discussion below we will designate these Oriental tree-frogs as 'rhacophorines', not 'rhacophorids'.

Liem (1970) pointed to several important taxonomic characters by which *Philautus* differs from other rhacophorines, which led Dubois (1981) to place this genus in a subfamily of its own within the family Rhacophoridae, the Philautinae, which he later (Dubois,

1987a, 1992) downgraded to the rank of tribe Philautini of the subfamily Rhacophorinae. Channing (1989) did not recognize this taxon, but his analysis, which takes into account only one species for each genus (and not always the type-species), is clearly incomplete.

Throughout the history of anuran taxonomy, the genus *Philautus* has been confused with many other genera, not only of rhacophorines, but also of other ranids and non-ranid groups. The most frequent confusions (see below) were with the rhacophorine genera *Rhacophorus* and *Chirixalus*, but also with other rhacophorine or with ranine genera such as *Micrixalus* Boulenger, 1888; significant confusions, by such experienced taxonomists as Stejneger, Taylor or Inger, also occurred with dicroglossines of the genus *Platymantis* Günther, 1859 (once known as *Cornufer* Tschudi, 1838). Such mistakes clearly point to the fact that these tiny frogs were often insufficiently studied by taxonomists: there is no other explanation for the placement by Taylor (1920, 1922a) of his *P. hazelae* and *P. polillensis* in the genus *Philautus*, despite their lacking intercalary cartilages between the last two phalanges of digits, or the placement by Stejneger (1905), Taylor (1920, 1922b) and Inger (1954) of *C. worcesteri* in the genus *Cornufer* despite its having such cartilages. Inger (1954) went as far as considering the latter *Philautus* species as a synonym of *Cornufer guentheri* Boulenger, 1882, a dicroglossine species now allocated to the genus *Platymantis* (Brown et al., 1998). However, these repeated confusions also point to resemblances, at least superficial or concerning certain characters, between these genera. For example, the ranine genus *Staurois*, five nominal species of which were first described as *Ixalus*, has a number of 'rhacophorine' characters, such as its ventral 'tree-frog belly skin' (Ohler, 1999: 40), its digital discs with complete inferior circummarginal groove limiting a closed 'cell' as in the Rhacophorinae or in the subgenus *Amo* Dubois, 1992 of the ranine genus *Amolops* Cope, 1865 (Boulenger, 1918; Dubois, 1992), or its tadpole's mouth with a high number of keratodont rows resembling some rhacophorines, which explains past incorrect allocation of *Staurois* tadpoles to the genus *Rhacophorus* (see Inger, 1966, 1985). In fact, but for the absence of intercalary cartilages on digits, there seems to be little reason for not assigning the genus *Staurois* to the Rhacophorinae. As for similarities between *Philautus* and *Platymantis*, they were already pointed out by Dubois (1992: 335), who was struck by the overall morphological and behavioural resemblance of some frogs of both genera, which have direct aerial development, and partly overlapping distribution ranges. Careful comparison of these two genera (and in particular of the detailed modalities of their development) might prove interesting, but recent cladistic analysis of molecular data by Marmayou et al.

(2000) suggest that the resemblance between these genera might be due to convergence.

Actually, several of the characters which define the taxon Rhacophorinae, such as dilated digit tips with differentiated pads circumscribed by a complete groove, intercalary cartilages on digits, T-shaped terminal phalanges and granular belly, are clearly adaptive characters related to arboreal life, and have appeared by convergence in other arboreal anuran families (e.g., Hylidae or Hyperoliidae). The possibility should be considered that the Rhacophorinae, rather than representing a holophyletic group (Ashlock, 1971; Mayr, 1997), be nested among one or several subfamilies of Ranidae (see Marmayou et al., 2000). Cladistic analyses, using molecular, morphological, anatomical and other characters, will have to clarify these relationships. In order to give significant results, such analyses will have to include a number of species of all the major family-group taxa recognized by Dubois (1992), which has never been done so far, as most recently published works on the cladistics of the Ranidae (e.g., Emerson & Berrigan, 1993; Emerson, 1996; Emerson & Ward, 1998; Richards & Moore, 1998) used only highly biased samples of taxa. The large impact of species sampling on cladistic analysis based on morphological data has long been shown to exist: 'Ideally, all known taxa of a group should be included in analysis, since omission can lead to misinterpretation of transformation series (...) and of relationships (...)' (Arnold, 1981: 29). The importance of taxon sampling for molecular cladistic analysis has also been demonstrated several times (e.g., Lecointre et al., 1993). However, the commonly recommended strategy of increasing the number of species sampled per lineage, i.e., subdividing long branches, should not be applied uncritically (Poe & Swofford, 1999), because adding taxa can in some cases also decrease accuracy (Kim, 1996; Poe & Swofford, 1999), so that reconstructing cladistic relationships in the Ranidae will probably be a long and difficult task.

### Generic taxonomy

The first frogs of the genus *Philautus* discovered by zoologists were found in Java, and first referred to the tree-frog genus *Hyla* (Kuhl & Van Hasselt, 1822; Schlegel, 1837). Shortly after, Tschudi (1838) erected for them a new genus, *Orchestes*. However, this generic name proved to be preoccupied, so that Duméril & Bibron (1841) proposed the replacement name *Ixalus*, which was long used for these frogs. In 1905, Stejneger showed that this name also was preoccupied, and resurrected for this genus the name *Philautus*, another replacement name of *Orchestes* Tschudi, 1838, which had been proposed, among many others (see Dubois, 1987b: 46), by Gistel (1848). Replacement in the zoological literature of the generic name *Ixalus* by *Philautus* was a rather quick

process that took only 15 years to be completed (Dubois & Ohler, 2001). Since then, most of these frogs have retained the latter generic name, although some of them have from time to time been transferred to other rhacophorine genera, mostly *Rhacophorus* Kuhl & Van Hasselt, 1822 and *Polypedates* Tschudi, 1838. Ahl (1931) was the only author to treat *Philautus* (as well as other rhacophorine genera) as a subgenus of *Rhacophorus*, a taxonomic treatment that allowed him to propose many replacement names for specific names that he had thus caused to be preoccupied (see below).

For a long time the genus *Philautus* was considered by many authors to be easy to distinguish from all other rhacophorine genera by a single character, the absence of vomerine teeth. However, after an analysis of numerous characters in many species, Liem (1970) proposed a new definition of the rhacophorine genera, according to which a few species of *Philautus* may have such teeth (in some specimens at least); on the other hand, Liem (1970) placed a few rhacophorine species without vomerine teeth (at least in some specimens), in other genera, such as *Buergeria* Tschudi, 1838, *Polypedates* and *Theلودerma* Tschudi, 1838. Liem's (1970: 68) view was that variation in the presence of vomerine teeth can occur within a species and is therefore by itself of little taxonomic value. Loss of these teeth may be regarded as a simple consequence of small size. This interpretation was adopted by subsequent authors.

The genus *Philautus*, as currently understood, is clearly heterogeneous in terms of morphology, and possibly also of life-history. Most probably, future studies will show that it should be split into several genera. This is also suggested by the preliminary molecular data of Marmayou et al. (2000), who found important differences in 12S mitochondrial DNA sequence between two specimens identified as *Philautus* cf. *parvulus* and *Philautus* cf. *banaensis*. For the time being however, the preliminary data available allow only a provisional division of the genus into subgenera and species-groups. These provisional subgroups can be used as working tools for future revisionary works (see e.g.: Dubois, 1999c; Dubois & Ohler, 1999).

Dubois (1987a) proposed three subgenera within the genus *Philautus*: besides the nominotypical subgenus *Philautus* (still containing most of the species previously referred to the genus *Philautus*), he erected two new subgenera (*Gorhixalus* and *Kirtixalus*) for several species which had until then been placed in the genera *Rhacophorus*, *Polypedates* and *Philautus*.

The subgenus *Gorhixalus* was proposed by Dubois (1987a) for the single species *Rhacophorus hosii* Boulenger, 1895. Independently, Dring (1987) also pointed to several morphological, bioacoustic and ecological characters by which this species, and the new species *Philautus ingeri*, differs from other *Philautus* species, and erected for these

two Bornean species a '*Philautus hosei* group'. Following Dubois (1992: 335), we here provisionally recognize a subgenus *Philautus* (*Gorhixalus*) for these two species, pending a taxonomic revision of the whole genus.

Concerning the subgenus *Kirtixalus*, its type-species (*Polypedates microtympaanum* Günther, 1859 from Sri Lanka) was stated to have a direct aerial development (Günther, 1876b; Ferguson, 1876; Kirtisinghe, 1946, 1957). Dutta & Manamendra-Arachchi (1996) referred it, and four closely related species, to the genus *Rhacophorus* Kuhl & Van Hasselt, 1822, and placed four other species, traditionally placed in this genus (Kirtisinghe, 1957), in the genus *Polypedates* Tschudi, 1838. They wrote: 'Sri Lankan *Polypedates* and *Rhacophorus* differ in the size of their vomerine teeth and body colouration, but otherwise are morphologically similar. The only striking difference between these two genera in Sri Lanka concerns their reproductive biology: all Sri Lankan *Rhacophorus* have direct development on land, whereas *Polypedates* lays eggs in foam nests and have aquatic larvae.' (Dutta & Manamendra-Arachchi, 1996: 140). As pointed out by Dubois (1999a: 5), such a taxonomy makes sense in Sri Lanka, where these two groups of frogs should clearly be placed in different genera, but the allocation of the former group to the genus *Rhacophorus* is questionable. It is always hazardous to base a taxonomy on information about taxa from a restricted area—taxonomic decisions should be based on comprehensive revisions, not on geographically limited surveys (see Dubois, 1981, 1992, 1999a,c). What seems true of Sri Lankan '*Rhacophorus*' (direct development on land) does not apply to most other numerous species currently allocated to the genus *Rhacophorus* (see e.g. Dubois, 1987a), and in particular to its type-species *Rhacophorus moschatus* Kuhl & Van Hasselt, 1822, currently known as *Rhacophorus reinwardtii* Kuhl & Van Hasselt, 1822 (see Dubois, 1982), which is known to lay eggs in a foam nest and to have aquatic larvae (Siedlecki, 1909; Van Kampen, 1909, 1923). The distinction between the genera *Rhacophorus* and *Polypedates*, proposed by Liem (1970), is tenuous, and was not accepted by all authors (see e.g. Dubois, 1987a); according to Dubois (1999a, 2000), for the time being, *Polypedates* can be recognized as a subgenus of *Rhacophorus*. On the other hand, it is clear that *Polypedates microtympaanum* and closely related species have a peculiar reproductive biology which should be recognized taxonomically: for this purpose, the genus-group name *Kirtixalus* Dubois, 1987 is available. Quite possibly *Kirtixalus* will once be raised to the genus rank, but for the time being we prefer to maintain it as a subgenus within *Philautus*, as suggested by Dubois (1987a). Detailed comparison of the modalities of direct development of these frogs with that of other groups that we maintain in *Philautus* will be necessary to

establish whether these modalities are identical or homologous, or were derived independently by convergence in two (or more) distinct clades.

As stressed by Dutta & Manamendra-Arachchi (1996: 201–202), it is still unclear which species of Sri Lankan *Kirtixalus* have been really documented to have direct development, and further field work on these frogs is badly needed. This lack of information is even stronger for the Indian species referred by Dubois (1987a) to *Kirtixalus*, as the reproductive biology and development of none of them is known. Rao (1915) described tadpoles that he referred to *Rhacophorus pleurostictus*, but, as pointed out by Dubois (1987a: 73), these tadpoles may have belonged to a Southern Indian species of the *Hylarana* section of *Rana* (sensu Dubois, 1992), possibly to *Rana (Clinotarsus) curtipes* Jerdon, 1863. In the original description of the nominal species *Polypedates variabilis* Jerdon, 1853, which belongs to this group, Jerdon (1853: 532) wrote that this species was ‘found in the Neelgherries in the banks of streams and in shrubs’ and our observations in the Nilgiris confirm this statement: we found these frogs calling during rainy days hidden in holes along the banks of pools or small rivers; their call was much more similar to calls of frogs currently referred to the genera *Rhacophorus* or *Polypedates* than to those of *Philautus*. These observations suggest that this species (probably unlike all true *Philautus* as well as *P. microtypanum* Günther, 1859) depends on water for its reproduction and might have a free tadpole stage. We therefore tentatively refer this species here to the genus *Rhacophorus*. We know of no information about the reproductive biology of the other continental species referred by Dubois (1987a) to the subgenus *Philautus (Kirtixalus)* or that would demonstrate that these species are closely related to the Sri Lankan ones. Until more is known on the relationships and taxonomy of these groups, we provisionally refer these large-egged continental species to the nominotypical subgenus *Philautus (Philautus)*, a highly provisional taxon that is very likely to prove heterogeneous.

It is quite unlikely that in the future the subgenera *Kirtixalus* and *Gorhixalus* will both have to be placed in a common genus distinct from *Philautus*. However, should this situation arise, priority between these two names was settled by the first-reviser action of Dubois (1999c: 91), who afforded relative priority to *Kirtixalus* over *Gorhixalus*.

Some words are necessary here regarding the generic name *Pseudophilautus* Laurent, 1943. This nominal genus was erected by Laurent (1943) for the nominal species *Ixalus temporalis* Günther, 1864 from Sri Lanka. Although Laurent (1943) considered this genus to belong to the subfamily Mantellinae of the Ranidae rather than to the Rhacophorinae, Inger, Duellman & Dutta (in Frost, 1985:

439) stated that its type-species was ‘probably a *Philautus*’. Dutta & Manamendra-Arachchi (1996) did not recognize the genus *Pseudophilautus* because ‘morphologically, *Philautus temporalis* is similar to *P. leucorhinus* and *P. nasutus*’. We agree with this statement, but, on the other hand, we note that these three species (as well as at least two other ones, *Philautus hypomelas* and *Philautus wynaadensis*, see below) are morphologically quite similar and different from other Sri Lankan species of *Philautus*, which suggests that the name *Pseudophilautus* might later have to be used to designate a subgenus or a genus. For the time being, we adopt a conservative approach and provisionally treat this name as a junior subjective synonym of *Philautus (Philautus)*. We are currently working on the morphology, bioacoustics and molecular cladistics of this group, and will provide more data on this question in the future.

Despite removal of some species, placed in the subgenera *Gorhixalus* and *Kirtixalus*, the nominotypical subgenus *Philautus* remains very large (with 74 species provisionally recognized below) and clearly heterogeneous. In order to help further taxonomic analysis, the provisional recognition of ‘species-groups’ would appear indicated. However, the only attempts in this respect until now are those of Dring (1987) and of Fei (1999), who both only considered some of the species of this genus, selected on geographical bases.

Dring (1987) only took into account the species of *Philautus* occurring in Borneo and in the Philippines. Beside his ‘*Philautus hosei* group’ (here recognized as the subgenus *Gorhixalus*), he diagnosed four species-groups for these islands: the *Philautus aurifasciatus*, the *Philautus surdus*, the *Philautus tectus* and the *Philautus vermiculatus* groups. These species-groups, defined by morphological, bioacoustic and ecological characters, were accepted and briefly discussed by Inger (1989) and Brown & Alcalá (1994). They can apparently be used to accommodate all or most *Philautus* from Indonesia, Malaysia and the Philippines, and also some other species of other regions. Unfortunately, Dring (1987) did not consider the *Philautus* species from other parts of the range of the genus (Sri Lanka, India, Indochina and China), where several other species-groups could probably be recognized.

Fei (1999) recently recognized five species-groups (the *Philautus albopunctatus*, *Philautus jinxiuensis*, *Philautus odontotarsus*, *Philautus palpebralis* and *Philautus rhododiscus* groups) among the Chinese species of the genus. However, these species-groups were mostly defined by coloration characters which can hardly be used for species outside China for which no published data on coloration in life are available. Furthermore, we consider that some of the nominal species included by Fei (1999) in *Philautus (Ixalus asper* Boulenger, 1886;

*Chirixalus idiootocus* Kuramoto & Wang, 1987; *Philautus palpebralis* Smith, 1924; *Philautus romeri* Smith, 1953) do not belong in this genus (see below), so that the whole taxonomy of this group proposed by Fei (1999) needs re-evaluation.

Revising the whole genus and redefining its species-groups is far beyond the scope of the present work, and we do not use species-groups here. However, for all species that have been allocated to species-groups by the authors above, these allocations are indicated below. A high proportion of species remain that have until now not been allocated to any species-group. Final allocation of all *Philautus* species to species-groups, subgenera and possibly genera will require an overall revision of the whole group, using a diversity of methods.

A last generic name must be mentioned here: the name *Dendrobatorana*, created by Ahl (1927a: 112). The type-species of this genus, *Hylambates dorsalis*, was described by Peters (1875) on the basis of a single specimen stated to have been collected in Nigeria. After examination of the specimen ZMB 7730, holotype of this species, Morère (in Dubois, 1987b: 41) considered that it belongs to the species *Philautus aurifasciatus* (Schlegel, 1837) and that the original statement of its Nigerian origin was a mistake. If this was true, the name *Dendrobatorana* Ahl, 1927 would have to be considered as a junior synonym of *Philautus*. However, after a careful analysis of all data in this case, Ohler (1999) concluded that *Hylambates dorsalis* belongs to an unidentified African ranoid genus, not to the genus *Philautus*.

### Specific taxonomy

Although 177 nominal species have been or are currently referred to the genus *Philautus*, very few authors have adopted a revisionary approach to this difficult group. Only three comprehensive revisions of all species of the genus have been attempted: by Günther (1859), Boulenger (1882a) and Ahl (1931). Partial revisions on geographical bases were provided by Van Kampen (1923), Smith (1930), Bourret (1942), Liu & Hu (1961), Taylor (1962), Inger (1966, 1989), Dring (1987), Brown & Alcalá (1994), Fei et al. (1991), Ye et al. (1993), Dutta & Manamendra-Arachchi (1996), Malkmus & Riede (1996a-b) and Fei (1999). However, no serious recent revisionary work has been published dealing with the Indian species of the genus, which were among the earliest ones to be described. The original type-specimens of several of them prove to have been lost or to belong to a mixture of several species (see below). Designation and description of lectotypes or neotypes for these nominal species is a prerequisite to any comprehensive revisionary work at the level of the whole genus. The present paper will be a first contribution to this much-needed work of nomenclatural clarification.

## Provisional supraspecific taxonomy of the genus *Philautus* Gistel, 1848

### Provisional subgenera

For reasons explained above, it is yet too early to propose a robust supraspecific taxonomy for frogs currently placed in the genus *Philautus*: much more morphological, anatomical, morphometric, molecular and bioacoustic research must be carried out before a cladistic analysis, a cladification and a classification (see Mayr, 1997) of this group can be produced. For the time being, we adopt a conservative approach and we provisionally maintain all these species in a single genus *Philautus*, with three subgenera: *Gorhixalus* Dubois, 1987; *Kirtixalus* Dubois, 1987; *Philautus* Gistel, 1848. We refrain at this stage from proposing diagnoses of the genus *Philautus* and of these three subgenera. We use these taxa as provisional, mostly phenetic groups, among which for the time being the nominal species are distributed. Future works might well lead to a complete re-evaluation of the supraspecific taxonomy of this complex. We think that future analyses will show that taxonomic changes are necessary: in particular, the subgenus *Kirtixalus* probably deserves the rank of genus, but with only a part of the species originally placed by Dubois (1987a) in this group (including its type-species), while the remaining species (including some possibly with a free tadpole stage) will probably have to be referred to other taxa (including some possibly of the tribe Rhacophorini). Uncertainties also remain for a number of other species, but this is not the place in which they should be addressed. For each *Philautus* species in the list of nominal species given below, we suggest an allocation to a subgenus within *Philautus*. Despite their incompleteness, we think these data will provide useful guides or hypotheses for future works on this genus.

All species of *Philautus* for which the mode of reproduction and development is known (Günther, 1876b; Ferguson, 1876; Kirtisinghe, 1946, 1957; Dring, 1979; Alcalá & Brown, 1982; Dubois, 1986; personal observations) lay their eggs on the ground, under stones or dead leaves, in leaf axils, epiphytic ferns or on the leaves of small shrubs or trees; these eggs then undergo a direct aerial development, which takes place entirely (or almost entirely) inside the egg capsule until the stage of imago, without a free-swimming aquatic tadpole. Although the modes of reproduction and of development of few species of *Philautus* are currently known, fortunately this information is available for the type-species of the genus, *Philautus aurifasciatus* (Schlegel, 1837), which displays the direct aerial development mentioned above (Dring, 1979). We consider that, in amphibians, the mode of development is an important character that deserves taxonomic

recognition at least at subgeneric level (see e.g. Martin & Watson, 1971; Dubois, 1988, 1992), and we think that only species with such a direct aerial development should be considered as 'true *Philautus*'. For this reason, in the course of the nomenclatural review of *Philautus* species presented below, we will point out species that, because of their having a free tadpole stage, should in our opinion be excluded from *Philautus*.

### Species excluded from the genus *Philautus*

Of the 133 nominal species originally described in the nominal genera *Ixalus* or *Philautus*, 40 (i.e., 30.1 %) are now placed in other genera. This strikingly points to the fact that for a long time the genus *Philautus* was not clearly understood by zoologists. In fact, for more than a century taxonomists tended to refer to this genus all new species having the following combination of characters: (1) small adult size; (2) vomerine teeth absent; (3) all digits with well-differentiated disks. The first two of these characters are now known to be misleading, while the third one is common to many rhacophorine and non-rhacophorine species, and is therefore not diagnostic of *Philautus*. Species first described as members of this genus include species now referred to other genera of rhacophorines (18 nominal species), to other subfamilies of the Ranidae (20 nominal species) and even to other families (2 nominal species). While some of these mistakes are ancient, some were made very recently. Most errors can be referred to two major categories: (1) confusion with five ranine and ranixaline genera, in particular with two endemic southern Indian ones; (2) confusion with five Asian rhacophorine genera.

(1) Two groups of small-sized ranine and ranixaline genera endemic of the forests of Southern India have been confused in the past with the genus *Philautus*: the genera *Micrixalus* Boulenger, 1888 and *Indirana* Laurent, 1986 (for a discussion of these two genera, see Dubois, 1987a, 1992). Unlike *Philautus*, frogs of these two groups have a smooth ventral skin, are devoid of intercalary cartilages on digits and have a free tadpole stage. Some of these species have already been referred by previous authors to *Micrixalus* (*Polypedates saxicola* Jerdon, 1853; *Ixalus opisthorhodus* Günther, 1869; *Ixalus fuscus* Boulenger, 1882; *Ixalus silvaticus* Boulenger, 1882) or *Indirana* (*Ixalus diplostictus* Günther, 1876). Five additional species, all described by Rao (1937) in the genus *Philautus*, are here for the first time excluded from this genus. On the basis of Rao's (1937) original descriptions, we refer four of these species (*P. elegans*, *P. kottigeharensis*, *P. narainensis* and *P. swamianus*) to the genus *Micrixalus*, and one (*P. longicrus*) to the genus *Indirana*. Pending the much-needed revisions of these two genera, we adopt a conservative position and provisionally consider these five species as valid, which probably is not true for most of them.

(2) Various authors, working in other parts of Asia, have referred small rhacophorines to the genus *Philautus* primarily because of their size and absence of vomerine teeth. In some cases, the new species were stated to have a free tadpole stage, which excludes them from the genus *Philautus* as here defined. Some of these species have already been referred by previous authors to the rhacophorine genera *Rhacophorus* Kuhl & Van Hasselt, 1822 (*Philautus zamboangensis* Taylor, 1922; *Philautus spiculatus* Smith, 1931; *Philautus gauri* Inger, 1966), *Buergeria* Tschudi, 1838 (*Ixalus japonicus* Hallowell, 1861), *Theloderma* Tschudi, 1838 (*Ixalus poecilopleurus* Lichtenstein, Weinland & Von Martens, 1856; *Ixalus asper* Boulenger, 1886; *Ixalus horridus* Boulenger, 1903), *Nyctixalus* Boulenger, 1882 (*Ixalus pictus* Peters, 1871; *Ixalus flavosignatus* Boettger, 1893) or *Chirixalus* Boulenger, 1893 (*Ixalus vittatus* Boulenger, 1887; *Philautus laevis* Smith, 1924; *Philautus palpebralis* Smith, 1924; *Philautus hansenae* Cochran, 1927; *Philautus nongkhorensis* Cochran, 1927). Several additional species are here for the first time withdrawn from *Philautus* (*Philautus montanus* Taylor, 1920; *Philautus romeri* Smith, 1953; *Philautus cherrapunjiae* Roonwal & Kripalani, 1966). As we were unable to examine their types, we adopted a conservative position by still considering them to apply to valid species. On the basis of their original descriptions, we tentatively referred these species either to the genus *Chirixalus* or to the genus *Rhacophorus*, two rhacophorine genera occurring in the same regions. This is only a provisional proposal that will have to be tested by re-examination of the types or description of neotypes, and taxonomic revisions of these two genera. In fact, both these genera are clearly heterogeneous, and will almost certainly have to be dismantled.

### Methodology followed in the list of nominal species

We attempted to trace all scientific species-group names ever published for frogs originally referred to the genera *Ixalus* Duméril & Bibron, 1841 or *Philautus* Gistel, 1848 and/or subsequently referred to these nominal genera (even if originally published as belonging to other genera and if now excluded from this genus). In other words, these are all the names that are to be found, in works of zoologists of the past, combined with the generic names *Ixalus* and/or *Philautus*. We provide below an annotated list of all these names, presented in chronological order of their publication. The purpose of this list is: (1) to give an overview of all scientific names available in the literature for frogs currently placed in the genus *Philautus* Gistel, 1848; (2) to identify the species not belonging to this genus and exclude them for further analysis; (3) to trace primary and current secondary



homonyms, objective and current subjective synonyms, and other nomenclatural problems, and to propose solutions to some of these; (4) to trace information on name-bearing types and type-localities of all nominal species involved, to discuss the nomenclatural problems sometimes posed in this respect, and to propose solutions to some of these problems. Although the purpose of the present work is mostly nomenclatural, of course (and fortunately) nomenclatural problems cannot be completely dissociated from taxonomic ones. A particularly important role is played in this respect by name-bearing types, which are the only objective link existing between the real world of animals and the world of language (see Dubois & Ohler, 1997; Dubois, 1999c). We therefore provide a detailed discussion of the status of some type specimens, and, in some cases, in order to clarify the nomenclatural situation, we were led to designate lectotypes or neotypes for some nominal species. In a few cases only, we express our opinion that the traditional taxonomy of a species may be wrong, and we propose a few new synonymies and resurrections of specific names. On the whole, however, the major purpose of the present work is nomenclatural, not taxonomic.

In the course of our work, we discovered several cases where the traditional acceptance of an old specific name proved incorrect. In all these cases, we decided to apply strictly the Principle of Priority, rather than trying to 'protect' an incorrect usage, however ancient it may be. The genus *Philautus* has until now not been the subject of much scientific work and its taxonomy is still in a very preliminary phase. Even if some names have been quoted a number of times, mostly in checklists or catalogues, most of the species have not been the subject of biological research, and these frogs have not yet attracted the attention of 'users' (such as ecologists, physiologists, ethologists, biochemists, or pet keepers) so that their names are virtually unknown outside specialized taxonomic literature. We think 'protection' of these incorrect uses by a small number of zoologists is not warranted and would only contribute to the recent general trend to 'weaken' the legislative value of the *Code* in the eyes of zoologists (see e.g. Holynski, 1994; Dubois & Ohler, 1997; Dubois, 1999b-c). For this reason, we did not make use of the concept of 'nomen protectum', very recently introduced in the current edition of the *Code* (Anonymous, 1999; see Dubois, 1999b): trying to 'protect' some names merely because they have been mentioned a few times in the literature, although the biological species they refer to (and often their type-specimens) have attracted very little attention from biologists, would only be a way of supporting the careless work of previous authors, and of encouraging a similar attitude in the future.

The taxonomy and nomenclature of the genus

*Philautus* is complicated by four particular problems: (1) the denial of access to foreign researchers of type-specimens conserved (or not?) in the Zoological Survey of India in Calcutta; (2) the disappearance of all type-specimens of taxa from Southern India described by Rao (1937); (3) the nomenclatural consequences of the works of Ahl (1927b, 1931); (4) the recent multiplication of descriptions of new species based on insufficient data. Let us consider these four problems.

(1) The type-specimens of a number of frog taxa described at the end of the 19<sup>th</sup> century by British zoologists were deposited in Calcutta in the Indian Museum, now the Calcutta branch of the Zoological Survey of India. The fate of these specimens has long remained unclear. The unavailability of name-bearing types in Calcutta and of information on these specimens was for long a cause of nomenclatural uncertainty and potential instability: in order to solve these problems, Dubois (1984b: 156) considered that the conditions were met that allowed neotype designations in those cases where doubts existed concerning the status of names based in type-specimens formerly deposited in Calcutta. However, according to Chanda et al. (2000), some type specimens that were considered lost are still extant in Calcutta. In such cases, according to Article 75.8 of the new *Code*, the neotype has to be set aside (except through ruling of the Commission). In the present work, we designated neotypes for a few species the type specimens of which are apparently no longer in existence in Calcutta. As for those that were recently 'rediscovered', it is to be hoped that they will now be made available for study to the scientific community, and that information will be provided to those who might request it.

(2) Rao (1937) described 20 new frog species and 'varieties' from Southern India and provided figures for all of them. Most species and their descriptions were based on holotypes alone, which in any case were clearly in poor condition (desiccated, having probably not been properly fixed in formalin), as can be seen from the drawings of the specimens. All these specimens were deposited in the Central College in Bangalore. In August 1984, one of us (AD) visited this college, where Prof. B. N. Chowdaiah told him that all the specimens from Rao's collection had been destroyed and were no longer available for study. Dubois (1984b: 156-157) reported this fact and suggested that, to definitely resolve the nomenclatural problems posed by Rao's (1937) names, neotypes should be designated for the nominal taxa concerned. For this, it is necessary to have specimens coming from a locality as close as possible to the original type-locality, and corresponding reasonably well with the original descriptions. Unfortunately, Dutta (1985) followed a different philosophy, since he proposed new

replacement names for two names of Rao (1937) which were preoccupied, without trying to allocate these names to actual specimens: such thoughtless practices cannot but add new nomenclatural problems to the already existing ones (see Dubois, 1999a: 6). In the present work, we followed Dubois's (1984b) proposal.

(3) In rhacophorines, a particular problem is posed by the works of Ahl (1927b, 1931), as was stressed by Inger (in Frost, 1985: 526): 'Ahl (...) created nomenclatural mischief by treating *Philautus* as a subgenus of *Rhacophorus*, thus creating many secondary homonyms for which, not surprisingly, Ahl provided his own substitute names.' Actually, in the third edition of the *Code* (Anonymous, 1985), Article 59.b expressly stated that 'A junior secondary homonym replaced before 1961 is permanently invalid', without requiring (as e.g. in Article 40.b) that this replacement name should have since then 'won general acceptance'. This wording was open to criticism, but it was for 15 years the rule of the *Code* and zoologists were bound to follow it— but then they should follow it in all cases, not in some of them and ignored in others, as was done by Inger (in Frost, 1985) for the names *Ixalus japonicus* Hallowell, 1861 and *Ixalus asper* Boulenger, 1886 (see below). Article 59.3 of the current edition of the *Code* is notably different, as it states: 'A junior secondary homonym replaced before 1961 is permanently invalid unless the substitute name is not in use and the relevant taxa are no longer considered congeneric, in which case the junior homonym is not to be rejected on grounds of that replacement.' This is followed by an example where replacement names created by Deignan in a similar case are to be rejected: 'because his classification and substitute names are not in use the species-group names that were replaced are not to be rejected under this Article'. We are here in a similar case. Ahl's taxonomy has been followed only once and by a single author (Wolf, 1936), and his replacement names have been ignored by all authors except Inger (in Frost, 1985) and Dutta (1997): they cannot be considered to be 'in use'. Consequently, in the present work we reinstated the original names whenever the species considered are not placed now in the genus *Rhacophorus*.

(4) The experience of Rao's (1937) paper, which proposed 20 new species names without proper comparisons, should have served to caution against the unwarranted creation of new nominal taxa without having first performed a revisionary work of the genus or at least the species-group concerned. Unfortunately, in the recent years, a clear trend towards the multiplication of such insufficiently serious papers, some of them in refereed journals, has been a new source of difficulty and confusion in the taxonomy of the genus *Philautus*. Such recent problems, in this genus and in other amphibian genera, are particularly numerous

concerning the fauna of the Indian region (see Dubois, 1999a). In this case, the problem may be amplified by situations similar to that described above in (1), i.e. deposition of the type specimens in collections where they are not readily available for study by the international scientific community.

The current trend evoked above, to ignore the *Code* or to refuse to respect some of its rules has a direct consequence which is clearly visible in a number of recent zoological publications: a growing number of authors tend to describe new taxa without consideration for the possible existence of earlier names for these taxa (for recent examples in amphibians, see e.g.: Dubois & Ohler, 1995, 1998, 1999; Dubois, 1995, 1998, 1999a-d). In a complex and speciose genus like *Philautus*, multiplying the descriptions of 'new species' without having first carried out a revision of the status of all existing nominal taxa cannot but open the door to future nomenclatural problems. As mentioned above, in the present work, we applied the rule of priority in all cases where we found an older name to apply without doubt to a species redescribed more recently, even when the older name had been rarely or never used since the original description. We think that, if all authors of taxonomic revisions adopted this philosophy, many zoologists would become more careful and prudent before proposing unwarranted new names.

Fully respecting the *Code* does not mean acting blindly. Even within the official rules, plenty of room remains for zoologists to make various choices (in first-reviser actions, designations of lectotypes and neotypes, etc.) so as to ensure nomenclatural universality and stability: an example is the establishment of an objective synonymy between two problematic names through lectotype or neotype designations (see e.g. below under *Ixalus tinniens* Jerdon, 1853 and *Ixalus punctatus* Anderson, 1871, or under *Ixalus glandulosus* Jerdon, 1853 and *Ixalus pulcher* Boulenger, 1882). Another concern for revisers of taxonomic groups should be to try as much as possible to make synonymies lighter. As was stressed by Dubois & Ohler (1995: 141, 1997: 301), an invalid name does not 'disappear' from taxonomic literature, since it must always be quoted in synonymies. So, when several scientific names are available for what is believed to be the same biological species, it may be justified in some particular cases to attach them (e.g., through lectotype or neotype designation) to specimens from different localities or having different characters, since there is a possibility that in the future these specimens may be shown to represent different taxa: in such cases, rather than having to coin a new name, it will be more economical to use an existing name, which will also lighten the synonymy from which it will be withdrawn (see e.g. below under *Ixalus petersi* Boulenger, 1900). Such a practice can be designated under the name of

*nomenclatural parsimony* (Dubois, in preparation).

In order to facilitate unambiguous reference to the various accounts below, we numbered them as follows: N1 to N177 for accounts dealing with the current status of the names studied in detail here; D1 to D26 for the descriptions or redescrptions of some of the name-bearing types of these nominal taxa; S1 to S84 for the synonymies and distributions of the species considered here as valid and members of the genus *Philautus* as here applied.

For each name of the list N1 to N177 below, whether available or unavailable, we provide the following information (items followed by \* are given in some accounts only):

**Original name.** Name as cited in the original description of the species-group taxon, followed by abbreviated citation of author and year of publication (reference to bibliography), and first page of appearance of the new name in this original publication. Placement of a scientific name between quotation marks indicates that this name is unavailable under the *Code*, being either a nomen nudum or an incorrect spelling. Where relevant, this paragraph also provides information on primary or secondary homonyms of the name considered.

**Name-bearing type.** Number of type-specimens, collection(s) where they are kept (see list of abbreviations above) and their collection numbers when known to us, with reference to the source of this information: either in the original description, or in a subsequent publication, or through our personal observation. When available, information on the sex, stage and snout-vent length of type-specimens is provided. Syntypes are listed here only if they are still syntypes: in case of a lectotype having been designated among them (including in the present work), this results in the loss of the status of name-bearing types for all other syntypes (see Dubois & Ohler, 1997), and these are not listed in this paragraph. We draw attention here to the problems caused by the changes in wording of Article 74 of the *Code* in its current edition. Under Article 74.b of the 1985 edition, any subsequent author publishing the inference that a specimen is 'the holotype' or 'the type' of a species-group taxon was deemed to have validly designated a lectotype 'by inference of holotype'; this led to clear interpretations of such designations (see e.g. Dubois & Ohler, 1999: 147), where no inference was needed about the number of specimens on which the original description was based, information that is often very difficult to obtain in old texts. In the new edition, Articles 74.5–6 state that this is not valid if it is clear in the original description that the latter was 'based

on more than one specimen', a requirement that is liable to cause problems in some cases, as exemplified below in the cases of the names *Ixalus japonicus* Hallowell, 1861, *Ixalus acutirostris* Peters, 1867, *Ixalus cinerascens* Stoliczka, 1870, *Ixalus beddomii* Günther, 1876 and *Ixalus vermiculatus* Boulenger, 1900. The role of the *Code* should be to allow unambiguous, objective interpretations of old *texts*, written before the current concepts and terms of zoological nomenclature were in force, and without having to make inferences on the authors' *opinions and judgements*. In this case, the new wording is not appropriate for texts published before the 20th century: the term *lectotype* was coined by Schuchert & Buckman (1905) and was not immediately in general use; the concept of name-bearing type was clearly recognized by taxonomists only much later, first under the term of *test* (Dennler, 1939), then under that of *onomatophore* (Simpson, 1940) (see Dubois & Ohler, 1995).

**Type-locality.** Current name of the type-locality, followed in square brackets and between quotation marks, when relevant, by the name of this locality as it appears in the original description. In case we were unable to find the current name of the locality or to locate the latter on a map, only the original name is given, but between quotation marks. Geographical co-ordinates of most localities, an item of information often difficult to obtain, were found in various sources (atlases, maps and books), in particular Anonymous (1993) and Zhao & Adler (1993). Altitude of type-locality, when specified in the original publication or confidently established later, is given in metres, followed in square brackets and between quotation marks, when relevant, by the altitude in feet given in the original publication.

**Current status of specific name.** Current taxonomic status of the species-group name: either valid under the original combination, or valid under a different combination, or currently considered invalid, being either a junior synonym or a junior homonym. For each name we provide at least one recent reference to its use; for subjective synonyms or new combinations we also provide the reference of the first work where they were proposed.

**Current generic and infrageneric allocation.** Information on the current allocation of the nominal species to a genus, and if relevant a subgenus and/or a species-group.

**Proposed status of specific name\*.** This paragraph appears only for the species for which we propose a change in specific taxonomic or nomenclatural status. The rationale for this change is explained below under the '*Comments*'.

**Proposed generic and infrageneric allocation\*.** This

paragraph only appears for the species for which we propose a change in the allocation to a genus, and if relevant to a subgenus.

**Comments\*.** The comments given here for some nominal species are mainly nomenclatural and distributional. When necessary, explanations are given here for our nomenclatural decisions, such as lectotype or neotype designations, proposed taxonomic changes, etc.

**Status of taxon.** This paragraph provides information on the proposed taxonomic and nomenclatural status of the taxon referred to by the name under study: (1) familial and subfamilial allocation; (2) complete combination and onymorph (see Smith & Pérez-Higareda, 1986) of the currently valid name, including subgeneric name if relevant. As for the familial classification, in ranoid frogs we followed the provisional classification of Dubois (1992) and in other anuran groups that of Duellman & Trueb (1985). In the family Ranidae, we followed the provisional generic and subgeneric classification of Dubois (1992), except in the case of the genus *Rhacophorus*: in the latter case, in view of the characters pointed out by Chou & Lin (1997), we recognize *Polypedates* as a third subgenus within this genus, beside *Rhacophorus* and *Leptomantis* (see also Dubois, 1987a: 74–77, 2000).

**Generic allocation status.** This paragraph summarizes whether the taxonomic and nomenclatural status of a species-group name regarding its generic allocation is currently the same as or different from that it had in the original publication (irrespective of other possible transitory changes during the history of the name). We recognize five categories in this respect:

A. Taxonomically unchanged in the genus *Philautus*: originally placed in the genus *Ixalus* Duméril & Bibron, 1841 or *Philautus* Gistel, 1848; currently placed in the genus *Philautus* Gistel, 1848. Two subcategories can be distinguished:

A1. Taxonomically unchanged, but nomenclaturally changed because of *Ixalus* Duméril & Bibron, 1841 being preoccupied by *Ixalus* Ogilby, 1837: originally placed in the genus *Ixalus* Duméril & Bibron, 1841; currently placed in the genus *Philautus* Gistel, 1848.

A2. Both taxonomically and nomenclaturally unchanged: originally placed in the genus *Philautus* Gistel, 1848; currently placed in the genus *Philautus* Gistel, 1848.

B. Taxonomically and nomenclaturally changed: originally placed in another genus (neither *Ixalus* Duméril & Bibron, 1841 nor *Philautus* Gistel, 1848); currently placed in the genus *Philautus* Gistel, 1848.

C. Taxonomically and nomenclaturally changed: originally placed in the genus *Ixalus* Duméril & Bibron, 1841 or *Philautus* Gistel, 1848; currently placed in another genus.

D. Taxonomically unchanged in a genus other than *Philautus*: originally placed in another genus (neither *Ixalus* Duméril & Bibron, 1841 nor *Philautus* Gistel, 1848); transitorily placed in the genus *Ixalus* Duméril & Bibron, 1841 or *Philautus* Gistel, 1848, but now returned to its original genus.

E. Taxonomically changed from a genus other than *Philautus* to another genus other than *Philautus*: originally placed in another genus (neither *Ixalus* Duméril & Bibron, 1841 nor *Philautus* Gistel, 1848); transitorily placed in the genus *Ixalus* Duméril & Bibron, 1841 or *Philautus* Gistel, 1848, but now placed in another genus but not in *Philautus*.

**Chronological list and commentary  
on available and unavailable scientific  
species-group names for frogs originally referred  
to the genera *Ixalus* Duméril & Bibron, 1841 or  
*Philautus* Gistel, 1848, and/or subsequently  
referred to these genera**

N1. '*Hyla aurifasciata*' Kuhl & Van Hasselt, 1822  
*Original name.* '[*Hyla*] *aurifasciata*' Kuhl & Van Hasselt, 1822: 104; nec *Hyla aurifasciata* Schlegel, 1837: 27.

*Name-bearing type.* None (unavailable name).

*Type-locality.* 'Rosamalen Forest', on Mount Gede ['Pangerango'] (06°47'S, 106°59'E), Mount Gede-Pangrango National Park, Jawa Barat [West Java], Java, Indonesia.

*Current status of specific name.* Unavailable name (nomen nudum); senior subjective synonym (Van Kampen, 1923: 276) of *Hyla aurifasciata* Schlegel, 1837.

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20, 32).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *aurifasciatus* (Schlegel, 1837).

*Generic allocation status.* Category B: taxonomic transfer from *Hyla* to *Philautus*.

N2. *Hyla aurifasciata* Schlegel, 1837

*Original name.* *Hyla aurifasciata* Schlegel, 1837: 27; nec '[*Hyla*] *aurifasciata*' Kuhl & Van Hasselt, 1822: 104.

*Name-bearing type.* Lectotype, by present designation, RMNH 4266.a, adult female, SVL 25.5 mm (see description D1 below).

*Type-locality.* Mountains in the inner part of Java, Indonesia.

*Current status of specific name.* Valid name, as *Philautus aurifasciatus* (Schlegel, 1837) (Brown & Alcalá, 1994: 189).

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois,

1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20, 32).

**Comments.** (1) Concerning the name-bearing types of this species, the following information, credited to Marinus S. Hoogmoed, appears in Frost's (1985: 527) checklist: 'Syntypes: probably RMNH 4266, 5064 (6 specimens); material collected by Müller on Java, which most likely was examined by Schlegel (MSH).' We asked Marinus S. Hoogmoed for additional information, and got from him the following detailed reply (e-mail of 22 November 1999 to AD): 'I checked the *Philautus aurifasciatus* material. RMNH 4266 was collected on Java by S. Müller, a technician of our Natuurkundige Commission, that made collections in Indonesia between 1820 and 1850. As one of the few survivors he returned to the Netherlands in 1837. He worked with Boie and Macklot, until they died and then continued collecting by himself. The material he collected was returned to the Netherlands at the latest in 1837 and thus was available to Schlegel for his description. Unfortunately Schlegel only refers to Kuhl and Van Hasselt as being the first ones to discover it. Then he continues saying something about its taxonomic position as perceived by Boie. He does not specifically mention Müller as one of the collectors. This probably made me state 'probably' in the Frost book. Looking at it now I think I could state: very likely. Just looking in the bottle and comparing it with the drawing in the *Atlas*, I even think it could very well be possible that one of the specimens was the basis for the figure. At least the position of the legs is very similar. (...) I had a quick look in our archives and tried to find the original drawing that Schlegel used for his publication. I only found a copy of it and it gave some additional information. Just below the name the words 'aloen-aloen' were written. Generally this would be the locality from where the specimen came. Not in this case: the words do not start with a capital, but are in lower cast. The words are Malayan and mean: front yard of a royal house. Thus it gives ecological data. However, I have no idea which royal house it might have been. (...) How the number RMNH 5064 came to figure in Frost's checklist remains a riddle to me, as this specimen only was collected in 1912 and certainly does not qualify for the type-series.' Thanks to the hospitality of M. S. Hoogmoed, we examined the six specimens of the series RMNH 4266 in Leiden. None of them agrees completely with Schlegel's illustration, but as it is very likely that they were seen by Schlegel at the time of the original description they may be regarded as syntypes. In order to avoid any further ambiguity on the status of the name-bearing type of this nominal species, we hereby designate one of these

specimens as lectotype. We chose the female RMNH 4266.a because it is well preserved and matches the figure the closest. (2) The spelling '*Ixalus semifasciatus*' used twice for this species by Hallowell (1861: 501) is an incorrect subsequent spelling, devoid of status in nomenclature.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) aurifasciatus* (Schlegel, 1837).

**Generic allocation status.** Category B: taxonomic transfer from *Hyla* to *Philautus*.

### N3. *Ixalus concolor* Hallowell, 1844

**Original name.** *Ixalus concolor* Hallowell, 1844: 60.

**Name-bearing type.** Holotype by monotypy, ANSP 3216 (Malnate, 1971: 350).

**Type-locality.** Liberia.

**Current status of specific name.** Valid name, as *Hyperolius concolor* (Hallowell, 1844) (Schjøtz, 1999: 104).

**Current generic and infrageneric allocation.** Genus *Hyperolius* Rapp, 1842 (Schjøtz, 1999: 104).

**Status of taxon.** Hyperoliidae, Hyperoliinae: *Hyperolius concolor* (Hallowell, 1844).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Hyperolius*.

### N4. *Polypedates variabilis* Jerdon, 1853

**Original name.** *Polypedates variabilis* Jerdon, 1853: 532; nec *Ixalus variabilis* Günther, 1859: xii, 74.

**Name-bearing type.** Neotype, by present designation, IRSNB 1918, adult male, SVL 48.0 mm (see description D2 below).

**Type-locality.** Nilgiri Hills ['Neelgherries'], Tamil Nadu, India; restricted by neotype designation (above) to the Botanical Gardens, Udhagamangalam ['Ootacamund', 'Ooty'] (11°24'N, 76°42'E), Nilgiri Hills, Tamil Nadu, India.

**Current status of specific name.** Name ignored by all authors since Jerdon (1870).

**Proposed status of specific name.** Valid name, as *Rhacophorus variabilis* (Jerdon, 1853).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Rhacophorus* Kuhl & Van Hasselt, 1822.

**Comments.** The original name-bearing type of this nominal species is unknown and probably lost, as it was already not listed by Günther (1859), Theobald (1868), Boulenger (1882a) and Sclater (1892b), and was not found by Chanda et al. (2000). Therefore the interpretation of the status of this name has to rely on the original description, which stated that SVL of this species is roughly 63.5 mm ['2 1/2 inches'] (Jerdon, 1853: 532). The diagnosis given for this species by Jerdon (1853) was not more imprecise than that given by him for several other species which have been consistently credited to him since

Boulenger's (1882a) book. This diagnosis clearly points to the species described by Günther (1864: 430) under the name *Polypedates pleurostictus*, as was acknowledged by Günther (1864: 431) himself, and confirmed by Jerdon (1870: 83). We therefore resurrect this name for this species, which is known to be common in the Nilgiri Hills (Daniel & Sekar, 1989: 200; personal observations). The current taxonomic situation in this group is so bad that no one can seriously speak of 'nomenclatural stability' that would have to be 'protected' through the nomenclatural invalidation ('suppression') of the name *P. variabilis* Jerdon, 1853. As the original name-bearing type appears to be lost, final stabilization of the status of this name requires the description of a neotype from the Nilgiri Hills. The generic status of this species, which has changed different times in the past, remains unclear. The last major change was the shift of *Polypedates pleurostictus* to the new subgenus *Philautus* (*Kirtixalus*) that was proposed by Dubois (1987a: 73) because of the similar morphology of this species with that of *Polypedates microtypanum* Günther, 1859 from Sri Lanka. However, it is most unlikely that *P. variabilis* Jerdon, 1853 actually belongs to this group, for two reasons at least: (1) this species is often found on the banks of streams (FB, personal observations) and probably depends on water for its reproduction (see above under 'Generic taxonomy'); (2) preliminary data based on mitochondrial DNA sequencing suggest that this species is cladistically more closely related to *Rhacophorus malabaricus* Jerdon, 1870 than to the genus *Philautus* (FB, unpublished data). Until more is known on the relationships and taxonomy of these groups, we propose to place provisionally *P. variabilis* Jerdon, 1853 and its synonyms *P. pleurostictus* Günther, 1864 and *R. parkeri* Ahl, 1927 in the nominotypical subgenus of the genus *Rhacophorus*.

**Status of taxon.** Ranidae, Rhacophorinae: *Rhacophorus* (*Rhacophorus*) *variabilis* (Jerdon, 1853).

**Generic allocation status.** Category E: taxonomic transfer from *Polypedates* to *Rhacophorus*.

#### N5. *Ixalus glandulosus* Jerdon, 1853

**Original name.** '*Ixalis*? [sic] *glandulosa*' Jerdon, 1853: 532; incorrect original spelling, to be corrected into *Ixalus glandulosus* Jerdon, 1853 (see Article 32.5 of the Code).

**Name-bearing type.** Neotype, by present designation, BMNH 1947.2.27.22 [ex BMNH 1882.2.10.39], adult male, SVL 22.3 mm (see description D3 below).

**Type-locality.** Southern India; restricted by neotype designation (above) to Manantavadi ['Manantodddy'] (11°49'N, 76°01'E), Wynaad, Kerala, India.

**Current status of specific name.** Valid name, as *Philautus*

*glandulosus* (Jerdon, 1853) (Dutta, 1997: 79).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 79).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** The original name-bearing type of this nominal species is unknown and probably lost, as it was already not listed by Günther (1859), Theobald (1868), Boulenger (1882a) and Sclater (1892b), and it was not found by Chanda et al. (2000). Therefore the interpretation of the status of this name has to rely on the original description, which stated that SVL of this species is roughly 30.5 mm ['1 2/10ths'] (Jerdon, 1853: 533). We do not agree with the traditional interpretation of this name as a synonym of *Phyllomedusa tinniens* Jerdon, 1853 (see below). Although this has been ignored by most authors until now, the green dorsal coloration of *I. glandulosa* Jerdon, 1853 clearly refers to a species close to, or synonymous with, the species described later under the names *Ixalus beddomii* Günther, 1876 or *Ixalus pulcher* Boulenger, 1882. The latter is known from two localities north of Palghat (Boulenger, 1882a; Pillai, 1986), while the former is known only from some localities south of Palghat (Boulenger, 1882a). The type-locality of *I. glandulosus* Jerdon, 1853 is unknown, but an examination in the BMNH of the *Philautus* sent by Jerdon shows that all were collected from regions north of Palghat, i.e. Malabar, Nilgiris and Wynaad, the latter being extremely close to the type-locality of *I. pulcher*. Moreover, *I. glandulosus* Jerdon, 1853 is described as yellowish on the sides and limbs, which exactly agrees with the yellow forelimbs that seem to distinguish *I. pulcher* Boulenger, 1882 from *I. beddomii* Günther, 1876. It is therefore very probable that the brief description of *I. glandulosus* Jerdon, 1853 referred to the same species as that of *I. pulcher*. This species is currently known (Frost, 1985: 531) under the name *Philautus pulcherrimus* (Ahl, 1927), a name which has until now merely been used in a few lists of the amphibian fauna of India (Inger & Dutta, 1986; Daniels, 1992; Dutta, 1992, 1997), but not in genuine biological studies of the species: its replacement by the name *Philautus glandulosus* (Jerdon, 1853) does not really 'threaten the stability of nomenclature'. As for the species currently referred to by the name *Philautus glandulosus* (Jerdon, 1853), another name is available, *Philautus tinniens* (Jerdon, 1853) (see below). As the original name-bearing type appears to be lost, in order to definitely stabilize the nomenclatural situation, the designation of a neotype of *I. glandulosus* Jerdon, 1853 is necessary: we chose for this the same specimen which is designated below as lectotype of *Ixalus pulcher* Boulenger, 1882, so that

the three names *I. glandulosus*, *I. pulcher* and *R. pulcherrimus* are now linked by an objective synonymy.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) glandulosus* (Jerdon, 1853).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

#### N6. *Phyllomedusa tinniens* Jerdon, 1853

**Original name.** *Phyllomedusa? tinniens* Jerdon, 1853: 533.

**Name-bearing type.** Neotype, by present designation, MNHN 1985.0527, adult female, SVL 25.0 mm (see description D4 below).

**Type-locality.** Nilgiri Hills ['Neelgherries'] (11°24'N, 76°42'E), Tamil Nadu, India; restricted by neotype designation above to the South-East of the Ooty Lake, Udthagamangalam ['Ootacamund', 'Ooty'] (11°24'N, 76°42'E), Nilgiri Hills, Tamil Nadu, India.

**Current status of specific name.** Invalid name, junior subjective synonym (Boulenger, 1882a: 103; Gorham, 1974: 166; Dutta, 1997: 79) of *Ixalus glandulosus* Jerdon, 1853, following the first reviser action of Günther (1876a: 573–574).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 79).

**Proposed status of specific name.** Valid name, as *Philautus tinniens* (Jerdon, 1853).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** (1) The original name-bearing type of this nominal species is unknown and probably lost, as it was already not listed by Günther (1859), Theobald (1868), Boulenger (1882a) and Sclater (1892b), and it was not found by Chanda et al. (2000). Therefore the interpretation of the status of this name has to rely on the original description, which stated that SVL of this species is roughly 27.9 mm ['1 1/10ths'] (Jerdon, 1853: 533). The name *Phyllomedusa tinniens* Jerdon, 1853 was considered as a probable subjective junior synonym of *Ixalus glandulosus* Jerdon, 1853 by Günther (1876a). This interpretation was followed without discussion by Boulenger (1882a), and has since then been accepted by all subsequent authors. However, Günther (1876a: 573–574) had doubts about this synonymy and wrote: 'It will be difficult to decide from the original notes with which these names are accompanied which of the two names ought to be applied, or whether they are synonyms'. This statement also indicates that the types of both species must already have been lost then. Although the original description of *P. tinniens* is very brief, there can be no doubt about the species that Jerdon (1853) had before him. The description clearly points to the species called *I. glandulosus* by Günther (1876a)

and Boulenger (1882a) and kept under this name in the collections of the BMNH and also of the ZSIM (FB, personal observations). The feet webbed at base only, the coloration of the dorsum, the dark side of the head, the yellow inner fingers, the short hind leg and the metallic tinkling call (referred to by the name 'tinniens') are very characteristic. Moreover, we found this species to be very common on different places in the Nilgiris, its type-locality. In the catalogue of the London collection, four specimens (BMNH 1872.4.14.168–171), are associated with the following information: 'Jerdon', 'as *Phyllomedusa tinniens*'. Günther's (1876a) treatment of *I. glandulosus* and *P. tinniens* as synonyms seems to have been based on the original description of the former, which stated that the 'abdomen is largely glandular'. Actually, all species of *Philautus* have a glandular abdomen, but Günther (1876a) was apparently struck by the specimens labelled *P. tinniens* having 'the sides (...) very glandular'. However, as stressed above, the description of *I. glandulosus* clearly refers to another species: the distinctive coloration ('green above, yellowish on the sides and limbs'), and the length of the hind leg cannot possibly refer to *P. tinniens*. Furthermore, Günther (1876a) also stated that 'Col. Beddome has collected specimens of the same species, which were determined by Mr. Jerdon himself as his *Phyllomedusa (?) tinniens*.' Because of the above evidence, we here remove *Philautus tinniens* (Jerdon, 1853) from the synonymy of *Philautus glandulosus* (Jerdon, 1853). As the original name-bearing type appears to be lost, stabilization of the status of this name requires the designation of a neotype coming from the Nilgiris. (2) It should be noted that Dubois's (1986) short notes on an undetermined species of *Philautus* from the Nilgiris laying eggs under stones, in which direct development occurred, applied to this species.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) tinniens* (Jerdon, 1853).

**Generic allocation status.** Category B: taxonomic transfer from *Phyllomedusa* to *Philautus*.

#### N7. *Phyllomedusa wynaadensis* Jerdon, 1853

**Original name.** *Phyllomedusa? wynaadensis* Jerdon, 1853: 533.

**Name-bearing type.** Neotype, by present designation, MNHN 1999.5596, adult male, SVL 28.3 mm (see description D5 below).

**Type-locality.** Southern India; restricted by neotype designation (above) to Ganapathivattam (Sultan's Battery; 11°40'N, 76°17'E), Wynaad, Kerala, India.

**Current status of specific name.** Invalid name, probable senior subjective synonym (Günther, 1876a: 573; Gorham, 1974: 167; Dutta, 1997: 89) of *Ixalus variabilis*

Günther, 1859.

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 89).

*Proposed status of specific name.* Valid name, as *Philautus wynaadensis* (Jerdon, 1853).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* The original name-bearing type of this nominal species is unknown and probably lost, as it was already not listed by Günther (1859), Theobald (1868), Boulenger (1882a) and Sclater (1892b), and it was not found by Chanda et al. (2000). Therefore the interpretation of the status of this name has to rely on the original description, which stated that SVL of this species is roughly 25.4 mm ['about 1 inch'] (Jerdon, 1853: 533). Günther (1876a: 573) remarked, under *Ixalus variabilis* Günther, 1859: 'It is possible that the specimens which Mr. Jerdon noticed as *Phyllomedusa* (?) *wynaadensis* belonged to this species. But in a genus in which the distinction of closely allied species is most difficult for the zoologist with the specimens before him, it is impossible to say to which of them a short, insufficient note, penned 25 years ago, refers.' This synonymy has been adopted by all authors since then. However, it is quite doubtful, not only because the type-locality of *P. wynaadensis* is in India and that of *I. variabilis* is Sri Lanka, but also because of elements given in Jerdon's (1853) original description. We think that this description refers to a frog of the same group as *Philautus leucorhinus* and related species from Sri Lanka: its large tympanum, its size of 'about 1 inch', its barred limbs and its reddish brown coloration are typical for this group. As differences are evident, particularly on morphometric grounds (FB, unpublished data), between the Indian specimens and those of this group from Sri Lanka, we propose here to use this specific name for the South Indian populations until more is known on the relationships of these frogs. As the original name-bearing type appears to be lost, final stabilization of the status of this name requires the description of a neotype. Because it can be inferred from the specific name that Jerdon (1853) considered the species to occur in Wynaad (11°40'N, 76°15'E; Southern India), this region is an appropriate choice for type-locality restriction through a neotype designation.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *wynaadensis* (Jerdon, 1853).

*Generic allocation status.* Category B: taxonomic transfer from *Phyllomedusa* to *Philautus*.

#### N8. *Polypedates saxicola* Jerdon, 1853

*Original name.* *Polypedates*? *saxicola* Jerdon, 1853: 533.

*Name-bearing type.* Syntypes, ZSIC *cnu*, original number,

sexes and stages unknown, now lost (Dutta, 1997: 141; Chanda et al., 2000).

*Type-locality.* (1) 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E), Kerala, India; (2) Wynaad, Kerala, India.

*Current status of specific name.* Valid name, as *Micrixalus saxicola* (Jerdon, 1853) (Dutta, 1997: 141).

*Current generic and infrageneric allocation.* Genus *Micrixalus* Boulenger, 1888 (Dubois, 1987a: 51–55; Dutta, 1997: 141).

*Comments.* Boulenger (1882a: 97) transferred this species to the genus *Ixalus*, but, shortly after (Boulenger, 1888: 205), to his new genus *Micrixalus*, where it has remained since then.

*Status of taxon.* Ranidae, Raninae: *Micrixalus saxicola* (Jerdon, 1853).

*Generic allocation status.* Category E: taxonomic transfer from *Polypedates* to *Micrixalus*.

#### N9. *Polypedates stellatus* Kelaart, 1853

*Original name.* '*Polypedates stellata*' Kelaart, 1853: 194; incorrect original spelling, to be corrected into *Polypedates stellatus* Kelaart, 1853 (see Article 32.5 of the *Code*).

*Name-bearing type.* Holotype by monotypy, original collection, number, sex and stage unknown, SVL 57.2 mm ['about 2 1/4 inches'], not traced.

*Type-locality.* Nuwara Eliya (06°57'N, 80°47'E) ['Newera-Ellia'], Sri Lanka ['Ceylon'].

*Current status of specific name.* Name ignored by most authors until now, but considered with doubt as a synonym of *Philautus variabilis* (Günther, 1859) by Kirtisinghe (1957: 2).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Kirtisinghe, 1957: 2).

*Proposed status of specific name.* Valid name, as *Philautus stellatus* (Kelaart, 1853).

*Proposed generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

*Comments.* This name was ignored by most authors until now. Ahl (1931: 174) listed it as an 'Unsichere Art' in his subgenus *Rhacophorus* (*Rhacophorus*). Kirtisinghe (1957: 2) first proposed it as a possible synonym of *Philautus variabilis* (Günther, 1859), but, below in the same book, did not list it among the synonyms of this latter name. Kelaart's (1853: 194) original description is very imprecise and could fit with a number of Sri Lankan frog species. According to the diagnosis Kelaart (1853: 193) gave of the genus *Polypedates*, this species must have had large disks on digits and an incomplete webbing: it was therefore probably a member of the Rhacophorinae. The bright green colour of the back excludes this species from



known Sri Lankan members of *Rhacophorus* (*Polypedates*). However, a green or greenish colour is sometimes found in some Sri Lankan species currently allocated to the subgenera *Philautus* and *Kirtixalus* of the genus *Philautus*. The size Kelaart (1853: 194) gave for the unique specimen that he examined (SVL 57.2 mm) is larger than that of any known Sri Lankan species of the nominotypical subgenus of *Philautus*, while several species of *Kirtixalus* are known to reach or exceed this size (see Dutta & Manamendra-Arachchi, 1996). We therefore think that this name was based on a specimen of *Kirtixalus* from the neighbourhood of Nuwara Eliya. As there remains a high number of species of this latter group to describe on this island (see Pethiyagoda & Manamendra-Arachchi, 1998), we suggest that this name should be used to designate one of them, agreeing by its characters with Kelaart's (1853) description, and occurring in the region of Nuwara Eliya. Final stabilization of the status of this name will require the description of a neotype collected in this area.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Kirtixalus*) *stellatus* (Kelaart, 1853).

**Generic allocation status.** Category B: taxonomic transfer from *Polypedates* to *Philautus*.

**N10. *Polypedates schmarda* Kelaart, 1854**

**Original name.** *Polypedates* (?) *schmarda* Kelaart, 1854a: 407.

**Name-bearing type.** Syntypes, original collection, number, sexes and stages unknown, not traced (Dutta & Manamendra-Arachchi, 1996: 206).

**Type-locality.** 'Adam's Peak' (06°49'N, 80°30'E; 1709 m) ['5600 feet'], Sri Lanka ['Ceylon'].

**Current status of specific name.** Valid name, as *Theلودerma schmarda* (Kelaart, 1854) (Dutta & Manamendra-Arachchi, 1996: 206).

**Current generic and infrageneric allocation.** Genus *Theلودerma* Tschudi, 1838 (Dutta & Manamendra-Arachchi, 1996: 206).

**Comments.** (1) According to the original description (Kelaart, 1854a: 408), the name of this species is based on the name of 'Professor Schmarda of Prague'. It is therefore a noun in the nominative singular standing in apposition to the generic name, and it must remain unchanged whatever the grammatical gender of the generic name with which it is combined (Articles 11.9 and 31.1 of the *Code*). This specific name has been subject to several minor changes in subsequent works by several authors: '*schmardana*' (Kelaart, 1854b: 22), '*schmardae*' (Peters, 1860: 186), '*schmardanus*' (Boulenger, 1882a: 99) and '*schmardanum*' (Frost, 1985: 550). All these spellings must be regarded as 'incorrect subsequent spellings',

which are not available in nomenclature according to Article 33 of the *Code*. (2) Peters (1860: 186) placed this species in the genus *Ixalus*, Ahl (1931: 86) referred it to the subgenus *Rhacophorus* (*Philautus*), and Kirtisinghe (1957: 71) to the genus *Philautus*. Liem (1970: 94) transferred it to the genus *Theلودerma*, where it has remained until now.

**Status of taxon.** Rhacophoridae, Rhacophorinae: *Theلودerma schmarda* (Kelaart, 1854).

**Generic allocation status.** Category E: taxonomic transfer from *Polypedates* to *Theلودerma*.

**N11. *Ixalus leucorhinus***

Lichtenstein, Weinland & Von Martens, 1856

**Original name.** *Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856: 36.

**Name-bearing type.** Holotype by monotypy (Lichtenstein et al., 1856: 36), ZMB 3057 (personal observation), juvenile, SVL originally roughly 19.1 mm ['0.75 inch'] (Lichtenstein et al., 1856: 36), currently 20.5 mm (FB, personal observations).

**Type-locality.** Sri Lanka ['Ceylon'].

**Current status of specific name.** Valid name, as *Philautus leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856) (Dutta & Manamendra-Arachchi, 1996: 148; Dutta, 1997: 82).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 148; Dutta, 1997: 82); subgenus *Philautus* Gistel, 1848 (Dubois, 1987a: 72).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** This species is morphologically similar to *Philautus temporalis* (Günther, 1864), the type-species of *Pseudophilautus* Laurent, 1943. Because of morphometric differences between its holotype and specimens from India (FB, unpublished data), we regard provisionally this species as distinct from the Indian *Philautus wynaadensis* (Jerdon, 1853).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N12. *Ixalus poecilopleurus***

Lichtenstein, Weinland & Von Martens, 1856

**Original name.** *Ixalus poecilopleurus* Lichtenstein, Weinland & Von Martens, 1856: 36.

**Name-bearing type.** Holotype by monotypy, ZMB 3058 (Bauer, 1998: 142), sex and stage not stated.

**Type-locality.** Sri Lanka ['Ceylon'].

**Current status of specific name.** Invalid name, junior subjective synonym (Kirtisinghe, 1957: 71; Dutta,

1997: 110) of *Polypedates schmarda* Kelaart, 1854.  
**Current generic and infrageneric allocation.** Genus *Theلودerma* Tschudi, 1838 (Dutta & Manamendra-Arachchi, 1996: 206; Dutta, 1997: 110).  
**Comments.** Dutta & Manamendra-Arachchi (1996) did not include this name in their review of the amphibians of Sri Lanka.  
**Status of taxon.** Ranidae, Rhacophorinae: *Theلودerma schmarda* (Kelaart, 1854).  
**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Theلودerma*.

**N13. *Ixalus warszewitschii* Schmidt, 1857**  
**Original name.** *Ixalus warszewitschii* Schmidt, 1857: 11.  
**Name-bearing type.** Holotype by monotypy, KM 1006.1338 (Hillis & De Sá, 1988: 15).  
**Type-locality.** Close to volcano Chiriqui (9°10'N, 81°54'W; 1370–1600 m) ['Unweit des Vulcubes Chiriqui, zwischen 6000' une 7000' Höhe'], Panama (see Hillis & De Sá, 1988: 15).  
**Current status of specific name.** Valid name, as *Rana warszewitschii* (Schmidt, 1857) (Hillis & De Sá, 1988; Duellman, 1993; Dubois, 1999c).  
**Current generic and infrageneric allocation.** Genus *Rana* Linnaeus, 1758 (Hillis & De Sá, 1988; Duellman, 1993); subgenus *Trypheropsis* Cope, 1868 (Dubois, 1992, 1999c).  
**Status of taxon.** Ranidae, Raninae: *Rana (Trypheropsis) warszewitschii* (Schmidt, 1857).  
**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Rana*.

**N14. *Ixalus variabilis* Günther, 1859**  
**Original name.** *Ixalus variabilis* Günther, 1859: xii, 74; nec *Polypedates variabilis* Jerdon, 1853: 532.  
**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.7.87 [ex BMNH 1855.2.12.11], figured in Günther (1859: pl. 4 fig. B), adult female, SVL 35.8 mm (see description D6 below).  
**Type-locality.** Sri Lanka ['Ceylon'].  
**Current status of specific name.** Valid name, as *Philautus variabilis* (Günther, 1859) (Dutta & Manamendra-Arachchi, 1996: 159; Dutta, 1997: 89).  
**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 159; Dutta, 1997: 89).  
**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.  
**Comments.** The original description (Günther, 1859: 74) mentioned ten syntypes ('a-i, k'), all 'from Mr. Cuming's Collection'. These specimens are still in the London collection, under numbers BMNH 1947.2.7.87–95 and BMNH 1947.2.7.97; the specimen BMNH 1947.2.7.96 [ex BMNH 1868.3.14.31] was obtained from Higgins in 1868 and is therefore not a

type. The old collection numbers of the ten syntypes are not successive and these specimens probably came from different localities in Sri Lanka, so that restriction of the use of the name by designation of a lectotype is in order. The specimen BMNH 1947.2.7.87 [ex BMNH 1855.2.12.11], an adult female in good condition and which had been figured in Günther (1859), is hereby designated lectotype of *Ixalus variabilis* Günther, 1859.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) variabilis* (Günther, 1859).  
**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N15. *Ixalus natator* Günther, 1859**  
**Original name.** *Ixalus natator* Günther, 1859: xii, 75.  
**Name-bearing type.** Syntypes, BMNH 1933.9.10.9–11 (Inger in Frost, 1985: 521).  
**Type-locality.** Philippines; restricted to 'Mindanao or Leyte' by Inger (1954: 338).  
**Current status of specific name.** Valid name, as *Stauroids natator* (Günther, 1859) (Dubois, 1992: 334).  
**Current generic and infrageneric allocation.** Genus *Stauroids* Cope, 1865 (Dubois, 1992: 334).  
**Status of taxon.** Ranidae, Raninae: *Stauroids natator* (Günther, 1859).  
**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Stauroids*.

**N16. *Ixalus guttatus* Günther, 1859**  
**Original name.** *Ixalus guttatus* Günther, 1859: xii, 76.  
**Name-bearing type.** Holotype by monotypy, BMNH *cnu* (Günther, 1859: 76; Boulenger, 1882a: 71; Inger, 1954: 335), adult male (Boulenger, 1882a: 71), SVL 30 mm (Günther, 1872b: 600).  
**Type-locality.** Borneo.  
**Current status of specific name.** Invalid name, junior subjective synonym (Inger, 1954: 335, 1966: 245) of *Ixalus natator* Günther, 1859, following the first reviser action of Boulenger (1882a: 71).  
**Current generic and infrageneric allocation.** Genus *Stauroids* Cope, 1865 (Dubois, 1992: 334).  
**Status of taxon.** Ranidae, Raninae: *Stauroids natator* (Günther, 1859).  
**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Stauroids*.

**N17. *Polypedates microtypanum* Günther, 1859**  
**Original name.** *Polypedates microtypanum* Günther, 1859: xii, 77.  
**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.8.48, figured in Günther (1859: pl. 6 fig. A), adult female, SVL 51.1 mm (see description D7 below).

**Type-locality.** Restricted to Sri Lanka ['Ceylon'] by lectotype designation (above).

**Current status of specific name.** Valid name, as *Philautus microtypanum* (Günther, 1859) (Dubois, 1987a: 73) or *Rhacophorus microtypanum* (Günther, 1859) (Dutta & Manamendra-Arachchi, 1996: 196; Dutta, 1997: 105).

**Current generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 73) or genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 196; Dutta, 1997: 105).

**Comments.** Günther (1859: 77) stated that the description of this species was based on 11 specimens ('a-k'): 10 from Ceylon and 1 ('f') from Madras. However, 12 specimens are present in the London collection as 'types', and all 12 are stated to be from Ceylon. In order to avoid any possible further doubt or confusion, we hereby designate as lectotype of this species one of these specimens from Sri Lanka, that had been figured by Günther (1859).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Kirtixalus*) *microtypanum* (Günther, 1859).

**Generic allocation status.** Category B: taxonomic transfer from *Polypedates* to *Philautus*.

#### N18. *Ixalus japonicus* Hallowell, 1861

**Original name.** *Ixalus japonicus* Hallowell, 1861: 501.

**Name-bearing type.** Syntypes, original number unknown, including USNM 7313.a-e (4 adult females, SVL 26.1–33.9 mm; 1 adult male, USNM 7313.d, SVL 25.1 mm) and MCZ 2602 (young female, SVL 25.0 mm) (Dubois & Ohler, unpublished data).

**Type-locality.** Amami-O-shima ['Ousima'] (28°15'N, 129°20'E), Nansei-Shoto ['Ryukyu Islands'], Japan (Stejneger, 1907: 157; Cochran, 1961: 63).

**Current status of specific name.** Valid name, as *Buergeria japonica* (Hallowell, 1861) (Inger in Frost, 1985: 537).

**Current generic and infrageneric allocation.** Genus *Buergeria* Tschudi, 1838 (Inger in Frost, 1985: 537).

**Comments.** (1) Under the 1985 *Code*, the mention by Stejneger (1907: 157) of the term 'type' in front of number USNM 7313.a (adult female, SVL 32.7 mm; Dubois & Ohler, unpublished data), associated with a detailed description of the corresponding specimen (Stejneger, 1907: 155–156), was a clear designation of lectotype for this species. This is not the case any more under the 1999 edition of the *Code*. Hallowell's (1861: 501) description included the formula 'In one of the specimens', so it can be inferred that this description was 'based on more than one specimen'; as Stejneger (1907: 155–157) did not 'explicitly indicate that he was selecting from the type series that particular specimen to serve as the name-bearing type' (a concept not yet clearly in existence then!),

his action cannot now be construed as a lectotype designation. (2) Inger (in Frost, 1985: 537) considered the name *Rana macropus* Boulenger, 1886 as a subjective synonym of this name, with its own type-specimen, which is incorrect. As noted by Stejneger (1907: 155), the name *Rana macropus* was proposed by Boulenger (1886: 414) as a new replacement name for *Ixalus japonicus* Hallowell, 1861, presumably because Boulenger considered it preoccupied in the genus *Rana* by both *Rana japonica* Boulenger, 1879 and *Rana esculenta* var. *japonica* Boulenger, 1882 (see Dubois & Ohler, 1995: 162). Although this has escaped the attention of all authors until now, under Article 59.b of the 1985 *Code* this case was falling under the situation of a junior secondary homonym replaced before 1961, which had to be considered permanently invalid (a case similar to that of all the new replacement names created for other rhacophorine species by Ahl, 1927b, 1931). Under the 1985 *Code*, but for a special decision of the Commission regarding this case, the valid name of this species would therefore have been *Buergeria macropus* (Boulenger, 1886). However, as mentioned above in the 'Introduction', the situation is now different under the 1999 *Code*: as 'the substitute name is not in use and the relevant taxa are no longer considered congeneric', according to the new Article 59.3 the earlier name must be kept for this species.

**Status of taxon.** Ranidae, Rhacophorinae: *Buergeria japonica* (Hallowell, 1861).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Buergeria*.

#### N19. *Polypedates surdus* Peters, 1863

**Original name.** *Polypedates surdus* Peters, 1863: 459.

**Name-bearing type.** Holotype by monotypy, ZMB 4920 (currently not located) (Bauer et al., 1995: 51), SVL 26 mm (Peters, 1863: 460).

**Type-locality.** Luzon (16°00'N, 121°00'E), Philippines.

**Current status of specific name.** Valid name, as *Philautus surdus* (Peters, 1863) (Brown & Alcalá, 1994: 197).

**Current generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus surdus* group (Dring, 1987: 20; Brown & Alcalá, 1994: 197).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *surdus* (Peters, 1863).

**Generic allocation status.** Category B: taxonomic transfer from *Polypedates* to *Philautus*.

#### N20. *Polypedates pleurostictus* Günther, 1864

**Original name.** *Polypedates pleurostictus* Günther, 1864: xxvi, 430.

**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.8.53 [ex BMNH 1852.12.11.12], figured

in Günther (1864: pl. 26 fig. 1), adult female, SVL 50.4 mm (see description D8 below).

*Type-locality.* 'Madras Presidency', now a large part of Southern India south of 16°N, India.

*Current status of specific name.* Valid name, as *Philautus pleurostictus* (Günther, 1864) (Dubois, 1987a: 73) or *Rhacophorus pleurostictus* (Günther, 1864) (Dutta, 1997: 107).

*Current generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 73) or genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta, 1997: 107).

*Proposed status of specific name.* Invalid name, junior subjective synonym of *Polypedates variabilis* Jerdon, 1853.

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Rhacophorus* Kuhl & Van Hasselt, 1822.

*Comments.* Inger (in Frost, 1985: 546) gave 'Madras' as the type-locality of this species, and stated that this was probably in error. In fact, the original publication said 'Madras Presidency', which was in the 19<sup>th</sup> century a geographic division that coincides approximately with Southern India south of 16°N. Therefore, there is no reason to state that the type-locality was in error. Moreover, according to the BMNH catalogue, the three syntypes of *P. pleurostictus* (BMNH 1947.2.7.74–75 and 1947.2.8.53) were collected by Jerdon, who also described *P. variabilis* Jerdon, 1853, possibly on the basis of the same specimens: it is thus quite possible that both nominal species were collected at the same place, the Nilgiris. Before being renumbered 1947.2.8.53, one of the female syntypes in the BMNH collection had the old number 1852.12.11.12, and therefore entered the London Museum in 1852. This specimen, which is one of the three syntypes of *P. pleurostictus* Günther, 1864, could even represent one of the 'lost' types of *P. variabilis* Jerdon, 1853. For this reason, and in order to definitely stabilize the status of this name, we chose this specimen as lectotype of *Polypedates pleurostictus* Günther, 1864.

*Status of taxon.* Ranidae, Rhacophorinae: *Rhacophorus (Rhacophorus) variabilis* (Jerdon, 1853).

*Generic allocation status.* Category E: taxonomic transfer from *Polypedates* to *Rhacophorus*.

#### N21. *Polypedates reticulatus* Günther, 1864

*Original name.* *Polypedates reticulatus* Günther, 1864: xxvi, 431.

*Name-bearing type.* Holotype by monotypy (Günther, 1864: 431), BMNH 1854.3.21.1 (Dutta & Manamendra-Arachchi, 1996: 202), adult female (Boulenger, 1882a: 80), SVL 59.3 mm ['2 1/3 inches'] (Günther, 1864: 431).

*Type-locality.* Sri Lanka ['Ceylon'].

*Current status of specific name.* Valid name, as *Rhacophorus*

*reticulatus* (Günther, 1864) (Dutta & Manamendra-Arachchi, 1996: 202; Dutta, 1997: 108).

*Current generic and infrageneric allocation.* Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 202; Dutta, 1997: 108).

*Proposed status of specific name.* Valid name, as *Philautus reticulatus* (Günther, 1864).

*Proposed generic and infrageneric allocation.* - Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Kirtixalus) reticulatus* (Günther, 1864).

*Generic allocation status.* Category B: taxonomic transfer from *Polypedates* to *Philautus*.

#### N22. *Ixalus temporalis* Günther, 1864

*Original name.* *Ixalus temporalis* Günther, 1864: xxvi, 434.

*Name-bearing type.* Syntypes, 6 specimens (Günther, 1864: 434), including BMNH 1947.2.6.8–11 (Inger et al., 1984: 555; Dutta & Manamendra-Arachchi, 1996: 155; Dutta, 1997: 88; FB, personal observations).

*Type-locality.* Sri Lanka ['Ceylon'].

*Current status of specific name.* Valid name, as *Philautus temporalis* (Günther, 1864) (Dutta & Manamendra-Arachchi, 1996: 155; Dutta, 1997: 88).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 155; Dutta, 1997: 88).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) All syntypes of the BMNH series are clearly conspecific and we postpone designation among them of a lectotype and its description until the end of our ongoing work on this group of *Philautus*. (2) This nominal species is the type-species of *Pseudophilautus* Laurent, 1943, a name that we provisionally consider here as a synonym of *Philautus* Gistel, 1848 (see above).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) temporalis* (Günther, 1864).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

#### N23. *Ixalus femoralis* Günther, 1864

*Original name.* *Ixalus femoralis* Günther, 1864: xxvi, 434.

*Name-bearing type.* Holotype by monotypy, BMNH 1947.2.26.89 [ex BMNH 1858.6.15.13] (Inger et al., 1984: 553; Inger in Frost, 1985: 528; Dutta & Manamendra-Arachchi, 1996: 142; Dutta, 1997: 78; personal observations), adult female (Boulenger, 1882a: 101), SVL 28.8 mm ['13 lines'] (Günther, 1864: 434).

*Type-locality.* Sri Lanka ['Ceylon'].

*Current status of specific name.* Valid name, as *Philautus*

*femoralis* (Günther, 1864) (Dutta & Manamendra-Arachchi, 1996: 142; Dutta, 1997: 78).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 142; Dutta, 1997: 78).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *femoralis* (Günther, 1864).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

#### N24. *Ixalus acutirostris* Peters, 1867

*Original name.* *Ixalus acutirostris* Peters, 1867: 32.

*Name-bearing type.* Syntypes, NMW 22885 (Häupl et al., 1994: 27) and ZMB 5690 (Bauer et al., 1995: 50) (see discussion under 'Comments' below).

*Type-locality.* Eastern region, Mindanao (08°00'N, 125°00'E), Philippines.

*Current status of specific name.* Valid name, as *Philautus acutirostris* (Peters, 1867) (Brown & Alcalá, 1994: 191).

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* (Dubois, 1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20, 32; Brown & Alcalá, 1994: 191).

*Comments.* Under the 1985 *Code*, the mention by Brown & Alcalá (1994: 191, 217) that the specimen ZMB 5690 was the holotype of this species was a clear, although probably unintentional, designation 'by inference of holotype' of lectotype for this species. This is not the case any more under the 1999 edition of the *Code*: Peters's (1867: 32) text clearly mentioned the existence of two specimens, which were therefore syntypes. These two syntypes are known to be still in existence today, under numbers NMW 22885 (Häupl et al., 1994: 27) and ZMB 5690 (Bauer et al., 1995: 50). According to Peters (1867: 32), the largest syntype has a SVL of 22 mm: in view of the measurements provided by Brown & Alcalá (1994: 191), it is probably an adult, and would appear to be a better choice for lectotype designation than ZMB 5690, an immature female with a SVL of 17 mm (Brown & Alcalá, 1994: 191). However, before designating NMW 22885 as lectotype for this nominal species, it will be necessary to reexamine this specimen and check whether it belongs indeed to the biological species recognized under this name by recent authors (Dring, 1987; Brown & Alcalá, 1994).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *acutirostris* (Peters, 1867).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

#### N25. *Leptomantis bimaculata* Peters, 1867

*Original name.* *Leptomantis bimaculata* Peters, 1867: 32.

*Name-bearing type.* Syntypes, NMW 16091 (Häupl et al., 1994: 28) and ZMB 5681 (Bauer et al., 1995: 51), sex, stage and SVL not stated.

*Type-locality.* Upper valley of the Agusan river, Mindanao, Philippines.

*Current status of specific name.* Valid name, as *Rhacophorus bimaculatus* (Peters, 1867) (Duellman, 1993: 293; Brown & Alcalá, 1994: 207).

*Current generic and infrageneric allocation.* Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Brown & Alcalá, 1994: 207); subgenus *Leptomantis* Peters, 1867 (Duellman, 1993: 293).

*Comments.* This species was for a while placed in the genus *Ixalus* (Boulenger, 1882a: 106, 1898: 475) or *Philautus* (Stejneger, 1905: 347; Van Kampen, 1923: 269; Bourret, 1942: 471; Inger, 1954: 399, 1966: 344; Taylor, 1962: 534; Gorham, 1974: 166; Frost, 1985: 527). It was transferred to the genus *Rhacophorus* by Liem (1970: 100) and to the subgenus *Leptomantis* by Dubois (1987a: 76).

*Status of taxon.* Ranidae, Rhacophorinae: *Rhacophorus* (*Leptomantis*) *bimaculatus* (Peters, 1867).

*Generic allocation status.* Category E: taxonomic transfer from *Leptomantis* to *Rhacophorus*.

#### N26. *Ixalus macropus* Günther, 1869

*Original name.* *Ixalus macropus* Günther, 1869: 484; nec *Rana macropus* Boulenger, 1886: 414.

*Name-bearing type.* Holotype by monotypy, BMNH 1864.7.11.24 (Dutta & Manamendra-Arachchi, 1996: 190; Dutta, 1997: 102), female (Boulenger, 1882a: 82), SVL 37 mm (Günther, 1869: 484).

*Type-locality.* Southern Sri Lanka ['Southern Ceylon'].

*Current status of specific name.* Valid name, as *Rhacophorus macropus* (Günther, 1864) (Dutta & Manamendra-Arachchi, 1996: 190; Dutta, 1997: 102).

*Current generic and infrageneric allocation.* Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 190; Dutta, 1997: 102).

*Proposed status of specific name.* Invalid name, junior subjective synonym of *Polypedates nanus* Günther, 1869, following the first reviser action of Boulenger (1882a: 81).

*Proposed generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

*Comments.* Dutta & Manamendra-Arachchi (1996: 202) resurrected this name from the synonymy of *Rhacophorus microtypanum* (Günther, 1869), where it had been placed (Wolf, 1936: 173; Gorham, 1974: 170). In the same work, they also stated that they considered the names *Polypedates nanus* Günther, 1869 and *Ixalus sarsinorum* Müller, 1887 to also apply to the same species.

While doing so, they ignored the first-reviser action of Boulenger (1882a: 81), who also considered the names *Ixalus macropus* Günther, 1869 and *Polypedates nanus* Günther, 1869 to be synonyms, and afforded priority among them to the latter. As was pointed out by Dubois (1999a: 6), the valid specific name of this species is therefore *Philautus nanus* (Günther, 1869).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Kirtixalus*) *nanus* (Günther, 1869).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N27. *Ixalus nasutus* Günther, 1869**

**Original name.** *Ixalus nasutus* Günther, 1869: 484.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.6.21 [ex BMNH 1868.3.17.34] (FB, personal observations), subadult male (Boulenger, 1882a: 100), SVL 17.3 mm (FB, personal observations).

**Type-locality.** Sri Lanka ['Ceylon'].

**Current status of specific name.** Valid name, as *Philautus nasutus* (Günther, 1869) (Dutta & Manamendra-Arachchi, 1996: 151; Dutta, 1997: 84).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 151; Dutta, 1997: 84).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** This species is morphologically quite similar to *Philautus temporalis* (Günther, 1864), the type-species of *Pseudophilautus* Laurent, 1943.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *nasutus* (Günther, 1869).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N28. *Ixalus opisthorhodus* Günther, 1869**

**Original name.** *Ixalus opisthorhodus* Günther, 1869: 484.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.29.87 (FB, personal observations), female (Boulenger, 1882a: 96), SVL 25 mm (Günther, 1869: 485).

**Type-locality.** Nilgiri Hills ['Nilgherries'] (11°24'N, 76°42'E), Tamil Nadu, India.

**Current status of specific name.** Invalid name, junior subjective synonym (Dubois, 1987a: 51; Dutta, 1997: 140) of *Limnodytes phyllophila* Jerdon, 1853.

**Current generic and infrageneric allocation.** Genus *Micrixalus* Boulenger, 1888 (Dubois, 1987a: 51–55; Dutta, 1997: 140).

**Status of taxon.** Ranidae, Raninae: *Micrixalus phyllophilus* (Jerdon, 1853).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Micrixalus*.

**N29. *Polypedates nanus* Günther, 1869**

**Original name.** *Polypedates nanus* Günther, 1869: 485.

**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.7.78, figured in Günther (1869: pl. 39 fig. 3), adult male, SVL 35.0 mm (see description D9 below).

**Type-locality.** Southern Sri Lanka ['Southern Ceylon'].

**Current status of specific name.** Invalid name, junior subjective synonym (Dutta & Manamendra-Arachchi, 1996: 190; Dutta, 1997: 102) of *Ixalus macropus* Günther, 1869.

**Current generic and infrageneric allocation.** Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 190; Dutta, 1997: 102).

**Proposed status of specific name.** Valid name, as *Philautus nanus* (Günther, 1869), following the first reviser action of Boulenger (1882a: 81) (see above).

**Proposed generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

**Comments.** According to Günther (1869: 485–486), this species was described on the basis of 3 specimens, the largest of which had a SVL of 35 mm. In the catalogue of the London Museum, 5 'types' are listed under the numbers BMNH 1947.2.7.78–82 [ex BMNH 1868.5.13.3], but only 4 specimens are present in the collection. In order to avoid further confusion, we hereby designate the largest specimen, BMNH 1947.2.7.78, figured by Günther (1869), as lectotype of this species.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Kirtixalus*) *nanus* (Günther, 1869).

**Generic allocation status.** Category B: taxonomic transfer from *Polypedates* to *Philautus*.

**N30. *Polypedates cavirostris* Günther, 1869**

**Original name.** *Polypedates cavirostris* Günther, 1869: 486.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.7.83 [ex BMNH 1868.3.17.32] (Dutta & Manamendra-Arachchi, 1996: 183; Dutta, 1997: 99), figured in Dutta & Manamendra-Arachchi (1996: 185), adult female (FB, personal observations), SVL 45 mm (Günther, 1869: 486).

**Type-locality.** Southern Sri Lanka ['Southern Ceylon'].

**Current status of specific name.** Valid name, as *Rhacophorus cavirostris* (Günther, 1869) (Dutta & Manamendra-Arachchi, 1996: 183; Dutta, 1997: 99).

**Current generic and infrageneric allocation.** Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 183; Dutta, 1997: 99).

**Proposed status of specific name.** Valid name, as *Philautus cavirostris* (Günther, 1869).

**Proposed generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Kirtixalus*) *cavirostris* (Günther, 1869).

**Generic allocation status.** Category B: taxonomic transfer from *Polypedates* to *Philautus*.

**N31. *Ixalus cinerascens* Stoliczka, 1870**

**Original name.** *Ixalus cinerascens* Stoliczka, 1870: 275.

**Name-bearing type.** Syntypes, original number unknown, including apparently four specimens under number ZSIC 2716 (Chanda et al., 2000), SVL of largest 19.1 mm [0.75 inch] (Stoliczka, 1870: 276) (see 'Comments' below).

**Type-locality.** Ataran river (16°41'N, 97°44'E), east of Mawlamyine ['Moulmein'], Mon ['Tenasserim'], Myanmar ['Burma']; 'probably obtained (...) in the Dawna Hills inland from Moulmein' according to Annandale (1913: 304).

**Current status of specific name.** Unused name, senior subjective synonym (Gorham, 1974: 43) of *Ixalus lateralis* Anderson, 1871.

**Current generic and infrageneric allocation.** Genus *Megophrys* Kuhl & Van Hasselt, 1822 (Gorham, 1974: 43).

**Proposed status of specific name.** Valid name, as *Philautus cinerascens* (Stoliczka, 1870).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** (1) In the original description of this species, Stoliczka (1870: 276) clearly referred to several specimens, without mentioning a precise number, but giving the size of the largest. However, two years later, he stated that this species had been 'originally described from two Moulmein specimens' (Stoliczka, 1872: 109). Several subsequent authors (Anderson, 1871: 38; Sclater, 1892a: 347, 1892b: 20; Annandale, 1908: 305, 1913: 304) mentioned a single 'type specimen' for this species. Sclater (1892b: 20), mentioned a single specimen as 'type of the species' and even provided its number (ZSIC 2716). Under the 1985 *Code*, this mention was a clear, although probably unintentional, designation 'by inference of holotype' of lectotype for this species. This is not the case any more under the 1999 edition of the *Code*, as the original description was clearly based upon several specimens. According to Chanda et al. (2000), in the Calcutta collection nowadays the number ZSIC 2716 embraces four specimens. It would then appear necessary to determine if these specimens are indeed the original syntypes, and preferably to designate and describe a lectotype among them. (2) Without having examined the syntypes, Boulenger (1890: 510) considered the description of *Ixalus cinerascens* to apply to a pelobatid species, and placed this name in the synonymy of *Leptobrachium monticola*. He was followed by Bourret (1942: 199, 202) and Gorham

(1974: 43), who placed it respectively in the synonymies of the names *Megophrys major* and *Megophrys lateralis* (Pelobatidae, Megophryinae). However, these authors ignored the comments of Sclater (1892a: 347) and Annandale (1913: 304), who, after examination of one of the syntypes, both stated that this specimen was 'a true *Ixalus*'. We prefer to follow these latter authors and to refer this nominal species to the genus *Philautus*. Final stabilization of the taxonomic status of this name will be possible in the frame of a revision of the genus *Philautus* after reexamination of the syntypes, or, if the latter cannot be identified with certainty, of topotypical specimens among which one should then be designated as neotype.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *cinerascens* (Stoliczka, 1870).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N32. *Ixalus punctatus* Anderson, 1871**

**Original name.** *Ixalus punctatus* Anderson, 1871: 27.

**Name-bearing type.** Neotype by present designation, MNHN 1985.527, adult female, SVL 25.0 mm (see description D10 below).

**Type-locality.** Nilgiri Hills ['Nilgiris'] (11°24'N, 76°42'E), Tamil Nadu, India; restricted by neotype designation above to the South-East of the Ooty Lake, Udthagamangalam ['Ootacamund', 'Ooty'] (11°24'N, 76°42'E), Nilgiri Hills, Tamil Nadu, India.

**Current status of specific name.** Invalid name, junior subjective synonym of either *Ixalus glandulosus* Jerdon, 1853 (Sclater, 1892a: 347; Gorham, 1974: 166) or *Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856 (Boulenger, 1890: 483).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Gorham, 1974: 166).

**Proposed status of specific name.** Invalid name, junior objective synonym of *Phyllomedusa tinniensi* Jerdon, 1853.

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** (1) Without explanation, Dutta (1997: 80, 82) did not choose between the two synonymies mentioned above and mentioned this name as a synonym of both *Philautus glandulosus* and *Philautus leucorhinus*. At the end of his book (Dutta, 1997: 174) he listed again this name, but as a 'doubtful species' and he wrote: 'there is no such species called *P. punctatus*'. (2) This species was described from a single specimen, for which Anderson (1871: 28) stated that SVL was 22.9 mm [0.90 inch], and Sclater (1892b: 21) provided the collection number ZSIC 2709. According to Chanda et al. (2000), this specimen

is now lost. The description of the tympanum (being only one third of the eye), of the webbing (the toes being less than one-third webbed) and especially of the coloration (dark brown axilla, groin and back of thigh) clearly point to a specimen of *Philautus tinniens*. Furthermore, Anderson (1871: 28) stated that his description was 'drawn up from a frog in the Museum labelled '*I. tinniens*', Jerdon, from the Nilgiris', 'Collected by Mr. Theobald', and he compared this specimen with Jerdon's (1853) short description. For all these reasons, we consider these two names as synonyms. Designation of the same specimen as neotype of both nominal species makes the latter objective synonyms, which will avoid further problems regarding their nomenclatural status.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) tinniens* (Jerdon, 1853).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N33. *Ixalus lateralis* Anderson, 1871

**Original name.** *Ixalus lateralis* Anderson, 1871: 29.

**Name-bearing type.** Holotype by monotypy, ZSIC 10967 (Sclater, 1892b: 33), SVL 27.5 mm ['1 inch 1/12'] (Anderson, 1871: 29), probably lost (not found by Chanda et al., 2000).

**Type-locality.** Unknown, but probably in northern Myanmar or western Yunnan (China), according to Anderson (1879: 844).

**Current status of specific name.** Valid name, as *Megophrys lateralis* (Anderson, 1871) (Dubois & Ohler, 1998: 14).

**Current generic and infrageneric allocation.** Subgenus *Xenophrys* Günther, 1864 of the genus *Megophrys* Kuhl & Van Hasselt, 1822 (Dubois & Ohler, 1998: 14).

**Status of taxon.** Pelobatidae, Megophryinae: *Megophrys (Xenophrys) lateralis* (Anderson, 1871).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Megophrys*.

N34. *Ixalus pictus* Peters, 1871

**Original name.** *Ixalus pictus* Peters, 1871: 580.

**Name-bearing type.** Holotype by monotypy, MSNG 10062 (Capocaccia, 1957: 217), SVL 32 mm (Peters, 1871: 580), figured in Peters (1872: pl. 6 fig. 2).

**Type-locality.** Sarawak [Borneo], Malaysia.

**Current status of specific name.** Valid name, as *Nyctixalus pictus pictus* (Peters, 1871) (Brown & Alcalá, 1994: 187).

**Current generic and infrageneric allocation.** Genus *Nyctixalus* Boulenger, 1882 (Dubois, 1981: 257).

**Status of taxon.** Ranidae, Rhacophorinae: *Nyctixalus pictus pictus* (Peters, 1871).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Nyctixalus*.

N35. *Ixalus fimbriatus* Günther, 1872

**Original name.** *Ixalus fimbriatus* Günther, 1872a: 87.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.31.29 [ex 1871.12.14.38] (Dutta & Manamendra-Arachchi, 1996: 183; Dutta, 1997: 99; FB, personal observation), adult female (Boulenger, 1882a: 83), SVL 32 mm (Günther, 1872a: 87).

**Type-locality.** Central Sri Lanka, probably in the neighbourhood of Peradenyia (07°16'N, 80°37'E), Sri Lanka.

**Current status of specific name.** Invalid name, junior subjective synonym (Dutta & Manamendra-Arachchi, 1996: 183; Dutta, 1997: 99) of *Polypedates cavirostris* Günther, 1869.

**Current generic and infrageneric allocation.** Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 183; Dutta, 1997: 99).

**Proposed generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Kirtixalus) cavirostris* (Günther, 1869).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N36. *Ixalus adspersus* Günther, 1872

**Original name.** *Ixalus adspersus* Günther, 1872a: 87.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.6.23 [ex BMNH 1871.12.14.36] (Dutta, 1997: 73); adult male (Boulenger, 1882a: 105), SVL 34 mm (Günther, 1872a: 88) (see Fig. 10 below).

**Type-locality.** Central Sri Lanka, probably in the neighbourhood of Peradenyia (07°16'N, 80°37'E), Sri Lanka.

**Current status of specific name.** Valid name, as *Philautus adspersus* (Günther, 1872) (Dutta, 1997: 73).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 73).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** Without explanation, Inger (in Frost, 1985: 526) resurrected this name from the synonymy of *Philautus variabilis* (Günther, 1859) where it had been placed by Kirtisinghe (1957: 74) and Inger et al. (1984: 556). Dutta & Manamendra-Arachchi (1996) did not include this name in their review of the amphibians of Sri Lanka. Dutta (1997: 73) tentatively considered it as a valid species. Pending further studies, we follow this proposal.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) adspersus* (Günther, 1872).



**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N37. *Ixalus oxyrhynchus* Günther, 1872

**Original name.** *Ixalus oxyrhynchus* Günther, 1872a: 88.

**Name-bearing type.** Syntypes, BMNH 1947.2.6.39–40 [ex BMNH 1871.12.14.25] (FB, personal observation), 2 adult females (Boulenger, 1882a: 98), SVL of larger 24 mm (Günther, 1872a: 88).

**Type-locality.** Central Sri Lanka, probably in the neighbourhood of Peradenyia (07°16'N, 80°37'E), Sri Lanka.

**Current status of specific name.** Invalid name, junior subjective synonym (Kirtisinghe, 1957: 69; Gorham, 1974: 166; Dutta, 1997: 82) of *Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856.

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 82).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** Dutta & Manamendra-Arachchi (1996) did not include this name in their review of the amphibians of Sri Lanka.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N38. *Ixalus pulchellus* Günther, 1872

**Original name.** *Ixalus pulchellus* Günther, 1872a: 88.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.26.90 [ex BMNH 1871.12.16.7] (Dutta, 1997: 78; FB, personal observations), adult female (Boulenger, 1882a: 101), SVL 23 mm (Günther, 1872a: 88).

**Type-locality.** Central Sri Lanka, probably in the neighbourhood of Peradenyia (07°16'N, 80°37'E), Sri Lanka.

**Current status of specific name.** Invalid name, junior subjective synonym (Boulenger, 1882a: 101; Ahl, 1931: 73; Dutta & Manamendra-Arachchi, 1996: 142; Dutta, 1997: 78) of *Ixalus femoralis* Günther, 1864.

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 142; Dutta, 1997: 78).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *femoralis* (Günther, 1864).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N39. *Polypedates jerdonii* Günther, 1876

**Original name.** *Polypedates jerdonii* Günther, 1876a: 571; nec *Ixalus jerdonii* Günther, 1876a: 575.

**Name-bearing type.** Lectotype, by subsequent designation of Dubois (1987a: 73), BMNH 1947.2.7.84 [ex BMNH 1872.4.17.189], sex, stage and SVL not stated.

**Type-locality.** Darjeeling (27°02'N, 88°16'E), West Bengal, India.

**Current status of specific name.** Valid name, as *Philautus jerdonii* (Günther, 1876) (Dubois, 1987a: 73) or *Rhacophorus jerdonii* (Günther, 1876) (Dutta, 1997: 101).

**Current generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 73) or genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta, 1997: 107).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** The generic allocation of this species and of the related *Rhacophorus dubius* Boulenger, 1882 and *Rhacophorus microdiscus* Annandale, 1912 (see below) is highly doubtful. Dubois (1987a: 73) referred them to the subgenus *Kirtixalus* because of their morphological similarity with *Polypedates microtypanum*, but it is not yet known whether they have a direct development (as is known for the latter species) or a free tadpole stage (as hypothesized above for *Rhacophorus variabilis*, that we here removed from *Kirtixalus*). Pending more studies on these three species, we here maintain them provisionally in the genus *Philautus*, mostly on account of the large unpigmented eggs reported by Dubois (1987a: 73) in the female holotype of *R. dubius*, that strongly suggest that this species might have a direct development, but in the nominotypical subgenus, as it is not clear whether these north Indian species are closely related to the Sri Lankan ones.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *jerdonii* (Günther, 1876).

**Generic allocation status.** Category B: taxonomic transfer from *Polypedates* to *Philautus*.

N40. *Ixalus montanus* Günther, 1876

**Original name.** *Ixalus montanus* Günther, 1876a: 574; nec *Philautus montanus* Taylor, 1920: 305; nec *Philautus montanus* Rao, 1937: 415.

**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.6.14 [ex BMNH 1872.4.14.304], figured in Günther (1876a: pl. 66 fig. A), adult female, SVL 33.1 mm (see description D11 below).

**Type-locality.** Kudremukh (13°08'N, 75°16'E; 1829 m) ['Kudra Mukh, 6000 ft'], Karnataka, India.

**Current status of specific name.** Invalid name, junior subjective synonym (Boulenger, 1882a: 103; Gorham, 1974: 166; Dutta, 1997: 79) of *Ixalus glandulosus* Jerdon, 1853.

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 79).

*Proposed status of specific name.* Invalid name, junior subjective synonym of *Phyllomedusa tinniens* Jerdon, 1853.

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* The syntypes, the original number of which is unknown (Günther, 1876a: 574), comprised at least 3 specimens ('*n-p*', SVL of largest 38 mm), but possibly much more ('*q*') (Boulenger, 1882a: 103). Three specimens are currently available in the London collection, under numbers BMNH 1947.2.6.13–15 [ex BMNH 1872.4.14.303–305]. In order to avoid future nomenclatural problems (in particular if other syntypes were rediscovered), we hereby designate as lectotype of this nominal species the specimen figured in Günther (1876a). Our reasons for using the name *Philautus tinniens* as the valid name of this species are given above under the latter name. The populations of this species from the Nilgiris and Kudremukh show significant morphological differences, whose taxonomic significance is unclear (FB, unpublished morphometric data).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) tinniens* (Jerdon, 1853).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

#### N41. *Ixalus diplostictus* Günther, 1876

*Original name.* *Ixalus diplostictus* Günther, 1876a: 574.

*Name-bearing type.* Syntypes, 4 specimens ('*a-d*', Boulenger, 1882a: 58), original numbers BMNH 1874.4.29.1412–1415, of which 3 are still available in London: BMNH 1947.2.3.21–23 [ex BMNH 1874.4.29.1412–1414], SVL of largest 27.1 mm (Dubois & Ohler, unpublished data).

*Type-locality.* 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E), Kerala, India.

*Current status of specific name.* Valid name, as *Indirana diplosticta* (Günther, 1876) (Dutta, 1997: 122).

*Current generic and infrageneric allocation.* Genus *Indirana* Laurent, 1986 (Dutta, 1997: 122).

*Status of taxon.* Ranidae, Ranixalinae: *Indirana diplosticta* (Günther, 1876).

*Generic allocation status.* Category C: taxonomic transfer from *Ixalus* to *Indirana*.

#### N42. *Ixalus chalazodes* Günther, 1876

*Original name.* *Ixalus chalazodes* Günther, 1876a: 574.

*Name-bearing type.* Holotype by monotypy, BMNH

1947.2.6.35 [ex BMNH 1874.4.29.267] (Dutta, 1997: 75; FB, personal observations), adult female, SVL 26 mm (Günther, 1876a: 575).

*Type-locality.* 'Travancore', now approximately Western Ghats south of Palghat (10°46'N, 76°39'E), Kerala, India.

*Current status of specific name.* Valid name, as *Philautus chalazodes* (Günther, 1876) (Dutta, 1997: 75).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 75).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* We suggest that this name may be a synonym of *Ixalus beddomii* Günther, 1876. In case of confirmation of this synonymy, we hereby act as first revisers by affording priority to the name *Ixalus beddomii* over *Ixalus chalazodes*, because only the former of these names is based on a name-bearing type from a precise type-locality (see below).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) chalazodes* (Günther, 1876).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

#### N43. *Ixalus jerdonii* Günther, 1876

*Original name.* *Ixalus jerdonii* Günther, 1876a: 575; nec *Polypedates jerdonii* Günther, 1876a: 571.

*Name-bearing type.* Holotype by monotypy, BMNH 1947.2.7.86 [ex BMNH 1872.4.17.172], adult female, SVL 44.5 mm (Dubois, 1987a: 73).

*Type-locality.* Doubtful, according to Günther (1876a: 575): either (1) Darjeeling (27°02'N, 88°16'E), West Bengal, India; or (2) Khasi Hills ['Khasis'], Meghalaya, India.

*Current status of specific name.* Invalid name, junior secondary homonym of *Polypedates jerdonii* Günther, 1876, following the first reviser action of Boulenger (1882a: 81), and invalid senior objective synonym of *Rhacophorus dubius* Boulenger, 1882 (Dutta, 1997: 100).

*Current generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 73) or genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta, 1997: 100).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) In the hand-written catalogue of the London Museum, the origin of the holotype is stated to be 'Darjeeling'. (2) For the generic and subgeneric allocation of this species, see above under *Polypedates jerdonii* Günther, 1876.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) dubius* (Boulenger, 1882).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N44. *Ixalus beddomii* Günther, 1876

*Original name.* *Ixalus beddomii* Günther, 1876a: 575.

*Name-bearing type.* Syntypes, original number unknown, including BMNH *cru* (Boulenger, 1882a: 102), SVL (presumably of largest) 23 mm, and NMW 22884 (Dutta, 1997: 74), sex, stage and SVL not stated.

*Type-locality.* 'Malabar' (Günther, 1876a: 575), corrected by Boulenger (1882a: 102) to Athirimalla (1219 m), Agasthyamala Hills, Thiruvananthapuram District (80°30'–44'N, 77°05'–18'N) ['Atray Mallay, Travancore, 4000 ft'], Kerala, India.

*Current status of specific name.* Valid name, as *Philautus beddomii* (Günther, 1876) (Dutta, 1997: 74).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 74).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) Under the 1985 *Code*, the mention by Dutta (1997: 74) that the specimen NMW 22884 is the 'type' of this species was a clear designation of lectotype for the latter. This is not the case any more under the 1999 edition of the *Code*, as Günther (1876a: 575) had clearly mentioned that the original description was based on 'Several specimens', and Boulenger (1882a: 102) had mentioned 'Many spec.' as 'Types' in the London Museum collection. (2) Boulenger (1882a) did not explain the reason for his type-locality correction, which is significant, since 'Atray Mallay' was stated to be in Travancore and not in Malabar; Indraneil Das (personal communication, 11 September 2000) found the current name and coordinates of this locality, which are provided above.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) beddomii* (Günther, 1876).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N45. *Ixalus stictomerus* Günther, 1876

*Original name.* *Ixalus stictomerus* Günther, 1876a: 575.

*Name-bearing type.* Holotype by monotypy, BMNH 1947.2.8.54 [ex BMNH 1874.4.29.51] (Dutta & Manamendra-Arachchi, 1996: 165; Dutta, 1997: 86; FB, personal observations), figured in Dutta & Manamendra-Arachchi (1996: 164), adult female, SVL 34 mm (Günther, 1876a: 576).

*Type-locality.* Sri Lanka ['Ceylon'].

*Current status of specific name.* Valid name, as *Philautus stictomerus* (Günther, 1876) (Dutta & Manamendra-Arachchi, 1996: 163; Dutta, 1997: 86).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 163; Dutta, 1997: 74).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) stictomerus* (Günther, 1876).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N46. *Ixalus fergusonii* Günther, 1876

*Original name.* *Ixalus fergusonii* Günther, 1876b: 379; nec *Rhacophorus fergusonii* Boulenger, 1882a: 82.

*Name-bearing type.* Lectotype, by present designation, BMNH 1947.2.26.91 [ex 1876.3.21.39], (sub)adult female, SVL 24.1 mm (see description D12 below).

*Type-locality.* Sri Lanka ['Ceylon'].

*Current status of specific name.* Invalid name, junior subjective synonym (Boulenger, 1882a: 101; Ahl, 1931: 73; Dutta & Manamendra-Arachchi, 1996: 142; Dutta, 1997: 78) of *Ixalus femoralis* Günther, 1864.

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 142; Dutta, 1997: 78).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* In the original description of this species, Günther (1876b: 380) stated in full words that this was based on two specimens only (SVL of largest 26 mm), which are therefore the only syntypes of the species. However, Boulenger (1882a: 101) and Dutta (1997: 78) considered 3 specimens as types. These 3 specimens are still in the London Museum, under numbers BMNH 1947.2.26.91–93 [ex 1876.3.21.39]. Probably the smallest of these specimens, listed by Boulenger (1882a: 101) as 'yg.', was not considered by Günther (1876a) when he wrote his description, and is not a syntype. In order to avoid any future problem, we hereby designate as lectotype of this nominal species one of the other two specimens.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) femoralis* (Günther, 1864).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N47. *Ixalus hypomelas* Günther, 1876

*Original name.* *Ixalus hypomelas* Günther, 1876b: 380.

*Name-bearing type.* Syntypes, original number unknown, including BMNH 1947.2.7.47–57 and BMNH 1947.2.27.8–10 [ex BMNH 1874.4.29.552–555, BMNH 1874.4.29.563–568 and BMNH 1876.3.21.31–33].

*Type-locality.* Sri Lanka ['Ceylon'].

*Current status of specific name.* Valid name, as *Philautus hypomelas* (Günther, 1876) (Dutta & Manamendra-Arachchi, 1996: 145; Dutta, 1997: 80).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 145; Dutta, 1997: 80).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) Long considered invalid (Kirtisinghe, 1957: 69; Gorham, 1974: 166) as a subjective junior synonym of *Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856, this name was resurrected by Dutta & Manamendra-Arachchi (1996: 145) for a species endemic to Sri Lanka. The original number of syntypes is unknown (Günther, 1876b: 380; Boulenger, 1882a: 97), but the London Museum collection still has 14 specimens, listed above. The specimen BMNH 1947.2.27.8 [ex BMNH 1876.3.21.31], figured in Dutta & Manamendra-Arachchi (1996: 146), a female (SVL 21.1 mm), is now in a terrible condition (it has lost part of its right leg, and the left leg is attached only by a single muscle fibre), and would not be a good choice for a lectotype designation. All syntypes of the BMNH series are clearly conspecific and we postpone designation among them of a lectotype and its description until the end of our ongoing work on this group of *Philautus*. (2) Given their morphology, the Indian tadpoles described under this name by Rao (1937: 422) clearly belong to the ranixaline genus *Nyctibatrachus*, not to this species.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) hypomelas* (Günther, 1876).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N48. *Ixalus kakhienensis* Anderson, 1879**

*Original name.* *Ixalus kakhienensis* Anderson, 1879: 845.

*Name-bearing type.* Holotype by monotypy, ZSIC *cnu*, SVL 23.6 mm ['0.93 inch'] (Anderson, 1879: 845), probably lost (not listed by Sclater, 1892b or Dutta, 1997; not found by Chanda et al., 2000).

*Type-locality.* Fields in the Nampaung ['Nampoung'] valley, near Nampaung (25°10'N, 97°24'E), Kakhyen Hills, Kachin, Myanmar ['border between Burma and Yunnan'].

*Current status of specific name.* Invalid name, junior subjective synonym (Boulenger, 1890: 462, 1920b: 217) of *Polypedates marmoratus* Blyth, 1855 (for the valid name of this species, see Dubois, 1992: 321, 340).

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Amolops* Cope, 1865 (Dubois, 1992: 321, 340).

*Status of taxon.* Ranidae, Raninae: *Amolops (Amolops) marmoratus* (Blyth, 1855).

*Generic allocation status.* Category C: taxonomic transfer from *Ixalus* to *Amolops*.

**N49. *Ixalus tuberculatus* Anderson, 1879**

*Original name.* *Ixalus tuberculatus* Anderson, 1879: 845;

nec *Polypedates tuberculatus* Anderson, 1871: 26.

*Name-bearing type.* Holotype by monotypy, ZSIC *cnu*, sex and stage not stated, SVL 20.3 mm ['0.80 inch'] (Anderson, 1879: 846), probably lost (not listed by Sclater, 1892b or Dutta, 1997; not found by Chanda et al., 2000).

*Type-locality.* Marshy flats on the banks of the Nampaung ['Nampoung'] river, near Nampaung (25°10'N, 97°24'E), Kakhyen Hills, Kachin, Myanmar ['border between Burma and Yunnan'].

*Current status of specific name.* Invalid name, once junior secondary homonym of *Polypedates tuberculatus* Anderson, 1871, according to Ahl (1927b), and therefore invalid senior objective synonym of *Rhacophorus andersoni* Ahl, 1927, according to Article 59.b of the 1985 edition of the *Code* (Inger in Frost, 1985: 526; Dutta, 1997: 73).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 73); *Philautus albopunctatus* group (Fei, 1999: 382).

*Proposed status of specific name.* Valid name, as *Philautus tuberculatus* (Anderson, 1879).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) Dutta (1992: 9–10) listed both *Philautus tuberculatus* and *Philautus andersonii* as valid species. This mistake was corrected in Dutta (1997: 73), where only the latter species was recognized as valid. (2) Under the 1999 edition of the *Code*, use for this species of Ahl's (1931) replacement name *Rhacophorus andersoni* is not warranted, for reasons explained above in the 'Introduction'.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) tuberculatus* (Anderson, 1879).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N50. *Rhacophorus dubius* Boulenger, 1882**

*Original name.* *Rhacophorus dubius* Boulenger, 1882a: 81, nomen novum pro *Ixalus jerdonii* Günther, 1876a: 575.

*Name-bearing type.* Same as for *Ixalus jerdonii* Günther, 1876.

*Type-locality.* Same as for *Ixalus jerdonii* Günther, 1876.

*Current status of specific name.* Valid name, junior objective synonym of *Ixalus jerdonii* Günther, 1876; valid name, as *Philautus dubius* (Dubois, 1987a: 73) or *Rhacophorus dubius* Boulenger, 1882 (Dutta, 1997: 100).

*Current generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 73) or genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta, 1997: 100).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** For the generic and subgeneric allocation of this species, see above under *Polypedates jerdonii* Günther, 1876.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *dubius* (Boulenger, 1882).

**Generic allocation status.** Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N51. ***Rhacophorus fergusonii*** Boulenger, 1882

**Original name.** *Rhacophorus fergusonii* Boulenger, 1882a: 82; nec *Ixalus fergusonii* Günther, 1876b: 379.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.27.61 [ex BMNH 1876.3.21.34] (FB, personal observations), female, SVL 45 mm (Boulenger, 1882a: 82).

**Type-locality.** Sri Lanka ['Ceylon'].

**Current status of specific name.** Invalid name, once junior secondary homonym of *Ixalus fergusonii* Günther, 1876, according to Ahl (1927b), and therefore invalid senior objective synonym of *Rhacophorus fergusonianus* Ahl, 1927, according to Article 59.b of the 1985 edition of the *Code* (Dutta & Manamendra-Arachchi, 1996: 189; Dutta, 1997: 100).

**Current generic and infrageneric allocation.** Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 186; Dutta, 1997: 100).

**Proposed generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

**Comments.** Under the 1999 edition of the *Code*, use for this species of Ahl's (1927b) replacement name *Rhacophorus fergusonianus* would not be warranted if the nominal species *Ixalus fergusonii* Günther, 1876 and *Rhacophorus fergusonii* Boulenger, 1882 were now placed in different genera. This might be the case in the future if *Kirtixalus* is considered as a genus distinct from *Philautus*, which is quite likely, but for the time being both nominal species are placed in the genus *Philautus*. A further complication is added by the fact that *Ixalus fergusonii* Günther, 1876 has been considered a subjective synonym of *Ixalus femoralis* Günther, 1864 since the work of Boulenger (1882a), i.e. before resurrection by Stejneger (1905) of the generic name *Philautus*, so that the combination *Philautus fergusonii* (Günther, 1876) has actually never been used in the literature. However, this is a case of 'virtual secondary generic combination', as defined by Dubois (1995: 64–65), and therefore of 'virtual secondary homonymy'. For the reasons explained in detail in the latter work we consider that this name preoccupies the use of the epithet *fergusonii* in the genus *Philautus*. As long as the nominal species *Rhacophorus fergusonii* Boulenger, 1882 is maintained in this genus, it should bear the name *Philautus fergusonianus* (Ahl, 1927), but not if

it is transferred to another genus.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Kirtixalus*) *fergusonianus* (Ahl, 1927).

**Generic allocation status.** Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N52. ***Ixalus fuscus*** Boulenger, 1882

**Original name.** *Ixalus fuscus* Boulenger, 1882a: 96.

**Name-bearing type.** Syntypes, original number unknown (Boulenger, 1882a: 96), including BMNH 1872.4.12.256, 1874.4.29.258–265, 1874.4.29.927–930, 1874.4.29.1401–1404, 1874.4.29.1459–1464 and 1874.4.29.1506–1508 (Dutta in Frost, 1985: 461), SVL (of largest?) 32 mm (Boulenger, 1882a: 96).

**Type-locality.** Southern India: (1) 'Travancore', now approximately Western Ghats south of Palghat (10°46'N, 76°39'E), Kerala; (2) 'Torocata' (?); (3) Anaimala Hills ['Anamallays'] (10°35'N, 76°56'E), Kerala and Tamil Nadu; (4) Sivagiri ['Sevagherry'] (09°20'N, 77°26'E), Kerala; (5) 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E); (6) Uttar Kanara District ['North Canara'], Karnataka.

**Current status of specific name.** Valid name, as *Micrixalus fuscus* (Boulenger, 1882) (Dutta, 1997: 139).

**Current generic and infrageneric allocation.** Genus *Micrixalus* Boulenger, 1888 (Dubois, 1987a: 51–55; Dutta, 1997: 140).

**Status of taxon.** Ranidae, Raninae: *Micrixalus fuscus* (Boulenger, 1882).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Micrixalus*.

N53. ***Ixalus flaviventris*** Boulenger, 1882

**Original name.** *Ixalus flaviventris* Boulenger, 1882a: 105.

**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.26.98 [ex BMNH 1874.4.29.1202], figured in Boulenger (1882a: pl. 11 fig. 1b), adult male, SVL 29.4 mm (see description D13 below).

**Type-locality.** 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E), India.

**Current status of specific name.** Valid name, as *Philautus flaviventris* (Boulenger, 1882) (Dutta, 1997: 79).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 79).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** (1) The syntypes of this species consisted of 'many spec., a–b, c, d, e' collected by Beddome in Malabar (Boulenger, 1882a: 106). We examined the syntypes still present in the London collection. This series appears heterogeneous and seems to be

composed of four different subseries, which bear different original collection numbers (see also Dutta, 1997: 79): BMNH 1947.2.27.2–7 [ex BMNH 1874.4.29.476–481], 1947.2.26.94 [ex BMNH 1874.4.29.498], 1947.2.27.1 [ex BMNH 1874.4.29.527] and BMNH 1947.2.26.98–99 [ex BMNH 1874.4.29.1202–1203]. These subseries may have been collected in different localities and/or at different dates. Even within the first series, some heterogeneity is evident. In order to stabilize the nomenclatural status of this name, we designate as lectotype of *Ixalus flaviventris* Boulenger, 1882 the specimen from this series which had been figured by Boulenger (1882a). (2) We suggest that this species, as redefined by the lectotype designation above, might be conspecific with *Ixalus signatus* Boulenger, 1882 (see below).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *flaviventris* (Boulenger, 1882).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N54. *Ixalus signatus* Boulenger, 1882**

**Original name.** *Ixalus signatus* Boulenger, 1882a: 106.

**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.27.36 [ex BMNH 1868.4.3.120], figured in Boulenger (1882a: pl. 11 fig. 2), adult male, SVL 31.5 mm (see description D14 below).

**Type-locality.** Restricted by lectotype designation to Nilgiri Hills (11°24'N, 76°42'E), Tamil Nadu, India.

**Current status of specific name.** Valid name, as *Philautus signatus* (Boulenger, 1882) (Dutta, 1997: 86).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 86).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** (1) According to Boulenger (1882a: 106), the syntypes of this species had two different origins: (a) 'a. Several spec., — ?, collected by W. Theobald': eight specimens are still present in the London Museum under the numbers BMNH 1947.2.27.35–42 [ex BMNH 1868.4.3.119–125, only seven original numbers]; (b) 'b, c – male and female, Malabar, collected by Beddome': these two specimens are also present in London, under the numbers BMNH 1947.2.24.33–34 [ex BMNH 1874.4.29.525–526]. In the London Museum catalogue, other specimens, i.e. BMNH 1874.4.29.471 and 1874.4.29.511–514, also from Malabar and collected by Beddome, bear the mention '? type', but cannot be syntypes, as the original description only mentioned a male and a female (listed above) from Beddome's collection from Malabar. The syntypes are thus heterogeneous in origin, and in order to definitely stabilize the status

of this name we designate as lectotype of *Ixalus signatus* Boulenger, 1882 the specimen from this series which had been figured by Boulenger (1882a). According to the London Museum catalogue, this specimen was collected by Theobald. Careful examination of the book of Boulenger (1882a) shows that all Indian species collected by Theobald were collected from the 'Nilgherries'. Moreover, five specimens kept in the London collection under the name *Philautus glandulosus* and stated there to be from the 'Nilgherries' bear the numbers BMNH 1868.4.3.114–118, which precede the ancient numbers (BMNH 1868.4.3.119–125) of some of the syntypes of *Ixalus signatus*, including the figured lectotype. We therefore consider that the lectotype designation also results in a restriction of the type-locality to the Nilgiri Hills. This species appears to be common in these mountains, since several specimens are available in the London and Paris Museums collections (BMNH 1920.11.4.1–2, Coonoor; MNHN 1985.481–486, Udhagamangalam). (2) In case this nominal species would prove to be conspecific with *Ixalus flaviventris* Boulenger, 1882, as suggested above, we hereby act as first revisers by affording priority among them to the name *Ixalus signatus* Boulenger, 1882, because this name is based on a name-bearing type from a more precise type-locality than *Ixalus flaviventris*.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *signatus* (Boulenger, 1882).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N55. *Ixalus silvaticus* Boulenger, 1882**

**Original name.** *Ixalus silvaticus* Boulenger, 1882a: 469.

**Name-bearing type.** Syntypes, original number unknown (Boulenger, 1882a: 469), including BMNH 1882.2.10.52–59 (Dutta in Frost, 1985: 462; FB, personal observations) and NMW 22913 (Häupl et al., 1994: 27), SVL (of largest?) 27 mm (Boulenger, 1882a: 469).

**Type-locality.** 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E), India.

**Current status of specific name.** Valid name, as *Micrixalus silvaticus* (Boulenger, 1882) (Dutta, 1992: 7).

**Current generic and infrageneric allocation.** Genus *Micrixalus* Boulenger, 1888 (Dubois, 1987a: 51–55; Dutta, 1997: 140).

**Status of taxon.** Ranidae, Raninae: *Micrixalus silvaticus* (Boulenger, 1882).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Micrixalus*.

N56. *Ixalus pulcher* Boulenger, 1882  
*Original name.* *Ixalus pulcher* Boulenger, 1882a: 469; nec *Rhacophorus pulcher* Boulenger, 1882a: 467.

*Name-bearing type.* Lectotype, by present designation, BMNH 1947.2.27.22 [ex BMNH 1882.2.10.39], adult male, SVL 22.3 mm (see description D15 below).

*Type-locality.* Manantavadi (11°49'N, 76°01'E) ['Manantoddy'], Kerala, India.

*Current status of specific name.* Invalid name, once junior secondary homonym of *Rhacophorus pulcher* Boulenger, 1882, according to Ahl (1927b), and therefore invalid senior objective synonym of *Rhacophorus pulcherrimus* Ahl, 1927, according to Article 59.b of the 1985 edition of the *Code* (Inger in Frost, 1985: 531; Dutta, 1997: 85).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 85).

*Proposed status of specific name.* Invalid name, junior objective synonym of *Ixalus glandulosus* Jerdon, 1853.

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* The original number of syntypes is unknown, but the maximum SVL was stated to be 23 mm (Boulenger, 1882a: 470). In the London Museum collection, 12 specimens are kept as syntypes, under the numbers BMNH 1947.2.27.21–32 [ex BMNH 82.2.10.38–49]. The designation of the lectotype of this nominal species as neotype of *Ixalus glandulosus* Jerdon, 1853 (see above) stabilizes definitely the nomenclature of this group as it links both names (and also *Rhacophorus pulcherrimus* Ahl, 1927) by an objective synonymy and provides a precise type-locality for the latter.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *glandulosus* (Jerdon, 1853).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N57. *Nyctixalus margaritifer* Boulenger, 1882  
*Original name.* *Nyctixalus margaritifer* Boulenger, 1882b: 35.

*Name-bearing type.* Neotype by designation of Dubois (1981: 257), BMNH 1885.12.31.35, adult male, SVL not stated.

*Type-locality.* Emended by neotype designation to Gunung Willis ['Willis Mountains'] (07°52'S, 111°48'E), Jawa Timur [East Java], Java, Indonesia.

*Current status of specific name.* Valid name, as *Nyctixalus pictus margaritifer* Boulenger, 1882 (Dubois, 1981: 257).

*Current generic and infrageneric allocation.* Genus *Nyctixalus* Boulenger, 1882 (Dubois, 1981: 257).

*Comments.* (1) Dubois (1981: 255–257) provided a detailed historical account of this name. This species

was described on the basis of a single specimen (IRSNB *cnu*, adult male, SVL 35 mm), which was therefore its holotype by monotypy, and which had been 'purchased as being from the East Indies' (Boulenger, 1882b). According to Smith (1931: 19) and de Fonseca (in Dubois, 1981: 257), this specimen is now lost. Dubois (1981: 257) designated as neotype a specimen which had been identified by Boulenger (1886: 412) himself, and examined by Smith (1931: 19) and Inger (1966: 350). Through this neotype designation, the species now has a precise type-locality. (2) The genus *Nyctixalus* was erected by Boulenger (1882b) for this nominal species, but synonymized with *Philautus* by Smith (1931: 19). Liem (1970: 96) removed a group including this nominal species from *Philautus* and placed these species in the genus *Hazelia* Taylor, 1920, a genus for which Dubois (1981: 257) showed that the valid name is *Nyctixalus*.

*Status of taxon.* Ranidae, Rhacophorinae: *Nyctixalus pictus margaritifer* Boulenger, 1882.

*Generic allocation status.* Category D: no taxonomic or nomenclatural change; described and maintained in *Nyctixalus*, but with a period in *Philautus*.

N58. *Rana macropus* Boulenger, 1886  
*Original name.* *Rana macropus* Boulenger, 1886: 414, nomen novum pro *Ixalus japonicus* Hallowell, 1861: 501; nec *Ixalus macropus* Günther, 1869: 484.

*Name-bearing type.* Same as for *Ixalus japonicus* Hallowell, 1861.

*Type-locality.* Same as for *Ixalus japonicus* Hallowell, 1861.

*Current status of specific name.* Invalid name, junior objective synonym of *Buergeria japonica* (Hallowell, 1861) (Stejneger, 1907: 155).

*Current generic and infrageneric allocation.* Genus *Buergeria* Tschudi, 1838 (Inger in Frost, 1985: 537).

*Comments.* See above under *Ixalus japonicus* Hallowell, 1861.

*Status of taxon.* Ranidae, Rhacophorinae: *Buergeria japonica* (Hallowell, 1861).

*Generic allocation status.* Category E: taxonomic transfer from *Rana* to *Buergeria*.

N59. *Ixalus asper* Boulenger, 1886  
*Original name.* *Ixalus asper* Boulenger, 1886: 415; nec *Rana aspera* Boulenger, 1882a: 433.

*Name-bearing type.* Syntypes, 2 specimens, BMNH 1947.2.6.18–19 [ex BMNH 1886.4.16.2–3], 1 male and 1 female, respectively (Boulenger, 1886: 415; Dutta, 1997: 109; FB, personal observations), SVL of both 33.2 mm (FB, personal observations).

*Type-locality.* 'Hill Garden', Larut (4°48'N, 100°44'E; 1006 m) ['3300 feet'], Perak [Malaya], Malaysia.

*Current status of specific name.* Valid name, as *Theلودerma*

*asperum* (Boulenger, 1886) (Inger in Frost, 1985: 549) or '*Theلودerma asper*' (Boulenger, 1886) (Dutta, 1997: 109) [incorrect spelling].

**Current generic and infrageneric allocation.** Genus *Theلودerma* Tschudi, 1838 (Dutta, 1997: 109); *Philautus albopunctatus* group (Fei, 1999: 382).

**Comments.** Although Inger (in Frost, 1985: 526) correctly stated that Article 59.b of the then in force 1985 edition of the *Code* required conservation of Ahl's (1927b, 1931) replacement names even when the secondary homonymy which had justified their proposal did not hold any more, he did not apply this rule consistently: thus, he applied it to several species now placed in the genus *Philautus*, but not to *Ixalus asper* Boulenger, 1886, which he listed under the name *Theلودerma asperum* (Boulenger, 1886) (Inger in Frost, 1985: 549). However, for this species also, Ahl (1927b: 37) had proposed a replacement name (*Rhacophorus asperrimus*) because he considered it to be a secondary homonym. At the time of Frost's (1985) checklist, as unjustified as Ahl's actions may have been, they should have been followed in all cases, and this species should have been listed as *Theلودerma asperrimum* (Ahl, 1927). However, as explained above in the '*Introduction*', under the 1999 edition of the *Code*, use for this species of Ahl's replacement name is not warranted any more.

**Status of taxon.** Ranidae, Rhacophorinae: *Theلودerma asperum* (Boulenger, 1886).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Theلودerma*.

**N60. *Ixalus latopalermatus* Boulenger, 1887**

**Original name.** *Ixalus latopalermatus* Boulenger, 1887a: 97.

**Name-bearing type.** Syntypes, 2 specimens, BMNH *cnu*, 1 adult female and 1 juvenile, SVL of female 53 mm (Boulenger, 1887a: 97).

**Type-locality.** Mount Kinabalu ['Mount Kina Baloo'] (6°05'N, 116°33'E), Sabah [Borneo], Malaysia.

**Current status of specific name.** Valid name, as *Stauroids latopalermatus* (Boulenger, 1887) (Dubois, 1992: 334).

**Current generic and infrageneric allocation.** Genus *Stauroids* Cope, 1865 (Dubois, 1992: 334).

**Status of taxon.** Ranidae, Raninae: *Stauroids latopalermatus* (Boulenger, 1887).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Stauroids*.

**N61. *Ixalus vittatus* Boulenger, 1887**

**Original name.** *Ixalus vittatus* Boulenger, 1887b: 421.

**Name-bearing type.** Lectotype, by designation of Capocaccia (1957: 217), MSNG 29397, SVL 25 mm (Boulenger, 1887b: 422).

**Type-locality.** 'Bhamò' (24°15'N, 97°15'E), Myanmar ['Burma'].

**Current status of specific name.** Valid name, as *Chirixalus vittatus* (Boulenger, 1887) (Dutta, 1997: 72).

**Current generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893 (Dutta, 1997: 72).

**Status of taxon.** Ranidae, Rhacophorinae: *Chirixalus vittatus* (Boulenger, 1887).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Chirixalus*.

**N62. *Ixalus sarasinorum* Müller, 1887**

**Original name.** *Ixalus sarasinorum* Müller, 1887: 256.

**Name-bearing type.** Lectotype, by designation of Forcart (1946: 129), NHMB 1217, juvenile, SVL 22.6 mm (Dutta & Manamendra-Arachchi, 1996: 195; Dutta, 1997: 102).

**Type-locality.** Peradenyia ['Peradenia'] (07°16'N, 80°37'E), Sri Lanka.

**Current status of specific name.** Invalid name, junior subjective synonym (Dutta & Manamendra-Arachchi, 1996: 190; Dutta, 1997: 102) of *Ixalus macropus* Günther, 1869.

**Current generic and infrageneric allocation.** Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 190; Dutta, 1997: 102).

**Proposed status of specific name.** Invalid name, junior subjective synonym of *Polypedates nanus* Günther, 1869.

**Proposed generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

**Comments.** Dutta & Manamendra-Arachchi (1996) stated that the lectotype of this species was NHMB 1218 in their page 190, and NHMB 1217 in their page 195: the latter information is correct (see Forcart, 1946: 129).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Kirtixalus) nanus* (Günther, 1869).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N63. *Ixalus granulatus* Boettger, 1888**

**Original name.** *Ixalus granulatus* Boettger, 1888: 57.

**Name-bearing type.** Holotype by monotypy, SMF 7002, juvenile male, SVL 26.8 mm (Ohler, 1996: 1011).

**Type-locality.** Originally Thailand ['Siam'] (Boettger, 1888: 57); corrected to Philippines by Boettger (1892: 16), followed by Mertens (1922, 1967).

**Current status of specific name.** Invalid name, junior subjective synonym (Ohler, 1996: 1011) of *Ixalus natator* Günther, 1859.

**Current generic and infrageneric allocation.** Genus *Stauroids* Cope, 1865 (Dubois, 1992: 334; Ohler, 1996: 1011).

**Status of taxon.** Ranidae, Raninae: *Stauroids natator* (Günther, 1859).



**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Stauroids*.

**N64. *Ixalus nubilus* Mocquard, 1890**

**Original name.** *Ixalus nubilus* Mocquard, 1890: 122, 153.

**Name-bearing type.** Syntypes, MNHN 1889.344–346, 3 specimens (Guibé, 1950: 44), SVL of largest, an adult female, 45 mm (Mocquard, 1890: 153; Guibé, 1950: 44).

**Type-locality.** Palawan (9°30'N, 118°30'E), Philippines.

**Current status of specific name.** Invalid name, junior subjective synonym (Boulenger, 1894: 87; Taylor, 1920: 277; Inger, 1954: 335) of *Ixalus natator* Günther, 1859.

**Current generic and infrageneric allocation.** Genus *Stauroids*, Cope, 1865 (Dubois, 1992: 334).

**Comments.** Guibé (1950: 44) stated that the Paris Museum collection had the 'holotype' (MNHN 1891.98) of '*Ixalus natator* var. *nubilus* Mocquard, 1892', but the latter nominal taxon does not exist and therefore has no type-specimen: Mocquard (1892: 195) clearly proposed this name merely as a new combination of his name *Ixalus nubilus*, for reasons that he explained in detail below in the same paper (Mocquard, 1892: 200–202).

**Status of taxon.** Ranidae, Raninae: *Stauroids natator* (Günther, 1859).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Stauroids*.

**N65. *Ixalus travancoricus* Boulenger, 1891**

**Original name.** *Ixalus travancoricus* Boulenger, 1891: 291.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.6.20 [ex BMNH 1891.7.2.15] (Inger in Frost, 1985; Dutta, 1997: 88), adult female, SVL originally 31 mm (Boulenger, 1891: 291), now 29.8 mm (FB, personal observations).

**Type-locality.** Bodinayakanur (10°01'N, 77°21'E) ['Bodanaikanur, Travancore, at the foot of the hills on the eastern side'], Tamil Nadu, India.

**Current status of specific name.** Valid name, as *Philautus travancoricus* (Boulenger, 1891) (Dutta, 1997: 88).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 88).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) travancoricus* (Boulenger, 1891).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N66. *Ixalus schmackeri* Boettger, 1892**

**Original name.** *Ixalus schmackeri* Boettger, 1892: vi, 17.

**Name-bearing type.** Holotype by monotypy, SMF 7035

[ex SMF 1099.a] (Boettger, 1892: 17; Brown & Alcalá, 1994: 218), adult, sex not stated, SVL 18.5 mm (Boettger, 1892: 17).

**Type-locality.** Mount Halcon (13°16'N, 121°00'E) ['Mt. Halcone'], Mindoro Oriental province, Mindoro, Philippines.

**Current status of specific name.** Valid name, as *Philautus schmackeri* (Boettger, 1892) (Brown & Alcalá, 1994: 195).

**Current generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20; Brown & Alcalá, 1994: 191).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) schmackeri* (Boettger, 1892).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N67. *Ixalus flavosignatus* Boettger, 1893**

**Original name.** *Ixalus flavosignatus* Boettger, 1893: 339.

**Name-bearing type.** Holotype by monotypy, SMF 7036 [ex SMF 1099.1a] (Mertens, 1922: 168, 1967: 47), adult female, SVL 45 mm (Boettger, 1893: 340).

**Type-locality.** 'Vulkan Tjisurupan', Jawa Barat [West-Java], Java, Indonesia.

**Current status of specific name.** Valid name, as *Nyctixalus flavosignatus* (Boettger, 1893) (Dubois, 1981: 257).

**Current generic and infrageneric allocation.** Genus *Nyctixalus* Boulenger, 1882 (Dubois, 1981: 257; Frost, 1985: 539).

**Comments.** Smith (1931: 20) considered this name as a junior subjective synonym of *Nyctixalus margaritifera* Boulenger, 1882, a name that he downgraded to the rank of subspecies of *Philautus pictus* (Peters, 1871). Gorham (1974: 167) included this name in the synonymy of the latter name. Pending a revision of the genus *Nyctixalus*, Liem (1970: 96) and Dubois (1981: 20) provisionally treated this name as a valid name.

**Status of taxon.** Ranidae, Rhacophorinae: *Nyctixalus flavosignatus* (Boettger, 1893).

**Generic allocation status.** Category C: taxonomic transfer from *Ixalus* to *Nyctixalus*.

**N68. *Ixalus carinensis* Boulenger, 1893**

**Original name.** *Ixalus carinensis* Boulenger, 1893: 310, 339.

**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.6.24 [ex BMNH 1893.10.9.25], adult male, SVL 35.6 mm, figured by Boulenger (1893: pl. 10 fig.3) (see description D16 below).

**Type-locality.** Restricted by lectotype designation to Karin Hills (884–1067 m) [2900–3500 ft], Karen, Myanmar ['Burma'].

**Current status of name.** Valid name, as *Philautus carinensis*

(Boulenger, 1893) (Inger in Frost, 1985: 527).  
**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 527).  
**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.  
**Comments.** (1) Boulenger (1893: 339) described this species on the basis of 7 specimens from Burma: 1 from the Karin Hills (2900–3500 ft), 1 from Thao and 5 from Karin Bia-po; he gave a SVL of 38 mm for this species, presumably the size of the largest specimen. In the London Museum, 4 specimens, BMNH 1947.2.6.24–27 [ex BMNH 1893.10.9.25–28], are labelled as types. Capocaccia (1957: 216) reported as ‘metatypes’ 3 specimens in the Genova Museum (MSNG 29852.A) from Thao, of which she stressed that only one (unidentified) could be a syntype. In view of these uncertainties, and in order to stabilize definitively the use of this name, we designate as lectotype of this species the specimen BMNH 1947.2.6.24, which had been figured by Boulenger (1893). (2) Morphologically and by its coloration, this species is quite similar to the species from Sri Lanka and northern India that were provisionally grouped by Dubois (1987a) in the subgenus *Kirtixalus* (AD, personal observations; see above under *Polypedates jerdonii* Günther, 1876).  
**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *carinensis* (Boulenger, 1893).  
**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N69. *Ixalus parvulus* Boulenger, 1893**

**Original name.** *Ixalus parvulus* Boulenger, 1893: 310, 339.  
**Name-bearing type.** Lectotype, by designation of Capocaccia (1957: 217), MSNG 29838.A, adult female, SVL 23.6 mm (see description D17 below).  
**Type-locality.** ‘District of the Karin Bia-po’, Karin Hills, Karen, Myanmar [‘Burma’].  
**Current status of specific name.** Valid name, as *Philautus parvulus* (Boulenger, 1893) (Duellman, 1993: 292).  
**Current generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20).  
**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *parvulus* (Boulenger, 1893).  
**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N70. *Chirixalus doriae* Boulenger, 1893**

**Original name.** *Chirixalus doriae* Boulenger, 1893: 310, 341.  
**Name-bearing type.** Lectotype, by designation of Capocaccia (1957: 217), MSNG 29426.A, sex and SVL not stated.

**Type-locality.** Restricted by lectotype designation to ‘District of the Karin Bia-po’, Karin Hills, Karen, Myanmar [‘Burma’].

**Current status of specific name.** Valid name, as *Chirixalus doriae* Boulenger, 1893.

**Current generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893 (Frost, 1985: 538; Zhao & Adler, 1993: 152).

**Comments.** Cochran (1927: 179), Pope (1931: 582–583), Pope & Boring (1940: 71), Taylor (1962: 522–539) and Gorham (1974: 165–167) considered *Chirixalus* as a synonym of *Philautus*, and therefore transferred this species (its type-species by monotypy) into this latter genus, while other authors, like Bourret (1942: 472–478) and Liem (1970: 94–95), considered *Chirixalus* as a distinct genus. Dubois’s (1987a) concept of the genus *Philautus*, that we adopted here, excludes from this genus all species with a free tadpole stage, including those referred here to *Chirixalus*.

**Status of taxon.** Ranidae, Rhacophorinae: *Chirixalus doriae* Boulenger, 1893.

**Generic allocation status.** Category D: no taxonomic or nomenclatural change; described and maintained in *Chirixalus*, but with a period in *Philautus*.

**N71. *Ixalus longicrus* Boulenger, 1894**

**Original name.** *Ixalus longicrus* Boulenger, 1894: 88; nec *Philautus longicrus* Rao, 1937: 414.

**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.6.29 [ex BMNH 1894.6.30.130], young female, SVL 20.1 mm (see description D18 below).

**Type-locality.** Palawan (9°30’N, 118°30’E), Philippines.

**Current status of specific name.** Valid name, as *Philautus longicrus* (Boulenger, 1894) (Brown & Alcalá, 1994: 193).

**Current generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20; Brown & Alcalá, 1994: 191).

**Comments.** Boulenger (1894: 88) described this species on the basis of 3 specimens, BMNH 1947.2.6.28–30 [ex BMNH 1894.6.30.129–131] (Inger in Frost, 1985: 530) and gave a SVL 21 mm, presumably for the largest. When redescribing the species, Brown & Alcalá (1994: 193) mentioned the existence of ‘syntypes’ in the BMNH, without listing them, but, in their list of specimens examined, they mentioned one ‘cotype’, BMNH 1947.2.6.29. As this specimen was the one used by them for their redefinition and redescription of the species, we hereby designate it as lectotype.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *longicrus* (Boulenger, 1894).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N72. *Rhacophorus hosii* Boulenger, 1895

**Original name.** *Rhacophorus hosii* Boulenger, 1895: 169.  
**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.8.88 [ex BMNH 1895.7.2.21] (Dring, 1987: 21), adult female, SVL 48 mm (Boulenger, 1895: 169).  
**Type-locality.** Patah river ['Pata River'] (2°30'N, 113°30'E), Fourth Division, Sarawak ['North Sarawak'] [Borneo], Malaysia.  
**Current status of specific name.** Valid name, as *Philautus hosii* (Boulenger, 1893) (Duellman, 1993: 290).  
**Current generic and infrageneric allocation.** Subgenus *Gorhixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72), or *Philautus hosei* group (Dring, 1987: 20).  
**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Gorhixalus) hosii* (Boulenger, 1893).  
**Generic allocation status.** Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N73. *Ixalus vittiger* Boulenger, 1897

**Original name.** *Ixalus vittiger* Boulenger, 1897: 106.  
**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.7.58 [ex BMNH 1896.12.3.31] (FB, personal observations), sex and stage not stated, SVL 22 mm (Boulenger, 1897: 106).  
**Type-locality.** Pengalengan (7°10'S, 107°34'E; 1219 m) ['4000 feet'], Jawa Barat [West Java], Java, Indonesia.  
**Current status of specific name.** Valid name, as *Philautus vittiger* (Boulenger, 1897) (Gorham, 1974: 167).  
**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Gorham, 1974: 167).  
**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.  
**Comments.** Without explanation, this name was ignored in the list of Frost (1985).  
**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) vittiger* (Boulenger, 1897).  
**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N74. *Ixalus mindorensis* Boulenger, 1897

**Original name.** *Ixalus mindorensis* Boulenger, 1897: 107.  
**Name-bearing type.** Lectotype, by present designation, BMNH 1947.2.6.31 [ex BMNH 1896.12.11.33], adult female, SVL 30.3 mm (see description D19 below).  
**Type-locality.** Mount Dulangan (12°50'N, 121°05'E; 1524 m) ['5000 feet'], Mindoro Oriental province, Mindoro, Philippines.  
**Current status of specific name.** Invalid name, junior subjective synonym (Inger, 1954: 404; Brown & Alcalá, 1994: 195) of *Ixalus schmackeri* Boettger, 1892.  
**Current generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20; Brown & Alcalá, 1994: 195).

**Comments.** Boulenger (1897: 107) described the species on the basis of 'several' specimens and stated that the SVL, presumably of the largest, was 29 mm. Syntypes have been reported to exist in two collections at least, under numbers BMNH 1947.2.6.31–34 [ex BMNH 1896.12.11.33–37, 5 numbers] (Inger, 1954: 404; Brown & Alcalá, 1994: 195; FB, personal observations) and CAS *cnu* (Inger, 1954: 404; specimen not listed by Brown & Alcalá, 1994). In order to avoid any future uncertainties or confusions regarding the status of this name, we hereby designate the largest of the London specimens as lectotype.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) schmackeri* (Boettger, 1892).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N75. *Ixalus leitensis* Boulenger, 1897

**Original name.** *Ixalus leitensis* Boulenger, 1897: 107.  
**Name-bearing type.** Holotype by monotypy, BMNH 1896.12.11.32 (Brown & Alcalá, 1994: 218), sex and stage not stated, SVL 20 mm (Boulenger, 1897: 107).  
**Type-locality.** Leyte (11°23'N, 124°29'E), Philippines.  
**Current status of specific name.** Valid name, as *Philautus leitensis* (Boulenger, 1897) (Brown & Alcalá, 1994: 192).  
**Current generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20; Brown & Alcalá, 1994: 191).  
**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) leitensis* (Boulenger, 1897).  
**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N76. *Ixalus petersi* Boulenger, 1900

**Original name.** *Ixalus petersi* Boulenger, 1900a: 185.  
**Name-bearing type.** Lectotype, by present designation, BMNH 1895.5.1.41, sex, stage and SVL not stated (Dring, 1987: 41, 47).  
**Type-locality.** Restricted by lectotype designation above to Natuna Besar Island [Great Natuna Island] (4°00'N, 108°15'E), Kepulauan Natuna Besar [North Natuna Archipelago], Indonesia.  
**Current status of specific name.** Valid name, as *Philautus petersi* (Boulenger, 1900) (Dring, 1987: 41).  
**Current generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 32).  
**Comments.** This species was described by Boulenger (1900a: 185) on the basis of several syntypes from four distinct localities of Borneo. The original number of specimens is unknown, but Dring (1987: 41, 45,

47) listed the following syntypes in the London Museum: (1) BMNH 1892.6.3.16, from Mount Dulit (3°00'N, 114°00'E), Fourth Division, Sarawak; (2) BMNH 1895.5.1.41–42 from Great Natuna Island (4°00'N, 108°15'E); (3) BMNH 1899.12.8.10 and 1909.8.18.5 from Mount Penrissen (1219–1372 m) [‘4000–4500 feet’], First Division, Sarawak; (4) BMNH 1947.2.27.19 from Pakka (3048 m) [‘10000 ft.’], Mount Kinabalu (6°05'N, 116°33'E), Sabah. While resurrecting this name from the synonymy of *P. aurifasciatus* where it had been placed by Inger (1966: 341), Dring (1987: 41) pointed to the heterogeneity of the syntypes, and stated that he was [‘basing his] use of the name’ on the syntypes from Mounts Penrissen and Dulit, but he did not formally designate a lectotype for the species. He wrote: ‘The syntypes from Great Natuna (...) are unique in their combination of characters and may represent a distinct species.’ On the other hand, he considered the nominal species *Ixalus larutensis* Boulenger, 1900 and *Ixalus castanomerus* Boulenger, 1905 as subjective synonyms of *Ixalus petersi* Boulenger, 1900. For this species, he used the name *Philautus petersi* (Boulenger, 1900), presumably because he considered it to have been published first, as he wrote in the synonymy of this species that the name *I. petersi* was from March 1900 and the name *I. larutensis* from August 1900, without providing the source of this information (possibly copied from Smith, 1930: 116). Actually, the latter is incorrect, as both names were published in August 1900: the description of *I. petersi* appeared in a paper that was included in the second issue for the year 1900 of the *Proceedings of the Zoological Society of London*, published in August 1900 (Duncan, 1937: 75), while the description of *I. larutensis* was published in the August 1900 issue of the *Annals and Magazine of Natural History*. No published information is available to ascertain the exact dates of publications of these two papers in August 1900. In a list of the publications of Boulenger (Anonymous, 1921), the first paper bears the number 422 and the second the number 435, but close examination of this list shows that publications are not listed there under a strict chronological order, but, within years, by periodicals. In the absence of additional information, both papers must be considered published on 31 August 1900, and the priority of *I. petersi* over *I. larutensis* was fixed by the first reviser action of Smith (1930: 116). Considering all the above information, clarification of the nomenclatural situation requires the designation of a lectotype for *I. petersi*. However, contrary to Dring (1987: 41), we think that this name should not be based on a specimen from Borneo, but on one from the Great Natuna Island: this way, this name would

be available, should the Great Natuna population deserve taxonomic recognition, while the name *I. larutensis* (or its synonym *I. castanomerus*) would become available for the Bornean and Malayan populations (i.e. for the biological species studied in detail by Dring, 1987: 41–43). In the same situation, the other solution (designating as lectotype of *I. petersi* a specimen from either Mounts Penrissen or Dulit) would require to coin a new name for the Great Natuna taxon, while leaving two names in the synonymy of *I. petersi*. We advocate the first solution to this nomenclatural problem for reasons of *nomenclatural parsimony* (Dubois, in preparation). For this reason, we here designate the specimen BMNH 1895.5.1.41 as lectotype of this nominal species. Unfortunately, we are unable to provide here a redescription of this specimen, as both Great Natuna syntypes were unavailable in the London Museum collection during several of our last visits to this institution.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) petersi* (Boulenger, 1900).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N77. *Ixalus larutensis* Boulenger, 1900

*Original name.* *Ixalus larutensis* Boulenger, 1900b: 187.

*Name-bearing type.* Lectotype, by present designation, BMNH 1947.2.6.36 [ex BMNH 1900.6.14.29], adult female, SVL 32.9 mm (see description D20 below).

*Type-locality.* Larut Hills (1219–1524 m) [‘4000 to 4500 feet’], near Larut (4°48'N, 100°44'E), Perak [Malaya], Malaysia.

*Current status of specific name.* Invalid name, junior subjective synonym (Smith, 1930: 116; Dring, 1987: 20, 41) of *Ixalus petersi* Boulenger, 1900.

*Current generic and infrageneric allocation.* *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 32).

*Comments.* (1) Boulenger (1900b: 187) described this species on the basis of ‘several’ specimens and stated that SVL, presumably of the largest, was 35 mm. At least 3 syntypes have been reported to exist in London, under numbers BMNH 1947.2.6.36–38 [ex BMNH 1900.6.14.29–31] (Dring, 1947: 47; FB, personal observations). (2) In case the use of the name *Philautus petersi* (Boulenger, 1900) would have to be restricted to the Great Natuna specimens (see above), the name *Philautus (Philautus) larutensis* would become available for the Malayan and Bornean populations.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) petersi* (Boulenger, 1900).

*Generic allocation status.* Category A1: no taxonomic

change; nomenclatural transfer from *Ixalus* to *Philautus*.

N78. *Ixalus vermiculatus* Boulenger, 1900

*Original name.* *Ixalus vermiculatus* Boulenger, 1900b: 187.

*Name-bearing type.* Lectotype, by present designation, BMNH 1947.2.27.43 [ex BMNH 1900.6.14.32], adult male, SVL 32.0 mm (see description D21 below).

*Type-locality.* Larut Hills (1219 m) ['4000 feet'], near Larut (4°48'N, 100°44'E), Perak [Malaya], Malaysia.

*Current status of specific name.* Valid name, as *Philautus vermiculatus* (Boulenger, 1900) (Dring, 1987: 20).

*Current generic and infrageneric allocation.* *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20).

*Comments.* Under the 1985 *Code*, the mention by Dring (1987: 47), that the specimen BMNH 1947.2.27.43 is the 'holotype' of this species was a clear designation 'by inference of holotype' of lectotype for the latter. This is not the case any more under the 1999 edition of the *Code*, as Boulenger (1900b: 187) had stated that his description was based on 3 specimens. In order to stabilize definitively the nomenclatural status of this name, we hereby designate formally this specimen as lectotype of this species and provide its description.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) vermiculatus* (Boulenger, 1900).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N79. *Ixalus horridus* Boulenger, 1903

*Original name.* *Ixalus horridus* Boulenger, 1903: 139.

*Name-bearing type.* Syntypes, original number unknown, SVL (of largest?) 40 mm (Boulenger, 1903: 140), including BMNH 1947.2.7.97 [ex BMNH 1903.4.13.111], BMNH 1947.2.7.99 [ex BMNH 1903.4.13.112] and BMNH 1947.2.8.1–10 [ex BMNH 1903.4.13.113–122] (larvae).

*Type-locality.* Bukit Besar, Pattani (6°50'N, 101°20'E), Thailand.

*Current status of specific name.* Valid name, as *Theioderma horridum* (Boulenger, 1903) (Liem, 1970: 94; Inger in Frost, 1985: 549).

*Current generic and infrageneric allocation.* Genus *Theioderma* Tschudi, 1838 (Inger in Frost, 1985: 549).

*Status of taxon.* Ranidae, Rhacophorinae: *Theioderma horridum* (Boulenger, 1903).

*Generic allocation status.* Category C: taxonomic transfer from *Ixalus* to *Theioderma*.

N80. *Rhacophorus pleurotaenia* Boulenger, 1904

*Original name.* *Rhacophorus pleurotaenia* Boulenger, 1904: 430.

*Name-bearing type.* Holotype by monotypy, BMNH 1947.2.7.64 [ex BMNH 1903.9.26.49] (Dutta & Manamendra-Arachchi, 1996: 196; Dutta, 1997: 107; FB, personal observations), figured in Dutta & Manamendra-Arachchi (1996: 197), juvenile female, SVL 27 mm (Boulenger, 1904: 431).

*Type-locality.* 'Kandy' (7°17'N, 80°40'E), Sri Lanka.

*Current status of specific name.* Valid name, as *Rhacophorus pleurotaenia* Boulenger, 1904 (Dutta, 1997: 107).

*Current generic and infrageneric allocation.* Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta, 1997: 107).

*Proposed status of specific name.* Valid name, as *Philautus pleurotaenia* (Boulenger, 1904).

*Proposed generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

*Comments.* This name was long considered a junior subjective synonym of *Polypedates microtypanum* Günther, 1859 (see e.g.: Wolf, 1936: 174; Kirtisinghe, 1957: 64; Gorham, 1974: 170; Dutta & Manamendra-Arachchi, 1996: 196). Recently Dutta (1997: 107) resurrected this name as valid 'pending further systematic study and additional collection'.

*Status of taxon.* Rhacophoridae, Rhacophorinae: *Philautus (Kirtixalus) pleurotaenia* (Boulenger, 1904).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N81. *Ixalus halyi* Boulenger, 1904

*Original name.* *Ixalus halyi* Boulenger, 1904: 431.

*Name-bearing type.* Holotype by monotypy, BMNH 1947.2.6.16 [ex BMNH 1903.9.26.50] (Dutta & Manamendra-Arachchi, 1996: 148; Dutta, 1997: 82; FB, personal observations), adult male, SVL 28.6 mm (FB, personal observations).

*Type-locality.* Pattipola (06°51'N, 80°49'E; about 1890 m), Central Province, Sri Lanka ['Ceylon'].

*Current status of specific name.* Invalid name, junior subjective synonym (Kirtisinghe, 1957: 69; Gorham, 1974: 166; Dutta & Manamendra-Arachchi, 1996: 148; Dutta, 1997: 82) of *Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856.

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 148; Dutta, 1997: 82); subgenus *Philautus* Gistel, 1848 (Dubois, 1987a: 72).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N82. *Ixalus castanomerus* Boulenger, 1905

*Original name.* *Ixalus castanomerus* Boulenger, 1905: 39.  
*Name-bearing type.* Holotype by monotypy, BMNH 1947.2.26.88 [ex BMNH 1905.1.28.8] (Dring, 1987: 47; FB, personal observations), adult female, SVL 30.2 mm (FB, personal observations).

*Type-locality.* Bujit Kutu ['Bujit Kutu'], Selangor (1067 m) ['3,500 feet'], Malaysia.

*Current status of specific name.* Invalid name, junior subjective synonym (Smith, 1925: 6; Dring, 1987: 20, 41) of *Ixalus petersi* Boulenger, 1900.

*Current generic and infrageneric allocation.* *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 32).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) petersi* (Boulenger, 1900).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N83. *Cornufer worcesteri* Stejneger, 1905

*Original name.* *Cornufer worcesteri* Stejneger, 1905: 345.

*Name-bearing type.* Holotype by original designation, USNM 34784 (Stejneger, 1905: 345), adult, SVL 28 mm (Stejneger, 1905) or 27.2 mm (Brown et al., 1998), sex not stated (Stejneger, 1905; Brown et al., 1998).

*Type-locality.* Mount Apo (6°59'N, 125°16'E; 1829 m), Davao province, Mindanao, Philippines.

*Current status of specific name.* Valid name, as *Philautus worcesteri* (Stejneger, 1905) (Brown et al., 1998).

*Current generic and infrageneric allocation.* *Philautus surdus* group of the genus *Philautus* Gistel, 1848 (Brown et al., 1998: 131).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) worcesteri* (Stejneger, 1905).

*Generic allocation status.* Category B: taxonomic transfer from *Cornufer* to *Philautus*.

N84. *Philautus woodi* Stejneger, 1905

*Original name.* *Philautus woodi* Stejneger, 1905: 346.

*Name-bearing type.* Holotype by original designation, USNM 34781 (Stejneger, 1905: 346; Brown & Alcalá, 1994: 217), SVL 29 mm (Stejneger, 1905), sex and stage not stated (Stejneger, 1905; Brown & Alcalá, 1994).

*Type-locality.* Mount Apo (6°59'N, 125°16'E; 1829 m) ['6,000 feet altitude'], Davao province, Mindanao, Philippines.

*Current status of specific name.* Invalid name, junior subjective synonym (Inger, 1954: 395; Brown & Alcalá, 1994: 191) of *Ixalus acutirostris* Peters, 1867.

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20, 32; Brown & Alcalá, 1994: 191).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus*

(*Philautus*) *acutirostris* (Peters, 1867).

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N85. *Ixalus annandalii* Boulenger, 1906

*Original name.* *Ixalus annandalii* Boulenger, 1906: 385.

*Name-bearing type.* Lectotype, by present designation, BMNH 1947.2.26.58 [ex BMNH 1906.8.10.40], adult female, SVL 17.0 mm (see description D22 below).

*Type-locality.* Kurseong (26°53'N, 88°17'E; 1524 m) ['5,000 feet'], Darjiling, West Bengal, India.

*Current status of specific name.* Valid name, as *Philautus annandalii* (Boulenger, 1906) (Dutta, 1997: 74).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 74).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) Dutta (1997: 74) stated that the 'type' (singular) was in the ZSIC collection, without providing a collection number. However, in the original description, Boulenger (1906: 386) referred to 'specimens' (plural), and two of these original syntypes, a male and a female, BMNH 1947.2.26.57–58 [ex BMNH 1906.8.10.39–40] are kept in the London collection. In order to stabilize definitively the nomenclatural status of this name, we hereby designate one of the London specimens as lectotype of this nominal species. This species, although distinct, is very closely related to *Philautus parvulus* (Boulenger, 1893), a member of the *Philautus aurifasciatus* group according to Dring (1987). As the lectotype (designated by Capocaccia, 1957) of *Ixalus parvulus* is an adult female, in order to facilitate comparisons we also designate an adult female as lectotype of *Ixalus annandalii*.- (2) We examined 10 adult males collected in 1973 by A. Dubois at Rakshe (Eastern Nepal), which appears to be the westernmost locality known for the genus *Philautus* in the Himalayan chain (see Dubois, 1980).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) annandalii* (Boulenger, 1906).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N86. *Rhacophorus anodon* Van Kampen, 1907

*Original name.* *Rhacophorus anodon* Van Kampen, 1907: 400.

*Name-bearing type.* Holotype by monotypy, ZMA 5707, adult female, SVL 24 mm (Van Kampen, 1907: 400–401; Van Tuijl, 1995: 129).

*Type-locality.* Kayutanam ['Schlucht bei Ajer Mantjur (Kaju tanam)'] (0°32'S, 100°19'E), Sumatera Barat [West Sumatra], Sumatra, Indonesia.

*Current status of specific name.* Valid name, as *Nyctixalus*

*anodon* (Van Kampen, 1907) (Dubois, 1981: 257).

**Current generic and infrageneric allocation.** Genus *Nyctixalus* Boulenger, 1882 (Dubois, 1981: 257).

**Comments.** (1) Smith (1931: 20) and Inger (1966: 349) considered this name as a junior subjective synonym of *Ixalus pictus* Peters, 1871. Pending a revision of the genus *Nyctixalus*, Liem (1970: 96) and Dubois (1981: 257) provisionally treated it as a valid name. (2) This species was described by Van Kampen (1907: 400) as a member of the genus *Rhacophorus*, but later placed by this author in the genus *Philautus* (Van Kampen, 1923: 271). It was transferred by Liem (1970: 96) to the genus *Hazelia*, and by Dubois (1981: 257) to the genus *Nyctixalus*.

**Status of taxon.** Ranidae, Rhacophorinae: *Nyctixalus anodon* (Van Kampen, 1907).

**Generic allocation status.** Category E: taxonomic transfer from *Rhacophorus* to *Nyctixalus*, but with a period in *Philautus*.

**N87. *Ixalus brevipes* Boulenger, 1908**

**Original name.** *Ixalus brevipes* Boulenger, 1908: 63.

**Name-bearing type.** Holotype by monotypy, BMNH 1947.2.6.22 [ex BMNH 1906.2.28.51], adult male, SVL 31.1 mm (FB, personal observations).

**Type-locality.** Gunung [Mount] Tahan (4°38'N, 102°14'E; 914 m) [‘3,000 ft’], Pahang, Malaysia.

**Current status of specific name.** Invalid name, junior subjective synonym (Smith, 1930: 115–116; Bourret, 1942: 458; Gorham, 1974: 167) of *Ixalus vermiculatus* Boulenger, 1900.

**Current generic and infrageneric allocation.** *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20).

**Comments.** Without explanation, Dring (1987: 20) did not mention this name as a synonym of *Philautus vermiculatus* (Boulenger, 1900).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) vermiculatus* (Boulenger, 1900).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N88. *Ixalus pallidipes* Barbour, 1908**

**Original name.** *Ixalus pallidipes* Barbour, 1908: 190.

**Name-bearing type.** Holotype by original designation, MCZ 2442, nearly adult female, SVL 25.4 mm [‘1 inch’] (Barbour, 1908: 190; Barbour & Loveridge, 1929: 284).

**Type-locality.** Pangrango (6°48'S, 106°56'E) [‘near the summit of the volcano Pangrango’], Mount Gede-Pangrango National Park, Jawa Barat [West Java], Java, Indonesia.

**Current status of specific name.** Valid name, as *Philautus pallidipes* (Barbour, 1908) (Inger in Frost, 1985: 531).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 531).

**Proposed generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848.

**Comments.** Liem (1972: 157) suggested that this name might be a synonym of *Philautus aurifasciatus* (Schlegel, 1837), but the status of this name was not discussed by Dring (1987: 20). Pending a reexamination of the holotype, we retain this name as a valid one.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) pallidipes* (Barbour, 1908).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N89. *Ixalus jacobsoni* Van Kampen, 1912**

**Original name.** *Ixalus jacobsoni* Van Kampen, 1912: 78.

**Name-bearing type.** Holotype by monotypy, ZMA 5709 (Daan & Hillenius, 1966: 121; Van Tuijl, 1995: 127), sex and stage not stated, SVL 23 mm (Van Kampen, 1912: 79).

**Type-locality.** Gunung [Mount] Ungaran (7°07'S, 110°24'E), near Semarang, Jawa Tengah [Central Java], Java, Indonesia.

**Current status of specific name.** Valid name, as *Philautus jacobsoni* (Van Kampen, 1912) (Inger in Frost, 1985: 529).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 529).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) jacobsoni* (Van Kampen, 1912).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N90. *Rhacophorus microdiscus* Annandale, 1912**

**Original name.** *Rhacophorus microdiscus* Annandale, 1912: 13.

**Name-bearing type.** Holotype by original designation, ZSIC 16924, sex and stage not stated, SVL 29 mm (Annandale, 1912: 14), sill present in ZSIC (Chanda et al., 2000).

**Type-locality.** Kobo (27°48'N, 95°20'E; 122 m) [‘400 ft’], at base of Abor foot-hills, Arunachal Pradesh [‘Assam’], India.

**Current status of specific name.** Valid name, as *Philautus microdiscus* (Annandale, 1912) (Dubois, 1987a: 73).

**Current generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 73).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) Without explanations, Frost (1985), Duellman (1993) and Dutta (1997) did not include this name in their lists. (2) For the generic and subgeneric allocation of this species, see above under *Polypedates jerdonii* Günther, 1876.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) microdiscus* (Annandale, 1912).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N91. *Ixalus argus* Annandale, 1912

*Original name.* *Ixalus argus* Annandale, 1912: 16.

*Name-bearing type.* Holotype by original designation, ZSIC 16950, sex and stage not stated, SVL 27 mm (Annandale, 1912: 16) or 24.8 mm (Chanda & Sarkar, 1997: 46), still present in ZSIC (Chanda et al., 2000).

*Type-locality.* Upper Renging (28°30'N, 95°00'E; 655 m) ['2150 feet'], Arunachal Pradesh ['Assam'], India.

*Current status of specific name.* Invalid name, junior subjective synonym (Boulenger, 1920b; Bourret, 1942; Dubois, 1974, 1992, 1999a; Gorham, 1974; Chanda & Sarkar, 1997) of *Amolops marmoratus* (Blyth, 1855) (for the valid name of this species, see Dubois, 1992: 321, 340).

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Amolops* Cope, 1865 (Dubois, 1992: 321, 340).

*Comments.* Without explanation, Inger (in Frost, 1985: 527), Chanda & Ghosh (1988, 1989), Dutta (1997: 74) and Inger et al. (1999: 29) recognized a nominal species *Philautus argus*, which led to unwarranted comparisons with other species referred to the genus *Philautus* (for more details, see Dubois, 1992, 1999a). Even more strangely, Bourret (1942: 390, 451) and Gorham (1974: 127, 166) cited this nominal species twice, first as a *Staurois* or as an *Amolops*, and second as a *Philautus*. The synonymy first proposed by Boulenger (1920b) was confirmed by Dubois (1974, 1992, 1999a) and Chanda & Sarkar (1997).

*Status of taxon.* Ranidae, Raninae: *Amolops (Amolops) marmoratus* (Blyth, 1855).

*Generic allocation status.* Category C: taxonomic transfer from *Ixalus* to *Amolops*.

N92. *Ixalus semiruber* Annandale, 1913

*Original name.* *Ixalus semiruber* Annandale, 1913: 305.

*Name-bearing type.* Holotype by original designation, ZSIC 17401, sex and stage not stated, SVL 12 mm (Annandale, 1913: 305), still present in ZSIC (Chanda et al., 2000).

*Type-locality.* Pattipola (06°51'N, 80°49'E; about 1829 m) ['ca. 6000 feet'], Central Province, Sri Lanka.

*Current status of specific name.* Invalid name, junior subjective synonym (Kirtisinghe, 1957: 69; Gorham, 1974: 166; Dutta, 1997: 82) of *Ixalus leucorhinus*

Lichtenstein, Weinland & Martens, 1856.

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 148; Dutta, 1997: 82); subgenus *Philautus* Gistel, 1848 (Dubois, 1987a: 72).

*Comments.* (1) Dutta & Manamendra-Arachchi (1996) did not include this name in their review of the amphibians of Sri Lanka. (2) The name '*Ixalus semirubra*' used by Dutta (1997: 82) is an incorrect subsequent spelling of *Ixalus semiruber* Annandale, 1913, that is therefore unavailable in nomenclature (Article 33.3 of the *Code*).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856).

*Generic allocation status.* Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

N93. *Chirixalus simus* Annandale, 1915

*Original name.* *Chirixalus simus* Annandale, 1915: 345.

*Name-bearing type.* Holotype by monotypy, ZSIC 17971, SVL 22 mm (Annandale, 1915: 346), sex and stage unknown, still present in ZSIC (Chanda et al., 2000).

*Type-locality.* Mangaldai (26°26'N, 92°02'E), Assam, India.

*Current status of specific name.* Valid name, as *Chirixalus simus* Annandale, 1915.

*Current generic and infrageneric allocation.* Genus *Chirixalus* Boulenger, 1893 (Frost, 1985: 538; Dutta, 1997: 71).

*Comments.* Pope (1931: 583) and Gorham (1974: 167) included this nominal species in the genus *Philautus*. Liem (1970: 95) returned it to the genus *Chirixalus*, where it currently stands.

*Status of taxon.* Ranidae, Rhacophorinae: *Chirixalus simus* Annandale, 1915.

*Generic allocation status.* Category D: no taxonomic or nomenclatural change; described and maintained in *Chirixalus*, but with a period in *Philautus*.

N94. *Nyctixalus robinsoni* Annandale, 1917

*Original name.* *Nyctixalus robinsoni* Annandale, 1917: 110.

*Name-bearing type.* Holotype by original designation, ZSIC 18337, sex and stage not stated, SVL 20 mm (Annandale, 1917: 110), still present in ZSIC (Chanda et al., 2000).

*Type-locality.* Cibodas Botanical Gardens ['Tjibodas'] (6°59'S, 106°56'E; 1433–1981 m) ['4,700–6,500 feet'], near Mount Gede-Pangrango National Park, Jawa Barat [West Java], Java, Indonesia.

*Current status of specific name.* Invalid name, junior subjective synonym (Smith, 1931: 19; Gorham, 1974: 166; Dring, 1987: 20, 33) of *Hyla aurifasciata* Schlegel, 1837.



**Current generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* (Dubois, 1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20, 32).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) aurifasciatus* (Schlegel, 1837).

**Generic allocation status.** Category B: taxonomic transfer from *Nyctixalus* to *Philautus*.

**N95. *Ixalus bombayensis* Annandale, 1919**

**Original name.** *Ixalus bombayensis* Annandale, 1919: 121, 124.

**Name-bearing type.** Holotype by original designation, ZSIC 18287 (not 18782, as erroneously written in the original description: see Chanda et al., 2000), sex and stage not stated, SVL 'not exceeding 3 cm' (Annandale, 1919: 124), still present in ZSIC (Chanda et al., 2000).

**Type-locality.** Castle Rock (15°25'N, 74°22'E), Uttar Kanara District, Maharashtra, India.

**Current status of specific name.** Valid name, as *Philautus bombayensis* (Annandale, 1919) (Dutta, 1997: 75).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 75).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) bombayensis* (Annandale, 1919).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N96. *Ixalus garo* Boulenger, 1919**

**Original name.** *Ixalus garo* Boulenger, 1919: 207.

**Name-bearing type.** Holotype by monotypy, ZSIC 19187 (Chanda et al., 2000), SVL 13 mm (Boulenger, 1919: 208), sex and stage not stated, still present in ZSIC (Chanda et al., 2000).

**Type-locality.** 'Above Tura' (25°31'N, 90°13'E), Garo Hills District, Meghalaya ['Assam'], India.

**Current status of specific name.** Valid name, as *Philautus garo* (Boulenger, 1919) (Dutta, 1997: 79).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 79).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) garo* (Boulenger, 1919).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N97. *Ixalus kempiae* Boulenger, 1919**

**Original name.** *Ixalus kempiae* Boulenger, 1919: 208.

**Name-bearing type.** Holotype by monotypy, BMNH *cnu* (Chanda, 1994: 102–104), SVL 17 mm (Boulenger,

1919: 208), sex and stage not stated.

**Type-locality.** 'Above Tura' (25°31'N, 90°13'E), Garo Hills, Meghalaya ['Assam'], India.

**Current status of specific name.** Valid name, as *Philautus kempiae* (Boulenger, 1919) (Dutta, 1997: 81).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 81).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) kempiae* (Boulenger, 1919).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N98. *Ixalus cornutus* Boulenger, 1920**

**Original name.** *Ixalus cornutus* Boulenger, 1920a: 295.

**Name-bearing type.** Syntypes, original number unknown ('Several specimens'), including BMNH 1947.2.6.41–42 [ex BMNH 1915.12.2.19–20] (FB, personal observations), SVL (presumably of largest) 28 mm, sex and stage not stated.

**Type-locality.** 'Sungei Kring', Gunung Kerinci (1°42'S, 101°16'E; 2225 m), ['Korinchi Peak, 7300 feet'], Sumatera Barat [West Sumatra], Sumatra, Indonesia.

**Current status of specific name.** Valid name, as *Philautus cornutus* (Boulenger, 1920) (Inger in Frost, 1985: 528).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 528).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) cornutus* (Boulenger, 1920).

**Generic allocation status.** Category A1: no taxonomic change; nomenclatural transfer from *Ixalus* to *Philautus*.

**N99. *Hazelia spinosa* Taylor, 1920**

**Original name.** *Hazelia spinosa* Taylor, 1920: 292.

**Name-bearing type.** Holotype by original designation, CM 3420 (Brown & Alcalá, 1994: 217), [ex EHT 406], sex not stated, SVL 41 mm (Taylor, 1920: 292–294).

**Type-locality.** Bunawan (8°12'N, 125°57'E), Agusan del Sur, Mindanao, Philippines.

**Current status of specific name.** Valid name, as *Nyctixalus spinosus* (Taylor, 1920) (Brown & Alcalá, 1994: 188).

**Current generic and infrageneric allocation.** Genus *Nyctixalus* Boulenger, 1882 (Dubois, 1981: 257; Brown & Alcalá, 1994: 188).

**Comments.** Ahl (1931: 75) transferred this species to his subgenus *Rhacophorus (Philautus)*. Wolf (1936: 156) considered it a subspecies of his species '*Rhacophorus leprosus*'. Inger (1954: 407) transferred it to the genus *Philautus*, which was followed by Gorham (1974: 176). Liem (1970: 95) revalidated the genus *Hazelia*,

for which Dubois (1981: 257) showed that the valid name is *Nyctixalus*.

*Status of taxon.* Ranidae, Rhacophorinae: *Nyctixalus spinosus* (Taylor, 1920).

*Generic allocation status.* Category E: taxonomic transfer from *Hazelia* to *Nyctixalus*, but with a period in *Philautus*.

**N100. *Philautus hazelae* Taylor, 1920**

*Original name.* *Philautus hazelae* Taylor, 1920: 298.

*Name-bearing type.* Holotype by original designation, CM 3427 (McCoy & Richmond, 1966: 247), [ex EHT F.293], sex not stated, SVL 34 mm (Taylor, 1920: 298–299).

*Type-locality.* Canlaon Volcano (10°20'N, 123°04'E; 1000 m), central northern Negros, Philippines.

*Current status of specific name.* Valid name, as *Platymantis hazelae* (Taylor, 1920) (Brown et al., 1997: 408).

*Current generic and infrageneric allocation.* Genus *Platymantis* Günther, 1859 (Brown et al., 1997: 408).

*Comments.* Brown et al. (1997: 408) stated that the holotype of this nominal species was in the CAS collection, which is incorrect (see: Slevin & Leviton, 1956: 536–537; McCoy & Richmond, 1966: 247).

*Status of taxon.* Ranidae, Dicroglossinae: *Platymantis hazelae* (Taylor, 1920).

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Platymantis*.

**N101. *Philautus montanus* Taylor, 1920**

*Original name.* *Philautus montanus* Taylor, 1920: 305; nec *Ixalus montanus* Günther, 1876a: 574; nec *Philautus montanus* Rao, 1937: 415.

*Name-bearing type.* Holotype by original designation, PBS 29, sex and stage not stated, SVL 39 mm (Taylor, 1920: 305, 307), destroyed during World War II (Brown & Alcalá, 1994: 201).

*Type-locality.* Mount Bongao (about 700 m), Bongao island (5°01'N, 119°46'E), near south end of Tawitawi, Sulu Archipelago, Philippines.

*Current status of specific name.* Invalid name, junior secondary homonym of *Ixalus montanus* Günther, 1876 and senior objective synonym of *Rhacophorus alticola* Ahl, 1931 (Brown & Alcalá, 1994: 201).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Brown & Alcalá, 1994: 201).

*Proposed status of specific name.* Invalid name, junior subjective synonym of *Rhacophorus macrotis* Boulenger, 1891.

*Proposed generic and infrageneric allocation.* Subgenus *Polypedates* Tschudi, 1838 of the genus *Rhacophorus* Kuhl & Van Hasselt, 1822.

*Comments.* Brown & Alcalá (1994: 201–202) very persuasively argued that this nominal species was most probably a synonym of the nominal species

*Rhacophorus macrotis* Boulenger, 1891, but they refrained from formally treating both names as synonyms 'until the presence of *macrotis* on Bongao Island is confirmed'. Given the impressive list of characters which supports this interpretation, and the fact that the original figure of the holotype of *Philautus montanus* (Taylor, 1920: pl. 3 fig. 5) clearly shows a *Rhacophorus*, we think that it is much more parsimonious to hypothesize the presence of *R. macrotis* on this island than the existence of a fully atypical species of the genus *Philautus*, never collected again since its original description from a single specimen. We therefore formally refer *Philautus montanus* Taylor, 1920 (and hence also *Rhacophorus alticola* Ahl, 1931) to the synonymy of *Rhacophorus macrotis* Boulenger, 1891. However, final stabilization of this interpretation should await the collection of a specimen of this species in Bongao Island, that could be designated as neotype of *Philautus montanus* Taylor, 1920.

*Status of taxon.* Ranidae, Rhacophorinae: *Rhacophorus (Polypedates) macrotis* Boulenger, 1891.

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Rhacophorus*.

**N102. *Philautus williamsi* Taylor, 1922**

*Original name.* *Philautus williamsi* Taylor, 1922a: 167.

*Name-bearing type.* Holotype by original designation, EHT 356, sex not stated, SVL 21 mm (Taylor, 1922a: 167–168) (see below).

*Type-locality.* Polillo island (14°50'N, 121°57'E), ['southern Polillo, along the trail between Polillo and Bislian at a point near where the trail crosses the low divide'], Philippines.

*Current status of specific name.* Invalid name, junior subjective synonym (Brown & Alcalá, 1994: 197) of *Polypedates surdus* Peters, 1863.

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus surdus* group (Dring, 1987: 20; Brown & Alcalá, 1994: 197).

*Comments.* There seems to exist some uncertainty about the fate of the holotype of this species. Taylor (1922a: 167) stated that it was kept in his collection (EHT) under the number 356. Slevin & Leviton (1956: 537) listed it among the holotypes kept in the CAS collection, under the number 62253, and mentioned expressly that it was the same as EHT 356; the same information was given by Inger (in Frost, 1985: 533) and Van Tuijl (1995: 128). However, Inger (1954: 409) did not mention having seen this specimen, although he had examined specimens in the CAS collection, and Brown & Alcalá (1994: 199) stated that this specimen had been deposited in the PBS collection (an hitherto unpublished information), but

'destroyed during World War II'. These latter authors also stated having examined two paratypes (CAS 62254 and MCZ 14473). Possibly some confusion has occurred in the past among the four specimens on which the original description of the species was based.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) surdus* (Peters, 1863).

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N103. *Philautus basilanensis* Taylor, 1922

*Original name.* *Philautus basilanensis* Taylor, 1922a: 169.

*Name-bearing type.* Holotype by original designation, CAS 60145 [ex EHT 1510], adult male, SVL 21 mm (Taylor, 1922a: 169–170; Slevin & Leviton, 1956: 536; Brown & Alcala, 1994: 217).

*Type-locality.* Abungabung, Basilan Island (6°42'N, 121°58'E), Philippines.

*Current status of specific name.* Invalid name, junior subjective synonym (Inger, 1954: 395; Dring, 1987: 20, 33; Brown & Alcala, 1994: 191) of *Ixalus acutirostris* Peters, 1867.

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* (Dubois, 1987a: 72); *Philautus aurifasciatus* group (Dring, 1987: 20, 33; Brown & Alcala, 1994: 191).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) acutirostris* (Peters, 1867).

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N104. *Philautus polillensis* Taylor, 1922

*Original name.* *Philautus polillensis* Taylor, 1922a: 171.

*Name-bearing type.* Holotype by original designation, CAS 62250 [ex EHT 351], sex and stage not stated, SVL 27 mm (Taylor, 1922a: 171–172; Slevin & Leviton, 1956: 536; Brown et al., 1997: 420).

*Type-locality.* Polillo island (14°50'N, 121°57'E), ['southern Polillo, on a trail running from the walled town of Polillo to the southeastern point of the island (known as Bislian) at a point where the trail crosses the low divide'], Philippines.

*Current status of specific name.* Valid name, as *Platymantis polillensis* (Taylor, 1922) (Brown et al., 1997).

*Current generic and infrageneric allocation.* Genus *Platymantis* Günther, 1859 (Brown et al., 1997).

*Comments.* The spelling *Platymantis polilloensis* used by Brown et al. (1997: 409) is an unjustified emendation, the authorship of which must be credited to these latter authors.

*Status of taxon.* Ranidae, Dicroglossinae: *Platymantis polillensis* (Taylor, 1922).

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Platymantis*.

N105. *Philautus zamboangensis* Taylor, 1922

*Original name.* *Philautus zamboangensis* Taylor, 1922a: 173.

*Name-bearing type.* Holotype by original designation, CAS 61840 [ex EHT 1059], adult male, SVL 28 mm (Taylor, 1922a: 173–174; Slevin & Leviton, 1956: 537).

*Type-locality.* Pasonanca ['on the bank of Tumugao River, above the waterworks' intake near Pasananka'] (6°58'N, 122°03'E), Zamboanga, Mindanao, Philippines.

*Current status of specific name.* Invalid name, junior subjective synonym (Inger, 1954: 399; Brown & Alcala, 1994: 207) of *Leptomantis bimaculata* Peters, 1867.

*Current generic and infrageneric allocation.* Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Brown & Alcala, 1994: 207); subgenus *Leptomantis* Peters, 1867 (Dubois, 1987a: 75–76).

*Status of taxon.* Ranidae, Rhacophorinae: *Rhacophorus (Leptomantis) bimaculatus* (Peters, 1867).

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Rhacophorus*.

N106. *Philautus similis* Van Kampen, 1923

*Original name.* *Philautus similis* Van Kampen, 1923: 269, 273.

*Name-bearing type.* Holotype by monotypy, RMNH 5066 (Inger in Frost, 1985: 532), sex and stage not stated, SVL 29 mm (Van Kampen, 1923: 273).

*Type-locality.* Gunong Talakmau ['Mount Talamau'] (0°11'N, 100°00'E; 1200 m), Sumatra, Indonesia.

*Current status of specific name.* Valid name, as *Philautus similis* Van Kampen, 1923 (Inger in Frost, 1985: 532).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 532).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) similis* Van Kampen, 1923.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N107. *Philautus laevis* Smith, 1924

*Original name.* *Philautus laevis* Smith, 1924: 225, 230.

*Name-bearing type.* Holotype by original designation, BMNH 1947.2.5.94 [ex MAS 2439, ex BMNH 1924.1.31.1], adult male (Smith, 1924: 230–231), SVL 25.3 mm (FB, personal observations).

*Type-locality.* 'Sui Kat', Langbian Plateau (11°56'N, 108°25'E; 1000 m), ['S. Annam'], Vietnam.

*Current status of specific name.* Valid name, as *Chirixalus laevis* (Smith, 1924) (Inger in Frost, 1985: 538).

**Current generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893 (Inger in Frost, 1985: 538).  
**Status of taxon.** Ranidae, Rhacophorinae: *Chirixalus laevis* (Smith, 1924).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Chirixalus*.

**N108. *Philautus gryllus* Smith, 1924**

**Original name.** *Philautus gryllus* Smith, 1924: 225, 231.

**Name-bearing type.** Holotype by original designation, BMNH 1947.2.5.95 [ex MAS 4962, ex BMNH 1924.1.31.5], adult male (Smith, 1924: 231–232), SVL 26.3 mm (FB, personal observations).

**Type-locality.** ‘Langbian Peaks’ (11°56’N, 108°25’E; 2000 m), Langbian Plateau, [‘S. Annam’], Vietnam.

**Current status of specific name.** Valid name, as *Philautus gryllus* Smith, 1924 (Inger in Frost, 1985: 529).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 529).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) gryllus* Smith, 1924.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

**N109. *Philautus palpebralis* Smith, 1924**

**Original name.** *Philautus palpebralis* Smith, 1924: 225, 233.

**Name-bearing type.** Holotype by original designation, BMNH 1947.2.8.14 [ex MAS 2589, ex BMNH 1924.1.31.2], adult female (Smith, 1924: 233), SVL 28.6 mm (FB, personal observations).

**Type-locality.** ‘Langbian Peaks’ (11°56’N, 108°25’E; 2000 m), Langbian Plateau, [‘S. Annam’], Vietnam.

**Current status of specific name.** Valid name, as *Philautus palpebralis* Smith, 1924 (Fei, 1999: 256) or *Chirixalus palpebralis* (Smith, 1924) (Inger et al., 1999: 23).

**Current generic and infrageneric allocation.** *Philautus palpebralis* group of the genus *Philautus* Gistel, 1848 (Fei, 1999: 382) or genus *Chirixalus* Boulenger, 1893 (Inger et al., 1999: 23).

**Proposed status of specific name.** Valid name, as *Chirixalus palpebralis* (Smith, 1924).

**Proposed generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893.

**Comments.** Both the original description and figure point to this species being a member of the group currently known under the generic name *Chirixalus* rather than to *Philautus*, as had already been noted by Ahl (1931: 104), Bourret (1939d: 60, 1942: 474) and Inger et al. (1999: 23).

**Status of taxon.** Ranidae, Rhacophorinae: *Chirixalus palpebralis* (Smith, 1924).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Chirixalus*.

**N110. *Philautus mjobergi* Smith, 1925**

**Original name.** *Philautus mjobergi* Smith, 1925: 7.

**Name-bearing type.** Holotype by original designation, BMNH 1947.2.27.13 [ex MAS 7265, ex BMNH 1925.9.1.1] (Smith, 1925: 7; Dring, 1987: 38; FB, personal observations), adult female (Smith, 1925: 8), SVL 31.0 mm (FB, personal observations).

**Type-locality.** Mount Murud (3°52’N, 115°30’E; 2134 m) [‘7000 feet’], Fourth Division, Sarawak, Malaysia.

**Current status of specific name.** Valid name, as *Philautus mjobergi* Smith, 1925 (Dring, 1987: 38).

**Current generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 33).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) mjobergi* Smith, 1925.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

**N111. *Rhacophorus andersoni* Ahl, 1927**

**Original name.** *Rhacophorus andersoni* Ahl, 1927b: 36, nomen novum pro *Ixalus tuberculatus* Anderson, 1879: 845 (nec *Polypedates tuberculatus* Anderson, 1871: 26).

**Name-bearing type.** Same as for *Ixalus tuberculatus* Anderson, 1879.

**Type-locality.** Same as for *Ixalus tuberculatus* Anderson, 1879.

**Current status of specific name.** Valid name, as *Philautus andersoni* (Ahl, 1927) (Dutta, 1997: 73); valid junior objective synonym of *Ixalus tuberculatus* Anderson, 1879, according to Article 59.b of the 1985 edition of the *Code* (Inger in Frost, 1985: 526).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 73).

**Proposed status of specific name.** Invalid name, junior objective synonym of *Ixalus tuberculatus* Anderson, 1879.

**Comments.** (1) Dutta (1997: 73) stated that the name-bearing type of this nominal species was ‘not known’, but, the name *Rhacophorus andersoni* being a replacement name, this nominal species has no type of its own. (2) Under the 1999 edition of the *Code*, use for this species of Ahl’s replacement name *Rhacophorus andersoni* is not warranted, for reasons explained above.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) tuberculatus* (Anderson, 1879).

**Generic allocation status.** Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N112. ***Rhacophorus rugatus*** Ahl, 1927

*Original name.* *Rhacophorus rugatus* Ahl, 1927b: 36.

*Name-bearing type.* Holotype by monotypy, ZMB *cnu*, sex and stage not stated, SVL 19 mm (Ahl, 1927b: 37).

*Type-locality.* 'Farnlands', Sri Lanka ['Ceylon'].

*Current status of specific name.* Invalid name, junior subjective synonym (Kirtisinghe, 1957: 69; Gorham, 1974: 166) of *Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856.

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Gorham, 1974: 166); subgenus *Philautus* Gistel, 1848 (Dubois, 1987a: 72).

*Comments.* Dutta & Manamendra-Arachchi (1996) and Dutta (1997) did not include this name in their reviews of the amphibians of Sri Lanka and India.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N113. ***Rhacophorus asperrimus*** Ahl, 1927

*Original name.* *Rhacophorus asperrimus* Ahl, 1927b: 37, nomen novum pro *Ixalus asper* Boulenger, 1886: 415 (nec *Rana aspera* Boulenger, 1882a: 433).

*Name-bearing type.* Same as for *Ixalus asper* Boulenger, 1886.

*Type-locality.* Same as for *Ixalus asper* Boulenger, 1886.

*Current status of specific name.* Invalid name, junior objective synonym of *Theلودerma asper* (Boulenger, 1886) (Dutta, 1997: 109).

*Current generic and infrageneric allocation.* Genus *Theلودerma* Tschudi, 1838 (Dutta, 1997: 109).

*Comments.* For the justification of the valid name of this species under the current *Code*, see above under *Ixalus asper* Boulenger, 1886.

*Status of taxon.* Ranidae, Rhacophorinae: *Theلودerma asperum* (Ahl, 1927).

*Generic allocation status.* Category E: taxonomic transfer from *Rhacophorus* to *Theلودerma*.

N114. ***Rhacophorus parkeri*** Ahl, 1927

*Original name.* *Rhacophorus parkeri* Ahl, 1927b: 38.

*Name-bearing type.* Holotype by monotypy, ZMB 10142, subadult male, SVL 34.8 mm (FB, personal observations).

*Type-locality.* 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E), India.

*Current status of specific name.* Valid name, as *Philautus parkeri* (Ahl, 1927) (Dutta, 1997: 85).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 85).

*Proposed status of specific name.* Invalid name, junior

subjective synonym of *Polypedates variabilis* Jerdon, 1853.

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Rhacophorus* Kuhl & Van Hasselt, 1822.

*Comments.* We examined the holotype of this species, which is in a bad condition and almost totally discolored. It has vomerine ridges, metatarsals of its toes IV and V are not fused, and its size is larger, for a subadult male, than in most *Philautus* s. str. species. It resembles specimens of *Polypedates variabilis* Jerdon, 1853. Ahl (1927b: 39) stated that this specimen was collected by Beddome in Malabar. We suggest that this specimen may have been obtained by the Berlin Museum from the London Museum, which had a large series of specimens collected by Beddome in Malabar and reported by Boulenger (1882a: 80) under the name *Rhacophorus pleurostictus*. We therefore suggest placing this name provisionally in the synonymy of *Polypedates variabilis* Jerdon, 1853.

*Status of taxon.* Ranidae, Rhacophorinae: *Rhacophorus (Rhacophorus) variabilis* (Jerdon, 1853).

*Generic allocation status.* Category D: no taxonomic or nomenclatural change; described and maintained in *Rhacophorus*, but with a period in *Philautus*.

N115. ***Rhacophorus malcolmsmithi*** Ahl, 1927

*Original name.* *Rhacophorus malcolmsmithi* Ahl, 1927b: 39.

*Name-bearing type.* Holotype by monotypy, ZMB *cnu*, sex and stage not stated, SVL 16 mm (Ahl, 1927b: 40).

*Type-locality.* Sri Lanka ['Ceylon'].

*Current status of specific name.* Invalid name, junior subjective synonym (Kirtisinghe, 1957: 69; Gorham, 1974: 166) of *Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856.

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Gorham, 1974: 166).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* Dutta & Manamendra-Arachchi (1996) and Dutta (1997) did not include this name in their reviews of the amphibians of Sri Lanka and India.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N116. ***Rhacophorus noblei*** Ahl, 1927

*Original name.* *Rhacophorus noblei* Ahl, 1927b: 40.

*Name-bearing type.* Holotype by monotypy, ZMB 10140, juvenile, SVL 20.3 mm (FB, personal observations).

*Type-locality.* 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between

Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E), India.

*Current status of specific name.* Valid name, as *Philautus noblei* (Ahl, 1927) (Dutta, 1997: 84).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 84).

*Proposed status of specific name.* Invalid name, junior subjective synonym of *Ixalus glandulosus* Jerdon, 1853.

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* We examined the holotype of this species. It is a completely discolored juvenile specimen stated to have been collected in Malabar by Beddome, that was therefore most probably received in Berlin from the London Museum. Especially in its broad head and webbing, this specimen very closely resembles the syntypes of *Ixalus pulcher* Boulenger, 1882, now an objective synonym of *Ixalus glandulosus* Jerdon, 1853. We therefore consider *Rhacophorus noblei* Ahl, 1927 a subjective synonym of the latter.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) glandulosus* Jerdon, 1853.

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

**N117. *Rhacophorus pulcherrimus* Ahl, 1927**

*Original name.* *Rhacophorus pulcherrimus* Ahl, 1927b: 41, nomen novum pro *Ixalus pulcher* Boulenger, 1882a: 469 (nec *Rhacophorus pulcher* Boulenger, 1882a: 467).

*Name-bearing type.* Same as for *Ixalus pulcher* Boulenger, 1882.

*Type-locality.* Same as for *Ixalus pulcher* Boulenger, 1882.

*Current status of specific name.* Valid name, as *Philautus pulcherrimus* (Ahl, 1927) (Dutta, 1997: 85), valid junior objective synonym of *Ixalus pulcher* Boulenger, 1882, according to Article 59.b of the 1985 edition of the *Code* (Inger in Frost, 1985: 526).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 85).

*Proposed status of specific name.* Invalid name, junior objective synonym of *Ixalus glandulosus* Jerdon, 1853, following the lectotype designation of *Ixalus pulcher* Boulenger, 1882 (see above).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* Dutta (1997: 73) stated that the name-bearing type of this nominal species was 'not traced', but, the name *Rhacophorus pulcherrimus* being a replacement name, this nominal species has no type of its own. Dutta provided no information on the status of the syntypes of *Ixalus pulcher* Boulenger, 1882, but we provided such information above, and we designated one of these specimens as neotype of *Ixalus glandulosus* Jerdon, 1853 and as lectotype of

both *Ixalus pulcher* Boulenger, 1882 and *Rhacophorus pulcherrimus* Ahl, 1927, so that these three names are now definitely linked by an objective synonymy.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) glandulosus* (Jerdon, 1853).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

**N118. *Rhacophorus zimmeri* Ahl, 1927**

*Original name.* *Rhacophorus zimmeri* Ahl, 1927b: 41.

*Name-bearing type.* Holotype by monotypy, ZMB *cnu*, sex and stage not stated, SVL 32 mm (Ahl, 1927b: 42).

*Type-locality.* Galle ['Point de Galle'] (06°02' N, 80°13' E; about 5 m), Sri Lanka ['Ceylon'].

*Current status of specific name.* Invalid name, junior subjective synonym (Dutta & Manamendra-Arachchi, 1996: 196; Dutta, 1997: 105) of *Polypedates microtypanum* Günther, 1859.

*Current generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 73) or genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 196; Dutta, 1997: 105).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Kirtixalus) microtypanum* (Günther, 1859).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

**N119. *Rhacophorus fergusonianus* Ahl, 1927**

*Original name.* *Rhacophorus fergusonianus* Ahl, 1927b: 44, nomen novum pro *Rhacophorus fergusonii* Boulenger, 1882a: 82 (nec *Ixalus fergusonii* Günther, 1876b: 379).

*Name-bearing type.* Same as for *Rhacophorus fergusonii* Boulenger, 1882.

*Type-locality.* Same as for *Rhacophorus fergusonii* Boulenger, 1882.

*Current status of specific name.* Valid name, as *Rhacophorus fergusonianus* Ahl, 1927 (Dutta & Manamendra-Arachchi, 1996: 186; Dutta, 1997: 100).

*Current generic and infrageneric allocation.* Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta & Manamendra-Arachchi, 1996: 186; Dutta, 1997: 100).

*Proposed status of specific name.* Valid name, as *Philautus fergusonianus* (Ahl, 1927).

*Proposed generic and infrageneric allocation.* Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

*Comments.* For the use of the specific name *Rhacophorus fergusonianus* Ahl, 1927 for this species, see above under *Rhacophorus fergusonii* Boulenger, 1882. Should this species be transferred from *Philautus* to another genus (e.g., *Kirtixalus*), the latter specific name would have to be resurrected for it.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus*

(*Kirtixalus*) *fergusonianus* (Ahl, 1927).

**Generic allocation status.** Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N120. ***Philautus nongkhorensis*** Cochran, 1927

**Original name.** *Philautus nongkhorensis* Cochran, 1927: 179.

**Name-bearing type.** Holotype by original designation, USNM 70108, adult male, SVL 28 mm (Cochran, 1927: 180).

**Type-locality.** 'Nong Khor', ['southeastern Siam'], Thailand.

**Current status of specific name.** Valid name, as *Chirixalus nongkhorensis* (Cochran, 1927) (Inger in Frost, 1985: 538).

**Current generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893 (Inger in Frost, 1985: 538).

**Status of taxon.** Ranidae, Rhacophorinae: *Chirixalus nongkhorensis* (Cochran, 1927).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Chirixalus*.

N121. ***Philautus hansenae*** Cochran, 1927

**Original name.** *Philautus hansenae* Cochran, 1927: 181.

**Name-bearing type.** Holotype by original designation, USNM 70109, adult male, SVL 21 mm (Cochran, 1927: 181).

**Type-locality.** 'Nong Khor', ['southeastern Siam'], Thailand.

**Current status of specific name.** Valid name, as *Chirixalus hansenae* (Cochran, 1927) (Inger in Frost, 1985: 538).

**Current generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893 (Inger in Frost, 1985: 538).

**Status of taxon.** Ranidae, Rhacophorinae: *Chirixalus hansenae* (Cochran, 1927).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Chirixalus*.

N122. ***Rhacophorus (Philautus) alticola*** Ahl, 1931

**Original name.** *R[hacophorus] (P[hilautus]) alticola* Ahl, 1931: xi, 95, nomen novum pro *Philautus montanus* Taylor, 1920: 305 (nec *Ixalus montanus* Günther, 1876a: 574).

**Name-bearing type.** Same as for *Philautus montanus* Taylor, 1920.

**Type-locality.** Same as for *Philautus montanus* Taylor, 1920.

**Current status of specific name.** Valid name, as *Philautus alticola* (Ahl, 1931) (Brown & Alcalá, 1994: 201), valid junior objective synonym of *Philautus montanus* Taylor, 1920 according to Article 59.b of the 1985 edition of the *Code* (Inger in Frost, 1985: 526).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Brown & Alcalá, 1994: 201).

**Proposed status of specific name.** Invalid name, junior subjective synonym of *Rhacophorus macrotis*

Boulenger, 1891.

**Proposed generic and infrageneric allocation.** Subgenus *Polypedates* Tschudi, 1838 of the genus *Rhacophorus* Kuhl & Van Hasselt, 1822.

**Comments.** See above the comments under *Philautus montanus* Taylor, 1920.

**Status of taxon.** Ranidae, Rhacophorinae: *Rhacophorus (Polypedates) macrotis* Boulenger, 1891.

**Generic allocation status.** Category D: no taxonomic or nomenclatural change; described and maintained in *Rhacophorus* but with a period in *Philautus*.

N123. ***Philautus amoenus*** Smith, 1931

**Original name.** *Philautus amoenus* Smith, 1931: 18.

**Name-bearing type.** Holotype by original designation, BMNH 1947.2.6.6. [ex BMNH 1929.12.22.25] (Inger in Frost, 1985: 526), adult female, SVL 24 mm (Smith, 1931: 18).

**Type-locality.** Kamburongoh ['Kamborangah'] (6°02'N, 116°32'E), Mount Kinabalu (2200 m) ['7200 feet'], Sabah [Borneo], Malaysia.

**Current status of specific name.** Valid name, as *Philautus amoenus* Smith, 1931 (Dring, 1987: 37).

**Current generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 33).

**Comments.** (1) Dring (1987: 37) referred to the two specimens on which the original description had been based as 'syntypes'. However, Smith (1931: 18) had clearly designated one of these specimens (adult), as 'type' (i.e., holotype); the other one (BMNH 1929.12.22.25.A, juvenile) is therefore a paratype. (2) Dring (1987: 37) wrote: 'field work at the type locality will probably show *amoenus* to be only a variant of *mjobergi*'.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) amoenus* Smith, 1931.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N124. ***Philautus spiculatus*** Smith, 1931

**Original name.** *Philautus spiculatus* Smith, 1931: 20.

**Name-bearing type.** Holotype by original designation, BMNH *cnu*, adult female, SVL 30 mm (Smith, 1931: 20).

**Type-locality.** Kenokok, Mount Kinabalu" (6°05'N, 116°33'E), Sabah [Borneo], Malaysia.

**Current status of specific name.** Invalid name, junior subjective synonym of *Rhacophorus macroscelis* Boulenger, 1896 (Inger, 1966: 298), a taxon currently considered a subspecies of *Rhacophorus everetti* Boulenger, 1894 (Inger, 1966: 298; Brown & Alcalá, 1994: 208).

**Current generic and infrageneric allocation.** Genus

*Rhacophorus* Kuhl & Van Hasselt, 1822 (Inger, 1966: 298; Brown & Alcalá, 1994: 208); unallocated to subgenus by Dubois (1987a).

*Status of taxon.* Ranidae, Rhacophorinae: *Rhacophorus everetti macroscelis* Boulenger, 1896.

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Rhacophorus*.

N125. ***Philautus maosonensis*** Bourret, 1937

*Original name.* *Philautus maosonensis* Bourret, 1937: 51.

*Name-bearing type.* Syntypes, MNHN 0157–0158 [ex LZUH B.76–77], adult male and female respectively, SVL 32 and 31 mm respectively (Bourret, 1937: 52; Guibé, 1950: 51).

*Type-locality.* ‘Mao-Son, Tonkin’ (22°00’N, 105°00’E), Vietnam. According to a hand-written note in the catalogue of the collections in the Paris Museum, this specimen was collected at an altitude of 1200 m.

*Current status of specific name.* Valid name, as *Philautus maosonensis* Bourret, 1937 (Inger et al., 1999: 28).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Inger et al., 1999: 28).

*Comments.* Several characters of these syntypes (e.g., large tympanum, long tibia, important webbing, presence of many spinules on back, small size of eggs in ovary of female) suggest that this species does not belong in the genus *Philautus*. However, pending further studies, we take a conservative approach and maintain it in this genus, following all authors until now (Bourret, 1937, 1939c–d, 1942; Gorham, 1974; Frost, 1985; Inger et al., 1999). The status of this species will be further explored elsewhere.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) maosonensis* Bourret, 1937.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N126. ***Philautus gracilipes*** Bourret, 1937

*Original name.* *Philautus gracilipes* Bourret, 1937: 52.

*Name-bearing type.* Holotype by monotypy, MNHN 1948.0156 [ex LZUH B.167], adult female, SVL 28 mm (Bourret, 1937: 52, 54) (see Fig. 20 below).

*Type-locality.* ‘Chapa, Tonkin’ (22°00’N, 105°00’N), Vietnam.

*Current status of specific name.* Valid name, as *Philautus gracilipes* Bourret, 1937 (Inger in Frost, 1985: 528).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 528); *Philautus palpebralis* group (Fei, 1999: 382)

*Comments.* This species is here provisionally placed in the nominotypical subgenus of the genus *Philautus*, although this taxonomic allocation is open to question: this matter will be explored further elsewhere.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) gracilipes* (Bourret, 1937).

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N127. ***Philautus charius*** Rao, 1937

*Original name.* *Philautus charius* Rao, 1937: 405.

*Name-bearing type.* Neotype by present designation, MNHN 1999.5597, adult male, SVL 29.0 mm (see description D23 below).

*Type-locality.* Emended by neotype designation to: hills around Chikmalagur (13°20’N, 75°46’E), Karnataka, India.

*Current status of specific name.* Valid name, as *Philautus charius* Rao, 1937 (Dutta, 1997: 76).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 76).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* This species was described on the basis of a single holotype, CCB *cnu*, sex and stage unknown, SVL 23.0 mm, from Kottigehar (approximately 13°07’N, 75°37’E), Kadur, Karnataka, India (Rao, 1937: 405–406). This specimen is now lost, like all other specimens described in the same publication (Dubois, 1984b: 157). Inger et al. (1984) reported rediscovery of this species in Pon Mudi, about 600 km south of the type-locality. We examined the specimens from Pon Mudi, and we found them to differ from the original description of *Philautus charius* by several characters, as acknowledged for the size and the webbing by Inger et al. (1984). We think they represent a different species. On the other hand, we think that the specimens of a series from Chikmalagur (roughly 35 km North-East of Kottigehar, Karnataka) fit very well with the description of *Philautus charius*. We therefore designate one of these specimens as neotype of this nominal species, in order to stabilize definitely the status of this name.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) charius* Rao, 1937.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N128. ***Philautus elegans*** Rao, 1937

*Original name.* *Philautus elegans* Rao, 1937: 407.

*Name-bearing type.* Holotype by monotypy, CCB *cnu*, sex and stage unknown, SVL 23.0 mm (Rao, 1937: 407–408).

*Type-locality.* ‘Kempholey’, Hassan (13°01’N, 76°03’E), Karnataka, India.

*Current status of specific name.* Valid name, as *Philautus elegans* Rao, 1937 (Dutta, 1997: 77).



**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 77).

**Proposed status of specific name.** Valid name, as *Micrixalus elegans* (Rao, 1937).

**Proposed generic and infrageneric allocation.** Genus *Micrixalus* Boulenger, 1888.

**Comments.** This species was described on the basis of a single holotype (see above), which is now lost, like all other specimens described in the same publication (Dubois, 1984b: 157). We think that this specimen did not belong to the genus *Philautus* because of the following combination of characters: (1) 'A small outer metatarsal tubercle': all other *Philautus* species of the Western Ghats have a small inner metatarsal tubercle and no outer metatarsal tubercle. In his description, Rao (1937) did not mention an inner metatarsal tubercle, and his drawing of the holotype (fig. 10) shows the latter, but no outer. It is impossible to explain the discrepancy between the description and the drawing, and to know which one was accurate in this respect. (2) Toes 'about less than half-webbed': this character would indeed fit with most *Philautus* species, but Rao's figure shows a rather extensive webbing, the web reaching the disk of the 3th toe. (3) 'Dorso-lateral glandular fold, feebly developed, extending from the posterior angle of the eye to the groin': not a single species of *Philautus* is known to have dorso-lateral folds. (4) 'Small glandular swellings behind the jaws and in front of the shoulder': such glandular areas are also absent in all *Philautus* species, but may be present in some species of *Rana* and *Micrixalus*. (5) 'Lower parts of the limbs and body smooth': all *Philautus* species are granular on belly and underside of the thighs, and additionally adult males have a granular throat. There was a time when the genera *Ixalus* and *Micrixalus* were not separated (e.g. Boulenger, 1882a), and Rao (1937: 405) expressed doubts about the validity of the latter genus, which was considered by Noble (1931: 521) as 'merely a group of small species of *Hylarana* lacking vomerine teeth', an opinion shared by Dubois (1987a, 1992). We think the description of *Philautus elegans* applies to a species of the genus *Micrixalus*, and, pending a review of this genus, we refer this nominal species to this genus and we provisionally recognize it as a valid species.

**Status of taxon.** Ranidae, Raninae: *Micrixalus elegans* (Rao, 1937).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Micrixalus*.

N129. *Philautus kottigeharensis* Rao, 1937

**Original name.** *Philautus kottigeharensis* Rao, 1937: 408.

**Name bearing type.** Holotype by monotypy, CCB *cnu*, now lost (Dubois, 1984b: 157), SVL 23.0 mm (Rao, 1937: 408–409).

**Type-locality.** Kottigehar (approximately 13°07'N, 75°37'E), Kadur, Karnataka, India.

**Current status of specific name.** Valid name, as *Philautus kottigeharensis* Rao, 1937 (Dutta, 1997: 81).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 81).

**Proposed status of specific name.** Valid name, as *Micrixalus kottigeharensis* (Rao, 1937).

**Proposed generic and infrageneric allocation.** Genus *Micrixalus* Boulenger, 1888.

**Comments.** The following characteristics clearly exclude this species from the genus *Philautus*: (1) the hindlimbs are long (ratio TL/SVL 0.652); (2) the webbing on toes extends to the disks; (3) dorso-lateral folds are present; (4) the ventral surface of body and thighs is smooth. We think that Rao's (1937: 408–409) description applies to a species of the genus *Micrixalus*, and we refer formally this nominal species to this genus.

**Status of taxon.** Ranidae, Raninae: *Micrixalus kottigeharensis* (Rao, 1937).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Micrixalus*.

N130. *Philautus swamianus* Rao, 1937

**Original name.** *Philautus swamianus* Rao, 1937: 409.

**Name bearing type.** Holotype by monotypy, CCB *cnu*, now lost (Dubois, 1984b: 157), SVL 29.0 mm (Rao, 1937: 409–411).

**Type-locality.** Kottigehar (approximately 13°07'N, 75°37'E), Kadur, Karnataka, India.

**Current status of specific name -** Valid name, as *Philautus swamianus* Rao, 1937 (Dutta, 1997: 87).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 87).

**Proposed status of specific name.** Valid name, as *Micrixalus swamianus* (Rao, 1937).

**Proposed generic and infrageneric allocation.** Genus *Micrixalus* Boulenger, 1888.

**Comments.** A number of characteristics in the description clearly indicate that this species, like the two preceding ones, is wrongly referred to the genus *Philautus*: the toes are fully webbed, the outer metatarsals are separated at the base, the skin is smooth below and dorso-lateral folds are present. We also suggest to refer this name to the genus *Micrixalus*, and to provisionally regard it as a valid name.

**Status of taxon.** Ranidae, Raninae: *Micrixalus swamianus* (Rao, 1937).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Micrixalus*.

N131. *Philautus melanensis* Rao, 1937

**Original name.** *Philautus melanensis* Rao, 1937: 411.

**Name-bearing type.** Neotype, by present designation, BMNH 1947.2.6.14 [exBMNH 1872.4.14.304], figured in Günther (1876a: pl. 66 fig. A), adult female, SVL 33.1 mm (see description D24 below).

**Type-locality.** Emended by neotype designation to Kudremukh (13°08'N, 75°16'E; 1829 m) ['Kudra Mukh, 6000 ft'], Karnataka, India.

**Current status of specific name.** Valid name, as *Philautus melanensis* Rao, 1937 (Dutta, 1997: 83).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 83).

**Proposed status of specific name.** Invalid name, junior subjective synonym of *Phyllomedusa tinniens* Jerdon, 1853.

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** This species was described on the basis of a single holotype, CCB *cnu*, now lost (Dubois, 1984b: 157), SVL 29.0 mm, from 'Kempholey', Hassan (13°01'N, 76°03'E), Karnataka, India (Rao, 1937: 411–412). Careful study of the original description suggests a close similarity of this specimen with the syntypes of *Ixalus montanus* Günther, 1876 from Kudremukh, that we referred above to the species *Philautus tinniens* (Jerdon, 1853). In order to definitely stabilize the status of this name, we hereby designate as neotype of *Philautus melanensis* Rao, 1937 the same specimen designated above as lectotype of the nominal species *Ixalus montanus* Günther, 1876. The locality of this specimen, Kudremukh, is situated about 45 km to the North-West of the Kempholey Forest.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) tinniens* (Jerdon, 1853).

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N132. *Philautus narainensis* Rao, 1937

**Original name.** *Philautus narainensis* Rao, 1937: 413.

**Name bearing type.** Holotype by monotypy, CCB *cnu*, now lost (Dubois, 1984b: 157), SVL 29 mm (Rao, 1937: 413, 414).

**Type-locality.** Kottigehar (approximately 13°07'N, 75°37'E), Kadur, Karnataka, India.

**Current status of specific name.** Valid name, as *Philautus narainensis* Rao, 1937 (Dutta, 1997: 83).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 83).

**Proposed status of specific name.** Valid name, as *Micrixalus narainensis* (Rao, 1937).

**Proposed generic and infrageneric allocation.** Genus *Micrixalus* Boulenger, 1888.

**Comments.** The combination of the extensive webbing, the absence of an inner metatarsal tubercle, the free outer metatarsals and the smooth skin below are a clear indication that this species was wrongly referred by Rao (1937) to the genus *Philautus*. In this case also, we provisionally transfer this nominal species into the genus *Micrixalus*.

**Status of taxon.** Ranidae, Raninae: *Micrixalus narainensis* (Rao, 1937).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Micrixalus*.

N133. *Philautus longicrus* Rao, 1937

**Original name.** *Philautus longicrus* Rao, 1937: 414; nec *Ixalus longicrus* Boulenger, 1894: 88.

**Name bearing type.** Holotype by monotypy, CCB *cnu*, now lost (Dubois, 1984b: 157), SVL 20.0 mm (Rao, 1937: 414–415).

**Type-locality.** 'Kempholey', Hassan (13°01'N, 76°03'E), Karnataka, India.

**Current status of specific name.** Invalid name, junior secondary homonym of *Ixalus longicrus* Boulenger, 1894 and junior objective synonym of *Philautus crnri* Dutta, 1985 (Dutta, 1997: 76).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 76).

**Proposed status of specific name.** Valid name, as *Indirana longicrus* (Rao, 1937).

**Proposed generic and infrageneric allocation.** Genus *Indirana* Laurent, 1986.

**Comments.** This species was described on the basis of a single specimen, now lost (see above). Several characters of the original description and figure suggest that this specimen, rather than to the genus *Philautus*, belonged to the ranid genus *Indirana* Laurent, 1986 (see Dubois, 1987a: 66–69, 1992: 334): (1) the disks on fingers were not very developed, being only slightly wider than the terminal phalangeal segment, and broader than long; (2) the hind limb was very long, the tibio-tarsal articulation reaching far beyond the tip of snout and the heels strongly overlapping when the limbs were folded at right angles to the body (TL/SVL = 0.650); (3) the original figure shows a rather extensive webbing between second and third toe; (4) the outer metatarsals were united only at the base; (5) the upper surface of the skin bore faint folds, and the sides short glandular folds, serially arranged; (6) the ventral surface of body and thighs was smooth; (7) a dark line stretched from heel to foot. Although the last of these characters is also found sometimes in *Philautus*, the combination of all these characters is very convincing. Two characters only do not exactly fit with this interpretation: the absence of vomerine teeth and of a lingual papilla. We suggest that these

discrepancies can be accounted for by defects of observations and that this lost specimen belonged to the same genus as the (also lost) holotype of the species described in the same paper by Rao (1937: 397) under the name *Rana tenuilingua*, now known under the name *Indirana tenuilingua*. Pending a revision of the genus *Indirana*, we here treat *Philautus longicrus* Rao, 1937 as a distinct species of this genus. In this case, the species *Indirana longicrus* (Rao, 1937) being no longer considered congeneric with *Ixalus longicrus* Boulenger, 1894, it has to keep its original name (see further discussion of this point below under *Philautus crnri* Dutta, 1985).

**Status of taxon.** Ranidae, Ranixalinae: *Indirana longicrus* (Rao, 1937).

**Generic allocation status.** Category C: taxonomic transfer from *Philautus* to *Indirana*.

N134. ***Philautus montanus*** Rao, 1937

**Original name.** *Philautus montanus* Rao, 1937: 415; nec *Ixalus montanus* Günther, 1876a: 574; nec *Philautus montanus* Taylor, 1920: 305.

**Name-bearing type.** Neotype, by present designation, BMNH 1947.2.26.98 [ex BMNH 1874.4.29.1202], figured in Boulenger (1882a: pl. 11 fig. 1b), adult male, SVL 29.4 mm (see description D25 below).

**Type-locality.** Emended by neotype designation (above) to: 'Malabar', now coast and Western Ghats in Karnataka and Kerala approximately between Goa (15°30'N, 73°50'E) and Palghat (10°46'N, 76°39'E), India.

**Current status of specific name.** Invalid name, junior secondary homonym of *Ixalus montanus* Günther, 1876a, junior primary homonym of *Philautus montanus* Taylor, 1920 and junior objective synonym of *Philautus hassanensis* Dutta, 1985 (Dutta, 1997: 80).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta, 1997: 80).

**Proposed status of specific name.** Invalid name, junior objective synonym of *Philautus flaviventris* (Boulenger, 1882), junior secondary homonym of *Ixalus montanus* Günther, 1876, and junior primary homonym of *Philautus montanus* Taylor, 1920.

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** This species was described on the basis of a single holotype, CCB *cnu*, now lost (Dubois, 1984b: 157), SVL 37.0 mm, from the 'hills of Kempholey', Hassan (13°01'N, 76°03'E), Karnataka, India (Rao, 1937: 415–417). Careful study of the original description suggests a close similarity of this specimen with the species currently known as *Philautus flaviventris* (Boulenger, 1882). In order to definitely stabilize the status of this name, we hereby designate as neotype of *Philautus montanus* Rao, 1937

the same specimen which we designated above as lectotype of the latter species: both names are now linked by an objective synonymy, and Rao's (1937) *Philautus montanus* cannot continue to be a cause of confusion or problems (see also below under *Philautus hassanensis* Dutta, 1985).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus* (*Philautus*) *flaviventris* (Boulenger, 1882).

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N135. ***Philautus banaensis*** Bourret, 1939

**Original name.** *Philautus banaensis* Bourret, 1939a: 34.

**Name-bearing type.** Lectotype, by present designation, MNHN 1948.0160 [ex LZUH B.254], adult female, SVL 33.9 mm (see description D26 below).

**Type-locality.** Ba Na ['Bana'] (15°59'N, 107°59'E), ['Annam'], Vietnam.

**Current status of specific name.** Valid name, as *Philautus banaensis* Bourret, 1939 (Inger in Frost, 1985: 527).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 527).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** (1) This species was described by Bourret (1939a: 34) on the basis of six syntype specimens that he had received in Hanoi in 1938 (Bourret, 1939a: 13). These specimens, LZUH B.251–256, had been collected by M. Merkle 'sur la route de Bana'. Bourret (1939a: 34) provided only a very short description and a few measurements of these specimens and added: 'Malheureusement ces échantillons, conservés dans de l'alcool trop fort, ont été tellement desséchés et déformés qu'il n'est pas possible d'en donner une bonne description.' Bourret was clearly unhappy of this situation, and must have asked Merkle for additional specimens, that he received in 1939, and which allowed him to provide a better description and figures of this species (Bourret, 1939b: 38–39; 1942: 464–465). However these 12 additional specimens from Bana are only topotypes, not syntypes of this nominal species. Guibé (1950: 50) listed four specimens in the Paris Museum's collection (MNHN 1948.0159–0162) as syntypes. However, examination of the original hand-written catalogue of the Paris Museum's collection, which indicates the original LZUH numbers of the specimens, shows that only three of these four specimens were part of the syntypes: MNHN 1948.0159 [ex LZUH B.252], MNHN 1948.0160 [ex LZUH B.254] and MNHN 1948.0161 [ex LZUH B.256]. The fourth specimen, MNHN 1948.0162 [ex LZUH B.260], is the specimen that was figured by Bourret (1939b, 1942) and which is a

simple topotype, not a syntype. We hereby designate one of the three syntypes in the Paris Museum as lectotype of this nominal species. (2) Morphologically and by its coloration, this species is quite similar to the species from Sri Lanka and northern India that were provisionally grouped by Dubois (1987a) in the subgenus *Kirtixalus* (AD, personal observations; see above under *Polypedates jerdonii* Günther, 1876).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) banaensis* Bourret, 1939.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N136. ***Rhacophorus dimbullae*** Shreve, 1940

**Original name.** *Rhacophorus dimbullae* Shreve, 1940: 105.

**Name-bearing type.** Holotype by original designation, MCZ 20878 [not MCZ 70878, as stated by Dutta, 1997: 105], adult female, SVL 47 mm (Shreve, 1940: 105–106; Barbour & Loveridge, 1946: 185).

**Type-locality.** Queenwood Estate, Dimbulla ['Dimbulla'] (06°57'N, 80°37'E; 1524 m) ['5000 ft'], Sri Lanka ['Ceylon'].

**Current status of specific name.** Invalid name, junior subjective synonym (Dutta & Manamendra-Arachchi, 1996: 196) of *Polypedates microtypanum* Günther, 1859.

**Current generic and infrageneric allocation.** Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Dutta, 1994: 105).

**Proposed generic and infrageneric allocation.** Subgenus *Kirtixalus* Dubois, 1987 of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Kirtixalus) microtypanum* (Günther, 1859).

**Generic allocation status.** Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N137. ***Philautus eximius*** Shreve, 1940

**Original name.** *Philautus eximius* Shreve, 1940: 105.

**Name-bearing type.** Holotype by original designation, MCZ 20879, adult female, SVL 36 mm (Shreve, 1940: 106–107; Barbour & Loveridge, 1946: 167; Dutta & Manamendra-Arachchi, 1996: 1996; Dutta, 1997: 77).

**Type-locality.** Queenwood Estate, Dimbulla (06°57'N, 80°38'E; 1524 m) ['5000 ft'], Sri Lanka ['Ceylon'].

**Current status of specific name.** Valid name, as *Philautus eximius* Shreve, 1940 (Dutta & Manamendra-Arachchi, 1996: 165; Dutta, 1997: 77).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Dutta & Manamendra-Arachchi, 1996: 165; Dutta, 1997: 77).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus*

(*Philautus*) *eximius* Shreve, 1940.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N138. ***Philautus tyttthus*** Smith, 1940

**Original name.** *Philautus tyttthus* Smith, 1940: 475.

**Name-bearing type.** Holotype by original designation, BMNH 1940.6.1.40, adult female, SVL 21 mm (Smith, 1940: 475).

**Type-locality.** Htingnan Gahtawng ['Htingnan'] (26°36'N, 97°53'E), ['Kajoitsu, The Triangle'], Kachin, Myanmar ['Burma'].

**Current status of specific name.** Valid name, as *Philautus tyttthus* Smith, 1940 (Inger in Frost, 1985: 532).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 532).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) tyttthus* Smith, 1940.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N139. ***Philautus romeri*** Smith, 1953

**Original name.** *Philautus romeri* Smith, 1953: 477.

**Name-bearing type.** Holotype by original designation, BMNH 1952.1.6.65, adult male, SVL 18 mm (Smith, 1953: 477).

**Type-locality.** 'Lamma Island' (22°12'N, 114°07'E), Hong Kong, China.

**Current status of specific name.** Valid name, as *Philautus romeri* Smith, 1953 (Inger in Frost, 1985: 531).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Inger in Frost, 1985: 531); *Philautus palpebralis* group (Fei, 1999: 382).

**Proposed status of specific name.** Valid name, as *Chirixalus romeri* (Smith, 1953).

**Proposed generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893.

**Comments.** According to Smith (1953: 478) and Karsen et al. (1986: 32), this species has a free tadpole stage: if this is true, the allocation of this species to the genus *Philautus* is in error. According to Smith (1953: 478), its tadpole is 'typically ranid'. The keratodont formula of 3/3 given by this author for this tadpole is quite unusual among Chinese rhacophorines (see e.g. Fei et al., 1991: 239–243), and suggests that either this species might belong in a new, undescribed genus, or that the tadpoles observed were in fact those of another species. Pending a reexamination of these tadpoles and a reevaluation of the proper status of this species, we place it provisionally in the genus *Chirixalus*, because Smith (1953: 478) stated that his new species was 'allied to *P. laevis* Smith from

the Langbian Plateau', a species currently allocated to the genus *Chirixalus*.

*Status of taxon.* Ranidae, Rhacophorinae: *Chirixalus romeri* (Smith, 1953).

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Chirixalus*.

N140. ***Rhacophorus lissobranchius*** Inger, 1954

*Original name.* *Rhacophorus lissobranchius* Inger, 1954: 370–371, 390.

*Name-bearing type.* Holotype by original designation, FMNH 50683, adult female, SVL 38.2 mm (Inger, 1954: 390–391).

*Type-locality.* East slope of mount McKinley (07°40'N, 125°50'E; 1340 m), Davao province, Mindanao, Philippines.

*Current status of specific name.* Invalid name, junior subjective synonym of *Philautus surdus* (Peters, 1863) (Brown & Alcalá, 1994: 197–198).

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus surdus* group (Dring, 1987: 20; Brown & Alcalá, 1994: 197).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) surdus* (Peters, 1863).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N141. ***Rhacophorus emembranatus*** Inger, 1954

*Original name.* *Rhacophorus emembranatus* Inger, 1954: 370–371, 392.

*Name-bearing type.* Holotype by original designation, FMNH 50684, adult female, SVL 40.1 mm (Inger, 1954: 392–393).

*Type-locality.* East slope of mount McKinley (07°40'N, 125°50'E; 950 m), Davao province, Mindanao, Philippines.

*Current status of specific name.* Invalid name, junior subjective synonym of *Cornufer worcesteri* Stejneger, 1905 (Brown et al., 1998).

*Current generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848 (Dubois, 1987a: 72); *Philautus surdus* group (Dring, 1987: 20; Brown & Alcalá, 1994: 197).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) worcesteri* (Stejneger, 1905).

*Generic allocation status.* Category B: taxonomic transfer from *Rhacophorus* to *Philautus*.

N142. ***Philautus rhododiscus*** Liu & Hu, 1962

*Original name.* *Philautus rhododiscus* Liu & Hu, 1962: 73, 98.

*Name-bearing type.* Holotype by original designation, CIB 601818, adult male, SVL 26.5 mm (Liu & Hu, 1962: 98).

*Type-locality.* 'Yang-liu-chung', Dayao Shan ['Yaoshan'; 24°00'N, 110°09'E; 1350 m], Guangxi Zhuang Zizhiqu ['Kwangsi'], China.

*Current status of specific name.* Valid name, as *Philautus rhododiscus* Liu & Hu, 1962 (Ye et al., 1993: 318; Zhao & Adler, 1993: 154).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Ye et al., 1993: 318; Zhao & Adler, 1993: 154); *Philautus rhododiscus* group (Fei, 1999: 382).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) rhododiscus* Liu & Hu, 1962.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N143. ***Philautus albopunctatus*** Liu & Hu, 1962

*Original name.* *Philautus albopunctatus* Liu & Hu, 1962: 73, 99.

*Name-bearing type.* Holotype by original designation, CIB 601686, adult male, SVL 32.5 mm (Liu & Hu, 1962: 99).

*Type-locality.* 'Yang-liu-chung' (1350 m), Dayao Shan ['Yaoshan'] (24°00'N, 110°09'E), Guangxi Zhuang Zizhiqu ['Kwangsi'], China.

*Current status of specific name.* Valid name, as *Philautus albopunctatus* Liu & Hu, 1962 (Ye et al., 1993: 318; Zhao & Adler, 1993: 153).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Ye et al., 1993: 318; Zhao & Adler, 1993: 153); *Philautus albopunctatus* group (Fei, 1999: 382).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) albopunctatus* Liu & Hu, 1962.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N144. ***Philautus gauni*** Inger, 1966

*Original name.* *Philautus gauni* Inger, 1966: 340, 346.

*Name-bearing type.* Holotype by original designation, FMNH 136314, adult female, SVL 35.7 mm (Inger, 1966: 346).

*Type-locality.* Mengiong River (1°31'N, 113°19'E), upper Baleh Basin, Third Division, Sarawak [Borneo], Malaysia.

*Current status of specific name.* Valid name, as *Rhacophorus gauni* (Inger, 1966) (Duellman, 1993: 294).

*Current generic and infrageneric allocation.* Genus *Rhacophorus* Kuhl & Van Hasselt, 1822 (Duellman, 1993: 294); subgenus *Leptomantis* Peters, 1867 (Dubois, 1987a: 76).

*Status of taxon.* Ranidae, Rhacophorinae: *Rhacophorus*

(*Leptomantis*) *gauni* (Inger, 1966).  
*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Rhacophorus*.

N145. *Philautus cherrapunjiae* Roonwal & Kripalani, 1966

*Original name.* *Philautus cherrapunjiae* Roonwal & Kripalani, 1966: 326.

*Name-bearing type.* Holotype by original designation, ZSIC 20806, imago, SVL 12 mm (Roonwal & Kripalani, 1966: 327–328), still present in ZSIC (Chanda et al., 2000).

*Type-locality.* Near Circuit House (1330 m), roughly 3 km from Cherrapunji (25°18'N, 91°42'E), Khasi-Jaintia Hills District, Meghalaya ['Assam'], India.

*Current status of specific name.* Valid name, as *Philautus cherrapunjiae* Roonwal & Kripalani, 1961 (Dutta, 1997: 76).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 76).

*Proposed status of specific name.* Valid name, as *Chirixalus cherrapunjiae* (Roonwal & Kripalani, 1966).

*Proposed generic and infrageneric allocation.* Genus *Chirixalus* Boulenger, 1893.

*Comments.* (1) Although this was not noted by previous authors, the publication date of this species' name is 1966, not 1961 (see 'Literature cited' below). (2) Both the adult morphology and the fact that this species was stated by Roonwal & Kripalani (1966) to have a free tadpole stage (with a keratodont formula of 5/3) point to the fact that its allocation to the genus *Philautus* was in error. We were not able to examine the holotype. Roonwal & Kripalani (1966) considered this species as 'close to *P. vittatus* (Boulenger)', a member of *Chirixalus*. Pending its reexamination, we tentatively refer it to the genus *Chirixalus*.

*Status of taxon.* Ranidae, Rhacophorinae: *Chirixalus cherrapunjiae* (Roonwal & Kripalani, 1966).

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Chirixalus*.

N146. *Philautus ocellatus* Liu & Hu, 1973

*Original name.* *Philautus ocellatus* Liu & Hu in Liu et al., 1973: 385, 393.

*Name-bearing type.* Holotype by original designation, CIB 64.III.1371, adult male, SVL 19 mm (Liu et al., 1973: 531).

*Type-locality.* Wuzhi Shan (18°50'N, 109°40'E; 700 m), Hainan, China.

*Current status of specific name.* Valid name, as *Philautus ocellatus* Liu & Hu, 1973 (Ye et al., 1993: 318; Zhao & Adler, 1993: 154).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Ye et al., 1993: 318; Zhao & Adler, 1993:

154); *Philautus palpebralis* group (Fei, 1999: 382).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) ocellatus* Liu & Hu, 1973.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N147. *Philautus shillongensis* Pillai & Chanda, 1973

*Original name.* *Philautus shillongensis* Pillai & Chanda, 1973: 30.

*Name-bearing type.* Holotype by original designation, ZSIC A.6971 [ex ZSIM V/ERS 472] (Chanda et al., 2000), [not ZSIC 472 as stated by Dutta, 1997: 85], adult, sex not stated, SVL 17 mm (Pillai & Chanda, 1973: 31).

*Type-locality.* 'Malki Forest, Shillong' (25°34'N, 91°53'E; 1524 m) ['5000 ft'], Meghalaya, India.

*Current status of the specific name.* Valid name, as *Philautus shillongensis* Pillai & Chanda, 1973 (Dutta, 1997: 85).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 85).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* (1) Inger (in Frost, 1985: 532) stated that the holotype was kept in the Madras branch of the Zoological Survey of India, but the original description clearly stated that the specimen was to be deposited in the Calcutta branch of this institution, which was confirmed by Dutta (1997: 85). (2) Pillai & Chanda (1973: 31) stated that all of the 8 specimens of the type-series are adult and 'do not show any external characters for distinguishing the sex'. The measurements given are in the range of 10 to 20 mm. We doubt that at least the smallest of these specimens are adult. Pillai & Chanda (1973) compared these specimens with several species which are clearly not closely related to it, but not to *Philautus annandalii* (Boulenger, 1906). We have been unable to examine the type-series, but we think the original description provides no character supporting specific distinctness of the two taxa, and we suggest that *Philautus shillongensis* Pillai & Chanda, 1973 might be a junior subjective synonym of *Ixalus annandalii* Boulenger, 1906. However, pending a re-examination of the holotype of *Philautus shillongensis*, we take a conservative approach and keep this name as valid.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) shillongensis* Pillai & Chanda, 1973.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N148. *Philautus jinxiuensis* Hu, 1978

**Original name.** *Philautus jinxiuensis* Hu in Hu et al., 1978: 20; nec *Philautus jinxiuensis* Hu & Tian in Hu et al., 1981: 116.

**Name-bearing type.** Holotype by original designation, CIB 660386, adult female, SVL 30.2 mm (Hu et al., 1981: 116–117).

**Type-locality.** Dayao Shan ['Yaoshan'] (24°00'N, 110°09'E), Jinxiu Xian [County], Guangxi Zhuang Zizhiqu, China.

**Current status of specific name.** Valid name, as *Philautus jinxiuensis* Hu, 1978 (Zhao & Adler, 1993: 154).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Zhao & Adler, 1993: 154); *Philautus jinxiuensis* group (Fei, 1999: 382).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) jinxiuensis* Hu, 1978.

**Comments.** Zhao & Adler (1993: 154) discussed the original description of this species.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N149. *Philautus longchuanensis* Yang & Li, 1979

**Original name.** *Philautus longchuanensis* Yang & Li in Yang et al., 1979: 186.

**Name-bearing type.** Holotype by original designation, KIZ 74.II.0046, adult male, SVL not stated (Yang et al., 1979: 186).

**Type-locality.** Gongdong (1600 m), Longchuan Xian [County] (25°11'N, 101°15'E), Yunnan, China.

**Current status of specific name.** Valid name, as *Philautus longchuanensis* Yang & Li, 1979 (Ye et al., 1993: 318; Zhao & Adler, 1993: 154).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Ye et al., 1993: 318; Zhao & Adler, 1993: 154); *Philautus rhododiscus* group (Fei, 1999: 382).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) longchuanensis* Yang & Li, 1979.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N150. *Philautus jinxiuensis* Hu & Tian, 1981

**Original name.** *Philautus jinxiuensis* Hu & Tian in Hu et al., 1981: 116; nec *Philautus jinxiuensis* Hu in Hu et al., 1978: 20.

**Name-bearing type.** Holotype by original designation, CIB 660386, adult female, SVL 30.2 mm (Hu et al., 1981: 116–117).

**Type-locality.** Dayao Shan ['Yaoshan'] (24°00'N, 110°09'E),

Jinxiu Xian, Guangxi Zhuang Zizhiqu, China.

**Current status of specific name.** Invalid name, junior primary homonym and objective synonym of *Philautus jinxiuensis* Hu, 1978 (Zhao & Adler, 1993: 154).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Zhao & Adler, 1993: 154).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** Zhao & Adler (1993: 154) discussed the original description of this species as *Philautus jinxiuensis* Hu in Hu et al., 1978. Strict following of the *Code* requires to recognize *Philautus jinxiuensis* Hu & Tian in Hu et al., 1981 as a distinct nominal species, with different authors and date, but with the same name-bearing type, i.e., a junior objective synonym of the first name. This case is similar to those of the names *Rana calcarata* and *Rana balcanica* discussed in detail by Dubois & Ohler (1995: 157, 179–180).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) jinxiuensis* Hu, 1978.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N151. *Philautus medogensis* Ye & Hu, 1984

**Original name.** *Philautus medogensis* Ye & Hu, 1984: 67.

**Name-bearing type.** Holotype by original designation, CIB 73.II.0051, adult male, SVL 26.5 mm (Ye & Hu, 1984: 67).

**Type-locality.** Medog Xian [County] (29°19'N, 95°19'E; 1500 m), Xizang Zizhiqu, China.

**Current status of specific name.** Valid name, as *Philautus medogensis* Ye & Hu, 1984 (Ye et al., 1993: 318–320; Zhao & Adler, 1993: 154).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Ye et al., 1993: 318–320; Zhao & Adler, 1993: 154); *Philautus jinxiuensis* group (Fei, 1999: 382).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) medogensis* Ye & Hu, 1984.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N152. *Philautus crnri* Dutta, 1985

**Original name.** *Philautus crnri* Dutta, 1985: 219, nomen novum pro *Philautus longicrus* Rao, 1937: 414 (nec *Ixalus longicrus* Boulenger, 1894: 88).

**Name-bearing type.** Same as for *Philautus longicrus* Rao, 1937.

**Type-locality.** Same as for *Philautus longicrus* Rao, 1937.

**Current status of specific name.** Valid name, as *Philautus*

*crnri* Dutta, 1985, valid junior objective synonym of *Philautus longicrus* Rao, 1937 (Dutta, 1997: 76).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 76).

*Proposed status of specific name.* Invalid name, junior objective synonym of *Philautus longicrus* Rao, 1937.

*Proposed generic and infrageneric allocation.* Genus *Indirana* Laurent, 1986.

*Comments.* (1) The name *Philautus longicrus* Rao, 1937 being a junior secondary homonym in the genus *Philautus* of *Ixalus longicrus* Boulenger, 1894, Dutta (1985) proposed to replace it by the nomen novum *Philautus crnri*. However, thus doing he did not discuss whether this name applies to an otherwise unnamed species of the same genus, the only condition that would have justified to propose this new replacement name. As discussed above under *Philautus longicrus* Rao, 1937, the original description of the latter species clearly points to a species of the genus *Indirana*, not to a *Philautus*. The nominal species *Ixalus longicrus* Boulenger, 1894 and *Philautus longicrus* Rao, 1937 being no longer considered congeneric, both have to keep their original names under Article 59.4 of the 1999 *Code*. Dutta's (1985) name cannot be 'protected' by Article 59.3, because replacement of the junior secondary homonym was posterior to 1961. (2) The name '*Philautus cruri*' used by Duellman (1993: 290, 291, 333, 357) is an incorrect subsequent spelling of *Philautus crnri* Dutta, 1985, that is therefore unavailable in nomenclature (Article 33.3 of the *Code*).

*Status of taxon.* Ranidae, Ranixalinae: *Indirana longicrus* (Rao, 1937).

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Indirana*.

#### N153. *Philautus hassanensis* Dutta, 1985

*Original name.* *Philautus hassanensis* Dutta, 1985: 220, nomen novum pro *Philautus montanus* Rao, 1937: 415 (nec *Ixalus montanus* Günther, 1876a: 574; nec *Philautus montanus* Taylor, 1920: 305).

*Name-bearing type.* Same as for *Philautus montanus* Rao, 1937.

*Type-locality.* Same as for *Philautus montanus* Rao, 1937.

*Current status of specific name.* Valid name, as *Philautus hassanensis* Dutta, 1985, valid junior objective synonym of *Philautus montanus* Rao, 1937 (Dutta, 1997: 80).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 80).

*Proposed status of specific name.* Invalid name, junior objective synonym of *Philautus flaviventris* (Boulenger, 1882).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Comments.* The name *Philautus montanus* Rao, 1937 being a junior primary homonym of *Philautus montanus* Taylor, 1920, Dutta (1985) proposed to replace it by the nomen novum *Philautus hassanensis*. However, thus doing he did not discuss whether this name applies to an otherwise unnamed species, the only condition that would have justified to propose this new replacement name. As discussed above under *Philautus montanus* Rao, 1937, the original description of the latter species fits well with the species now known as *Philautus flaviventris* (Boulenger, 1882). Following the designation (above) of the same specimen as lectotype of *Ixalus flaviventris* Boulenger, 1882 and as neotype of *Philautus montanus* Rao, 1937, these two names, as well as the name *Philautus hassanensis* Dutta, 1985, are now definitely linked by an objective synonymy, and the first of these three names is the valid one for the species.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) flaviventris* (Boulenger, 1882).

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

#### N154. *Philautus namdaphaensis*

Sarkar & Sanyal, 1985

*Original name.* *Philautus namdaphaensis* Sarkar & Sanyal, 1985: 287.

*Name-bearing type.* Holotype by original designation, ZSIC A.7177, adult male, SVL 27 mm (Sarkar & Sanyal, 1985: 288), still present in ZSIC (Chanda et al., 2000).

*Type-locality.* Farmbase Camp (350 m), Tirap (27°16'N, 95°46'E) District, Arunachal Pradesh, India.

*Current status of specific name.* Valid name, as *Philautus namdaphaensis* Sarkar & Sanyal, 1985 (Dutta, 1997: 83).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 83).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) namdaphaensis* Sarkar & Sanyal, 1985.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

#### N155. *Philautus ingeri* Dring, 1987

*Original name.* *Philautus ingeri* Dring, 1987: 19, 21.

*Name-bearing type.* Holotype by original designation, BMNH 1978.1820, adult male, SVL 36.3 mm (Dring, 1987: 21–23).

*Type-locality.* 'Camp three' (1300 m), Gunung Mulu (4°02'N, 114°54'E), Fourth Division, Sarawak [Borneo], Malaysia.



**Current status of specific name.** Valid name, as *Philautus ingeri* Dring, 1987 (Duellman, 1993: 290).

**Current generic and infrageneric allocation.** *Philautus hosei* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20); subgenus *Gorhixalus* Dubois, 1987 (Dubois, 1992: 335).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Gorhixalus) ingeri* Dring, 1987.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N156. ***Philautus acutus*** Dring, 1987

**Original name.** *Philautus acutus* Dring, 1987: 19, 24.

**Name-bearing type.** Holotype by original designation, BMNH 1978.1765, adult male, SVL 26.6 mm (Dring, 1987: 24–25).

**Type-locality.** ‘Camp three’ (1300 m), Gunung Mulu (4°02’N, 114°54’E), Fourth Division, Sarawak [Borneo], Malaysia.

**Current status of specific name.** Valid name, as *Philautus acutus* Dring, 1987 (Duellman, 1993: 289).

**Current generic and infrageneric allocation.** *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 24).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) acutus* Dring, 1987.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N157. ***Philautus kerangae*** Dring, 1987

**Original name.** *Philautus kerangae* Dring, 1987: 19, 28.

**Name-bearing type.** Holotype by original designation, BMNH 1978.1771, adult male, SVL 33.6 mm (Dring, 1987: 28).

**Type-locality.** ‘Kerangas camp’ (200 m), Gunung Mulu (4°02’N, 114°54’E), Fourth Division, Sarawak [Borneo], Malaysia.

**Current status of specific name.** Valid name, as *Philautus kerangae* Dring, 1987 (Duellman, 1993: 290).

**Current generic and infrageneric allocation.** *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 28).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) kerangae* Dring, 1987.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N158. ***Philautus tectus*** Dring, 1987

**Original name.** *Philautus tectus* Dring, 1987: 19, 30.

**Name-bearing type.** Holotype by original designation, BMNH 1978.1825, adult female, SVL 27.3 mm (Dring, 1987: 30).

**Type-locality.** ‘Camp five’ (150 m), Gunung Mulu (4°02’N, 114°54’E), Fourth Division, Sarawak [Borneo], Malaysia.

**Current status of specific name.** Valid name, as *Philautus tectus* Dring, 1987 (Duellman, 1993: 292).

**Current generic and infrageneric allocation.** *Philautus tectus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 30).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) tectus* Dring, 1987.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N159. ***Philautus umbra*** Dring, 1987

**Original name.** *Philautus umbra* Dring, 1987: 19, 43.

**Name-bearing type.** Holotype by original designation, BMNH 1978.1806, adult male, SVL 35.1 mm (Dring, 1987: 43).

**Type-locality.** ‘Pinnacles camp’ (1200 m), Gunung Api, Gunung Mulu (4°02’N, 114°54’E), Fourth Division, Sarawak [Borneo], Malaysia.

**Current status of specific name.** Valid name, as *Philautus umbra* Dring, 1987 (Duellman, 1993: 292).

**Current generic and infrageneric allocation.** *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 43).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) umbra* Dring, 1987.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N160. ***Chirixalus idiootocus*** Kuramoto & Wang, 1987

**Original name.** *Chirixalus idiootocus* Kuramoto & Wang, 1987: 931.

**Name-bearing type.** Holotype by original designation, NTUMA.1010, adult male, SVL 24.9 mm (Kuramoto & Wang, 1987: 932–933).

**Type-locality.** Near temple Sanshengkong (500 m), on southern slope of Mount Mientien-Shan, Taipei, Taiwan.

**Current status of specific name.** Valid name, as *Chirixalus idiootocus* Kuramoto & Wang, 1987 (Zhao & Adler, 1993: 153) or as *Philautus idiootocus* (Kuramoto & Wang, 1987) (Fei, 1999: 252).

**Current generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893 (Zhao & Adler, 1993: 153) or *Philautus odontotarsus* group of the genus *Philautus* Gistel, 1848 (Fei, 1999: 381).

**Proposed status of specific name.** Valid name, as *Chirixalus idiootocus* Kuramoto & Wang, 1987.

**Proposed generic and infrageneric allocation.** Genus *Chirixalus* Boulenger, 1893.

**Comments.** According to Kuramoto & Wang (1987), this

species has a free tadpole stage, so that its allocation by Fei (1999) to *Philautus* is not warranted. We return it provisionally to the genus *Chirixalus*, although it probably belongs in a distinct genus, but the genus *Chirixalus* is deeply in need of redefinition and revision.

*Status of taxon.* Ranidae, Rhacophorinae: *Chirixalus idiootocus* Kuramoto & Wang, 1987.

*Generic allocation status.* Category D: no taxonomic or nomenclatural change; described and maintained in *Chirixalus*, but with a period in *Philautus*.

N161. ***Philautus shyamrupus*** Chanda & Ghosh, 1989  
*Original name.* *Philautus shyamrupus* Chanda & Ghosh, 1989: 215.

*Name-bearing type.* Holotype by original designation, ZSIC A.8475 [formerly ZSIS KZ.313] (Chanda et al., 2000), adult female, SVL 25.0 mm (Chanda & Ghosh, 1989: 216–217).

*Type-locality.* Hornbill (27°31'N, 96°28'E), Namdapha Tiger Reserve, Arunachal Pradesh, India.

*Current status of specific name.* Valid name, as *Philautus shyamrupus* Chanda & Ghosh, 1989 (Dutta, 1997: 85).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Dutta, 1997: 85).

*Proposed status of specific name.* Valid name, as *Chirixalus shyamrupus* (Chanda & Ghosh, 1989).

*Proposed generic and infrageneric allocation.* Genus *Chirixalus* Boulenger, 1893.

*Comments.* Chanda & Ghosh (1989) and later Chanda & Sarkar (1997) compared this species with the nominal species *Ixalus argus* Annandale, 1912, a completely irrelevant comparison as the latter is clearly a member of the ranid genus *Amolops* (see Dubois, 1992), but they failed to compare it with any species of *Philautus* from the Eastern Himalayas and neighbouring regions (see Dubois, 1999a). Dutta (1997: 86) followed Chanda & Ghosh (1989) and stated that this species was 'close to *P. argus* and *P. aurifasciatus*', which has little meaning since the former is an *Amolops* and the latter a *Philautus*! Study of their descriptive notes and of the photo of fig. 1 of Chanda & Sarkar (1997) strongly suggests that this species is not a member of the genus *Philautus*: no *Philautus* species is known to have longitudinal bands or lines on the body or flanks, as stated in the original description and shown on the photograph of the holotype of *P. shyamrupus*; this specimen is stated to have a smooth chest and belly, an extensive webbing, and to lack both inner and outer metatarsal tubercles. We suggest to provisionally refer this species to the genus *Chirixalus*. Final stabilization of the status of this name will require reexamination of the holotype and relevant comparisons with truly related species.

*Status of taxon.* Ranidae, Rhacophorinae: *Chirixalus shyamrupus* (Chanda & Ghosh, 1989).

*Generic allocation status.* Category C: taxonomic transfer from *Philautus* to *Chirixalus*.

N162. ***Philautus disgregus*** Inger, 1989

*Original name.* *Philautus disgregus* Inger, 1989: 235.

*Name-bearing type.* Holotype by original designation, FMNH 231140, adult male, SVL 22.0 mm (Inger, 1989: 235–237).

*Type-locality.* Danum Valley Field Centre (05°12'N, 117°50'E), Lahad Datu District, Sabah [Borneo], Malaysia.

*Current status of specific name.* Valid name, as *Philautus disgregus* Inger, 1989 (Duellman, 1993: 290).

*Current generic and infrageneric allocation.* *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Inger, 1989: 235–236).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) disgregus* Inger, 1989.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N163. ***Philautus aurantium*** Inger, 1989

*Original name.* *Philautus aurantium* Inger, 1989: 239.

*Name-bearing type.* Holotype by original designation, FMNH 233224, adult female, SVL 26.2 mm (Inger, 1989: 239–240).

*Type-locality.* Mendolong (04°55'N, 115°45'E), Sipitang District, Sabah [Borneo], Malaysia.

*Current status of specific name.* Valid name, as *Philautus aurantium* Inger, 1989 (Duellman, 1993: 289).

*Current generic and infrageneric allocation.* *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Inger, 1989: 235, 239–240).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) aurantium* Inger, 1989.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N164. ***Philautus menglaensis*** Kou, 1990

*Original name.* *Philautus menglaensis* Kou, 1990: 210.

*Name-bearing type.* Holotype by original designation, YU A.845090, adult male, SVL 17.5 mm (Kou, 1990: 210–211).

*Type-locality.* Zhushihe (900 m), Mengla Xian [County] (21°27'N, 101°34'E), Yunnan, China.

*Current status of specific name.* Valid name, as *Philautus menglaensis* Kou, 1990 (Ye et al., 1993: 319; Zhao & Adler, 1993: 154).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Ye et al., 1993: 319; Zhao & Adler, 1993: 154); *Philautus rhododiscus* group (Fei, 1999: 382).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) menglaensis* Kou, 1990.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N165. *Philautus odontotarsus* Ye & Fei, 1993

*Original name.* *Philautus odontotarsus* Ye & Fei in Ye et al., 1993: 318, 320.

*Name-bearing type.* Holotype by original designation, CIB 57311, adult male, SVL 30.8 mm (Ye et al., 1993: 320–321).

*Type-locality.* Mengyang (22°00'N, 100°53'E), Jing Hong Xian [County], Yunnan, China.

*Current status of specific name.* Valid name, as *Philautus odontotarsus* Ye & Fei, 1993 (Ye et al., 1993: 320).

*Current generic and infrageneric allocation.* Genus *Philautus* Gistel, 1848 (Ye et al., 1993: 320); *Philautus odontotarsus* group (Fei, 1999: 382).

*Proposed generic and infrageneric allocation.* Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) odontotarsus* Ye & Fei, 1993.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N166. *Philautus poecilus* Brown & Alcalá, 1994

*Original name.* *Philautus poecilus* Brown & Alcalá, 1994: 185, 196.

*Name-bearing type.* Holotype by original designation, CAS 133526, sex and SVL not stated (Brown & Alcalá, 1994: 196).

*Type-locality.* South side of Mount Hilonghlong (9°06'N, 125°44'E), Agusan del Norte Province, Mindanao, Philippines.

*Current status of specific name.* Valid name, as *Philautus poecilus* Brown & Alcalá, 1994 (Glaw et al., 1998: xxiv).

*Current generic and infrageneric allocation.* *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Brown & Alcalá, 1994: 195–196).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) poecilus* Brown & Alcalá, 1994.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N167. *Philautus sarrufus* Brown & Alcalá, 1994

*Original name.* *Philautus sarrufus* Brown & Alcalá, 1994: 185, 200.

*Name-bearing type.* Holotype by original designation, CAS-SU 21013, adult female, SVL not stated (Brown & Alcalá, 1994: 200).

*Type-locality.* Submontane forest on west side of Dapitan Peak (8°39'N, 123°26'E; 1800–1900 m), about 10 km SE of Masawan, Misamis Occidental Province, Mindanao Island, Philippines.

*Current status of specific name.* Valid name, as *Philautus sarrufus* Brown & Alcalá, 1994 (Glaw et al., 1998: xxiv).

*Current generic and infrageneric allocation.* *Philautus surdus* group of the genus *Philautus* Gistel, 1848 (Brown & Alcalá, 1994: 200).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) sarrufus* Brown & Alcalá, 1994.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N168. *Philautus bunitus* Inger, Stuebing & Tan, 1995

*Original name.* *Philautus bunitus* Inger, Stuebing & Tan, 1995: 127.

*Name-bearing type.* Holotype by original designation, FMNH 239261, adult male, SVL 40.8 mm (Inger et al., 1995: 127, 129).

*Type-locality.* Gunong [Mount] Lumaku (4°52'N, 115°38'E; 1350 m), Sipitang District, Sabah [Borneo], Malaysia.

*Current status of specific name.* Valid name, as *Philautus bunitus* Inger, Stuebing & Tan, 1995 (Glaw et al., 1998: xxiv).

*Current generic and infrageneric allocation.* *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Inger et al., 1995: 127).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) bunitus* Inger, Stuebing & Tan, 1995.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N169. *Philautus refugii* Inger & Stuebing, 1996

*Original name.* *Philautus refugii* Inger & Stuebing, 1996: 543.

*Name-bearing type.* Holotype by original designation, FMNH 252418, adult male, SVL 16.0 mm.

*Type-locality.* Bukit Lanjak (1°24'N, 112°00'E; 840 m), Lubok Antu District, Second Division, Sarawak [Borneo], Malaysia.

*Current status of specific name.* Valid name, as *Philautus refugii* Inger & Stuebing, 1996 (Glaw et al., 1998: xxiv).

*Current generic and infrageneric allocation.* *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Inger & Stuebing, 1996: 544).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) refugii* Inger & Stuebing, 1996.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N170. ***Philautus mjobergi*** Malkmus & Riede, 1996  
*Original name.* *Philautus mjobergi* Malkmus & Riede, 1996a: 27, nomen novum pro *Philautus mjobergi* Smith, 1925: 7.

*Name-bearing type.* Same as for *Philautus mjobergi* Smith, 1925.

*Type-locality.* Same as for *Philautus mjobergi* Smith, 1925.

*Current status of specific name.* Although other recent authors (e.g.: Dring, 1987: 38; Inger & Stuebing, 1996: 544) considered the valid name of this species to be *Philautus mjobergi* Smith, 1925, Malkmus & Riede (1996a: 29) emended the spelling of this name into *Philautus mjobergi*.

*Proposed status of specific name.* Invalid name, junior objective synonym of *Philautus mjobergi* Smith, 1925.

*Species-group allocation.* *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Dring, 1987: 20, 33; Malkmus & Riede, 1996a: 29).

*Comments.* Malkmus & Riede (1996a-b) consistently used the spelling *P. mjobergi* for the species described by Smith (1925) as *P. mjobergi*. They probably considered this spelling change as a justified emendation, but, as already noted by Matsui (in Frost, 1985: 410) for the species *Leptobranchella mjobergi*, this is not true. Smith (1925) dedicated his new species to the Dr. Eric Mjöberg, a Swedish entomologist (see e.g. Söderberg, 1919: 3). He wrote the specific name as *mjöbergi*, with a diaeresis: under the current *Code* this is an incorrect original spelling that must be corrected. Article 32.5 of the *Code* expressly states that, in such cases, insertion of an 'e' after a vowel is to be made only in the case of a scientific name based upon a German word. As Mjöberg is a Swedish name, the justified emendation of Smith's name is *P. mjobergi*. On the other hand, as its use was clearly intentional, the spelling *Philautus mjobergi* must be considered as an unjustified emendation, i.e. a particular case of nomen novum (see e.g. Dubois, 1987b), whose authorship is to be credited to Malkmus & Riede (1996a).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) mjobergi* Smith, 1925.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N171. ***Philautus saueri*** Malkmus & Riede, 1996

*Original name.* *Philautus saueri* Malkmus & Riede, 1996a: 27, 29.

*Name-bearing type.* Holotype by original designation, ZMB 53626, adult male, SVL 21.4 mm (Malkmus & Riede, 1996a: 29–30).

*Type-locality.* East of Pakka Cave (3050 m), south-western slope of Mount Kinabalu (6°03'N, 116°32'E), Sabah [Borneo], Malaysia.

*Current status of specific name.* Valid name, as *Philautus saueri* Malkmus & Riede, 1996 (Glaw et al., 1998: xxiv).

*Current generic and infrageneric allocation.* *Philautus aurifasciatus* group of the genus *Philautus* Gistel, 1848 (Malkmus & Riede, 1996a: 29).

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) saueri* Malkmus & Riede, 1996.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N172. ***Philautus aurantium gunungensis***

Malkmus & Riede, 1996

*Original name.* *Philautus aurantium gunungensis* Malkmus & Riede, 1996b: 21, 22.

*Name-bearing type.* Holotype by original designation, ZMB 53627, adult male, SVL 25.3 mm (Malkmus & Riede, 1996b: 22).

*Type-locality.* Above the Silau stream (1450 m), southern slope of Mount Kinabalu (6°03'N, 116°32'E), Sabah [Borneo], Malaysia.

*Current status of specific name.* Valid name, as *Philautus aurantium gunungensis* Malkmus & Riede, 1996 (Glaw et al., 1998: xxiv).

*Current generic and infrageneric allocation.* *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Malkmus & Riede, 1996a: 21).

*Proposed status of specific name.* Valid name, as *Philautus gunungensis* Malkmus & Riede, 1996.

*Comments.* Malkmus & Riede (1996b) stated that this form was morphologically very similar to *Philautus aurantium* Inger, 1989 but had a 'very different' call. Both forms occur on Mount Kinabalu, although apparently not sympatrically. Apparently no specimens or populations intermediate between the two taxa, either for morphology or for call, were found. We consider this evidence in favour of treating the two taxa as distinct species, not subspecies. For the time being, no subspecies is recognized in the genus *Philautus*, and we think this could be done only on the basis of detailed genetic studies on gene flow between sympatric or parapatric populations.

*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) gunungensis* Malkmus & Riede, 1996b.

*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N173. ***Platymantis polilloensis***

Brown, Brown & Alcalá, 1997

*Original name.* *Platymantis polilloensis* Brown, Brown & Alcalá, 1997: 406, nomen novum (unjustified emendation) pro *Philautus polillensis* Taylor, 1922a:

171.

**Name-bearing type.** Same as for *Philautus polillensis* Taylor, 1922.

**Type-locality.** Same as for *Philautus polillensis* Taylor, 1922.

**Current status of specific name.** Invalid name, junior objective synonym of *Philautus polillensis* Taylor, 1922.

**Current generic and infrageneric allocation.** Genus *Platymantis* Günther, 1859 (Brown et al., 1997: 409).

**Status of taxon.** Ranidae, Dicroglossinae: *Platymantis polillensis* (Taylor, 1922).

**Generic allocation status.** Category E: no taxonomic or nomenclatural change; named and maintained in *Platymantis*.

**N174. *Philautus sanctisilvaticus*** Das & Chanda, 1997

**Original name.** *Philautus sanctisilvaticus* Das & Chanda, 1997: 21.

**Name-bearing type.** Holotype by original designation, ZSIC A.1778, adult male, SVL 20.8 mm (Das & Chanda, 1997: 22, 24).

**Type-locality.** Kapildhara Falls, Amarkantak (22°40'N, 81°44'E), Shahdol, Jabalpur District, Madhya Pradesh, India.

**Current status of specific name.** One of the two original spellings of *Philautus sanctisilvaticus* Das & Chanda, 1997.

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Das & Chanda, 1997).

**Proposed status of specific name.** Valid name, as *Philautus sanctisilvaticus* Das & Chanda, 1997.

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** Two different specific names were given to this species in the original description: acting as first-revisers, we hereby choose the spelling *sanctisilvaticus* as the 'correct original spelling' of this name (see below under '*Philautus sanctipalustris*' Das & Chanda, 1997).

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) sanctisilvaticus* Das & Chanda, 1997.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

**N175. '*Philautus sanctipalustris*'**  
Das & Chanda, 1997

**Original name.** '*Philautus sanctipalustris*' Das & Chanda, 1997: 24, incorrect original spelling (following the first reviser action taken hereby) of *Philautus sanctisilvaticus* Das & Chanda, 1997, unavailable in nomenclature (Articles 24.2 and 32.4 of the *Code*).

**Name-bearing type.** Same as for *Philautus sanctisilvaticus* Das & Chanda, 1997.

**Type-locality.** Same as for *Philautus sanctisilvaticus* Das & Chanda, 1997.

**Current status of specific name.** One of the two original spellings of *Philautus sanctisilvaticus* Das & Chanda, 1997.

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Das & Chanda, 1997).

**Proposed status of specific name.** Unavailable name, incorrect original spelling of *Philautus sanctisilvaticus* Das & Chanda, 1997.

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Comments.** This name appears once (Das & Chanda, 1997: 24) in the paper devoted to the description of *Philautus sanctisilvaticus* Das & Chanda, 1997. The latter spelling appears 6 times in this paper, including in the title, and is given an etymological justification: it was clearly the name intended by the authors. The spelling '*sanctipalustris*' apparently resulted from a 'contamination' from the name *Nyctibatrachus sanctipalustris*, which is discussed in the same page. Acting as first-revisers, according to Articles 24 and 32 of the *Code*, we hereby adopt the spelling *sanctisilvaticus* as the 'correct original spelling' of this specific name: consequently, the spelling '*sanctipalustris*' becomes an 'incorrect original spelling' of this name, devoid of nomenclatural availability.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) sanctisilvaticus* Das & Chanda, 1997.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

**N176. *Philautus terebrans*** Das & Chanda, 1998

**Original name.** *Philautus terebrans* Das & Chanda, 1998: 105.

**Name-bearing type.** Holotype by original designation, USNM 239428, adult male, SVL 21.6 mm (Das & Chanda, 1998: 105).

**Type-locality.** Peddavalasa (17°47'N, 82°16'E; roughly 1000 m), Vishakhapatnam, Andhra Pradesh, India.

**Current status of specific name.** Valid name, as *Philautus terebrans* Das & Chanda, 1997 (Das & Chanda, 1998: 105).

**Current generic and infrageneric allocation.** Genus *Philautus* Gistel, 1848 (Das & Chanda, 1998: 105).

**Proposed generic and infrageneric allocation.** Nominotypical subgenus of the genus *Philautus* Gistel, 1848.

**Status of taxon.** Ranidae, Rhacophorinae: *Philautus (Philautus) terebrans* Das & Chanda, 1998.

**Generic allocation status.** Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.

N177. *Philautus abditus*

Inger, Orlov &amp; Darevsky, 1999

*Original name.* *Philautus abditus* Inger, Orlov & Darevsky, 1999: 26.*Name-bearing type.* Holotype by original designation, FMNH 252833, sex not stated, SVL 28.1 mm (Inger et al., 1999: 28).*Type-locality.* Buon Luoi, An Khe District, Vietnam.*Current status of specific name.* Valid name, as *Philautus abditus* Inger, Orlov & Darevsky, 1999 (Inger et al., 1999).*Current generic and infrageneric allocation.* *Philautus vermiculatus* group of the genus *Philautus* Gistel, 1848 (Inger et al., 1999: 28).*Status of taxon.* Ranidae, Rhacophorinae: *Philautus (Philautus) abditus* Inger, Orlov & Darevsky, 1999.*Generic allocation status.* Category A2: no taxonomic or nomenclatural change; described and maintained in *Philautus*.**Description of type-specimens**

In order to allow comparisons, all descriptions below were made using a numbered list of characters that applies to all anuran species (see Dubois & Ohler, 1998, 1999; Ohler et al., 2000).

D1. *Hyla aurifasciata* Schlegel, 1837

(Figure 1)

Lectotype, RMNH 4266.a, adult female.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 25.5 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 10.6 mm; HL 10.0 mm, MN 8.9 mm; MFE 7.3 mm; MBE 4.3 mm), convex above. (3) Snout rounded, slightly protruding, its length (SL 3.6 mm) equal to horizontal diameter of eye (EL 3.6 mm). (4) Canthus rostralis distinct, rounded; loreal region slightly concave. (5) Interorbital space convex, somewhat larger (IUE 2.8 mm) than upper eyelid (UEW 2.7 mm), somewhat less than internarial distance (IN 2.9 mm); distance between front of eyes (IFE 5.8 mm) 1.6 times in distance between back of eyes (IBE 9.3 mm). (6) Nostrils oval, without flap of skin laterally, closer to tip of snout (NS 1.1 mm) than to eye (EN 2.0 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.5 mm) rather distinct, oval, oblique, 42 % of eye diameter; tympanum-eye distance (TYE 0.8 mm) 53 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderately large, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to

shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 6.5 mm) shorter than hand (HAL 7.8 mm), not enlarged. (17) Fingers moderately long and strong (TFL 4.4 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.7 mm, fw1 0.5 mm; fd2 1.1 mm, fw2 0.7 mm; fd3 1.5 mm, fw3 0.8 mm; fd4 1.5 mm, fw4 0.8 mm). (20) Dermal fringe on inside of all fingers; webbing on fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, distinct; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels slightly overlapping when legs are folded at right angles to body; tibia 4.5 times longer (TL 14.9 mm) than wide (TW 3.3 mm), longer than thigh (FL 13.7 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 12.0 mm). (24) Toes moderately long and strong, toe IV (FTL 6.1 mm) 3.0 times in distance from base of tarsus to tip of toe IV (TFOL 18.4 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 = 5 < 4$ . (26) Tips of all toes with disks, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.8 mm, tw1 0.6 mm; td2 1.0 mm, tw2 0.7 mm; td3 1.3 mm, tw3 0.8 mm; td4 1.3 mm, tw4 0.7 mm; td5 1.3 mm, tw5 0.8 mm). (27) Webbing present, toes about half webbed (MTTF 5.1 mm, MTF 5.6 mm, TTF 4.9 mm, FFTF 5.1 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles prominent, rounded, simple and all present (but third tubercle of toe IV very small). (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.5 mm) 1.7 times in length of toe I (ITL 2.6 mm). (31) Tarsal fold absent, but some small spinules present. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on toe IV, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back, and upper part of flanks shagreened; lower part of flanks (beneath line from insertion of arm to groin) slightly granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus shagreened. (36) Throat smooth to slightly shagreened, chest shagreened, belly with treefrog belly skin, ventral part of thighs granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum brownish. Head brown with a dark brown, white-edged stripe between eyes, dorsum brown and tan vermiculated, with a dark brown X-mark. Upper part of flanks with two dark brown bands on whitish background, lower part of flanks light brown. Tympanic

region dark brown, vermiculated with whitish; tympanum brown; Side of head dark, with a dark brown stripe below eye. Upper lip white. (39) Forelimb brown with two dark brown stripes, dorsal part of thighs and tibia brown with three dark stripes, dorsal part of feet brown with darker stripes, posterior part of thigh mostly dark brown. (40) Throat, chest, belly, ventral part of thighs and webbing tan, margin of throat tan vermiculated with some darker brown.

**(H) Female secondary sexual characters.** No female secondary sexual characters evident. (No incision was made for checking oviduct or ovary).

**D2. *Polypedates variabilis* Jerdon, 1853**  
(Figure 2)

Neotype, IRSNB 1918, adult male.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 48.6 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, as long as broad (HW 17.2 mm; HL 17.2 mm, MN 15.1 mm; MFE 11.1 mm; MBE 6.2 mm), flat above. (3) Snout rounded, slightly protruding, its length (SL 6.1 mm) longer than horizontal diameter of eye (EL 5.1 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space flat, larger (IUE 5.5 mm) than upper eyelid (UEW 3.9 mm), larger than internarial distance (IN 4.2 mm); distance between front of eyes (IFE 9.3 mm) 1.5 times in distance between back of eyes (IBE 14.5 mm). (6) Nostrils rounded without flap of skin laterally, closer to tip of snout (NS 2.1 mm) than to eye (EN 4.4 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 3.0 mm) distinct, rounded, 59 % of eye diameter; tympanum-eye distance (TYE 1.3 mm) 43 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing a few small teeth ( $N = 2 \times 4$ ), between the choanae, with an angle of  $60^\circ$  relative to body axis, slightly closer to choanae than from each other, longer than distance between them. (11) Tongue large, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 11.1 mm) shorter than hand (HAL 15.3 mm), not enlarged. (17) Fingers moderately long and strong (TFL 9.2 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.3 mm, fw1 1.0 mm; fd2 2.5 mm, fw2 1.4 mm; fd3 2.7 mm, fw3 1.6 mm; fd4 2.6 mm, fw4 1.6 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers present, rudimentary.

(21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, flat, indistinct; supernumerary tubercles not evident.

**(D) Hind limbs.** (23) Hind limbs moderately long; tibia 3.8 times longer (TL 23.1 mm) than wide (TW 6.0 mm), shorter than thigh (FL 23.9 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 22.4 mm). (24) Toes moderately long and strong, toe IV (FTL 12.6 mm) 2.6 times in distance from base of tarsus to tip of toe IV (TFOL 33.4 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with disks, with distinct circummarginal grooves, rather wide compared to toe width (td1 1.5 mm, tw1 1.1 mm; td2 1.7 mm, tw2 1.2 mm; td3 1.9 mm, tw3 1.3 mm; td4 2.1 mm, tw4 1.4 mm; td5 2.0 mm, tw5 1.4 mm). (27) Webbing present, toes more than half webbed (MTTF 12.2 mm, MTFF 14.1 mm, TFTF 9.0 mm, FFTF 8.2 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles prominent, rounded, simple and all present. (30) Inner metatarsal tubercle oval, rather indistinct, its length (IMT 2.1 mm) 3.1 times in length of toe I (ITL 6.5 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles absent, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back, and upper part of flanks smooth, lower part of flanks (beneath line from insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat with glandular warts, chest shagreened, belly with treefrog belly skin and thighs smooth, granular around anus. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum, and upper part of flanks greyish green, with large brown spots; groin brown and white marbled; loreal region, tympanic region and tympanum greyish green. Upper and lower lip greyish green. (39) Forelimb and dorsal part of thighs, tibia and foot greyish green with several brown cross bands, posterior part of thigh yellowish with small white spots. (40) Throat, chest and belly greyish, ventral part of thighs yellowish, webbing grey.

**(G) Male secondary sexual characters.** (41) Nuptial spines present. (42) Vocal sacs not evident. (43) No other male secondary sexual characters evident.

**D3. *Ixalus glandulosus* Jerdon, 1853**  
(Figure 3)

Neotype, BMNH 1947.2.27.22, adult male.

**(A) Size and general aspect.** (1) Frog of small size (SVL 22.3 mm), body moderately elongate.

**(B) Head.** (2) Head of rather large size, broader than long (HW 9.4 mm; HL 8.5 mm, MN 7.4 mm; MFE 6.0 mm; MBE 2.3 mm), slightly convex above. (3) Snout rounded, not protruding, its length (SL 3.2 mm) longer than horizontal diameter of eye (EL 3.8 mm). (4) Canthus rostralis rounded, loreal region slightly concave to almost flat. (5) Interorbital space convex, larger (IUE 3.3 mm) than upper eyelid (UEW 2.0 mm), larger than internarial distance (IN 2.6 mm); distance between front of eyes (IFE 5.1 mm) about 1.8 times in distance between back of eyes (IBE 9.1 mm). (6) Nostrils nearly rounded without flap of skin laterally, closer to tip of snout (NS 1.2 mm) than to eye (EN 1.7 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.1 mm) rather distinct, rounded, 29 % of eye diameter; tympanum-eye distance (TYE 0.1 mm) 9 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing no visible teeth, between choanae, with an angle of approximately 60° to body axis, closer to choanae than to each other, much shorter than distance between them. (11) Tongue rather small, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 5.5 mm) shorter than hand (HAL 6.2 mm), not enlarged. (17) Fingers moderately long and strong (TFL 3.2 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.8 mm, fw1 0.5 mm; fd2 0.9 mm, fw2 0.6 mm; fd3 1.3 mm, fw3 0.8 mm; fd4 1.3 mm, fw4 0.8 mm). (20) Small dermal fringe on inside of all fingers; webbing at base of fingers rudimentary. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, prominent; two palmar tubercles, oval, rather indistinct; supernumerary tubercles present on fingers II, III and IV.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels not in contact when limbs are folded at right angles to body. Tibia 4.4 times longer (TL 10.9 mm) than wide (TW 2.5 mm), shorter than thigh (FL 11.1 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 8.9 mm). (24) Toes moderately long and strong, toe IV (FTL 4.5 mm) 3.1 times in distance from base of tarsus to tip of toe IV (TFOL 14.2 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.8 mm, tw1 0.5 mm; td2 0.9 mm, tw2 0.6 mm; td3 0.9 mm, tw3 0.6 mm; td4 1.1 mm, tw4 0.7 mm; td5 1.2 mm, tw5 0.8 mm). (27) Webbing present, medium (MTTF 4.5 mm, MTFF 5.2 mm, TFTF 3.5 mm, FFTF 3.3 mm). (28) Dermal fringe

along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles prominent, rounded, simple and all present, antepenultimate subarticular tubercle on fourth toe smaller. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.0 mm) 2.1 times in length of toe I (ITL 2.1 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles absent, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back, and upper part of flanks smooth, lower part of flanks (beneath line from insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat smooth, chest and ventral part of thighs shagreened, belly granular. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum purple, flanks white, loreal region, tympanic region and tympanum white with some brown spots. Upper lip white. (39) Forelimb white with some brown spots, dorsal part of thigh white with a purple line, dorsal part of tibia purple, dorsal part of foot white, and posterior part of thigh uncoloured tan. (40) Throat, chest, belly and webbing white, ventral part of thigh brownish white.

**(G) Male secondary sexual characters.** (41) Nuptial spines absent. (42) Vocal sacs present, unique; a pair of distinct slit-like openings at base of jaw.

D4. *Phyllomedusa tinniens* Jerdon, 1853  
(Figure 4)

Neotype, MNHN 1985.0527, adult female.

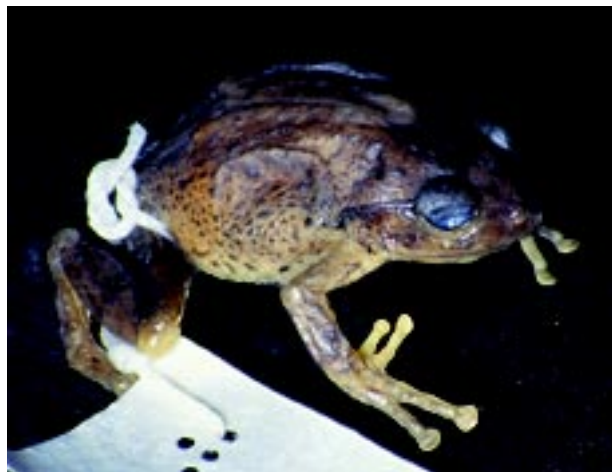
**(A) Size and general aspect.** (1) Frog of rather small size (SVL 25.0 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 9.3 mm; HL 8.6 mm, MN 7.5 mm; MFE 6.0 mm; MBE 3.4 mm), convex above. (3) Snout rounded, slightly protruding, its length (SL 2.8 mm) about equal to horizontal diameter of eye (EL 2.8 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space convex, larger (IUE 3.0 mm) than upper eyelid (UEW 2.0 mm), larger than internarial distance (IN 2.3 mm); distance between front of eyes (IFE 5.0 mm) 1.5 times in distance between back of eyes (IBE 7.7 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 0.9 mm) than to eye (EN 1.9 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.2 mm) rather indistinct, rounded, 43 % of eye diameter; tympanum-eye distance (TYE 0.7 mm) 58 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, bearing a retracted lingual papilla in front. Tooth-like projections on lower jaw absent. (12)





**Figure 1.** *Hyla aurifasciata* Schlegel, 1837, lectotype, RMNH 4266.a, adult female (SVL 25.5 mm).



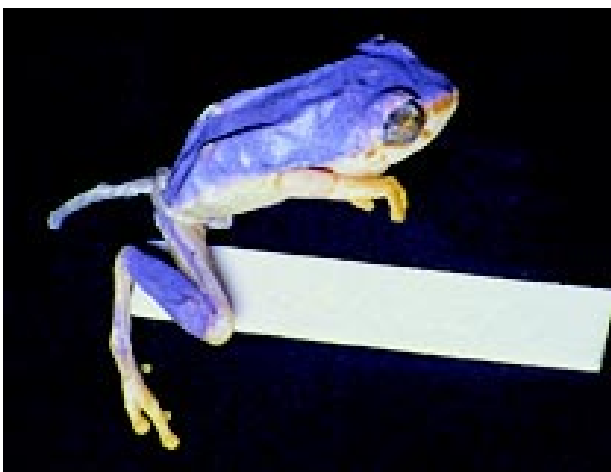
**Figure 4.** *Phyllomedusa tinniense* Jerdon, 1853, neotype, MNHN 1985.0527, adult female (SVL 25.0 mm).



**Figure 2.** *Polypedates variabilis* Jerdon, 1853, neotype, IRSNB 1918, adult male (SVL 48.0 mm).



**Figure 5.** *Phyllomedusa wynaadensis* Jerdon, 1853, neotype, MNHN 1999.5596, adult male (SVL 28.3 mm).



**Figure 3.** *Ixalus glandulosus* Jerdon, 1853, neotype, BMNH 1947.2.27.22 [ex BMNH 1882.2.10.39], adult male (SVL 22.3 mm).



**Figure 6.** *Ixalus variabilis* Günther, 1859, lectotype, BMNH 1947.2.7.87 [ex BMNH 1855.2.12.11], adult female (SVL 35.8 mm).

Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 5.8 mm) shorter than hand (HAL 6.9 mm), not enlarged. (17) Fingers moderately long and strong (TFL 4.9 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.8 mm, fw1 0.6 mm; fd2 1.0 mm, fw2 0.7 mm; fd3 1.4 mm, fw3 0.8 mm; fd4 1.2 mm, fw4 0.8 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex absent.

**(D) Hind limbs.** (23) Hind limbs rather short, heels barely in touch when limbs are folded at right angles to body. Tibia 3.7 times longer (TL 9.9 mm) than wide (TW 2.7 mm), shorter than thigh (FL 10.2 mm), shorter than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 10.2 mm). (24) Toes moderately long and strong, toe IV (FTL 5.6 mm) 2.9 times in distance from base of tarsus to tip of toe IV (TFOL 16.4 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, somewhat smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.8 mm, tw1 0.6 mm; td2 1.0 mm, tw2 0.7 mm; td3 1.1 mm, tw3 0.7 mm; td4 1.1 mm, tw4 0.7 mm; td5 1.1 mm, tw5 0.7 mm). (27) Webbing present, small (MTTF 4.1 mm, MTF 5.0 mm, TTF 5.2 mm, FTF 5.0 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles distinct, rounded, simple and all present, antepenultimate subarticular tubercle on fourth toe small. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.0 mm) 2.6 times in length of toe I (ITL 2.6 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on all toes, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head and anterior part of back smooth, posterior part of back shagreened, upper part of flanks shagreened, lower part of flanks (beneath the line from insertion of arm to groin) granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus shagreened. (36) Throat shagreened, chest, belly and ventral part of thigh granular. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum dark brown, flanks yellowish with dark brown spots, loreal region, tympanic region and tympanum dark brown. Upper and lower lip brown. (39) Forelimb, dorsal part of thigh, dorsal part of tibia and dorsal part of foot brown, posterior part of thighs and groin with large blackish spot. Two inner fingers and toes yellowish. (40) Throat,

margin of throat, chest, belly, ventral part of thighs and webbing yellowish, with some small darker spots.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with large, yellowish oocytes.

#### D5. *Phyllomedusa wynaadensis* Jerdon, 1853

(Figure 5)

Neotype, MNHN 1999.5596, adult male.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 28.3 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, longer than broad (HW 9.6 mm; HL 10.1 mm, MN 8.7 mm; MFE 6.7 mm; MBE 3.3 mm), slightly convex above. (3) Snout subelliptical, slightly protruding, its length (SL 3.6 mm) shorter than horizontal diameter of eye (EL 4.1 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space convex, larger (IUE 3.3 mm) than upper eyelid (UEW 2.5 mm), larger than internarial distance (IN 3.0 mm); distance between front of eyes (IFE 5.7 mm) 1.5 times in distance between back of eyes (IBE 8.8 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.1 mm) than to eye (EN 2.1 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 2.1 mm) very distinct, rounded, 51 % of eye diameter; tympanum-eye distance (TYE 0.2 mm) 10 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, bearing no lingual papilla, but with a hole. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 6.5 mm) shorter than hand (HAL 7.3 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.2 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.8 mm, fw1 0.6 mm; fd2 1.1 mm, fw2 0.7 mm; fd3 1.3 mm, fw3 0.8 mm; fd4 1.2 mm, fw4 0.8 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, distinct; supernumerary tubercles present on toes III and IV.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels slightly overlapping when limbs are folded at right angles to body. Tibia 4.2 times longer (TL 13.4 mm) than wide (TW 3.2 mm), longer than thigh (FL 12.9 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 11.8 mm). (24) Toes moderately long and strong,

toe IV (FTL 6.0 mm) 3.0 times in distance from base of tarsus to tip of toe IV (TFOL 17.8 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.5 mm, tw1 0.4 mm; td2 0.6 mm, tw2 0.5 mm; td3 0.7 mm, tw3 0.6 mm; td4 0.9 mm, tw4 0.6 mm; td5 0.9 mm, tw5 0.7 mm). (27) Webbing present, medium (MTTF 5.0 mm, MTFF 6.0 mm, TFTF 5.4 mm, FFTF 4.9 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles prominent, rounded, simple and all present, antepenultimate subarticular tubercle on fourth toe very small. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.1 mm) 2.2 times in length of toe I (ITL 2.4 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on all toes, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes and side of head smooth to slightly shagreened, anterior and posterior part of back with small horny spinules, upper part of flanks shagreened, lower part of flanks (beneath line from insertion of arm to groin) slightly granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened to granular, belly and ventral part of thighs granular. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum, and upper part of flanks reddish brown, loreal region and tympanic region darker brown than on back, upper 2/3 of tympanum dark brown. Upper lip brownish, lower lip white and brown. (39) Forelimb brown with some darker bands, dorsal part of thigh and tibia with three darker bands, dorsal part of foot brown, and posterior part of thigh orange-brown. (40) Throat, chest, belly and ventral part of thighs whitish, margin of throat and webbing whitish, speckled with brown.

**(G) Male secondary sexual characters.** (41) Nuptial spines present. (42) Vocal sacs present, unique; a pair of rounded openings distinct at base of jaw. (43) Small spines on the back.

**D6. *Ixalus variabilis* Günther, 1859**  
(Figure 6)

Lectotype, BMNH 1947.2.7.87, adult female.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 37.2 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 14.9 mm; HL 13.1 mm, MN 12.4 mm; MFE 9.8 mm; MBE 4.8 mm), flat above. (3) Snout nearly rounded, not protruding, its length (SL 4.9 mm) subequal to horizontal diameter of eye (EL 5.0 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space flat, larger (IUE 4.4 mm) than upper

eyelid (UEW 3.0 mm), larger than internarial distance (IN 3.2 mm); distance between front of eyes (IFE 7.5 mm) 1.7 times in distance between back of eyes (IBE 13.1 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.0 mm) than to eye (EN 3.0 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.8 mm) rather indistinct, rounded, 36 % of eye diameter; tympanum-eye distance (TYE 0.7 mm) 39 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing no visible teeth, between the choanae, with an angle of 60° relative to body axis, closer to choanae than to each other, somewhat longer than the distance between them. (11) Tongue moderate, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 8.3 mm) shorter than hand (HAL 10.5 mm), not enlarged. (17) Fingers moderately long and strong (TFL 6.5 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.3 mm, fw1 0.9 mm; fd2 1.6 mm, fw2 1.0 mm; fd3 2.0 mm, fw3 1.2 mm; fd4 1.7 mm, fw4 1.2 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles distinct, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, flat, rather indistinct; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs moderately long. Tibia 4.1 times longer (TL 17.7 mm) than wide (TW 4.3 mm), longer than thigh (FL 17.2 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 16.2 mm). (24) Toes moderately long and strong, toe IV (FTL 8.3 mm) 3.0 times in distance from base of tarsus to tip of toe IV (TFOL 24.7 mm). (25) Relative length of toes when opposed:  $1 < 2 < 5 < 3 < 4$ . (26) Tips of all toes with moderate disks, somewhat smaller than those of fingers, with a distinct circummarginal groove, rather wide compared to toe width (td1 1.0 mm, tw1 0.8 mm; td2 1.3 mm, tw2 0.9 mm; td3 1.4 mm, tw3 1.0 mm; td4 1.7 mm, tw4 1.2 mm; td5 1.6 mm, tw5 1.2 mm). (27) Webbing present, medium (MTTF 7.8 mm, MTFF 8.8 mm, TFTF 6.3 mm, FFTF 6.8 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles distinct, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.6 mm) 2.5 times in length of toe I (ITL 4.0 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on all toes, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth, upper part of flanks smooth, lower part of flanks (beneath line from insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened, belly and ventral part of thighs granular. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum, upper part of flanks, loreal region, tympanic region and tympanum brown and purple marbled. Lower part of flanks marbled brown and whitish. Upper and lower lip white. (39) Forelimb, dorsal part of thigh and dorsal part of tibia purple with brown stripes, dorsal part of foot and posterior part of thighs purple marbled with brown. (40) Throat white, with some faint gray spots; margin of throat white; chest, belly, ventral part of thighs and webbing whitish.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with yellowish oocytes.

**D7. *Polypedates microtypanum* Günther, 1859**  
(Figure 7)

Lectotype, BMNH 1947.2.8.48, adult female.

**(A) Size and general aspect.** (1) Frog of rather large size (SVL 51.1 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 19.2 mm; HL 17.5 mm, MN 15.3 mm; MFE 12.5 mm; MBE 7.1 mm), convex above. (3) Snout rounded, slightly protruding, its length (SL 6.9 mm) longer than horizontal diameter of eye (EL 5.8 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space slightly convex, larger (IUE 5.5 mm) than upper eyelid (UEW 3.7 mm), somewhat larger than internarial distance (IN 5.3 mm); distance between front of eyes (IFE 9.9 mm) 1.6 times in distance between back of eyes (IBE 15.6 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 2.9 mm) than to eye (EN 3.5 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 2.8 mm) rather distinct, rounded to vertically oval, 48 % of eye diameter; tympanum-eye distance (TYE 1.8 mm) 64 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing a few small teeth, between the choanae, with an angle of 45° relative to body axis, closer to choanae than to each other, shorter than distance between them. (11) Tongue moderate, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 12.1 mm) shorter than hand (HAL 15.5 mm), not

enlarged. (17) Fingers moderately long and strong (TFL 10.4 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.6 mm, fw1 1.2 mm; fd2 2.1 mm, fw2 1.4 mm; fd3 2.6 mm, fw3 1.6 mm; fd4 2.4 mm, fw4 1.4 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers rudimentary. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, prominent; two palmar tubercles, one large, distinct, and one small, both oval; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs rather long. Tibia 3.7 times longer (TL 26.0 mm) than wide (TW 7.0 mm), longer than thigh (FL 24.3 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 22.2 mm). (24) Toes moderately long and strong, toe IV (FTL 12.0 mm) 3.0 times in distance from base of tarsus to tip of toe IV (TFOL 35.5 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, with distinct circummarginal grooves, rather wide compared to toe width (td1 1.3 mm, tw1 1.2 mm; td2 1.5 mm, tw2 1.3 mm; td3 1.8 mm, tw3 1.3 mm; td4 1.9 mm, tw4 1.3 mm; td5 1.7 mm, tw5 1.3 mm). (27) Webbing present, medium (MTTF 10.3 mm, MTFF 12.8 mm, TFTF 11.3 mm, FFTF 10.4 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles prominent, rounded, simple, all present. (30) Inner metatarsal tubercle oval, distinct, its length (IMT 2.5 mm) 2.3 times in length of toe I (ITL 5.8 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on all toes, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth, upper part of flanks shagreened, lower part of flanks (beneath line from insertion of arm to groin) granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened, belly granular and ventral part of thighs shagreened to slightly granular. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal part of head with a greyish triangle from snout to between eyes, followed by a dark brown stripe between eyes, flanks greyish brown with dark brown markings, loreal region with a brown stripe under the eye, tympanic region brown, very dark brown stripe from snout through eye, covering lower half of supratympanic fold. Upper and lower lip light brown with darker markings. (39) Forelimb with two broad brown bands, dorsal part of thigh, tibia and foot with three dark brown bands, posterior part of thighs speckled with brown. (40) Throat, margin of throat and chest light brown, speckled with some small darker spots, belly, ventral part of thighs and webbing uniform brownish.

**(H) Female secondary sexual characters.** (44) Oviduct not evident. (45) Ovary with very large, yellowish oocytes.

**D8. *Polypedates pleurostictus* Günther, 1864**  
(Figure 8)

Lectotype, BMNH 1947.2.8.53, adult female.

**(A) Size and general aspect.** (1) Frog of rather large size (SVL 50.4 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 18.3 mm; HL 17.3 mm, MN 15.1 mm; MFE 11.4 mm; MBE 6.5 mm), convex above. (3) Snout rounded, not protruding, its length (SL 7.3 mm) longer than horizontal diameter of eye (EL 5.8 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space slightly convex, larger (IUE 6.4 mm) than upper eyelid (UEW 5.2 mm), larger than internarial distance (IN 4.3 mm); distance between front of eyes (IFE 9.9 mm) 1.5 times in distance between back of eyes (IBE 15.2 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 2.4 mm) than to eye (EN 4.1 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 3.0 mm), rather distinct, rounded to slightly oval, 52 % of eye diameter; tympanum-eye distance (TYE 1.2 mm) 40 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing a few ( $N=3$ ) small teeth, between the choanae, with an angle of  $60^\circ$  relative to body axis, closer to choanae than to each other, approximately as long as distance between them. (11) Tongue moderate, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 12.1 mm) much shorter than hand (HAL 16.8 mm), not enlarged. (17) Fingers rather long, moderately strong (TFL 9.9 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 2.0 mm, fw1 1.3 mm; fd2 2.7 mm, fw2 1.5 mm; fd3 2.9 mm, fw3 1.6 mm; fd4 2.8 mm, fw4 1.6 mm). (20) Dermal fringe on inside of all fingers; webbing on fingers rather rudimentary but present. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, flat; supernumerary tubercles not evident.

**(D) Hind limbs.** (23) Hind limbs rather long, heels overlapping when limbs are folded at right angles to body. Tibia 4.8 times longer (TL 26.7 mm) than wide (TW 5.6 mm), longer than thigh (FL 24.8 mm), longer than distance from base of internal metatarsal tubercle

to tip of toe IV (FOL 23.9 mm). (24) Toes relatively long, moderately strong, toe IV (FTL 14.1 mm) 2.7 times in distance from base of tarsus to tip of toe IV (TFOL 37.8 mm). (25) Relative length of toes when opposed:  $1 < 2 < 5 < 3 < 4$ . (26) Tips of all toes with moderate disks, with distinct circummarginal grooves, rather wide compared to toe width (td1 2.1 mm, tw1 1.4 mm; td2 2.2 mm, tw2 1.4 mm; td3 2.2 mm, tw3 1.5 mm; td4 2.5 mm, tw4 1.6 mm; td5 2.5 mm, tw5 1.6 mm). (27) Webbing present, large (MTTF 12.7 mm, MTFF 14.1 mm, TFTF 9.1 mm, FFTF 10.2 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles distinct, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 2.6 mm) 2.8 times in length of toe I (ITL 7.4 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle, supernumerary tubercles and tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head and anterior part of back smooth, posterior part of back slightly shagreened, upper part of flanks shagreened, lower part of flanks (beneath line from insertion of arm to groin) granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest smooth to slightly shagreened, belly granular and ventral part of thighs smooth, granular around anus. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal part of head and dorsum brownish purple, with large brown spots on posterior part of back. Flanks with large brown spots, groin dark brown with white spots. Loreal region, tympanic region, tympanum and upper lip brownish purple. A darker stripe from tip of snout along canthus rostralis over supratympanic fold. (39) Forelimb, dorsal part of thigh, tibia and foot brownish purple with some dark brown bands, posterior part of thighs uniform dark brown with several small white spots. (40) Throat, margin of throat, chest and belly greyish, ventral part of thighs dark brown, webbing brown.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with rather large, yellowish oocytes.

**D9. *Polypedates nanus* Günther, 1869**  
(Figure 9)

Lectotype, BMNH 1947.2.7.78, adult male.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 35.0 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, rather broad, broader than long (HW 14.1 mm; HL 13.5 mm, MN 12.1 mm; MFE 9.6 mm; MBE 5.6 mm), convex above. (3) Snout rounded, slightly protruding, its length (SL 4.7 mm) shorter than horizontal diameter of eye (EL 5.2

mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space almost flat, larger (IUE 4.3 mm) than upper eyelid (UEW 3.7 mm), larger than internarial distance (IN 3.4 mm); distance between front of eyes (IFE 7.7 mm) 1.6 times in distance between back of eyes (IBE 12.6 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.6 mm) than to eye (EN 3.0 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 2.1 mm) rather distinct, rounded, 40 % of eye diameter; tympanum-eye distance (TYE 1.0 mm) 48 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing some small teeth ( $N = 7$ ), between choanae, with an angle of approximately  $60^\circ$  relative to body axis, closer to choanae than to each other, longer than distance between them. (11) Tongue moderate, emarginate, bearing no lingual papilla, but with a rounded depression in front. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 8.8 mm) shorter than hand (HAL 9.9 mm), not enlarged. (17) Fingers moderately long and strong (TFL 6.3 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.1 mm, fw1 0.7 mm; fd2 1.2 mm, fw2 0.7 mm; fd3 1.6 mm, fw3 0.8 mm; fd4 1.4 mm, fw4 0.8 mm). (20) Inconspicuous dermal fringe on inside of all fingers; webbing on fingers rudimentary. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, distinct; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels slightly overlapping when limbs are folded at right angles to body. Tibia 4.3 times longer (TL 19.0 mm) than wide (TW 4.4 mm), longer than thigh (FL 18.2 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 15.3 mm). (24) Toes moderately long and strong, toe IV (FTL 7.5 mm) 3.3 times in distance from base of tarsus to tip of toe IV (TFOL 25.0 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.8 mm, tw1 0.6 mm; td2 0.9 mm, tw2 0.6 mm; td3 1.1 mm, tw3 0.7 mm; td4 1.2 mm, tw4 0.7 mm; td5 1.2 mm, tw5 0.7 mm). (27) Webbing present (MTTF 6.5 mm, MTFF 8.2 mm, TFTF 7.6 mm, FFTF 6.3 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal, poorly developed. (29) Subarticular tubercles distinct, rounded, simple, all present. (30) Inner metatarsal tubercle prominent, oval, its length (IMT 1.4 mm) 2.6 times in

length of toe I (ITL 3.7 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent; supernumerary tubercles present on all toes; tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes and side of head smooth, anterior part of back smooth with a few horny spinules, posterior part of back smooth, upper part of flanks smooth, lower part of flanks (beneath line from insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened to slightly granular, belly with treefrog belly skin and ventral part of thighs smooth to slightly granular around the anus. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal part of head brownish, with a dark brown line connecting eyes, dorsum, flanks, loreal region and tympanic region brownish, a dark line from snout through eye, covering part of tympanum and lower half of supratympanic fold. Upper and lower lip light brown. (39) Forelimb and dorsal part of thigh, tibia and foot with some darker bands, posterior part of thighs brownish. (40) Throat, margin of throat, chest, belly, ventral part of thighs and webbing whitish.

**(G) Male secondary sexual characters.** (41) Nuptial pads present on finger I and partly on prepollex. (42) Vocal sacs present; a pair of distinct, slightly oval openings at base of jaw.

**D10. *Ixalus punctatus* Anderson, 1871**  
(Figure 4)

Neotype, MNHN 1985.0527, adult female: see above description D4 of neotype of *Phyllomedusa tinniensi* Jerdon, 1853.

**D11. *Ixalus montanus* Günther, 1876**  
(Figure 11)

Lectotype, BMNH 1947.2.6.14, adult female.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 33.1 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 13.1 mm; HL 11.9 mm, MN 10.5 mm; MFE 8.2 mm; MBE 4.7 mm), slightly convex above. (3) Snout rounded, very slightly protruding, its length (SL 3.9 mm) subequal to horizontal diameter of eye (EL 4.0 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space almost flat, larger (IUE 3.6 mm) than upper eyelid (UEW 2.6 mm), larger than internarial distance (IN 3.0 mm); distance between front of eyes (IFE 6.2 mm) 1.8 times in distance between back of eyes (IBE 11.1 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.3 mm) than to eye (EN 2.5 mm). (7) Pupil rounded, horizontal. (8)



**Figure 7.** *Polypedates microtympaum* Günther, 1859, lectotype, BMNH 1947.2.8.48, adult female (SVL 51.1 mm).



**Figure 10.** *Ixalus adpersus* Günther, 1872, Holotype by monotypy, BMNH 1947.2.6.23 [ex BMNH 1871.12.14.36], adult male (SVL 34 mm).



**Figure 8.** *Polypedates pleurostictus* Günther, 1864, lectotype, BMNH 1947.2.8.53 [ex BMNH 1852.12.11.12], adult female (SVL 50.4 mm).



**Figure 11.** *Ixalus montanus* Günther, 1876, lectotype, BMNH 1947.2.6.14 [ex BMNH 1872.4.14.304], adult female (SVL 33.1 mm).



**Figure 9.** *Polypedates nanus* Günther, 1869, lectotype, BMNH 1947.2.7.78, adult male (SVL 35.0 mm).



**Figure 12.** *Ixalus flaviventris* Boulenger, 1882, lectotype, BMNH 1947.2.26.98 [ex BMNH 1874.4.29.1202], adult male (SVL 29.4 mm).

Tympanum (TYD 1.1 mm) rather small and indistinct, rounded, 28 % of eye diameter; tympanum-eye distance (TYE 1.2 mm) 110 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing no teeth, between and posterior to choanae, with an angle of approximately 45° to body axis, closer to choanae than to each other, somewhat longer than distance between them. (11) Tongue moderately large, emarginate, bearing a lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 8.5 mm) shorter than hand (HAL 9.3 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.9 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.9 mm, fw1 0.6 mm; fd2 1.3 mm, fw2 0.8 mm; fd3 1.7 mm, fw3 0.9 mm; fd4 1.4 mm, fw4 0.9 mm). (20) Dermal fringe on inside of all fingers; webbing on fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex distinct, oval; two palmar tubercles, rather rounded; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels slightly overlapping when limbs are folded at right angles to body. Tibia 3.8 times longer (TL 14.9 mm) than wide (TW 3.9 mm), longer than thigh (FL 14.6 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 13.9 mm). (24) Toes moderately long and strong, toe IV (FTL 7.1 mm) 3.1 times in distance from base of tarsus to tip of toe IV (TFOL 22.3 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 1.0 mm, tw1 0.7 mm; td2 1.2 mm, tw2 0.7 mm; td3 1.3 mm, tw3 0.8 mm; td4 1.4 mm, tw4 0.9 mm; td5 1.4 mm, tw5 0.9 mm). (27) Webbing present, medium (MTTF 5.9 mm, MTFF 7.1 mm, TFTF 6.9 mm, FFTF 6.7 mm). (28) Dermal fringe along toe V present, from tip of toe to second subarticular tubercle of toe V. (29) Subarticular tubercles prominent, rounded, simple and all present, antepenultimate subarticular tubercle on fourth toe smaller. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.2 mm) 3.1 times in length of toe I (ITL 3.7 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on all toes and tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth, upper and lower part of flanks (above and beneath line from

insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat, chest, and ventral part of thighs shagreened to granular, belly granular. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum, flanks, loreal region, tympanic region and tympanum brown. Upper lip brown and yellow. (39) Forelimb, dorsal part of thigh, dorsal part of tibia, foot and posterior part of thigh brown. (40) Throat, chest, belly, ventral part of thigh and webbing yellowish.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with yellowish oocytes.

#### D12. *Ixalus fergusonii* Günther, 1876

Lectotype, BMNH 1947.2.26.91, female adult.

**(A) Size and general aspect.** (1) Frog of rather small size (SVL 24.1 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 9.7 mm; HL 9.4 mm, MN 9.0 mm; MFE 7.1 mm; MBE 3.9 mm), convex above. (3) Snout rounded, almost not protruding, its length (SL 3.4 mm) approximately equal to horizontal diameter of eye (EL 3.3 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space convex, larger (IUE 3.9 mm) than upper eyelid (UEW 1.7 mm), larger than internarial distance (IN 2.0 mm); distance between front of eyes (IFE 5.4 mm) 1.5 times in distance between back of eyes (IBE 8.2 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.0 mm) than to eye (EN 2.1 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.7 mm) rather indistinct, rounded, 52 % of eye diameter; tympanum-eye distance (TYE 0.4 mm) 24 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 6.2 mm) shorter than hand (HAL = 6.5 mm), not enlarged. (17) Fingers moderately long and strong (TFL 3.6 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.8 mm, fw1 0.5 mm; fd2 1.0 mm, fw2 0.6 mm; fd3 1.1 mm, fw3 0.7 mm; fd4 1.0 mm, fw4 0.7 mm). (20) Small dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles rounded, single, all present. (22) Prepollex oval, distinct; two flat palmar tubercles; supernumerary tubercles present on some fingers.



**(D) Hind limbs.** (23) Hind limbs moderately long, heels in touch when limbs are folded at right angles to body. Tibia 5.3 times longer (TL 12.8 mm) than wide (TW 2.4 mm), longer than thigh (FL 12.5 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 9.0 mm). (24) Toes moderately long and strong, toe IV (FTL 4.5 mm) 3.6 times in distance from base of tarsus to tip of toe IV (TFOL 16.4 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 = 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.6 mm, tw1 0.4 mm; td2 0.7 mm, tw2 0.5 mm; td3 0.7 mm, tw3 0.5 mm; td4 0.9 mm, tw4 0.7 mm; td5 0.9 mm, tw5 0.7 mm). (27) Webbing present, medium (MTTF 5.0 mm, MTFF 5.0 mm, TFTF 3.7 mm, FFTF 3.8 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal, poorly developed. (29) Subarticular tubercles rounded, simple, all present. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.2 mm) 2.1 times in length of toe I (ITL 2.5 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercle not evident and tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back, and flanks smooth. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat smooth, chest shagreened, belly with treefrog belly skin and ventral part of thighs smooth to shagreened. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum greyish with some black spots, flanks, loreal region, tympanic region and tympanum greyish. Upper lip pinkish white. (39) Forelimb, dorsal part of thigh, tibia and foot greyish and posterior part of thigh brown. (40) Throat and chest whitish, belly and webbing yellowish, ventral part of thigh brown.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary not evident.

D13. *Ixalus flaviventris* Boulenger, 1882  
(Figure 12)

Lectotype, BMNH 1947.2.26.98, adult male.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 29.4 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 11.8 mm; HL 10.4 mm, MN 9.1 mm; MFE 6.9 mm; MBE 3.5 mm), slightly convex above. (3) Snout rounded, almost not protruding, its length (SL 3.9 mm) equal to horizontal diameter of eye (EL 3.9 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space almost flat, larger (IUE 3.7 mm) than upper eyelid (UEW 2.6 mm), larger than

internarial distance (IN 2.8 mm); distance between front of eyes (IFE 6.2 mm) 1.6 times in distance between back of eyes (IBE 10.1 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 0.8 mm) than to eye (EN 2.6 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.4 mm) rather distinct, rounded, 36 % of the eye diameter; tympanum-eye distance (TYE 1.0 mm) 71 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present; bearing no teeth, posterior to choanae, with an angle of approximately 45° to body axis, closer to choanae than to each other, longer than distance between them. (11) Tongue moderately large, emarginate, bearing a conical lingual papilla in front. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 7.6 mm) shorter than hand (HAL 8.8 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.2 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.8 mm, fw1 0.5 mm; fd2 0.9 mm, fw2 0.6 mm; fd3 1.0 mm, fw3 0.7 mm; fd4 1.0 mm, fw4 0.7 mm). (20) Fingers without dermal fringe; webbing at base of fingers rudimentary. (21) Subarticular tubercles distinct, rounded, single, all present. (22) Prepollex oval, distinct; palmar tubercles not evident; supernumerary tubercles present on some fingers.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels in touch when limbs are folded at right angles to body. Tibia 4.2 times longer (TL 13.5 mm) than wide (TW 3.2 mm), as long as thigh (FL 13.5 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 12.3 mm). (24) Toes rather long and thin, toe IV (FTL 5.8 mm) 3.3 times in distance from base of tarsus to tip of toe IV (TFOL 19.4 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, moderately wide compared to toe width (td1 0.6 mm, tw1 0.6 mm; td2 0.7 mm, tw2 0.6 mm; td3 0.8 mm, tw3 0.6 mm; td4 0.8 mm, tw4 0.6 mm; td5 0.8 mm, tw5 0.6 mm). (27) Webbing present, medium (MTTF 5.5 mm, MTFF 5.6 mm, TFTF 5.5 mm, FFTF 5.8 mm). (28) Dermal fringe along toe V absent. (29) Subarticular tubercles prominent, rounded, simple and all present, antepenultimate subarticular tubercle on fourth toe much smaller. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.2 mm) 2.5 times in length of toe I (ITL 3.0 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle, supernumerary tubercles and tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth, upper part and lower part of flanks (above and beneath line from insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat, chest and belly granular, ventral part of thighs slightly granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum, and flanks brown with cream dots. Loreal region, tympanic region and tympanum brown. Upper lip cream-coloured. (39) Forelimb, dorsal part of thigh, tibia and foot, and posterior part of thigh brown with cream dots. (40) Throat and chest dark brown, margin of throat cream-coloured, belly and ventral part of thigh brown marbled with cream, webbing dark brown.

**(G) Male secondary characters.** (41) Nuptial spines absent. (42) Vocal sacs present; a pair of distinct, rounded openings at base of jaw.

D14. *Ixalus signatus* Boulenger, 1882  
(Figure 13)

Lectotype, BMNH 1947.2.27.36, adult male.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 31.5 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 12.0 mm; HL 11.6 mm, MN 9.5 mm; MFE 6.9 mm; MBE 3.5 mm), slightly convex above. (3) Snout rounded, slightly protruding, its length (SL 4.6 mm) longer than horizontal diameter of eye (EL 4.1 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space almost flat, larger (IUE 4.0 mm) than upper eyelid (UEW 2.9 mm), larger than internarial distance (IN 3.2 mm); distance between front of eyes (IFE 6.8 mm) 1.6 times in distance between back of eyes (IBE 10.6 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.5 mm) than to eye (EN 2.8 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.7 mm) rather distinct, oval, vertical, 41 % of eye diameter; tympanum-eye distance (TYE 0.6 mm) 35 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing no teeth, between choanae, with an angle of approximately 60° to body axis, closer to choanae than to each other, much shorter than distance between them. (11) Tongue moderately large, emarginate, bearing a lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 7.6 mm) shorter than hand (HAL 8.8 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.5 mm).

(18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.0 mm, fw1 0.7 mm; fd2 1.5 mm, fw2 0.8 mm; fd3 1.9 mm, fw3 0.9 mm; fd4 1.9 mm, fw4 0.9 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, prominent; two palmar tubercles, oval, distinct; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs rather long, heels overlapping when limbs are folded at right angles to body. Tibia 3.8 times longer (TL 15.0 mm) than wide (TW 3.9 mm), longer than thigh (FL 14.2 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 13.1 mm). (24) Toes moderately long and strong, toe IV (FTL 6.3 mm) 3.2 times in distance from base of tarsus to tip of toe IV (TFOL = 19.9 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.9 mm, tw1 0.7 mm; td2 1.1 mm, tw2 0.7 mm; td3 1.3 mm, tw3 0.8 mm; td4 1.3 mm, tw4 0.8 mm; td5 1.3 mm, tw5 0.8 mm). (27) Webbing present, medium (MTTF 6.1 mm, MTFF 7.2 mm, TFTF 5.9 mm, FFTF 5.2 mm). (28) Dermal fringe along toe V not evident. (29) Subarticular tubercles prominent, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.4 mm) 2.1 times in length of toe I (ITL 3.0 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle, supernumerary tubercles and tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes and side of head smooth to slightly shagreened, anterior and posterior part of back shagreened, with very small horny spinules, upper part and lower part of flanks (above and beneath line from insertion of arm to groin) granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat, chest, belly and ventral part of thighs granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum, and upper part of flanks brownish, with small dark brown spots. A darker band between the eyes, and a dark cross-mark on the back. Loreal region brownish with a few white spots, tympanic region and tympanum brownish. Upper lip brown, with some white spots. (39) Forelimb and dorsal part of thigh light brown with darker bands; dorsal part of tibia, dorsal part of foot, and posterior part of thigh light brown. (40) Throat, chest, belly, ventral part of thigh and webbing uniformly light brown.

**(G) Male secondary characters.** (41) Nuptial spines absent. (42) Vocal sacs present, unique; openings distinct,

oval, at base of jaw. (43) Other male secondary sexual character: small spines on back.

D15. *Ixalus pulcher* Boulenger, 1882  
(Figure 3)

Lectotype, BMNH 1947.2.27.22, adult male: see above description D3 of neotype of *Ixalus glandulosus* Jerdon, 1853.

D16. *Ixalus carinensis* Boulenger, 1893  
(Figure 14)

Lectotype, BMNH 1947.2.6.24, male adult.

**(A) Size and general aspect.** (1) Frog of rather medium size (SVL 35.6 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 13.7 mm; HL 12.2 mm, MN 10.6 mm; MFE 8.4 mm; MBE 4.8 mm), convex above. (3) Snout rounded, slightly protruding, its length (SL 4.4) subequal to horizontal diameter of eye (EL 4.8 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space almost flat, slightly larger (IUE 3.8 mm) than upper eyelid (UEW 3.4 mm), almost equal to internarial distance (IN 3.6 mm); distance between front of eyes (IFE 7.5 mm) 1.6 times in distance between back of eyes (IBE 12.0 mm). (6) Nostrils oval without flap of skin laterally, much closer to tip of snout (NS 0.9 mm) than to eye (EN 2.7 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.7 mm) rather indistinct, rounded, 35 % of eye diameter; tympanum-eye distance (TYE 0.9 mm) 53 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 8.4 mm) shorter than hand (HAL 10.9 mm), not enlarged. (17) Fingers moderately long and strong (TFL 6.3 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.2 mm, fw1 0.9 mm; fd2 1.9 mm, fw2 1.0 mm; fd3 2.2 mm, fw3 1.0 mm; fd4 2.1 mm, fw4 1.0 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, distinct; palmar tubercles oval, flat; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs rather long, heels overlapping when limbs are folded at right angles to body. Tibia 3.6 times longer (TL 17.1 mm) than wide

(TW 4.8 mm), longer than thigh (FL 16.3 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 16.5 mm). (24) Toes moderately long and strong, toe IV (FTL 8.9 mm) 2.7 times in distance from base of tarsus to tip of toe IV (TFOL 23.9 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, slightly smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 1.0 mm, tw1 0.7 mm; td2 1.2 mm, tw2 0.9 mm; td3 1.7 mm, tw3 1.0 mm; td4 1.9 mm, tw4 1.0 mm; td5 1.7 mm, tw5 1.0 mm). (27) Webbing present, toes about 3/4 webbed (MTTF 9.3 mm, MTFF 10.1 mm, TFTF 6.0 mm, FFTF 5.6 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles prominent, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, its length (IMT 1.6 mm) 2.8 times in length of toe I (ITL 4.5 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle, supernumerary tubercles and tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth, upper part of flanks smooth, lower part of flanks (beneath line from insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened, belly with treefrog belly skin, ventral part of thighs granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal part of head, dorsum and flanks brown. A darker interocular crossbar and a cross-mark on the back starting between the eyes. Loreal region, tympanic region and tympanum darker brown. Upper and lower lip whitish. (39) Forelimb, dorsal part of thigh, dorsal part of tibia, dorsal part of foot, and posterior part of thigh brown. Some darker bands on forearm and legs. (40) Throat and margin of throat light brown, chest, belly, ventral part of thighs and webbing whitish.

**(G) Male secondary characters.** (41) Nuptial spines present on first finger, rather indistinct. (42) Vocal sacs present; a pair of distinct, rounded openings at base of jaw. (43) No other male secondary sexual characters evident.

D17. *Ixalus parvulus* Boulenger, 1893  
(Figure 15)

Lectotype, MSNG 29838.A, adult female.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 23.6 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 8.9 mm; HL 8.5 mm, MN 7.7 mm; MFE 6.3 mm; MBE 3.6 mm), slightly convex above. (3) Snout rounded, not protruding, its length (SL 3.0 mm) shorter

than horizontal diameter of eye (EL 3.5 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space convex, larger (IUE 2.8 mm) than upper eyelid (UEW 2.1 mm), equal to internarial distance (IN 2.8 mm); distance between front of eyes (IFE 5.2 mm) 1.5 times in distance between back of eyes (IBE 7.9 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 0.9 mm) than to eye (EN 1.4 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.3 mm) distinct, rounded, 37 % of eye diameter; tympanum-eye distance (TYE 0.3 mm) 23 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, bearing no lingual papilla, but with a hole. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 5.1 mm) shorter than hand (HAL 5.4 mm), not enlarged. (17) Fingers moderately long and strong (TFL 3.3 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.5 mm, fw1 0.4 mm; fd2 0.7 mm, fw2 0.5 mm; fd3 0.8 mm, fw3 0.5 mm; fd4 0.7 mm, fw4 0.5 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present but second tubercles of fingers III and IV much smaller. (22) Prepollex rounded to slightly oval, distinct; two oval palmar tubercles; supernumerary tubercles present on third finger.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels in touch when limbs are folded at right angles to body. Tibia 3.7 times longer (TL 9.7 mm) than wide (TW 2.6 mm), slightly longer than thigh (FL 9.4 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 8.1 mm). (24) Toes moderately long and strong, toe IV (FTL 4.2 mm) 3.2 times in distance from base of tarsus to tip of toe IV (TFOL 13.4 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.5 mm, tw1 0.4 mm; td2 0.6 mm, tw2 0.5 mm; td3 0.7 mm, tw3 0.5 mm; td4 0.7 mm, tw4 0.5 mm; td5 0.6 mm, tw5 0.5 mm). (27) Webbing present, medium (MTTF 3.4 mm, MTFF 4.3 mm, TFTF 3.9 mm, FFTF 3.5 mm). (28) Dermal fringe along toe V not evident. (29) Subarticular tubercles prominent, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 0.7 mm) 2.6 times in length of toe I (ITL 1.8 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle

absent, supernumerary tubercles not evident, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back and upper part of flanks smooth, lower part of flanks (beneath line from insertion of arm to groin) shagreened. Some small spinules on eyelids. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest smooth, belly with treefrog belly skin and ventral part of thighs granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol, coloration largely lost). (38) Dorsal part of head, loreal region, tympanic region, dorsum and flanks tan. Lower half of supratympanic fold dark brown. (39) Forelimb and tibia tan with some faint darker bands, thighs and dorsal part of foot tan. (40) Throat, chest, belly and ventral part of thighs tan.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with rather small, whitish oocytes. (46) No other secondary sexual characters evident.

D18. *Ixalus longicrus* Boulenger, 1894  
(Figure 16)

Lectotype, BMNH 1947.2.6.29, juvenile female.

**(A) Size and general aspect.** (1) Frog of small size (SVL 20.1 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 7.7 mm; HL 8.4 mm, MN 7.3 mm; MFE 5.5 mm; MBE 3.0 mm), convex above. (3) Snout rounded, slightly protruding, its length (SL 3.1 mm) approximately as long as horizontal diameter of eye (EL 3.0 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space almost flat, larger (IUE 2.8 mm) than upper eyelid (UEW 2.1 mm), larger than internarial distance (IN 2.3 mm); distance between front of eyes (IFE 4.9 mm) 1.5 times in distance between back of eyes (IBE 7.4 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.2 mm) than to eye (EN 2.1 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.3 mm) rather indistinct, oval, slightly oblique to almost vertical, 43 % of eye diameter; tympanum-eye distance (TYE 0.9 mm) 69 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderately large, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 5.1 mm) shorter than hand (HAL 5.3 mm), not enlarged. (17) Fingers moderately long and strong (TFL 3.0 mm).



**Figure 13.** *Ixalus signatus* Boulenger, 1882, lectotype, BMNH 1947.2.27.36 [ex BMNH 1868.4.3.120], adult male (SVL 31.5 mm).



**Figure 16.** *Ixalus longicrus* Boulenger, 1894, lectotype, BMNH 1947.2.6.29 [ex BMNH 1894.6.30.130], young female (SVL 20.1 mm).



**Figure 14.** *Ixalus carinensis* Boulenger, 1893, lectotype, BMNH 1947.2.6.24 [ex BMNH 1893.10.9.25], adult male (SVL 35.6 mm).



**Figure 17.** *Ixalus mindorensis* Boulenger, 1897, lectotype, BMNH 1947.2.6.31 [ex BMNH 1896.12.11.33], adult female (SVL 30.3 mm).



**Figure 15.** *Ixalus parvulus* Boulenger, 1893, lectotype, MSNG 29838.A, adult female (SVL 23.6 mm).



**Figure 18.** *Ixalus vermiculatus* Boulenger, 1900, lectotype, BMNH 1947.2.27.43 [ex BMNH 1900.6.14.32], adult male (SVL 32.0 mm).

(18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.6 mm, fw1 0.4 mm; fd2 0.7 mm, fw2 0.5 mm; fd3 1.1 mm, fw3 0.6 mm; fd4 1.0 mm, fw4 0.6 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, prominent; two palmar tubercles, oval, distinct; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs rather long, heels overlapping when limbs are folded at right angles to body. Tibia 3.8 times longer (TL 13.0 mm) than wide (TW 3.4 mm), longer than thigh (FL 12.1 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 9.1 mm). (24) Toes moderately long and strong, toe IV (FTL 4.5 mm) 3.4 times in distance from base of tarsus to tip of toe IV (TFOL 15.3 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, with distinct circummarginal grooves, moderately wide compared to toe width (td1 0.5 mm, tw1 0.4 mm; td2 0.6 mm, tw2 0.5 mm; td3 0.8 mm, tw3 0.5 mm; td4 0.7 mm, tw4 0.5 mm; td5 0.7 mm, tw5 0.5 mm). (27) Webbing present, toes half webbed (MTTF 4.1 mm, MTFF 4.6 mm, TFTF 3.8 mm, FFTF 3.6 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal, poorly developed. (29) Subarticular tubercles prominent, rounded, simple, all present, third tubercle of toe IV and second tubercle of toe V smaller. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.0 mm) 2 times in length of toe I (ITL 2.0 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent; supernumerary tubercles present on all toes; a small tarsal tubercle present.

**(E) Skin.** (33) Snout, between eyes, side of head and anterior part of back shagreened, posterior part of back smooth, upper part of flanks shagreened (above line from insertion of arm to groin), lower part of flanks granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest smooth, belly with treefrog belly skin, ventral part of thighs smooth, granular around anus. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal part of head and dorsum brown with two rather large and a few smaller dark brown spots on back, behind eyes, on a level with insertion of forelimbs; flanks and loreal region brown, tympanic region and tympanum dark brown, lower part of supratympanic fold dark brown, upper lip brown, lower lip brown with some white spots. (39) Forelimb, dorsal part of thigh and tibia brown with a darker band, posterior part of thighs brown with a large dark brown spot around the anus. (40) Throat, chest,

belly, ventral part of thighs and webbing yellowish brown. A dark brown line stretching from heel to tip of toes.

**(H) Female secondary characters.** (44) Oviduct rather linear. (45) Ovary with whitish (unripe) oocytes.

D19. *Ixalus mindorensis* Boulenger, 1897  
(Figure 17)

Lectotype, BMNH 1947.2.6.31, adult female.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 30.3 mm), body moderately elongate.

**(B) Head.** (2) Head rather large, broader than long (HW 13.2 mm; HL 12.3 mm, MN 10.8 mm; MFE 8.5 mm; MBE 4.5 mm), convex above. (3) Snout rounded, slightly protruding, its length (SL 4.6 mm) about equal to horizontal diameter of eye (EL 4.5 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space almost flat, larger (IUE 3.7 mm) than upper eyelid (UEW 2.1 mm), larger than internarial distance (IN 3.2 mm); distance between front of eyes (IFE 6.1 mm) 1.7 times in distance between back of eyes (IBE 10.7 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.8 mm) than to eye (EN 2.7 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 2.0 mm) rather distinct, oval, oblique, 44 % of eye diameter; tympanum-eye distance (TYE 0.8 mm) 40 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing no teeth, between choanae, with an angle of 45° relative to body axis, closer to choanae than to each other, much shorter than distance between them. (11) Tongue large, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 6.9 mm) shorter than hand (HAL 8.9 mm), not enlarged. (17) Fingers moderately long and strong (TFL 4.7 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.1 mm, fw1 0.7 mm; fd2 1.3 mm, fw2 0.8 mm; fd3 1.5 mm, fw3 0.9 mm; fd4 1.4 mm, fw4 0.8 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers very rudimentary. (21) Subarticular tubercles distinct, rounded, single, all present. (22) Prepollex oval, prominent; two distinct palmar tubercles; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs rather long, heels overlapping when limbs are folded at right angles to body. Tibia 5.3 times longer (TL 15.4 mm) than wide

(TW 2.9 mm), longer than thigh (FL 14.9 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 12.5 mm). (24) Toes moderately long and strong, toe IV (FTL 5.5 mm) 3.7 times in distance from base of tarsus to tip of toe IV (TFOL 20.2 mm). (25) Relative length of toes when opposed:  $1 < 2 < 5 < 3 < 4$ . (26) Tips of all toes with moderate disks, somewhat smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.8 mm, tw1 0.6 mm; td2 0.9 mm, tw2 0.7 mm; td3 1.1 mm, tw3 0.7 mm; td4 1.1 mm, tw4 0.7 mm; td5 1.1 mm, tw5 0.7 mm). (27) Webbing present, rather small (MTTF 5.3 mm, MTFF 6.0 mm, TFTF 5.5 mm, FFTF 6.1 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles distinct, rounded, simple and all present. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.4 mm) 2.2 times in length of toe I (ITL 3.1 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on some toes, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth, upper part and lower part of flanks (above and beneath line from insertion of arm to groin) shagreened. (34) Dorsolateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened, belly granular, ventral part of thighs shagreened to slightly granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head with a white line from tip of snout over canthus rostralis and supratympanic fold, dorsum brown with two hourglass shaped markings, upper part of flanks greyish with some dark brown spots, lower part of flanks whitish with a large dark brown spot on the groin. Loreal region, tympanic region and tympanum dark brown. Upper lip uniformly white, lower lip white with some brown spots. (39) Forelimb, dorsal part of thighs, dorsal part of tibia and dorsal part of foot brown with some darker bands, posterior part of thighs with a large dark brown spot. (40) Throat, margin of throat and chest greyish marbled with brown; belly, ventral part of thighs and webbing yellowish.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with very large, creamy-white to yellowish oocytes.

#### D20. *Ixalus larutensis* Boulenger, 1900

Lectotype, BMNH 1947.2.6.36, adult female.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 32.9 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 13.7 mm; HL 12.9 mm, MN 11.7 mm; MFE

8.9 mm; MBE 5.4 mm), convex above. (3) Snout rounded to slightly pointed, slightly protruding, its length (SL 5.3 mm) longer than horizontal diameter of eye (EL 5.0 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space almost flat, larger (IUE 4.3 mm) than upper eyelid (UEW 3.2 mm), larger than internarial distance (IN 3.1 mm); distance between front of eyes (IFE 7.1 mm) 1.7 times in distance between back of eyes (IBE 11.8 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 2.0 mm) than to eye (EN 3.0 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.6 mm) distinct, rounded, 32 % of eye diameter; tympanum-eye distance (TYE 1.4 mm) 87 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 7.6 mm) shorter than hand (HAL 9.9 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.5 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.4 mm, fw1 0.8 mm; fd2 1.6 mm, fw2 0.9 mm; fd3 2.2 mm, fw3 1.2 mm; fd4 2.2 mm, fw4 1.1 mm). (20) Dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles distinct, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, distinct; supernumerary tubercles present on several fingers.

**(D) Hind limbs.** (23) Hind limbs rather long, heels overlapping when limbs are folded at right angles to body. Tibia 4.1 times longer (TL 17.6 mm) than wide (TW 4.3 mm), longer than thigh (FL 16.6 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 13.7 mm). (24) Toes moderately long and strong, toe IV (FTL 6.5 mm) 3.4 times in distance from base of tarsus to tip of toe IV (TFOL 21.9 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, somewhat smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 1.2 mm, tw1 0.7 mm; td2 1.2 mm, tw2 0.7 mm; td3 1.4 mm, tw3 0.8 mm; td4 1.5 mm, tw4 0.8 mm; td5 1.5 mm, tw5 0.8 mm). (27) Webbing present, toes more than half webbed (MTTF 7.0 mm, MTFF 8.4 mm, TFTF 5.5 mm, FFTF 5.3 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles distinct, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, long, oval, its length (IMT



**Figure 19.** *Ixalus annandalii* Boulenger, 1906, lectotype, BMNH 1947.2.26.58 [ex BMNH 1906.8.10.40], adult female (SVL 17.0 mm).



**Figure 21.** *Philautus charius* Rao, 1937, neotype, MNHN 1999.5597, adult male, SVL 29.0 mm.



**Figure 20.** *Philautus gracilipes* Bourret, 1937, holotype, MNHN 1948.0156 [ex LZUH B.167], adult female (SVL 28 mm).



**Figure 22.** *Philautus banaensis* Bourret, 1939, lectotype, MNHN 1948.0160 [ex LZUH B.254], adult female (SVL 33.9 mm).

1.6 mm) 1.7 times in length of toe I (ITL 2.8 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles not evident, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth; upper part of flanks smooth; lower part of flanks (beneath line from insertion of arm to groin) shagreened. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened, belly with treefrog belly skin, ventral part of thighs smooth, slightly granular around anus. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of dorsum light brown, dorsal part of head with an

interocular dark brown band and a brown spot on occiput. Upper part of flanks brown, lower part of flanks brown with large white spots. Loreal region, tympanic region and tympanum brown. Lower part of supratympanic fold dark brown. Upper and lower lip white and brown marbled. (39) Forelimb, dorsal part of thighs, dorsal part of tibia and dorsal part of foot brown with some darker bands, posterior part of thighs darker brown with some whitish spots. (40) Throat dark brown, marbled with white, margin of throat brown and white alternately, chest and belly whitish, ventral part of thighs brown marbled with white, webbing brown.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with yellowish oocytes.



D21. *Ixalus vermiculatus* Boulenger, 1900  
(Figure 18)

Lectotype, BMNH 1947.2.27.43, adult male.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 32.0 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 13.0 mm; HL 11.8 mm, MN 10.9 mm; MFE 8.7 mm; MBE 4.4 mm), convex above. (3) Snout rounded, not protruding, its length (SL 4.5 mm) subequal to horizontal diameter of eye (EL 4.8 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space slightly convex, larger (IUE 4.0 mm) than upper eyelid (UEW 3.2 mm), equal to internarial distance (IN 3.2 mm); distance between front of eyes (IFE 6.8 mm) 1.7 times in distance between back of eyes (IBE 11.5 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.1 mm) than to eye (EN 2.5 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.7 mm) rather indistinct, rounded, 35 % of eye diameter; tympanum-eye distance (TYE 0.8 mm) 47 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderately large, emarginate, bearing no lingual papilla. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 8.8 mm) shorter than hand (HAL 9.3 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.5 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 1.1 mm, fw1 0.7 mm; fd2 1.4 mm, fw2 0.8 mm; fd3 2.1 mm, fw3 1.0 mm; fd4 1.7 mm, fw4 1.0 mm). (20) Very small dermal fringe on inside of all fingers; webbing at base of fingers rudimentary. (21) Subarticular tubercles distinct, rounded, single, all present. (22) Prepollex oval, prominent; two palmar tubercles, oval, flat; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels slightly overlapping when limbs are folded at right angles to body. Tibia 4.5 times longer (TL 16.5 mm) than wide (TW 3.7 mm), longer than thigh (FL 15.9 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 13.2 mm). (24) Toes moderately long and strong, toe IV (FTL 6.3 mm) 3.4 times in distance from base of tarsus to tip of toe IV (TFOL 21.6 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 = 5 < 4$ . (26) Tips of all toes with moderate disks, with distinct circummarginal grooves, moderately wide compared to toe width (td1 1.0 mm,

tw1 0.7 mm; td2 1.3 mm, tw2 0.8 mm; td3 1.4 mm, tw3 0.9 mm; td4 1.6 mm, tw4 1.0 mm; td5 1.4 mm, tw5 0.9 mm). (27) Webbing present, toes about half webbed (MTTF 6.5 mm, MTFF 6.5 mm, TFTF 5.2 mm, FFTF 5.8 mm). (28) Dermal fringe along toe V present, from tip of toe to metatarsal, poorly developed. (29) Subarticular tubercles prominent, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 1.5 mm) 2.1 times in length of toe I (ITL 3.1 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on some toes; tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, anterior and posterior part of back smooth; upper part of flanks (above line from insertion of arm to groin) smooth; lower part of flanks shagreened. (34) Dorsolateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest granular, belly with treefrog belly skin, ventral part of thighs smooth, granular around anus. (37) Macroglans absent.

**(F) Coloration.** (In alcohol). (38) Dorsal part of head and dorsum, upper part of flanks, loreal region, tympanic region, tympanum, upper lip and lower lip grey and brown marbled. Lower part of flanks whitish. (39) Forelimb, dorsal part of thigh, tibia and foot grey with brown marbled, posterior part of thighs whitish. (40) Throat, margin of throat, chest, belly, ventral part of thighs and webbing whitish to cream.

**(G) Male secondary characters.** (41) Nuptial spines absent. (42) Vocal sacs present; a pair of distinct, rounded openings at base of jaw. (43) No other secondary sexual characters evident.

D22. *Ixalus annandalii* Boulenger, 1906  
(Figure 19)

Lectotype, BMNH 1947.2.26.58, adult female.

**(A) Size and general aspect.** (1) Frog of very small size (SVL 17.0 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, longer than broad (HW 5.9 mm; HL 6.2 mm, MN 5.8 mm; MFE 4.8 mm; MBE 2.7 mm), slightly convex above. (3) Snout subelliptical, slightly protruding, its length (SL 2.3 mm) about equal to horizontal diameter of eye (EL 2.2 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space convex, larger (IUE 2.4 mm) than upper eyelid (UEW 1.4 mm), larger than internarial distance (IN 2.0 mm); distance between front of eyes (IFE 3.8 mm) 1.5 times in distance between back of eyes (IBE 5.7 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.0 mm) than to eye (EN 1.2 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.0 mm) rather distinct, rounded, 45 % of eye diameter; tympanum-eye distance (TYE 0.4 mm)

40 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, lingual papilla not evident. Tooth-like projections on lower jaw absent. (12) Supratympanic fold prominent, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 4.2 mm) shorter than hand (HAL 4.3 mm), not enlarged. (17) Fingers moderately long and strong (TFL 2.7 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.4 mm, fw1 0.3 mm; fd2 0.5 mm, fw2 0.4 mm; fd3 0.6 mm, fw3 0.5 mm; fd4 0.6 mm, fw4 0.4 mm). (20) Small dermal fringe on inside of all fingers; webbing at base of fingers absent. (21) Subarticular tubercles distinct, rounded, single, all present. (22) Prepollex rounded to slightly oval, distinct; two palmar tubercles, oval, distinct; supernumerary tubercles not evident.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels slightly overlapping when limbs are folded at right angles to body. Tibia 4.7 times longer (TL 8.4 mm) than wide (TW 1.8 mm), longer than thigh (FL 8.2 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 6.8 mm). (24) Toes moderately long and strong, toe IV (FTL 3.6 mm) 3.0 times in distance from base of tarsus to tip of toe IV (TFOL 10.9 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, smaller than those of fingers, with distinct circummarginal grooves, rather wide compared to toe width (td1 0.4 mm, tw1 0.4 mm; td2 0.5 mm, tw2 0.4 mm; td3 0.5 mm, tw3 0.4 mm; td4 0.7 mm, tw4 0.5 mm; td5 0.6 mm, tw5 0.5 mm). (27) Webbing present, medium (MTTF 3.0 mm, MTFF 3.4 mm, TFTF 3.2 mm, FFTF 2.8 mm). (28) Dermal fringe along toe V weak but present, from tip of toe to base of metatarsal. (29) Subarticular tubercles distinct, rounded, simple and all present, antepenultimate subarticular tubercle on fourth toe small. (30) Inner metatarsal tubercle distinct, oval, its length (IMT 0.8 mm) 1.5 times in length of toe I (ITL 1.2 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, some supernumerary tubercles evident, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes and side of head smooth to slightly shagreened; upper part of flanks shagreened; lower part of flanks (beneath line from insertion of arm to groin) slightly granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat and chest shagreened, belly and ventral part of thighs granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal parts of head and dorsum, loreal region and upper part of flanks brown; tympanic region, upper 2/3 of tympanum and lower half of supratympanic fold dark brown. Upper and lower lip brownish. (39) Forelimb brown with a darker band, dorsal part of thigh and tibia brown with a darker band, dorsal

part of foot and posterior part of thigh light brown. (40) Throat, chest, belly and ventral part of thighs greyish brown, margin of throat and webbing whitish, speckled with brown.

**(H) Female secondary sexual characters.** (44) Oviduct convoluted. (45) Ovary with small creamy-whitish oocytes.

#### D23. *Philautus charius* Rao, 1937

(Figure 21)

Neotype, MNHN 1999.5597, adult male.

**(A) Size and general aspect.** (1) Frog of rather small size (SVL 29.0 mm), body moderately elongate.

**(B) Head.** (2) Head of medium size, broader than long (HW 10.7 mm; HL 10.0 mm, MN 8.6 mm; MFE 7.0 mm; MBE 4.1 mm), slightly convex above. (3) Snout rounded, slightly protruding, its length (SL 3.6 mm) subequal to horizontal diameter of eye (EL 3.7 mm). (4) Canthus rostralis rounded, loreal region slightly concave. (5) Interorbital space convex, larger (IUE 3.5 mm) than upper eyelid (UEW 2.7 mm), slightly larger than internarial distance (IN 3.1 mm); distance between front of eyes (IFE 6.1 mm) 1.5 times in distance between back of eyes (IBE 9.4 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.3 mm) than to eye (EN 2.1 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.3 mm) rather indistinct, rounded, 35 % of eye diameter; tympanum-eye distance (TYE 0.2 mm) 15 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge present, bearing no teeth, between choanae, with an angle of approximately 75° to body axis, closer to choanae than to each other, shorter than distance between them. (11) Tongue moderately large, emarginate, bearing no lingual papilla, but with a small depression in front. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 7.0 mm) shorter than hand (HAL 8.7 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.9 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.8 mm, fw1 0.7 mm; fd2 1.0 mm, fw2 0.8 mm; fd3 1.4 mm, fw3 0.8 mm; fd4 1.4 mm, fw4 0.8 mm). (20) Dermal fringe on inside of all fingers; webbing on fingers absent. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex distinct, oval; two palmar tubercles, one large, distinct, and one smaller; supernumerary tubercles present on all fingers.

**(D) Hind limbs.** (23) Hind limbs moderately long, heels barely in touch when limbs are folded at right angles to body. Tibia 3.7 times longer (TL 12.7 mm) than wide (TW 3.4 mm), shorter than thigh (FL 13.3 mm), longer than dis-

tance from base of internal metatarsal tubercle to tip of toe IV (FOL 12.3 mm). (24) Toes moderately long and strong, toe IV (FTL 6.3 mm) 3.1 times in distance from base of tarsus to tip of toe IV (TFOL 19.3 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, with distinct circummarginal grooves, moderately wide compared to toe width (td1 0.9 mm, tw1 0.7 mm; td2 0.9 mm, tw2 0.7 mm; td3 0.9 mm, tw3 0.7 mm; td4 1.1 mm, tw4 0.8 mm; td5 1.0 mm, tw5 0.8 mm). (27) Webbing present, medium (MTTF 5.2 mm, MTFF 6.2 mm, TFTF 6.1 mm, FFTF 5.8 mm). (28) Dermal fringe along toe V present, from tip of toe to metatarsal. (29) Subarticular tubercles distinct, rounded, simple, all present. (30) Inner metatarsal tubercle distinct, short, its length (IMT 1.1 mm) 2.4 times in length of toe I (ITL 2.7 mm). (31) Tarsal fold absent. (32) Outer metatarsal tubercle absent, supernumerary tubercles present on all toes; tarsal tubercle absent.

**(E) Skin.** (33) Snout shagreened, between eyes shagreened with small folds forming a more or less oval figure, side of head smooth, anterior and posterior part of back with small, horny spinules, upper part of flanks shagreened (above line from insertion of arm to groin), lower part of flanks granular. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth. (36) Throat, chest, belly and ventral part of thighs granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Head with a light brown triangle from tip of snout to between eyes and with an interocular dark brown cross-bar, dorsum with a dark cross-mark, flanks greyish, groin grey with large pale yellow spots, loreal region dark brown, tympanic region and tympanum greyish. Upper and lower lip grey with some white spots. (39) Forelimb, dorsal part of thigh, tibia and foot greyish with some darker bands, posterior part of thigh grey with some round pale yellow spots. (40) Throat and margin of throat marbled with grey, chest, belly, ventral part of thighs and webbing whitish.

**(G) Male secondary characters.** (41) Nuptial pads not evident. (42) Vocal sacs present; a pair of distinct, rounded openings at base of jaw. (43) Secondary sexual character: horny spinules on back.

D24. *Philautus melanensis* Rao, 1937

(Figure 11)

Neotype, BMNH 1947.2.6.14, adult female: see above description D11 of lectotype of *Ixalus montanus* Günther, 1876.

D25. *Philautus montanus* Rao, 1937

(Figure 12)

Neotype, BMNH 1947.2.26.98, adult male: see above description D13 of lectotype of *Ixalus flaviventris* Boulenger, 1882.

D26. *Philautus banaensis* Bourret, 1939

(Figure 22)

Lectotype, MNHN 1948.0160, adult female.

**(A) Size and general aspect.** (1) Frog of medium size (SVL 33.9 mm), body moderately robust.

**(B) Head.** (2) Head of medium size, longer than wide (HW 12.4 mm; HL 13.1 mm, MN 12.0 mm; MFE 9.0 mm; MBE 5.4 mm), flat above. (3) Snout rounded, slightly protruding, its length (SL 4.8 mm) longer than horizontal diameter of eye (EL 3.7 mm). (4) Canthus rostralis rounded, loreal region concave. (5) Interorbital space flat, larger (IUE 4.3 mm) than upper eyelid (UEW 2.9 mm), larger than internarial distance (IN 3.5 mm); distance between front of eyes (IFE 7.5 mm) 1.3 times in distance between back of eyes (IBE 10.1 mm). (6) Nostrils oval without flap of skin laterally, closer to tip of snout (NS 1.0 mm) than to eye (EN 3.3 mm). (7) Pupil rounded, horizontal. (8) Tympanum (TYD 1.6 mm) rather distinct, oval, oblique, 43 % of the eye diameter; tympanum-eye distance (TYE 0.6 mm) 37 % of tympanum diameter. (9) Pineal ocellus absent. (10) Vomerine ridge absent. (11) Tongue moderate, emarginate, bearing no lingual papilla in front. Tooth-like projections on lower jaw absent. (12) Supratympanic fold distinct, from back of eye to shoulder. (13) Parotoid glands absent. (14) Cephalic ridges absent. (15) Co-ossified skin on head absent.

**(C) Forelimbs.** (16) Arm of normal size; forearm (FLL 7.5 mm) shorter than hand (HAL 8.6 mm), not enlarged. (17) Fingers moderately long and strong (TFL 5.4 mm). (18) Relative length of fingers when opposed:  $1 < 2 < 4 < 3$ . (19) Tips of all fingers with well-developed disks, with distinct circummarginal grooves, rather wide compared to finger width (fd1 0.9 mm, fw1 0.7 mm; fd2 1.3 mm, fw2 1.0 mm; fd3 1.6 mm, fw3 1.1 mm; fd4 1.5 mm, fw4 1.1 mm). (20) Dermal fringe on inside of all fingers; rudimentary webbing between fingers III and IV. (21) Subarticular tubercles prominent, rounded, single, all present. (22) Prepollex oval, distinct; two palmar tubercles, oval, distinct; supernumerary tubercles present on some fingers.

**(D) Hind limbs.** (23) Hind limbs long, heels slightly overlapping when limbs are folded at right angles to body. Tibia 6.6 times longer (TL 17.1 mm) than wide (TW 2.6 mm), about as long as thigh (FL 17.1 mm), longer than distance from base of internal metatarsal tubercle to tip of toe IV (FOL 13.8 mm). (24) Toes moderately long and strong, toe IV (FTL 8.0 mm) 2.6 times in distance from base of tarsus to tip of toe IV (TFOL 20.5 mm). (25) Relative length of toes when opposed:  $1 < 2 < 3 < 5 < 4$ . (26) Tips of all toes with moderate disks, somewhat smaller than those of fingers, with distinct circummarginal grooves, rather wide

compared to toe width (td1 0.7 mm, tw1 0.5 mm; td2 0.9 mm, tw2 0.5 mm; td3 1.2 mm, tw3 0.8 mm; td4 1.4 mm, tw4 1.0 mm; td5 1.4 mm, tw5 1.2 mm). (27) Webbing present, medium (MTTF 7.4 mm, MTFF 7.4 mm, TFTF 4.6 mm, FFTF 5.6 mm). (28) Dermal fringe along toe V present, from tip of toe to base of metatarsal. (29) Subarticular tubercles distinct, rounded, simple and all present. (30) Inner metatarsal tubercle rather indistinct, oval, its length (IMT 1.6 mm) 2.0 times in length of toe I (ITL 3.2 mm). (31) Tarsal fold present. (32) Outer metatarsal tubercle absent, supernumerary tubercles not evident, tarsal tubercle absent.

**(E) Skin.** (33) Snout, between eyes, side of head, back and flanks smooth. (34) Dorso-lateral folds absent. (35) Dorsal part of forelimb, thigh, tibia and tarsus smooth.

(36) Throat smooth, chest shagreened, belly with treefrog belly skin, ventral part of thighs granular. (37) Macroglands absent.

**(F) Coloration.** (In alcohol). (38) Dorsal part of head and dorsum tan with dark brown spots, with a dark X-mark on dorsum. Flanks, loreal region, tympanic region, tympanum and lips tan with dark brown spots. (39) Forelimb tan with two dark brown stripes; dorsal part of thighs, dorsal part of tibia and dorsal part of foot tan with three dark brown stripes; posterior part of thighs tan. (40) Throat, margin of throat, chest, belly, ventral part of thighs and webbing tan.

**(H) Female secondary sexual characters.** (44) Oviduct not evident. (45) Ovary with large, yellowish oocytes.

### List of currently recognized taxa and synonyms for frogs of the genus *Philautus* Gistel, 1848

The following list gives the provisional synonymies of the 84 species that we tentatively recognize as valid in the genus *Philautus* s.l. as defined above. For each species, we give the complete current onymorph (Smith & Perez-Higareda, 1986) and a synonymy-chresonymy (Smith & Smith, 1973) that includes the first uses of all combinations and onymorphs that we have found in the literature. The following list is meant at being useful for future revisers of the genus *Philautus* or of parts of it. Such revisions will no doubt be followed by important changes in this list, which should be understood as a working tool rather than as a final result.

#### Genus *Philautus* Gistel, 1848

**Known distribution.** Bhutan, Borneo, China, India, Java, Malaya, Myanmar, Natuna Islands, Nepal, Philippines, Sri Lanka, Sumatra, Thailand, Vietnam.

**Proposed common name.** Oriental shrub-frogs.

#### A. Subgenus *Gorhixalus* Dubois, 1987

*Philautus hosei* group: Dring, 1987: 20–21.

*Gorhixalus* Dubois, 1987: 72. Type-species by original designation: *Rhacophorus hosii* Boulenger, 1895: 169.

**Known distribution.** Borneo.

**Proposed common name.** Gorham's Oriental shrub-frogs.

#### S1. *Philautus (Gorhixalus) hosii* Boulenger, 1895

*Rhacophorus hosii* Boulenger, 1895: 169. Sarawak [Borneo], Malaysia.

*R[hacophorus] (R[hacophorus]) hosii*: Ahl, 1931: xi, 57, 119.

*Rh[acophorus] buergeri hosii*: Wolf, 1936: 170.

*Rhacophorus hosei*: Inger, 1966: 304.

*Philautus hosei*: Liem, 1970: 68.

*Philautus hosii*: Inger in Frost, 1985: 529.

*Philautus (Gorhixalus) hosii*: Dubois, 1987a: 72.

**Known distribution** (Dring, 1987). Borneo.

#### S2. *Philautus (Gorhixalus) ingeri* Dring, 1987

*Philautus ingeri* Dring, 1987: 19–21. Sarawak [Borneo], Malaysia.

*Philautus (Gorhixalus) ingeri*: Dubois, 1992: 335.

**Known distribution** (Dring, 1987). Borneo.

**B. Subgenus *Kirtixalus* Dubois, 1987**

*Kirtixalus* Dubois, 1987a: 72. Type-species by original designation: *Polypedates microtypanum* Günther, 1859: xii, 77.

**Known distribution.** Sri Lanka.

**Proposed common name.** Kirtisinghe's Oriental shrub-frogs.

**S3. *Philautus (Kirtixalus) cavirostris***  
(Günther, 1869)

*Polypedates cavirostris* Günther, 1869: 486. Sri Lanka.  
*Rhacophorus cavirostris*: Boulenger, 1882a: viii, 82.  
*Rhacophorus (R[hacophorus]) cavirostris*: Ahl, 1931: [xi, 57, 121], 122.  
*Philautus cavirostris*: Jiang et al., 1987: 32.  
*Ixalus fimbriatus* Günther, 1872: 87. Sri Lanka.

**Known distribution** (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.

**S4. *Philautus (Kirtixalus) fergusonianus***  
(Ahl, 1927)

*Rhacophorus fergusonii* Boulenger, 1882a: 82. Sri Lanka.  
*Rhacophorus (Polyp[edates]) fergusonii*: Müller, 1887: 255.  
*Rhacophorus fergusonianus* Ahl, 1927b: 44. Sri Lanka.  
*Rhacophorus (R[hacophorus]) fergusonianus*: Ahl, 1931: [xii, 58], 130.

**Known distribution** (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.

**S5. *Philautus (Kirtixalus) microtypanum*** (Günther, 1859)

*Polypedates microtypanum* Günther, 1859: xii, 77. Sri Lanka.  
*Rhacophorus microtypanum*: Boulenger, 1882a: viii, 79.  
*Rhacophorus (Polyp[edates]) microtypanum*: Müller, 1885: 671.  
*Rhacophorus (R[hacophorus]) microtypanum*: Ahl, 1931: [xi, 58, 128], 129.  
*Rh[acophorus] buergeri microtypanum*: Wolf, 1936: 143, 173.  
*Philautus (Kirtixalus) microtypanum*: Dubois, 1987a: 73.  
*Philautus microtypanum*: Dubois, 1987a: 73.  
*Rhacophorus zimmeri* Ahl, 1927b. Sri Lanka.  
*R[hacophorus] (R[hacophorus]) zimmeri*: Ahl, 1931: xi, 56, 109.  
*Rhacophorus dimbullae* Shreve, 1940. Sri Lanka.

**Known distribution** (Dutta, 1997). Sri Lanka.

**S6. *Philautus (Kirtixalus) nanus*** (Günther, 1869)

*Ixalus macropus* Günther, 1869: 484. Sri Lanka.  
*Rhacophorus macropus*: Ahl, 1931: 57.  
*Rhacophorus (R[hacophorus]) macropus*: Ahl, 1931: [xii, 58], 131.  
*Polypedates nanus* Günther, 1869: 485. Sri Lanka.  
*Rhacophorus nanus*: Boulenger, 1882a: viii, 80.  
*Philautus (Kirtixalus) nanus*: Dubois, 1999a: 6.  
*Ixalus sarasinorum* Müller, 1887: 256. Sri Lanka.  
*Micrixalus sarasinorum*: Boulenger, 1890: 464.  
*Stauroids sarasinorum*: Forcart, 1946: 129.

**Known distribution** (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.

**S7. *Philautus (Kirtixalus) pleurotaenia***  
(Boulenger, 1904)

*Rhacophorus pleurotaenia* Boulenger, 1904: 430. Sri Lanka.  
*R[hacophorus] (R[hacophorus]) pleurotaenia*: Ahl, 1931: xi, 57, 127.

**Known distribution** (Dutta, 1997). Sri Lanka.

**S8. *Philautus (Kirtixalus) reticulatus***

(Günther, 1864)

*Polypedates reticulatus* Günther, 1864: xxvi, 431. Sri Lanka.*Rhacophorus reticulatus*: Boulenger, 1882a: viii, 81.*Rhacophorus (R[hacophorus]) reticulatus*: Ahl, 1931: [xii, 58, 131], 132.**Known distribution** (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.**S9. *Philautus (Kirtixalus) stellatus* (Kelaart, 1853)***Polypedates stellatus* Kelaart, 1853: xxxi, 194. Sri Lanka.*R[hacophorus] (R[hacophorus]) stellatus*: Ahl, 1931: [xii], 174.**Known distribution** (Kelaart, 1853). Sri Lanka.**C. Subgenus *Philautus* Gistel, 1848***Orchestes* Tschudi, 1838: 32 (nec Illiger, 1798: 498; nec Leach, 1830: 402). Type-species by monotypy: *Hyla aurifasciata* Schlegel, 1837: 27.*Ixalus* Duméril & Bibron, 1841: 523 (nec Ogilby, 1837: 119; nec Gistel, 1848: x). Nomen novum pro *Orchestes* Tschudi, 1838.*Philautus* Gistel, 1848: x. Nomen novum pro *Orchestes* Tschudi, 1838.*Pseudophilautus* Laurent, 1943: 2. Type-species by original designation: *Ixalus temporalis* Günther, 1864: xxvi, 434.**Known distribution.** Bhutan, Borneo, China, India, Java, Malaya, Myanmar, Natuna Islands, Nepal, Philippines, Sri Lanka, Sumatra, Thailand, Vietnam.**Proposed common name.** Gistel's Oriental shrub-frogs.**S10. *Philautus (Philautus) abditus***

Inger, Orlov &amp; Darevsky, 1999

*Philautus abditus* Inger, Orlov & Darevsky, 1999: 26. Vietnam.**Known distribution** (Inger et al., 1999). Vietnam.**S11. *Philautus (Philautus) acutirostris***

(Peters, 1867)

*Ixalus acutirostris* Peters, 1867: 32. Mindanao, Philippines.*Philautus acutirostris*: Stejneger, 1905: 347.*R[hacophorus] (P[hilautus]) acutirostris*: Ahl, 1931: xi, 55, 96.*Philautus (Philautus) acutirostris*: Dubois, 1987a: 72.*Philautus woodi* Stejneger, 1905: 346. Mindanao, Philippines.*R[hacophorus] (P[hilautus]) woodi*: Ahl, 1931: x, 52, 66.*Philautus basilanensis* Taylor, 1922. Basilan, Philippines.*R[hacophorus] (P[hilautus]) basilanensis*: Ahl, 1931: xi, 54, 81.**Known distribution** (Brown & Alcala, 1994). Philippines.**S12. *Philautus (Philautus) acutus* Dring, 1987***Philautus acutus* Dring, 1987: 19, 24. Sarawak [Borneo], Malaysia.**Known distribution** (Dring, 1987). Borneo.**S13. *Philautus (Philautus) adpersus* (Günther, 1872)***Ixalus adpersus* Günther, 1872a: 87. Sri Lanka.*Rhacophorus (Philautus) adpersus*: Ahl, 1931: [xi, 55], 94.*Philautus adpersus*: Inger in Frost, 1985: 526.**Known distribution** (Dutta, 1997). Sri Lanka.

**S14. *Philautus (Philautus) albopunctatus* Liu & Hu, 1962**

*Philautus albopunctatus* Liu & Hu, 1962: 73, 99. Guangxi, China.

*Known distribution* (Fei, 1999). China.

**S15. *Philautus (Philautus) amoenus* Smith, 1931**

*Philautus amoenus* Smith, 1931. Sabah [Borneo], Malaysia.

*Known distribution* (Dring, 1987). Borneo.

**S16. *Philautus (Philautus) annandalii***

(Boulenger, 1906)

*Ixalus annandalii* Boulenger, 1906: 385. West Bengal, India.

*R[hacophorus] (P[hilautus]) annandalii*: Ahl, 1931: x, 53, 71.

*Ph[hilautus] annandalii*: Bourret, 1942: 451.

*Philautus annandalii*: Dubois, 1974: 411.

*P[hilautus] annadali*: Tiwari, 1991: 65.

*Philautus annadeli*: Tiwari, 1991: 138.

*[Philautus] annadoli*: Tiwari, 1991: 184.

*Known distribution* (Dubois, 1980; Dutta, 1997). Bhutan, India, Nepal.

**S17. *Philautus (Philautus) aurantium* Inger, 1989**

*Philautus aurantium* Inger, 1989: 239. Sabah [Borneo], Malaysia.

*P[hilautus] a[urantium] aurantium*: Malkmus & Riede, 1996a: 35.

*Philautus aurantium aurantium*: Malkmus & Riede, 1996b: 28.

*Known distribution* (Inger, 1989). Borneo.

**S18. *Philautus (Philautus) aurifasciatus***

(Schlegel, 1837)

'*[Hyla] aurifasciata*' Kuhl & Van Hasselt, 1822: 104. Java, Indonesia.

*Hyla aurifasciata* Schlegel, 1837: 27. Java, Indonesia.

*Orchestes aurifasciatus*: Tschudi, 1838: 76.

*Ixalus aurifasciatus*: Duméril & Bibron, 1841: 523.

*Ixalus semifasciatus* [sic]: Hallowell, 1861: 501.

*Philautus aurifasciatus*: Barbour, 1912: 68, 171.

*Rhacophorus aurifasciatus*: Ahl, 1931: 52.

*R[hacophorus] (P[hilautus]) aurifasciatus*: Ahl, 1931: xi, 55, 94.

*Philautus (Philautus) aurifasciatus*: Dubois, 1987a: 72.

*Nyctixalus robinsoni* Annandale, 1917: 110. Java, Indonesia.

*Known distribution* (Dring, 1987). Java.

**S19. *Philautus (Philautus) banaensis* Bourret, 1939**

*Philautus banaensis* Bourret, 1939a: 15, 34. Vietnam.

*Known distribution* (Bourret, 1942). Vietnam.

**S20. *Philautus (Philautus) beddomii***

(Günther, 1876)

*Ixalus beddomii* Günther, 1876a: 575. Kerala, India.

*Rhacophorus (Philautus) beddomii*: Ahl, 1931: [xi, 54, 79], 80.

*[Philautus] beddomii*: Gorham, 1974: 166.

*Philautus beddomii*: Inger in Frost, 1985: 527.

*Known distribution* (Dutta, 1997). India.

**S21. *Philautus (Philautus) bombayensis* (Annandale, 1919)**

*Ixalus bombayensis* Annandale, 1919: 124. Karnataka, India.  
*R[hacophorus] (P[hilautus]) bombayensis*: Ahl, 1931: xi, 54, 79.  
*[Philautus] bombayensis*: Gorham, 1974: 166.  
*Philautus bombayensis*: Inger in Frost, 1985: 527.  
*P[hilautus] bombavensis*: Tiwari, 1991: 66, 184.

*Known distribution* (Dutta, 1997). India.

**S22. *Philautus (Philautus) bunitus***

Inger, Stuebing & Tan, 1995

*Philautus bunitus* Inger, Stuebing & Tan, 1995: 127. Sabah [Borneo], Malaysia.

*Known distribution* (Inger et al., 1995: 127). Borneo.

**S23. *Philautus (Philautus) carinensis***

(Boulenger, 1893)

*Ixalus carinensis* Boulenger, 1893: 339. Myanmar.  
*Rhacophorus (Philautus) carinensis*: Ahl, 1931: [xi, 55, 89], 90.  
*Ph[ilautus] carinensis*: Smith, 1940: 475.  
*Philautus carinensis*: Bourret, 1942: [451], 458.

*Known distribution* (Bourret, 1942). Myanmar.

**S24. *Philautus (Philautus) chalazodes***

(Günther, 1876)

*Ixalus chalazodes* Günther, 1876a: 574. Kerala, India.  
*Rhacophorus (Philautus) chalazodes*: Ahl, 1931: [xi, 54], 87.  
*[Philautus] chalazodes*: Gorham, 1974: 166.  
*Philautus chalazodes*: Inger in Frost, 1985: 527.

*Known distribution* (Dutta, 1997). India.

**S25. *Philautus (Philautus) charius* Rao, 1937**

*Philautus charius* Rao, 1937. Karnataka, India.

*Known distribution* (Dutta, 1997). India.

**S26. *Philautus (Philautus) cinerascens***

(Stoliczka, 1870)

*Ixalus cinerascens* Stoliczka, 1870: 275. Myanmar.  
*Rhacophorus (Philautus) cinerascens*: Ahl, 1931: [xi, 53], 75.

*Known distribution* (Stoliczka, 1870). Myanmar.

**S27. *Philautus (Philautus) cornutus***

(Boulenger, 1920)

*Ixalus cornutus* Boulenger, 1920a: 295. Sumatra, Indonesia.  
*Philautus cornutus*: Van Kampen, 1923: [xii], 274.  
*R[hacophorus] (P[hilautus]) cornutus*: Ahl, 1931: x, 53, 68.

*Known distribution* (Van Kampen, 1923). Sumatra.

**S28. *Philautus (Philautus) disgregus* Inger, 1989**

*Philautus disgregus* Inger, 1989: 235. Sabah [Borneo], Malaysia.

*Known distribution* (Inger, 1989). Borneo.



**S29. *Philautus (Philautus) dubius***

(Boulenger, 1882)

- Ixalus jerdonii* Günther, 1876a: 575. West Bengal or Meghalaya, India.  
*Philautus jerdonii*: Sarkar et al., 1992: 90.  
*Rhacophorus dubius* Boulenger, 1882a: 81. West Bengal or Meghalaya, India.  
*Rhacophorus (Philautus) dubius*: Ahl, 1931: [xi, 55], 93.  
*Philautus (Kirtixalus) dubius*: Dubois, 1987a: 73.  
*Philautus dubius*: Dubois, 1987a: 73.

*Known distribution* (Dutta, 1997). India.**S30. *Philautus (Philautus) eximius* Shreve, 1940***Philautus eximius* Shreve, 1940. Sri Lanka.*Known distribution* (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.**S31. *Philautus (Philautus) femoralis***

(Günther, 1864)

- Ixalus femoralis* Günther, 1864: xxvi, 434. Sri Lanka.  
*Rhacophorus (Philautus) femoralis*: Ahl, 1931: [xi, 53], 73.  
*Philautus femoralis*: Inger et al., 1984: 553.  
*Ixalus pulchellus* Günther, 1872a: 88. Sri Lanka.  
*Ixalus fergusonii* Günther, 1876b: 379. Sri Lanka.

*Known distribution* (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). India, Sri Lanka.**S32. *Philautus (Philautus) flaviventris***

(Boulenger, 1882)

- Ixalus flaviventris* Boulenger, 1882a: 105. India.  
*Rhacophorus (Philautus) flaviventris*: Ahl, 1931: [xi, 53], 78.  
[*Philautus*] *flaviventris*: Gorham, 1974: 166.  
*Philautus flaviventris*: Inger in Frost, 1985: 528.  
*Philautus montanus* Rao, 1937. Karnataka and Kerala, India. **Syn. nov.**  
*Philautus hassannensis* Dutta, 1985. Karnataka and Kerala, India. **Syn. nov.**  
P[*hilautus*] *hassannensis*: Tiwari, 1991: 66.  
[*Philautus*] *hassonnensis*: Tiwari, 1991: 184.

*Known distribution* (Dutta, 1997). India.**S33. *Philautus (Philautus) garo* (Boulenger, 1919)**

- Ixalus garo* Boulenger, 1919: 207. Meghalaya, India.  
R[hacophorus] (*P[hilautus]*) *garo*: Ahl, 1931: x, 53, 70.  
Ph[*ilautus*] *garo*: Bourret, 1942: 450–451.  
*Philautus garo*: Inger in Frost, 1985: 528.  
[*Philautus*] *gara*: Tiwari, 1991: 184.

*Known distribution* (Dutta, 1997). India.**S34. *Philautus (Philautus) glandulosus***

(Jerdon, 1853)

- Ixalis* ? [sic] *glandulosa* Jerdon, 1853: 533. Kerala, India.  
[*Ixalus*] *glandulosa*: Jerdon, 1870: 85.  
*Ixalus glandulosa*: Anderson, 1871: 28–29.  
*Ixalus glandulosus*: Günther, 1876a: 573.  
*Ixalus glandulosus*: Müller, 1883: 6.  
*Philautus glandulosus*: Roux, 1928: 465.  
*Rhacophorus (Philautus) glandulosus*: Ahl, 1931: [xi, 53, 71], 72.  
*Philautus glandulosus*: Tiwari, 1991: 132, 184.  
*Ixalus pulcher*, Boulenger, 1882a: 469. Kerala, India. **Syn. nov.**  
*Philautus pulcher*: Rao, 1937: 423.  
*Rhacophorus noblei* Ahl, 1927b: 40. Karnataka and Kerala, India. **Syn. nov.**  
R[hacophorus] (*P[hilautus]*) *noblei*: Ahl, 1931: xi, 55, 100.  
[*Philautus*] *noblei*: Gorham, 1974: 167.

*Philautus noblei*: Inger in Frost, 1985: 530.  
*Rhacophorus pulcherrimus* Ahl, 1927b: 41. Kerala, India. **Syn. nov.**  
*R[hacophorus] (P[hilautus]) pulcherrimus*: Ahl, 1931: xi, 55, 101.  
*[Philautus] pulcherrimus*: Gorham, 1974: 167.  
*Philautus pulcherrimus*: Inger in Frost, 1985: 531.

*Known distribution* (this paper). India.

**S35. *Philautus (Philautus) gracilipes* Bourret, 1937**  
*Philautus gracilipes* Bourret, 1937: 6, 52. Vietnam.

*Known distribution* (Bourret, 1942). Vietnam.

**S36. *Philautus (Philautus) gryllus* Smith, 1924**  
*Philautus gryllus* Smith, 1924: 225, 231. Vietnam.  
*Rhacophorus (Philautus) gryllus*: Ahl, 1931: [xi, 55], 92.

*Known distribution* (Bourret, 1942). Vietnam.

**S37. *Philautus (Philautus) gunungensis***  
Malkmus & Riede, 1996  
*Philautus aurantium gunungensis* Malkmus & Riede, 1996b: 21–22. Sabah [Borneo], Malaysia.

*Known distribution* (Malkmus & Riede, 1996b). Borneo.

**S38. *Philautus (Philautus) hypomelas***  
(Günther, 1876)  
*Ixalus hypomelas* Günther, 1876b: 380. Sri Lanka.  
*Rhacophorus (Philautus) hypomelas*: Ahl, 1931: [x, 52, 65], 66.  
*Philautus hypomelas*: Rao, 1937: 422.

*Known distribution* (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.

**S39. *Philautus (Philautus) jacobsoni***  
(Van Kampen, 1912)  
*Ixalus jacobsoni* Van Kampen, 1912: 78. Java, Indonesia.  
*Philautus jacobsoni*: Van Kampen, 1923: 268, 272.  
*R[hacophorus] (P[hilautus]) jacobsoni*: Ahl, 1931: xi, 56, 102.

*Known distribution* (Van Kampen, 1923). Java.

**S40. *Philautus (Philautus) jerdonii***  
(Günther, 1876)  
*Polypedates jerdonii* Günther, 1876a: 571. West Bengal, India.  
*Rhacophorus jerdonii*: Boulenger, 1882a: viii, 80.  
*Rhacophorus (R[hacophorus]) jerdonii*: Ahl, 1931: [xi, 56], 114.  
*Rh[acophorus] buergeri jerdonii*: Wolf, 1936: 172.  
*Philautus (Kirtixalus) jerdonii*: Dubois, 1987a: 73.  
*Philautus jerdonii*: Duellman, 1993: 290.  
*Rhacophorus (Rhacophorus) jerdonii*: Dutta, 1997: 101.  
*Rhacophorus jerdoni*: Tiwari, 1991: 138, 186.

*Known distribution* (Dutta, 1997). India.

**S41. *Philautus (Philautus) jinxiuensis* Hu, 1978**  
*Philautus jinxiuensis* Hu in Hu et al., 1978: 20. Guangxi, China.  
*Philautus jinxiuensis* Hu & Tian in Hu et al., 1981: 116. Guangxi, China.

*Known distribution* (Fei, 1999). China.

**S42. *Philautus (Philautus) kempiae***  
(Boulenger, 1919)

- Ixalus kempiae* Boulenger, 1919: 208. Meghalaya, India.  
*R[hacophorus] (P[hilautus]) kempiae*: Ahl, 1931: x, 53, 69.  
*Ph[ilautus] kempiae*: Bourret, 1942: 450–451.  
*Philautus kempiae*: Inger in Frost, 1985: 529.  
*P[hilautus] kempie*: Tiwari, 1991: 65, 184.

*Known distribution* (Dutta, 1997). India.

**S43. *Philautus (Philautus) kerangae* Dring, 1987**

*Philautus kerangae* Dring, 1987: 19, 28. Sarawak [Borneo], Malaysia.

*Known distribution* (Dring, 1987). Borneo.

**S44. *Philautus (Philautus) leitensis***  
(Boulenger, 1897)

- Ixalus leitensis* Boulenger, 1897: 107. Leyte, Philippines.  
*Philautus leitensis*: Stejneger, 1905: 347.  
*R[hacophorus] (P[hilautus]) leitensis*: Ahl, 1931: xi, 54, 82.

*Known distribution* (Brown & Alcala, 1994). Philippines.

**S45. *Philautus (Philautus) leucorhinus* (Lichtenstein, Weinland & Von Martens, 1856)**

- Ixalus leucorhinus* Lichtenstein, Weinland & Von Martens, 1856: 36. Sri Lanka.  
*R[hacophorus] (P[hilautus]) leucorhinus*: Ahl, 1931: xi, 55, 91.  
*Philautus leucorhinus*: Roux, 1928: 463.  
*Philautus leucorhincus*: Rao, 1937: 421.  
*Philautus (Philautus) leucorhinus*: Dubois, 1987a: 72.  
*Ixalus oxyrhynchus* Günther, 1872a: 88. Sri Lanka.  
*Rhacophorus (Philautus) oxyrhynchus*: Ahl, 1931: [xi, 53], 72.  
*Ixalus halyi* Boulenger, 1904: 431. Sri Lanka.  
*R[hacophorus] (P[hilautus]) halyi*: Ahl, 1931: xi, 53, 77.  
*Ixalus semiruber* Annandale, 1913: 305. Sri Lanka.  
*Rhacophorus (Philautus) semiruber*: Ahl, 1931: [xi, 55], 97.  
*Ixalus semirubra*: Dutta, 1997: 82.  
*Rhacophorus rugatus* Ahl, 1927b: 36. Sri Lanka. **Syn. nov.**  
*R[hacophorus] (P[hilautus]) rugatus*: Ahl, 1931: xi, 53, 73.  
*Rhacophorus malcolmsmithi* Ahl, 1927b: 39. Sri Lanka. **Syn. nov.**  
*R[hacophorus] (P[hilautus]) malcolmsmithi*: Ahl, 1931: xi, 55, 87.

*Known distribution* (this paper). Sri Lanka.

**S46. *Philautus (Philautus) longchuanensis***  
Yang & Li, 1979

*Philautus longchuanensis* Yang & Li in Yang et al., 1979: 196. Yunnan, China.

*Known distribution* (Fei, 1999). China.

**S47. *Philautus (Philautus) longicrus***  
(Boulenger, 1894)

- Ixalus longicrus* Boulenger, 1894: 88. Palawan, Philippines.  
*Philautus longicrus*: Stejneger, 1905: 347.  
*R[hacophorus] (P[hilautus]) longicrus*: Ahl, 1931: xi, 54, 83.

*Known distribution* (Brown & Alcala, 1994). Borneo, Philippines.

**S48. *Philautus (Philautus) maosonensis***  
Bourret, 1937

*Philautus maosonensis* Bourret, 1937: 51. Vietnam.

*Known distribution* (Inger et al., 1999). Vietnam.

**S49. *Philautus (Philautus) medogensis***

Ye & Hu, 1984

*Philautus medogensis* Ye & Hu, 1984: 67. Xizang, China.

*Known distribution* (Fei, 1999). China.

**S50. *Philautus (Philautus) menglaensis* Kou, 1990**

*Philautus menglaensis* Kou, 1990: 210. Yunnan, China.

*Known distribution* (Fei, 1999). China.

**S51. *Philautus (Philautus) microdiscus***

(Annandale, 1912)

*Rhacophorus microdiscus* Annandale, 1912: 13. Arunachal Pradesh, India.

*R[hacophorus] (R[hacophorus]) microdiscus*: Ahl, 1931: xi, 57, 121.

*Philautus (Kirtixalus) microdiscus*: Dubois, 1987a: 73.

*Known distribution* (Annandale, 1912). India.

**S52. *Philautus (Philautus) mjobergi* Smith, 1925**

*Philautus mjobergi* Smith, 1925. Sarawak [Borneo], Malaysia.

*Philautus mjobergi* Malkmus & Riede, 1996. Sarawak, Malaysia.

*Known distribution* (Dring, 1987). Borneo.

**S53. *Philautus (Philautus) namdaphaensis* Sarkar & Sanyal, 1985**

*Philautus namdaphaensis* Sarkar & Sanyal, 1985: 287. Arunachal Pradesh, India.

*Known distribution* (Dutta, 1997). India.

**S54. *Philautus (Philautus) nasutus* (Günther, 1869)**

*Ixalus nasutus* Günther, 1869: 484. Sri Lanka.

*Rhacophorus (Philautus) nasutus*: Ahl, 1931: [xi, 54], 85.

*Philautus nasutus*: Rao, 1937: 422.

*Philautus nasutus*: Kirtisinghe, 1957: x, 73.

*Philautus (Philautus) nasutus*: Dubois, 1987a: 72.

*Known distribution* (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.

**S55. *Philautus (Philautus) ocellatus***

Liu & Hu, 1973

*Philautus ocellatus* Liu & Hu in Liu et al., 1973: 385, 393. Hainan, China.

*Known distribution* (Fei, 1999). China.

**S56. *Philautus (Philautus) odontotarsus***

Ye & Fei, 1993

*Philautus odontotarsus* Ye & Fei in Ye et al., 1993: 318, 320. Yunnan, China..

*Known distribution* (Fei, 1999). China.

**S57. *Philautus (Philautus) pallidipes***

(Barbour, 1908)

*Ixalus pallidipes* Barbour, 1908: 190. Java, Indonesia.

*Philautus pallidipes*: Barbour, 1912: 69.

*R[hacophorus] (P[hilautus]) pallidipes*: Ahl, 1931: xi, 54, 82.

*Known distribution* (Van Kampen, 1923). Java.

**S58. *Philautus (Philautus) parvulus***  
(Boulenger, 1893)

*Ixalus parvulus* Boulenger, 1893: 339. Myanmar.

*Rhacophorus (Philautus) parvulus*: Ahl, 1931: [x, 53], 70.

*Philautus parvulus*: Bourret, 1942: [450], 451.

*Philautus (Philautus) parvulus*: Dubois, 1987a: 72.

*Known distribution* (Inger et al., 1999). Myanmar, Thailand, Vietnam.

**S59. *Philautus (Philautus) petersi***  
(Boulenger, 1900)

*Ixalus petersi* Boulenger, 1900a: 185. Great Natuna.

*Philautus petersi*: Barbour, 1912: 171.

*R[hacophorus] (P[hilautus]) petersi*: Ahl, 1931: xi, 54, 85.

*Rhacophorus (Philautus) petersi*: Bourret, 1942: 456.

*Ixalus larutensis* Boulenger, 1900b: 187. Perak, Malaysia.

*P[hilautus] larutensis*: Smith, 1930: 115.

*R[hacophorus] (P[hilautus]) larutensis*: Ahl, 1931: xi, 54, 86.

*Rhacophorus (Philautus) larutensis*: Bourret, 1942: 456.

*Ixalus castanomerus* Boulenger, 1905: 39. Selangor, Malaysia.

*Philautus castanomerus*: Smith, 1922: 280.

*R[hacophorus] (P[hilautus]) castanomerus*: Ahl, 1931: xi, 54, 84.

*Rhacophorus (Philautus) castanomerus*: Bourret, 1942: 456.

*Known distribution* (Dring, 1987). Borneo, Great Natuna, Malaya.

**S60. *Philautus (Philautus) poecilus***  
Brown & Alcala, 1994

*Philautus poecilus* Brown & Alcala, 1994: 185, 196. Mindanao, Philippines.

*Known distribution* (Brown & Alcala, 1994). Philippines.

**S61. *Philautus (Philautus) refugii***  
Inger & Stuebing, 1996

*Philautus refugii* Inger & Stuebing, 1996: 543. Sarawak [Borneo], Malaysia.

*Known distribution* (Inger & Stuebing, 1996). Borneo.

**S62. *Philautus (Philautus) rhododiscus***  
Liu & Hu, 1962

*Philautus rhododiscus* Liu & Hu, 1962: 73, 98. Guangxi, China.

*Known distribution* (Fei, 1999). China.

**S63. *Philautus (Philautus) sanctisilvaticus***  
Das & Chanda, 1997

*Philautus sanctisilvaticus* Das & Chanda, 1997: 21. Madhya Pradesh, India.

'*Philautus sanctipalustris*': Das & Chanda, 1997: 24. Madhya Pradesh, India.

*Known distribution* (Das & Chanda, 1997). India.

**S64. *Philautus (Philautus) saueri***  
Malkmus & Riede, 1996

*Philautus saueri* Malkmus & Riede, 1996a: 27, 29. Sabah [Borneo], Malaysia.

*Known distribution* (Malkmus & Riede, 1996a). Borneo.

**S65. *Philautus (Philautus) schmackeri***

(Boettger, 1892)

- Ixalus schmackeri* Boettger, 1892: 17. Mindoro, Philippines.  
*Philautus schmackeri*: Stejneger, 1905: 347.  
*R[hacophorus] (P[hilautus]) schmackeri*: Ahl, 1931: xi, 54, 83.  
*Philautus (Philautus) schmackeri*: Dubois, 1987a: 72.  
*Ixalus mindorensis* Boulenger, 1897: 107. Mindoro, Philippines.  
*Philautus mindorensis*: Stejneger, 1905: 347.  
*R[hacophorus] (P[hilautus]) mindorensis*: Ahl, 1931: xi, 55, 88.

*Known distribution* (Brown & Alcala, 1994). Philippines.

**S66. *Philautus (Philautus) shillongensis***

Pillai &amp; Chanda, 1973

*Philautus shillongensis* Pillai & Chanda, 1973. Meghalaya, India.

*Known distribution* (Dutta, 1997). India.

**S67. *Philautus (Philautus) signatus***

(Boulenger, 1882)

- Ixalus signatus* Boulenger, 1882a: 106. Tamil Nadu, India.  
*Rhacophorus (Philautus) signatus*: Ahl, 1931: [xi, 53], 77.  
*[Philautus] signatus*: Gorham, 1974: 166.  
*Philautus signatus*: Inger et al., 1984: 554.

*Known distribution* (Dutta, 1997). India.

**S68. *Philautus (Philautus) similis***

Van Kampen, 1923

- Philautus similis* Van Kampen, 1923: 269, 273. Sumatra, Indonesia.  
*R[hacophorus] (P[hilautus]) similis*: Ahl, 1931: xi, 55, 102.

*Known distribution* (Van Kampen, 1923). Sumatra.

**S69. *Philautus (Philautus) stictomerus***

(Günther, 1876)

- Ixalus stictomerus* Günther, 1876a: 575. Sri Lanka.  
*Rhacophorus stictomerus*: Boulenger, 1882a: viii, 78.  
*Rhacophorus (R[hacophorus]) stictomerus*: Ahl, 1931: [xi, 58], 127.  
*Philautus stictomerus*: Dutta & Manamendra-Arachchi, 1996: 163.

*Known distribution* (Dutta & Manamendra-Arachchi, 1996; Dutta, 1997). Sri Lanka.

**S70. *Philautus (Philautus) surdus* (Peters, 1863)**

- Polypedates surdus* Peters, 1863: 459. Luzon, Philippines.  
*Rhacophorus surdus*: Boulenger, 1882a: viii, 79.  
*R[hacophorus] (R[hacophorus]) surdus*: Ahl, 1931: xi, 57, 118.  
*Rh[acophorus] buergeri surdus*: Wolf, 1936: 169.  
*P[hilautus] surdus*: Liem, 1970: 68, 93, 131, 137–139.  
*Philautus surdus*: Inger in Frost, 1985: 532.  
*Philautus (Philautus) surdus*: Dubois, 1987a: 72.  
*Philautus williamsi* Taylor, 1922. Polillo, Philippines.  
*R[hacophorus] (P[hilautus]) williamsi*: Ahl, 1931: xi, 55, 101.  
*Rhacophorus lissobranchius* Inger, 1954: 370–371, 390. Mindanao, Philippines.  
*Philautus lissobranchius*: Liem, 1970: [53], 68.  
*Philautus (Philautus) lissobranchius*: Dubois, 1987a: 72.

*Known distribution* (Brown & Alcala, 1994). Philippines.

**S71. *Philautus (Philautus) surrufus***

Brown & Alcala, 1994

*Philautus surrufus* Brown & Alcala, 1994. Mindanao, Philippines.

**Known distribution** (Brown & Alcala, 1994). Philippines.

**S72. *Philautus (Philautus) tectus* Dring, 1987**

*Philautus tectus* Dring, 1987: 19, 30. Sarawak [Borneo], Malaysia.

**Known distribution** (Dring, 1987). Borneo.

**S73. *Philautus (Philautus) temporalis***

(Günther, 1864)

*Ixalus temporalis* Günther, 1864: xxvi, 434. Sri Lanka.

*Ixalus leucorhinus* var. *temporalis*: Müller, 1887: 256.

*R[hacophorus] (P[hilautus]) temporalis*: Ahl, 1931: xi, 55, 97.

*Pseudophilautus temporalis*: Laurent, 1943: 2.

*Philautus temporalis*: Inger et al., 1984: 555.

**Known distribution** (Dutta, 1997). Sri Lanka, India.

**S74. *Philautus (Philautus) terebrans***

Das & Chanda, 1998

*Philautus terebrans* Das & Chanda, 1998: 105. Andhra Pradesh, India.

**Known distribution** (Das & Chanda, 1998). India.

**S75. *Philautus (Philautus) tinniens* (Jerdon, 1853)**

*Phyllomedusa ? tinniens* Jerdon, 1853: 533. Tamil Nadu, India.

*Ixalus tinniens*: Jerdon, 1870: 85.

*Ixalus punctatus* Anderson, 1871: 27. Tamil Nadu, India. **Syn. nov.**

*Ixalus montanus* Günther, 1876a: 574. Karnataka, India. **Syn. nov.**

*Philautus melanensis* Rao, 1937: 411. Karnataka, India. **Syn. nov.**

**Known distribution** (this paper). India.

**S76. *Philautus (Philautus) travancoricus***

(Boulenger, 1891)

*Ixalus travancoricus* Boulenger, 1891: 291. Tamil Nadu, India.

*R[hacophorus] (P[hilautus]) travancoricus*: Ahl, 1931: xi, 54, 79.

*[Philautus] travancoricus*: Gorham, 1974: 167.

*Philautus travancoricus*: Inger in Frost, 1985: 532.

**Known distribution** (Dutta, 1997). India.

**S77. *Philautus (Philautus) tuberculatus***

(Anderson, 1879)

*Ixalus tuberculatus* Anderson, 1879: 845. Border between Myanmar and Yunnan (China).

*Philautus tuberculatus*: Bourret, 1942: 92.

*Rhacophorus andersoni* Ahl, 1927b: 36. Border between Myanmar and Yunnan (China).

*R[hacophorus] (P[hilautus]) andersoni*: Ahl, 1931: x, 53, 67.

*Philautus andersonii*: Bourret, 1942: [450], 452.

*Rhacophorus andersonii*: Bourret, 1942: 452.

*Rhacophorus (Philautus) andersoni*: Bourret, 1942: 452.

*[Philautus] andersoni*: Gorham, 1974: 166.

*Philautus andersoni*: Inger in Frost, 1985: 526.

**Known distribution** (Dutta, 1997). China, India, Myanmar.

**S78. *Philautus (Philautus) tyttus* Smith, 1940***Philautus tyttus* Smith, 1940: 475. Myanmar.**Known distribution** (Smith, 1940). Myanmar.**S79. *Philautus (Philautus) umbra* Dring, 1987***Philautus umbra* Dring, 1987. Sarawak [Borneo], Malaysia.**Known distribution** (Dring, 1987). Borneo.**S80. *Philautus (Philautus) variabilis***

(Günther, 1859)

*Ixalus variabilis* Günther, 1859: xii, 74. Sri Lanka.*Philautus variabilis*: Roux, 1928: 464.*Rhacophorus variabilis*: Ahl, 1931: 55.*Rhacophorus (Philautus) variabilis*: Ahl, 1931: [xi, 55, 98], 99.*Philautus variabilis*: Tiwari, 1991: 133.[*Philautus*] *variabilis*: Tiwari, 1991: 184.**Known distribution** (Dutta, 1997). India, Sri Lanka.**S81. *Philautus (Philautus) vermiculatus***

(Boulenger, 1900)

*Ixalus vermiculatus* Boulenger, 1900b: 187. Perak [Malaya], Malaysia.*P[hilautus] vermiculatus*: Smith, 1922: 280.*Philautus vermiculatus*: Smith, 1930: 116.*R[hacophorus] (P[hilautus]) vermiculatus*: Ahl, 1931: xi, 55, 95.*Rhacophorus (Philautus) vermiculatus*: Bourret, 1942: 458.*Ixalus brevipes* Boulenger, 1908: 63. Pahang [Malaya], Malaysia.*Philautus brevipes*: Smith, 1922: 279.*R[hacophorus] (P[hilautus]) brevipes*: Ahl, 1931: xi, 54, 80.*Rhacophorus (Philautus) brevipes*: Bourret, 1942: 458.**Known distribution** (Dring, 1987). Malaya.**S82. *Philautus (Philautus) vittiger***

(Boulenger, 1897)

*Ixalus vittiger* Boulenger, 1897: 106. Java, Indonesia.*Philautus vittiger*: Barbour, 1912: 171.*R[hacophorus] (P[hilautus]) vittiger*: Ahl, 1931: xi, 55, 100.**Known distribution** (Van Kampen, 1923). Java.**S83. *Philautus (Philautus) worcesteri***

(Stejneger, 1905)

*Cornufer worcesteri* Stejneger, 1905: 345. Mindanao, Philippines.*Philautus worcesteri*: Brown et al., 1998: 131.*Rhacophorus emembranatus* Inger, 1954: 370–371, 392. Mindanao, Philippines.*P[hilautus] emembranatus*: Liem, 1970: 68, 93, 131, 137–139.*Philautus emembranatus*: Inger in Frost, 1985: 528.*Philautus (Philautus) emembranatus*: Dubois, 1987a: 72.**Known distribution** (Brown & Alcala, 1994). Philippines.**S84. *Philautus (Philautus) wynaadensis***

(Jerdon, 1853)

*Phyllomedusa? wynaadensis* Jerdon, 1853: 533. Kerala, India.[*Ixalus*] *wynaadensis*: Jerdon, 1870: 85.**Known distribution** (this paper). India.



**Table 1.** Current status of the 177 species-group names for frogs originally referred to the genera *Ixalus* Duméril & Bibron, 1841 or *Philautus* Gistel, 1848, and/or currently or subsequently referred to these nominal genera.

SG, species-group within the genus *Philautus* to which the species was allocated by previous authors: (1) Dring's (1987) species-groups: DA, *Philautus aurifasciatus* group; DH, *Philautus hosii* group; DS, *Philautus surdus* group; DT, *Philautus tectus* group; DV, *Philautus vermiculatus* group; (2) Fei's (1999) species-groups: FA, *Philautus albopunctatus* group; FJ, *Philautus jinxiuensis* group; FO, *Philautus odontotarsus* group; FP, *Philautus palpebralis* group; FR, *Philautus rhododiscus* group; (3) U, unallocated to species-group by previous authors.

GAS, generic allocation status: see text (p. 12) for the meaning of the categories A1, A2 and B to E.

Original name	Current status	SG	GAS
<i>Philautus abditus</i> Inger, Orlov & Darevsky, 1999	<i>Philautus (Philautus) abditus</i> Inger, Orlov & Darevsky, 1999	DV	A2
<i>Ixalus acutirostris</i> Peters, 1867	<i>Philautus (Philautus) acutirostris</i> (Peters, 1867)	DA	A1
<i>Philautus acutus</i> Dring, 1987	<i>Philautus (Philautus) acutus</i> Dring, 1987	DV	A2
<i>Ixalus adpersus</i> Günther, 1872	<i>Philautus (Philautus) adpersus</i> (Günther, 1872)	U	A1
<i>Philautus albopunctatus</i> Liu & Hu, 1962	<i>Philautus (Philautus) albopunctatus</i> Liu & Hu, 1962	FA	A2
<i>Rhacophorus (Philautus) alticola</i> Ahl, 1931	<i>Rhacophorus (Polypedates) macrotis</i> Boulenger, 1891	U	D
<i>Philautus amoenus</i> Smith, 1931	<i>Philautus (Philautus) amoenus</i> Smith, 1931	DA	A2
<i>Rhacophorus andersoni</i> Ahl, 1927	<i>Philautus (Philautus) tuberculatus</i> (Anderson, 1879)	FA	B
<i>Ixalus annandalii</i> Boulenger, 1906	<i>Philautus (Philautus) annandalii</i> (Boulenger, 1906)	U	A1
<i>Rhacophorus anodon</i> Van Kampen, 1907	<i>Nyctixalus anodon</i> (Van Kampen, 1907)	U	E
<i>Ixalus argus</i> Annandale, 1912	<i>Amolops (Amolops) marmoratus</i> (Blyth, 1855)	U	C
<i>Ixalus asper</i> Boulenger, 1886	<i>Theloderma asperum</i> (Boulenger, 1886)	FA	C
<i>Rhacophorus asperrimus</i> Ahl, 1927	<i>Theloderma asperum</i> (Boulenger, 1886)	FA	E
<i>Philautus aurantium</i> Inger, 1989	<i>Philautus (Philautus) aurantium</i> Inger, 1989	DV	A2
<i>Hyla aurifasciata</i> Kuhl & Van Hasselt, 1822	<i>Philautus (Philautus) aurifasciatus</i> (Schlegel, 1837)	DA	B
<i>Hyla aurifasciata</i> Schlegel, 1837	<i>Philautus (Philautus) aurifasciatus</i> (Schlegel, 1837)	DA	B
<i>Philautus banaensis</i> Bourret, 1939	<i>Philautus (Philautus) banaensis</i> Bourret, 1939	U	A2
<i>Philautus basilanensis</i> Taylor, 1922	<i>Philautus (Philautus) acutirostris</i> (Peters, 1867)	DA	A2
<i>Ixalus beddomii</i> Günther, 1876	<i>Philautus (Philautus) beddomii</i> (Günther, 1876)	U	A1
<i>Leptomantis bimaculata</i> Peters, 1867	<i>Rhacophorus (Leptomantis) bimaculatus</i> (Peters, 1867)	U	E
<i>Ixalus bombayensis</i> Annandale, 1919	<i>Philautus (Philautus) bombayensis</i> (Annandale, 1913)	U	A1
<i>Ixalus brevipes</i> Boulenger, 1908	<i>Philautus (Philautus) vermiculatus</i> (Boulenger, 1900)	DV	A1
<i>Philautus bunitus</i> Inger, Stuebing & Tan, 1995	<i>Philautus (Philautus) bunitus</i> Inger, Stuebing & Tan, 1995	DV	A2
<i>Ixalus carinensis</i> Boulenger, 1893	<i>Philautus (Philautus) carinensis</i> (Boulenger, 1893)	U	A1
<i>Ixalus castanomerus</i> Boulenger, 1905	<i>Philautus (Philautus) petersi</i> (Boulenger, 1900)	DA	A1
<i>Polypedates cavirostris</i> Günther, 1869	<i>Philautus (Kirtixalus) cavirostris</i> (Günther, 1869)	U	B
<i>Ixalus chalazodes</i> Günther, 1876	<i>Philautus (Philautus) chalazodes</i> (Günther, 1876)	U	A1
<i>Philautus charius</i> Rao, 1937	<i>Philautus (Philautus) charius</i> Rao, 1937	U	A2
<i>Philautus cherrapunjiae</i> Roonwal & Kripalani, 1966	<i>Chirixalus cherrapunjiae</i> (Roonwal & Kripalani, 1966)	U	C
<i>Ixalus cinerascens</i> Stoliczka, 1870	<i>Philautus (Philautus) cinerascens</i> (Stoliczka, 1870)	U	A1
<i>Ixalus concolor</i> Hallowell, 1844	<i>Hyperolius concolor</i> (Hallowell, 1844)	U	C
<i>Ixalus cornutus</i> Boulenger, 1920	<i>Philautus (Philautus) cornutus</i> (Boulenger, 1920)	U	A1
<i>Philautus crnri</i> Dutta, 1985	<i>Indirana longicrus</i> (Rao, 1937)	U	C
<i>Rhacophorus dimbullae</i> Shreve, 1940	<i>Philautus (Kirtixalus) microtympaum</i> (Günther, 1859)	U	B
<i>Ixalus diplostictus</i> Günther, 1876	<i>Indirana diplosticta</i> (Günther, 1876)	U	C
<i>Philautus disgregus</i> Inger, 1989	<i>Philautus (Philautus) disgregus</i> Inger, 1989	DV	A2
<i>Chirixalus doriae</i> Boulenger, 1893	<i>Chirixalus doriae</i> Boulenger, 1893	U	D
<i>Rhacophorus dubius</i> Boulenger, 1882	<i>Philautus (Philautus) dubius</i> (Boulenger, 1882)	U	B
<i>Philautus elegans</i> Rao, 1937	<i>Micrixalus elegans</i> (Rao, 1937)	U	C
<i>Rhacophorus emembranatus</i> Inger, 1954	<i>Philautus (Philautus) worcesteri</i> (Stejneger, 1905)	DS	B
<i>Philautus eximius</i> Shreve, 1940	<i>Philautus (Philautus) eximius</i> Shreve, 1940	U	A2
<i>Ixalus femoralis</i> Günther, 1864	<i>Philautus (Philautus) femoralis</i> (Günther, 1864)	U	A1
<i>Ixalus fergusonii</i> Günther, 1876	<i>Philautus (Philautus) femoralis</i> (Günther, 1864)	U	A1
<i>Rhacophorus fergusonianus</i> Ahl, 1927	<i>Philautus (Kirtixalus) fergusonianus</i> (Ahl, 1927)	U	B
<i>Rhacophorus fergusonii</i> Boulenger, 1882	<i>Philautus (Kirtixalus) fergusonianus</i> (Ahl, 1927)	U	B
<i>Ixalus fimbriatus</i> Günther, 1872	<i>Philautus (Kirtixalus) cavirostris</i> (Günther, 1869)	U	A1
<i>Ixalus flaviventris</i> Boulenger, 1882	<i>Philautus (Philautus) flaviventris</i> (Boulenger, 1882)	U	A1
<i>Ixalus flavosignatus</i> Boettger, 1893	<i>Nyctixalus flavosignatus</i> (Boettger, 1893)	U	C
<i>Ixalus fuscus</i> Boulenger, 1882	<i>Micrixalus fuscus</i> (Boulenger, 1882)	U	C
<i>Ixalus garo</i> Boulenger, 1919	<i>Philautus (Philautus) garo</i> (Boulenger, 1919)	U	A1

Table 1 *continued*...

Original name	Current status	SG	GAS
<i>Philautus gauni</i> Inger, 1966	<i>Rhacophorus (Leptomantis) gauni</i> (Inger, 1966)	U	C
<i>Ixalus glandulosus</i> Jerdon, 1853	<i>Philautus (Philautus) glandulosus</i> (Jerdon, 1853)	U	A1
<i>Philautus gracilipes</i> Bourret, 1937	<i>Philautus (Philautus) gracilipes</i> Bourret, 1937	FP	A2
<i>Ixalus granulatus</i> Boettger, 1888	<i>Staurois natator</i> (Günther, 1859)	U	C
<i>Philautus gryllus</i> Smith, 1924	<i>Philautus (Philautus) gryllus</i> Smith, 1924	U	A2
<i>Philautus aurantium gunungensis</i> Malkmus & Riede, 1996	<i>Philautus (Philautus) gunungensis</i> Malkmus & Riede, 1996	DV	A2
<i>Ixalus guttatus</i> Günther, 1859	<i>Staurois natator</i> (Günther, 1859)	U	C
<i>Ixalus halyi</i> Boulenger, 1904	<i>Philautus (Philautus) leucorhinus</i> (Lichtenstein, Weinland & Von Martens, 1856)	U	A1
<i>Philautus hansena</i> Cochran, 1927	<i>Chirixalus hansena</i> (Cochran, 1927)	U	C
<i>Philautus hassanensis</i> Dutta, 1985	<i>Philautus (Philautus) flaviventris</i> (Boulenger, 1882)	U	A2
<i>Philautus hazelae</i> Taylor, 1920	<i>Platymantis hazelae</i> (Taylor, 1920)	U	C
<i>Ixalus horridus</i> Boulenger, 1903	<i>Theloderma horridum</i> (Boulenger, 1903)	U	C
<i>Rhacophorus hosii</i> Boulenger, 1893	<i>Philautus (Gorhixalus) hosii</i> (Boulenger, 1893)	DH	B
<i>Ixalus hypomelas</i> Günther, 1876	<i>Philautus (Philautus) hypomelas</i> (Günther, 1876)	U	A1
<i>Philautus ingeri</i> Dring, 1987	<i>Philautus (Gorhixalus) ingeri</i> Dring, 1987	DH	A2
<i>Chirixalus idiootocus</i> Kuramoto & Wang, 1987	<i>Chirixalus idiootocus</i> Kuramoto & Wang, 1987	FO	D
<i>Ixalus jacobsoni</i> Van Kampen, 1912	<i>Philautus (Philautus) jacobsoni</i> (Van Kampen, 1912)	U	A1
<i>Ixalus japonicus</i> Hallowell, 1861	<i>Buergeria japonica</i> (Hallowell, 1861)	U	C
<i>Polypedates jerdonii</i> Günther, 1876	<i>Philautus (Philautus) jerdonii</i> (Günther, 1876)	U	B
<i>Ixalus jerdonii</i> Günther, 1876	<i>Philautus (Philautus) dubius</i> (Boulenger, 1882)	U	A1
<i>Philautus jinxiuensis</i> Hu, 1978	<i>Philautus (Philautus) jinxiuensis</i> Hu, 1978	FJ	A2
<i>Philautus jinxiuensis</i> Hu & Tian, 1981	<i>Philautus (Philautus) jinxiuensis</i> Hu, 1978	FJ	A2
<i>Ixalus kakhienensis</i> Anderson, 1879	<i>Amolops (Amolops) marmoratus</i> (Blyth, 1855)	U	C
<i>Ixalus kempiae</i> Boulenger, 1919	<i>Philautus (Philautus) kempiae</i> (Boulenger, 1919)	U	A1
<i>Philautus kerangae</i> Dring, 1987	<i>Philautus (Philautus) kerangae</i> Dring, 1987	DV	A2
<i>Philautus kottigeharensis</i> Rao, 1937	<i>Micrixalus kottigeharensis</i> (Rao, 1937)	U	C
<i>Philautus laevis</i> Smith, 1924	<i>Chirixalus laevis</i> (Smith, 1924)	U	C
<i>Ixalus larutensis</i> Boulenger, 1900	<i>Philautus (Philautus) petersi</i> (Boulenger, 1900)	DA	A1
<i>Ixalus lateralis</i> Anderson, 1871	<i>Megophrys (Xenophrys) lateralis</i> (Anderson, 1871)	U	C
<i>Ixalus latopalmaris</i> Boulenger, 1887	<i>Staurois latopalmaris</i> (Boulenger, 1887)	U	C
<i>Ixalus leitensis</i> Boulenger, 1897	<i>Philautus (Philautus) leitensis</i> (Boulenger, 1897)	DA	A1
<i>Ixalus leucorhinus</i> Lichtenstein, Weinland & Von Martens, 1856	<i>Philautus (Philautus) leucorhinus</i> (Lichtenstein, Weinland & Von Martens, 1856)	U	A1
<i>Rhacophorus lissobrachiis</i> Inger, 1954	<i>Philautus (Philautus) surdus</i> (Peters, 1863)	DS	B
<i>Philautus longchuanensis</i> Yang & Li, 1979	<i>Philautus (Philautus) longchuanensis</i> Yang & Li, 1979	FR	A2
<i>Ixalus longicrus</i> Boulenger, 1894	<i>Philautus (Philautus) longicrus</i> (Boulenger, 1894)	DA	A1
<i>Philautus longicrus</i> Rao, 1937	<i>Indirana longicrus</i> (Rao, 1937)	U	C
<i>Ixalus macropus</i> Günther, 1869	<i>Philautus (Kirtixalus) nanus</i> (Günther, 1864)	U	A1
<i>Rana macropus</i> Boulenger, 1886	<i>Buergeria japonica</i> (Hallowell, 1861)	U	E
<i>Rhacophorus malcolmsmithi</i> Ahl, 1927	<i>Philautus (Philautus) leucorhinus</i> (Lichtenstein, Weinland & Von Martens, 1856)	U	B
<i>Philautus maosonensis</i> Bourret, 1937	<i>Philautus (Philautus) maosonensis</i> Bourret, 1937	U	A2
<i>Nyctixalus margaritifer</i> Boulenger, 1882	<i>Nyctixalus pictus margaritifer</i> Boulenger, 1882	U	D
<i>Philautus medogensis</i> Ye & Hu, 1984	<i>Philautus (Philautus) medogensis</i> Ye & Hu, 1984	FJ	A2
<i>Philautus melanensis</i> Rao, 1937	<i>Philautus (Philautus) tinniensis</i> (Jerdon, 1853)	U	A2
<i>Philautus menglaensis</i> Kou, 1990	<i>Philautus (Philautus) menglaensis</i> Kou, 1990	FR	A2
<i>Rhacophorus microdiscus</i> Annandale, 1912	<i>Philautus (Philautus) microdiscus</i> (Annandale, 1912)	U	B
<i>Polypedates microtypanum</i> Günther, 1859	<i>Philautus (Kirtixalus) microtypanum</i> (Günther, 1859)	U	B
<i>Ixalus mindorensis</i> Boulenger, 1897	<i>Philautus (Philautus) schmackeri</i> (Boettger, 1892)	DA	A1
<i>Philautus mjobergi</i> Smith, 1925	<i>Philautus (Philautus) mjobergi</i> Smith, 1925	DA	A2
<i>Philautus mjobergi</i> Malkmus & Riede, 1996	<i>Philautus (Philautus) mjobergi</i> Smith, 1925	DA	A2
<i>Ixalus montanus</i> Günther, 1876	<i>Philautus (Philautus) tinniensis</i> (Jerdon, 1853)	U	A1
<i>Philautus montanus</i> Taylor, 1920	<i>Rhacophorus (Polypedates) macrotis</i> Boulenger, 1891	U	C
<i>Philautus montanus</i> Rao, 1937	<i>Philautus (Philautus) flaviventris</i> (Boulenger, 1882)	U	A2
<i>Philautus namdaphaensis</i> Sarkar & Sanyal, 1985	<i>Philautus (Philautus) namdaphaensis</i> Sarkar & Sanyal, 1985	U	A2
<i>Polypedates nanus</i> Günther, 1869	<i>Philautus (Kirtixalus) nanus</i> (Günther, 1864)	U	B

Table 1 continued...

Original name	Current status	SG	GAS
<i>Philautus narainensis</i> Rao, 1937	<i>Micrixalus narainensis</i> (Rao, 1937)	U	C
<i>Ixalus nasutus</i> Günther, 1869	<i>Philautus (Philautus) nasutus</i> (Günther, 1869)	U	A1
<i>Ixalus natator</i> Günther, 1859	<i>Staurois natator</i> (Günther, 1859)	U	C
<i>Rhacophorus noblei</i> Ahl, 1927	<i>Philautus (Philautus) glandulosus</i> (Jerdon, 1853)	U	B
<i>Philautus nongkhorensis</i> Cochran, 1927	<i>Chirixalus nongkhorensis</i> (Cochran, 1927)	U	C
<i>Ixalus nubilus</i> Mocquard, 1890	<i>Staurois natator</i> (Günther, 1859)	U	C
<i>Philautus ocellatus</i> Liu & Hu, 1973	<i>Philautus (Philautus) ocellatus</i> Liu & Hu, 1973	FP	A2
<i>Philautus odontotarsus</i> Ye & Fei, 1993	<i>Philautus (Philautus) odontotarsus</i> Ye & Fei, 1993	FO	A2
<i>Ixalus opisthorhodus</i> Günther, 1869	<i>Micrixalus phyllophilus</i> (Jerdon, 1853)	U	C
<i>Ixalus oxyrhynchus</i> Günther, 1872	<i>Philautus (Philautus) leucorhinus</i> (Lichtenstein, Weinland & Von Martens, 1856)	U	A1
<i>Ixalus pallidipes</i> Barbour, 1908	<i>Philautus (Philautus) pallidipes</i> (Barbour, 1908)	DA	A1
<i>Philautus palpebralis</i> Smith, 1924	<i>Chirixalus palpebralis</i> (Smith, 1924)	FP	C
<i>Rhacophorus parkeri</i> Ahl, 1927	<i>Rhacophorus (Rhacophorus) variabilis</i> (Jerdon, 1853)	U	D
<i>Ixalus parvulus</i> Boulenger, 1893	<i>Philautus (Philautus) parvulus</i> (Boulenger, 1893)	DA	A1
<i>Ixalus petersi</i> Boulenger, 1900	<i>Philautus (Philautus) petersi</i> (Boulenger, 1900)	DA	A1
<i>Ixalus pictus</i> Peters, 1871	<i>Nyctixalus pictus pictus</i> (Peters, 1871)	U	C
<i>Polypedates pleurostictus</i> Günther, 1864	<i>Rhacophorus (Rhacophorus) variabilis</i> (Jerdon, 1853)	U	E
<i>Rhacophorus pleurotaenia</i> Boulenger, 1904	<i>Philautus (Kirtixalus) pleurotaenia</i> (Boulenger, 1904)	U	B
<i>Ixalus poecilopleurus</i> Lichtenstein, Weinland & Von Martens, 1856	<i>Theloderma schmarda</i> (Kelaart, 1854)	U	C
<i>Philautus poecilus</i> Brown & Alcalá, 1994	<i>Philautus (Philautus) poecilus</i> Brown & Alcalá, 1994	DV	A2
<i>Philautus polillensis</i> Taylor, 1922	<i>Platymantis polillensis</i> (Taylor, 1922)	U	C
<i>Platymantis polilloensis</i> Brown, Brown & Alcalá, 1997	<i>Platymantis polillensis</i> (Taylor, 1922)	U	E
<i>Ixalus pulchellus</i> Günther, 1872	<i>Philautus (Philautus) femoralis</i> (Günther, 1864)	U	A1
<i>Ixalus pulcher</i> Boulenger, 1882	<i>Philautus (Philautus) glandulosus</i> (Jerdon, 1853)	U	A1
<i>Rhacophorus pulcherrimus</i> Ahl, 1927	<i>Philautus (Philautus) glandulosus</i> (Jerdon, 1853)	U	B
<i>Ixalus punctatus</i> Anderson, 1871	<i>Philautus (Philautus) tinniensi</i> (Jerdon, 1853)	U	A1
<i>Philautus refugii</i> Inger & Stuebing, 1996	<i>Philautus (Philautus) refugii</i> Inger & Stuebing, 1996	DA	A2
<i>Polypedates reticulatus</i> Günther, 1864	<i>Philautus (Kirtixalus) reticulatus</i> (Günther, 1864)	U	B
<i>Philautus rhododiscus</i> Liu & Hu, 1962	<i>Philautus (Philautus) rhododiscus</i> Liu & Hu, 1962	FR	A2
<i>Nyctixalus robinsoni</i> Annandale, 1917	<i>Philautus (Philautus) aurifasciatus</i> (Schlegel, 1837)	DA	B
<i>Philautus romeri</i> Smith, 1953	<i>Chirixalus romeri</i> (Smith, 1953)	FP	C
<i>Rhacophorus rugatus</i> Ahl, 1927	<i>Philautus (Philautus) leucorhinus</i> (Lichtenstein, Weinland & Von Martens, 1856)	U	B
<i>Philautus sanctipalustris</i> Das & Chanda, 1997	<i>Philautus (Philautus) sanctisilvaticus</i> Das & Chanda, 1997	U	A2
<i>Philautus sanctisilvaticus</i> Das & Chanda, 1997	<i>Philautus (Philautus) sanctisilvaticus</i> Das & Chanda, 1997	U	A2
<i>Ixalus sarasinorum</i> Müller, 1887	<i>Philautus (Kirtixalus) nanus</i> (Günther, 1869)	U	A1
<i>Philautus saueri</i> Malkmus & Riede, 1996	<i>Philautus (Philautus) saueri</i> Malkmus & Riede, 1996	DA	A2
<i>Polypedates saxicola</i> Jerdon, 1853	<i>Micrixalus saxicola</i> (Jerdon, 1853)	U	E
<i>Ixalus schmackeri</i> Boettger, 1892	<i>Philautus (Philautus) schmackeri</i> (Boettger, 1892)	DA	A1
<i>Polypedates schmarda</i> Kelaart, 1854	<i>Theloderma schmarda</i> (Kelaart, 1854)	U	E
<i>Ixalus semiruber</i> Annandale, 1913	<i>Philautus (Philautus) leucorhinus</i> (Lichtenstein, Weinland & Von Martens, 1856)	U	A1
<i>Philautus shillongensis</i> Pillai & Chanda, 1973	<i>Philautus (Philautus) shillongensis</i> Pillai & Chanda, 1973	U	A2
<i>Philautus shyamrupus</i> Chanda & Ghosh, 1989	<i>Chirixalus shyamrupus</i> (Chanda & Ghosh, 1989)	U	C
<i>Ixalus signatus</i> Boulenger, 1882	<i>Philautus (Philautus) signatus</i> (Boulenger, 1882)	U	A1
<i>Ixalus silvaticus</i> Boulenger, 1882	<i>Micrixalus silvaticus</i> (Boulenger, 1882)	U	C
<i>Philautus similis</i> Van Kampen, 1923	<i>Philautus (Philautus) similis</i> Van Kampen, 1923	U	A2
<i>Chirixalus simus</i> Annandale, 1915	<i>Chirixalus simus</i> Annandale, 1915	U	D
<i>Philautus spiculatus</i> Smith, 1931	<i>Rhacophorus everetti macroscelis</i> Boulenger, 1896	U	C
<i>Hazelia spinosa</i> Taylor, 1920	<i>Nyctixalus spinosus</i> (Taylor, 1920)	U	E
<i>Polypedates stellatus</i> Kelaart, 1853	<i>Philautus (Kirtixalus) stellatus</i> (Kelaart, 1853)	U	B
<i>Ixalus stictomerus</i> Günther, 1876	<i>Philautus (Philautus) stictomerus</i> (Günther, 1876)	U	A1
<i>Polypedates surdus</i> Peters, 1863	<i>Philautus (Philautus) surdus</i> (Peters, 1863)	DS	B
<i>Philautus surrufus</i> Brown & Alcalá, 1994	<i>Philautus (Philautus) surrufus</i> Brown & Alcalá, 1994	DS	A2
<i>Philautus swamianus</i> Rao, 1937	<i>Micrixalus swamianus</i> (Rao, 1937)	U	C
<i>Philautus tectus</i> Dring, 1987	<i>Philautus (Philautus) tectus</i> Dring, 1987	DT	A2

Table 1 *continued*...

Original name	Current status	SG	GAS
<i>Ixalus temporalis</i> Günther, 1864	<i>Philautus (Philautus) temporalis</i> (Günther, 1864).	U	A1
<i>Philautus terebrans</i> Das & Chanda, 1998	<i>Philautus (Philautus) terebrans</i> Das & Chanda, 1998	U	A2
<i>Phyllomedusa tinniensi</i> Jerdon, 1853	<i>Philautus (Philautus) tinniensi</i> (Jerdon, 1853)	U	B
<i>Ixalus travancoricus</i> Boulenger, 1891	<i>Philautus (Philautus) travancoricus</i> (Boulenger, 1891)	U	A1
<i>Ixalus tuberculatus</i> Anderson, 1879	<i>Philautus (Philautus) tuberculatus</i> (Anderson, 1879)	FA	A1
<i>Philautus tyttus</i> Smith, 1940	<i>Philautus (Philautus) tyttus</i> Smith, 1940	U	A2
<i>Philautus umbra</i> Dring, 1987	<i>Philautus (Philautus) umbra</i> Dring, 1987	DA	A2
<i>Polypedates variabilis</i> Jerdon, 1853	<i>Rhacophorus (Rhacophorus) variabilis</i> (Jerdon, 1853)	U	E
<i>Ixalus variabilis</i> Günther, 1859	<i>Philautus (Philautus) variabilis</i> (Günther, 1859)	U	A1
<i>Ixalus vermiculatus</i> Boulenger, 1900	<i>Philautus (Philautus) vermiculatus</i> (Boulenger, 1900)	DV	A1
<i>Ixalus vittatus</i> Boulenger, 1887	<i>Chirixalus vittatus</i> (Boulenger, 1887)	U	C
<i>Ixalus vittiger</i> Boulenger, 1897	<i>Philautus (Philautus) vittiger</i> (Boulenger, 1897)	U	A1
<i>Ixalus warszewitschii</i> Schmidt, 1857	<i>Rana (Trypheroopsis) warszewitschii</i> (Schmidt, 1857)	U	C
<i>Philautus williamsi</i> Taylor, 1922	<i>Philautus (Philautus) surdus</i> (Peters, 1863)	DS	A2
<i>Philautus woodi</i> Stejneger, 1905	<i>Philautus (Philautus) acutirostris</i> (Peters, 1867)	DA	A2
<i>Cornufer worcesteri</i> Stejneger, 1905	<i>Philautus (Philautus) worcesteri</i> (Stejneger, 1905)	DS	B
<i>Phyllomedusa wynaadensis</i> Jerdon, 1853	<i>Philautus (Philautus) wynaadensis</i> (Jerdon, 1853)	U	B
<i>Philautus zamboangensis</i> Taylor, 1922	<i>Rhacophorus (Leptomantis) bimaculatus</i> (Peters, 1867)	U	C
<i>Rhacophorus zimmeri</i> Ahl, 1927	<i>Philautus (Kirtixalus) microtypanum</i> (Günther, 1859)	U	B

**Table 2.** Nominal species for which name-bearing types are designated and/or described in this paper. All lectotypes and neotypes below are designated here, except for the lectotype of *Ixalus parvulus* Boulenger, 1893. All type-specimens below are described or redescribed in detail here, except for the lectotype of *Ixalus petersi* Boulenger, 1900.

Nominal species	Kind of name-bearing type	Museum of deposition
<i>Ixalus annandalii</i> Boulenger, 1906	Lectotype	BMNH
<i>Hyla aurifasciata</i> Schlegel, 1837	Lectotype	RMNH
<i>Philautus banaensis</i> Bourret, 1939	Lectotype	MNHN
<i>Ixalus carinensis</i> Boulenger, 1893	Lectotype	BMNH
<i>Philautus charius</i> Rao, 1937	Neotype	MNHN
<i>Ixalus fergusonii</i> Günther, 1876	Lectotype	BMNH
<i>Ixalus flaviventris</i> Boulenger, 1882	Lectotype	BMNH
<i>Ixalus glandulosus</i> Jerdon, 1853	Neotype	BMNH
<i>Ixalus larutensis</i> Boulenger, 1900	Lectotype	BMNH
<i>Ixalus longicrus</i> Boulenger, 1894	Lectotype	BMNH
<i>Philautus melanensis</i> Rao, 1937	Neotype	BMNH
<i>Polypedates microtypanum</i> Günther, 1859	Lectotype	BMNH
<i>Ixalus mindorensis</i> Boulenger, 1897	Lectotype	BMNH
<i>Ixalus montanus</i> Günther, 1876	Lectotype	BMNH
<i>Philautus montanus</i> Rao, 1937	Neotype	BMNH
<i>Polypedates nanus</i> Günther, 1869	Lectotype	BMNH
<i>Ixalus parvulus</i> Boulenger, 1893	Lectotype	MSG
<i>Ixalus petersi</i> Boulenger, 1900	Lectotype	BMNH
<i>Polypedates pleurostictus</i> Günther, 1864	Lectotype	BMNH
<i>Ixalus pulcher</i> Boulenger, 1882	Lectotype	BMNH
<i>Ixalus punctatus</i> Anderson, 1871	Neotype	MNHN
<i>Ixalus signatus</i> Boulenger, 1882	Lectotype	BMNH
<i>Phyllomedusa tinniensi</i> Jerdon, 1853	Neotype	MNHN
<i>Ixalus variabilis</i> Günther, 1859	Lectotype	BMNH
<i>Polypedates variabilis</i> Jerdon, 1853	Neotype	IRSNB
<i>Ixalus vermiculatus</i> Boulenger, 1900	Lectotype	BMNH
<i>Phyllomedusa wynaadensis</i> Jerdon, 1853	Neotype	MNHN

## Conclusion

Table 1 gives the current status of the 177 species-group names studied in detail above: 121 of these names apply to species here referred to the genus *Philautus*, and 56 to species referred to other genera. Among the 121 names that refer to *Philautus* as here understood, 84 are here provisionally considered valid, and 37 invalid. In a separate paper, Dubois & Ohler (2001) provide a historical and metataxonomic analysis of these data.

In this study, we identified 175 name-bearing types: of these, 143 are considered to be still extant, while 20 are known to have been lost or destroyed, and the fate of the remaining 12 is currently unknown (see Dubois & Ohler, 2001). In the course of this work, we designated and/or described 19 lectotypes and 8 neotypes, that are kept in the collections of 5 European museums (see table 2). These designations and descriptions will help clarifying the status of the corresponding names.

The present work is only one step toward stabilization of the nomenclatural and taxonomic situation in the genus *Philautus*, which will be useful for future progress of the taxonomy of this difficult group.

## Acknowledgements

Completion of this paper would have been impossible without the help of colleagues. For allowing access to specimens kept in their collections, we are very grateful to E. N. Arnold, B. T. Clarke and C. McCarthy (BMNH), G. Coulon and G. Lenglet (IRSNB), M. S. Hoogmoed (RMNH) and R. Günther (ZMB). For various pieces of information and comments, we are indebted to I. Das (Kota Samarahan), G. Decock (Brussels), M. Delorme (Paris), M. S. Hoogmoed (Leiden), A. Ohler (Paris) and R. Pethiyagoda (Colombo).

## Literature cited

- Anonymous, 1921. Liste des publications ichthyologiques et herpétologiques (1877–1920) de G.-A. Boulenger. *Ann. Soc. roy. zool. malacol. Belgique*, 52: 11–88.
- Anonymous [International Commission on Zoological Nomenclature], 1985. *International code of zoological nomenclature*. Third edition. London, International Trust for zoological Nomenclature: i-xx + 1–338.
- Anonymous, 1993. *The new international atlas*. Chicago, New York & San Francisco, Rand McNally & Co.: i-xl + 1–320 + II–I199.
- Anonymous [International Commission on Zoological Nomenclature], 1999. *International code of zoological nomenclature*. Fourth edition. London, International Trust for zoological Nomenclature: i-xxix + 1–306.
- Ahl, E., 1927a. Ueber neue oder seltene Froschlurche aus dem Zoologischen Museum Berlin. *Sber. Ges. naturf. Freunde Berl.*, 1926: 111–117.
- Ahl, E., 1927b. Zur Systematik der asiatischen Arten der Froschgattung *Rhacophorus*. *Sber. Ges. naturf. Freunde Berlin*, 1927: 35–47.
- Ahl, E., 1931. Anura III. Polypedatidae. *Das Tierreich*, 55: i-xvi + 1–477.
- Alcala, A. C. & Brown, W. C., 1982. Reproductive biology of some species of *Philautus* (Rhacophoridae) and other Philippine anurans. *Kalikasan, Philipp. J. Biol.*, 11: 203–226.
- Anderson, J., 1871. A list of the Reptilian accession to the Indian Museum, Calcutta, from 1865 to 1870, with a description of some new species. *J. asiat. Soc. Bengal*, 40: 12–39.
- Anderson, J., 1879. *Anatomical and zoological researches, comprising an account of the zoological results of the two expeditions to Western Yunnan in 1868 and 1875 and monograph of the two Cetacean genera Platanista and Orcella*. London, Quaritch, “1878”. Vol. I: i-xxv + 1–985; Vol. II: pl. 1–81. [For correct publication date, see Zhao & Adler, 1993: 350.]
- Annandale, N., 1908. Notes on some Batrachia recently added to the collection of the Indian Museum. *Rec. indian Mus.*, 2: 304–305.
- Annandale, N., 1912. Batrachia. In: *Zoological results of the Abor Expedition, 1911–12*, *Rec. indian Mus.*, 8 (1): 7–36, pl. 2–4.
- Annandale, N., 1913. Some new and interesting Batrachia and lizards from India, Ceylon and Borneo. *Rec. indian Mus.*, 9: 301–307, pl. 15.
- Annandale, N., 1915. Herpetological notes and descriptions. *Rec. indian Mus.*, 11: 341–347, pl. 33.
- Annandale, N., 1917. Report on a collection of reptiles and batrachians from Java. *J. fed. malay St. Mus.*, 7: 107–111.
- Annandale, N., 1919. The fauna of certain small streams in the Bombay Presidency. *Rec. indian Mus.*, 16: 109–161, pl. 1–7.
- Arnold, E. N., 1981. Estimating phylogenies at low taxonomic levels. *Z. zool. Syst. Evol.-forsch.*, 19: 1–35.
- Ashlock, P. D., 1971. Monophyly and associated terms. *Syst. Zool.*, 20: 63–69.
- Barbour, T., 1908. Some new Amphibia Salientia. *Proc. biol. Soc. Washington*, 21: 189–190.
- Barbour, T., 1912. A contribution to the zoögeography of the East Indian islands. *Mem. Mus. comp. Zool. Harvard Coll.*, 44 (1): 1–203, pl. 1–8.
- Barbour, T. & Loveridge, A., 1929. Typical reptiles and amphibians. *Bull. Mus. comp. Zool.*, 49: 203–360.
- Barbour, T. & Loveridge, A., 1946. First supplement to typical reptiles and amphibians. *Bull. Mus. comp. Zool.*, 96 (2): 59–214.
- Bauer, A. M., 1998. South Asian herpetological specimens of historical note in the Zoological Museum, Berlin. *Hamadryad*, 23 (2): 133–149.
- Bauer, A. M., Günther, R. & Klipfel, M., 1995. Synopsis of the herpetological taxa described by Wilhelm Peters. In: A. M. Bauer, R. Günther, & M. Klipfel, M., *The herpetological contributions of Wilhelm C. H. Peters*

- (1815–1883), Ithaca, SSAR: 39–87.
- Boettger, O., 1888. Materialien zur herpetologischen Fauna von China. II. *Ber. Offenbach. Verein Naturk.*, 1888: 51–191, pl. 1–2.
- Boettger, O., 1892. *Katalog der Batrachier-Sammlung im Museum der Senckenbergischen naturforschenden Gesellschaft in Frankfurt am Main*. Frankfurt am Main, Gebrüder Knauer: i-x + 1–73.
- Boettger, O., 1893. Neue Reptilien und Batrachier aus West Java. *Zool. Anz.*, 16: 334–340.
- Boulenger, G. A., 1882a. *Catalogue of the Batrachia Salientia s. Ecaudata in the collection of the British Museum*. London, Taylor & Francis: i-xvi + 1–503, pl. 1–30.
- Boulenger, G. A., 1882b. Description of a new genus and species of frogs of the family Ranidae. *Ann. Mag. nat. Hist.*, (5), 10: 35.
- Boulenger, G. A., 1886. First report on additions to the batrachian collection in the Natural-History Museum. *Proc. zool. Soc. London*, 1886 (3): 411–416, pl. 39.
- Boulenger, G. A., 1887a. On new reptiles and batrachians from north Borneo. *Ann. Mag. nat. Hist.*, (5), 20: 95–97.
- Boulenger, G. A., 1887b. An account of the Batrachians obtained in Burma by M. L. Fea, of the Genoa Civic Museum. *Ann. Mus. civ. Stor. nat. Genova*, (2), 5: 418–424, pl. 3–5.
- Boulenger, G. A., 1888. Note on the classification of the Ranidae. *Proc. zool. Soc. London*, 1888 (2): 204–206.
- Boulenger, G. A., 1890. *The fauna of the British India, including Ceylon and Burma. Reptilia and Batrachia*. London, Taylor & Francis: i-xviii + 1–541.
- Boulenger, G. A., 1891. On new or little-known Indian and Malayan reptiles and batrachians. *Ann. Mag. nat. Hist.*, (6), 8: 288–292.
- Boulenger, G. A., 1893. Concluding report on the reptiles and batrachians obtained in Burma by Signor L. Fea, dealing with the collection made in Pegu and the Karin Hills in 1887–88. *Ann. Mus. Stor. nat. Genova*, (2a), 13: 304–347, pl. 7–12.
- Boulenger, G. A., 1894. On the herpetological fauna of Palawan and Balabac. *Ann. Mag. nat. Hist.*, (6), 14: 81–90.
- Boulenger, G. A., 1895. Descriptions of four new batrachians discovered by Mr. Charles Hose in Borneo. *Ann. Mag. nat. Hist.*, (6), 16: 169–171.
- Boulenger, G. A., 1897. Descriptions of new Malay frogs. *Ann. Mag. nat. Hist.*, (6), 19: 106–108.
- Boulenger, G. A., 1898. Fourth report on additions to the batrachian collection in the Natural-History Museum. *Proc. zool. Soc. London*, 1898 (3): 473–482, pl. 38–39.
- Boulenger, G. A., 1900a. Descriptions of new reptiles and batrachians from Borneo. *Proc. zool. Soc. Lond.*, 1900 (2): 182–187, pl. 14–17.
- Boulenger, G. A., 1900b. Descriptions of new batrachians and reptiles from the Larut Hills, Perak. *Ann. Mag. nat. Hist.*, (7) 6 (32): 186–193.
- Boulenger, G. A., 1903. Report on the batrachians and reptiles. *Fasciculi malayenses, Zoology*, 1: 131–176, pl. 1–5.
- Boulenger, G. A., 1904. Descriptions of three new frogs from southern India and Ceylon. *J. Bombay nat. Hist. Soc.*, 15: 430–431, 1 pl.
- Boulenger, G. A., 1905. Description of a new frog of the genus *Ixalus* from Selangor. *J. fed. malay St. Mus.*, 1 (2): 39, pl. 4.
- Boulenger, G. A., 1906. Description of two Indian frogs. *J. & Proc. asiat. Soc. Bengal*, (n.s.), 2 (9): 385–386.
- Boulenger, G. A., 1908. Fishes, batrachians and reptiles. *J. fed. malay St. Mus.*, 3: 61–69, pl. 4–5.
- Boulenger, G. A., 1918. Remarks on the batrachian genera *Cornufer*, Tschudi, *Platymantis*, Gthr., *Simomantis*, g. n. and *Stauroids*, Cope. *Ann. Mag. nat. Hist.*, (9), 1: 372–375.
- Boulenger, G. A., 1919. Descriptions of three new batrachians from the Garo Hills, Assam. *Rec. indian Mus.*, 16: 207–208.
- Boulenger, G. A., 1920a. Reptiles and batrachians collected in Korinchi, west Sumatra, by Messrs. H. C. Robinson and C. Boden Kloss. *J. fed. malay St. Mus.*, 8 (2): 285–296, pl. 8.
- Boulenger, G. A., 1920b. A monograph of the South Asian, Papuan, Melanesian, and Australian frogs of the genus *Rana*. *Rec. indian Mus.*, 20: 1–226.
- Bourret, R., 1937. Notes herpétologiques sur l'Indochine française. XIV. Les Batraciens de la collection du Laboratoire des Sciences Naturelles de l'Université. Descriptions de quinze espèces ou variétés nouvelles. *Annexe Bull. gén. Instr. publ.*, Décembre 1937, 4: 5–56.
- Bourret, R., 1939a. Notes herpétologiques sur l'Indochine française. XVII. Reptiles et Batraciens reçus au Laboratoire des Sciences Naturelles de l'Université au cours de l'année 1938. Descriptions de trois espèces nouvelles. *Annexe Bull. gén. Instr. publ.*, Février 1939, 6: 13–34, 1 pl.
- Bourret, R., 1939b. Notes herpétologiques sur l'Indochine française. XVIII. Reptiles et Batraciens reçus au Laboratoire des Sciences Naturelles de l'Université au cours de l'année 1939. Descriptions de quatre espèces et d'une variété nouvelles. *Annexe Bull. gén. Instr. publ.*, Décembre 1939, 4: 5–39, 1 pl.
- Bourret, R., 1939c. La faune herpétologique des stations d'altitude du Tonkin. *Annexe Bull. gén. Instr. publ.*, Décembre 1939, 4: 41–47.
- Bourret, R., 1939d. Notes herpétologiques sur l'Indochine française. XX. Liste des Reptiles et Batraciens actuellement connus en Indochine Française. *Annexe Bull. gén. Instr. publ.*, Décembre 1939, 4: 49–60.
- Bourret, R., 1942. *Les Batraciens de l'Indochine*. Hanoi, Institut océanographique de l'Indochine: i-x + 1–547, 4 pl.
- Brown, W. C. & Alcalá, A. C., 1994. Philippine frogs of the family Rhacophoridae. *Proc. Calif. Acad. Sci.*, 48 (10): 185–220.
- Brown, W. C., Alcalá, A. C. & Brown, R. M., 1998. Taxonomic status of *Cornufer worcesteri* Stejneger. *J. Herp.*, 32 (1): 131–133.
- Brown, W. C., Brown, R. M. & Alcalá, A. C., 1997. Species of the *hazela* group of *Platymantis* (Amphibia: Ranidae) from the Philippines, with descriptions of two new species. *Proc. Calif. Acad. Sci.*, 49 (11): 405–

- 421.
- Capocaccia, L., 1957. Catalogo dei tipi di anfibi del Museo Civico di Storia Naturale di Genova. *Ann. Mus. Civ. Stor. Nat. Genova*, 69: 208–222.
- Chanda, S. K., 1994. Anuran (Amphibia) fauna of northeast India. *Mem. zool. Surv. India*, 18 (2): i-vi + 1–143 + a-w.
- Chanda, S. K., Das, I. & Dubois, A., 2000. Catalogue of amphibian types in the collection of the Zoological Survey of India. *Hamadryad*, 25 (2): 100–128.
- Chanda, S. K. & Ghosh, A. K., 1988. Addenda to the amphibian fauna of India. *J. Bombay nat. Hist. Soc.*, 85: 626–627.
- Chanda, S. K. & Ghosh, A. K., 1989. A new frog of the genus *Philautus* Gistel, from the proposed Namdapha Biosphere Reserve, Arunachal Pradesh, Northeast India. *J. Bombay nat. Hist. Soc.*, 86: 215–217.
- Chanda, S. K. & Sarkar, A. K., 1997. The validity of *Philautus shyamrupus* Chanda and Ghosh, 1989 (Anura: Rhacophoridae). *Hamadryad*, 22 (1): 46–47.
- Channing, A., 1989. A re-evaluation of the phylogeny of the Old World treefrogs. *S.-Afr. Tydskr. Dierk.*, 24 (2): 116–131.
- Chou, W.-H. & Lin, J.-Y., 1997. Tadpoles of Taiwan. *Natn. Mus. nat. Sci. spec. Publ.*, 7: i-iv + 1–98.
- Cochran, D. M., 1927. New reptiles and batrachians collected by Dr. Hugh M. Smith in Siam. *Proc. biol. Soc. Washington*, 40: 179–191.
- Cochran, D. M., 1961. Type specimens of reptiles and amphibians in the United States National Museum. *Bull. U. S. nat. Mus.*, 220: i-xv + 1–291.
- Daan, S. & Hillenius, D., 1966. Catalogue of the type specimens of amphibians and reptiles in the Zoological Museum, Amsterdam. *Beaufortia*, 13 (158): 117–144.
- Daniel, J. C. & Sekar, A. G., 1989. Field guide to the amphibians of Western India. Part 4. *J. Bombay nat. Hist. Soc.*, 86: 194–202, pl. 1–2.
- Daniels, R. J. R., 1992. Geographical distribution patterns of amphibians in the Western Ghats, India. *J. Biogeogr.*, 19: 521–529.
- Das, I. & Chanda, S. K., 1997. *Philautus sanctisilvaticus* (Anura: Rhacophoridae), a new frog from the sacred groves of Amarkantak, central India. *Hamadryad*, 22: 21–27.
- Das, I. & Chanda, S. K., 1998. A new species of *Philautus* (Anura: Rhacophoridae) from the Eastern Ghats, south-eastern India. *J. South Asian nat. Hist.*, 3 (1): 103–112.
- Dennler, J. G., 1939. La importancia de la distribución geográfica en la sistemática de los vertebrados. *Physis*, 16: 41–53, pl 1–8.
- Dring, J. C. M., 1979. Amphibia and Reptiles from northern Trengganu, Malaysia, with description of two new geckos: *Cnemaspis* and *Cyrtodactylus*. *Bull. brit. Mus. nat. Hist.*, (Zool.), 34: 181–241.
- Dring, J. C. M., 1987. Bornean treefrogs of the genus *Philautus* (Rhacophoridae). *Amphibia-Reptilia*, 8: 19–47.
- Dubois, A., 1974. Liste commentée d'Amphibiens récoltés au Népal. *Bull. Mus. natn. Hist. nat.*, (3), 213 (Zool.143): 341–411.
- Dubois, A., 1980. L'influence de l'homme sur la répartition des Amphibiens dans l'Himalaya central et occidental. *C. r. Soc. Biogéogr.*, 55: 155–178.
- Dubois, A., 1981. Liste des genres et sous-genres nominaux de Ranoidea (Amphibiens Anoures) du monde, avec identification de leurs espèces-types: conséquences nomenclaturales. *Monit. zool. ital.*, (n. s.), 15, suppl.: 225–284.
- Dubois, A., 1982. Le statut nomenclatural des noms génériques d'Amphibiens créés par Kuhl & Van Hasselt (1822): *Megophrys*, *Occidozyga* et *Rhacophorus*. *Bull. Mus. natn. Hist. nat.*, (4), 4 (A): 261–280.
- Dubois, A., 1984a. La nomenclature supragénérique des Amphibiens Anoures. *Mém. Mus. natn. Hist. nat.*, (A), 131: 1–64.
- Dubois, A., 1984b. Note préliminaire sur le groupe de *Rana limnocharis* Gravenhorst, 1829 (Amphibiens, Anoures). *Alytes*, 3 (4): 143–159.
- Dubois, A., 1986. Diagnose préliminaire d'un nouveau genre de Ranoidea (Amphibiens, Anoures) du sud de l'Inde. *Alytes*, 4 (3): 113–118.
- Dubois, A., 1987a. Miscellanea taxinomica batrachologica (I). *Alytes*, 5: 7–95.
- Dubois, A., 1987b. Again on the nomenclature of frogs. *Alytes*, 6: 27–55.
- Dubois, A., 1988. The genus in zoology: a contribution to the theory of evolutionary systematics. *Mém. Mus. natn. Hist. nat.*, (A), 140: 1–123.
- Dubois, A., 1992. Notes sur la classification des Ranidae (Amphibiens, Anoures). *Bull. Soc. linn. Lyon*, 61 (10): 305–352.
- Dubois, A., 1995. The valid scientific names of the Italian treefrog, with comments on the status of some early scientific names of Amphibia Anura, and some articles of the *Code* concerning secondary homonyms. *Dumerilia*, 2: 55–71.
- Dubois, A., 1998. List of European species of amphibians and reptiles: will we soon be reaching 'stability'? *Amphibia-Reptilia*, 19 (1): 1–28.
- Dubois, A., 1999a. South Asian Amphibia: a new frontier for taxonomists. Invited editorial / Book review. *J. South Asian nat. Hist.*, 4 (1): 1–11.
- Dubois, A., 1999b. Editorial. *Alytes*, 17 (1–2): 1–2.
- Dubois, A., 1999c. Miscellanea nomenclatorica batrachologica. 19. Notes on the nomenclature of Ranidae and related groups. *Alytes*, 17 (1–2): 81–100.
- Dubois, A., 2000. The influence of man on the distribution of amphibians in the Himalayas of Nepal: an example of critical evaluation of biogeographical data. In: G. Miede & Y. Zhang, *Environmental changes in High Asia*, Marburg-am-Lahn, *Marburger geographische Schriften*, 135: 326–345.
- Dubois, A. & Ohler, A., 1995. Frogs of the subgenus *Pelophylax* (Amphibia, Anura, genus *Rana*): a catalogue of available and valid scientific names, with comments on name-bearing types, complete synonymies, proposed common names, and maps showing all type localities. *Zool. Polon.*, (1994), 39 (3–

- 4): 139–204.
- Dubois, A. & Ohler, A., 1997. Early scientific names of Amphibia Anura. I. Introduction. *Bull. Mus. natn. Hist. nat.*, '1996', (4), 18 (3–4): 297–320.
- Dubois, A. & Ohler, A., 1998. A new species of *Leptobrachium* (*Vibrissaphora*) from northern Vietnam, with a review of the taxonomy of the genus *Leptobrachium* (Pelobatidae, Megophryinae). *Dumerilia*, 4 (1): 1–32.
- Dubois, A. & Ohler, A., 1999. Asian and Oriental toads of the *Bufo melanostictus*, *Bufo scaber* and *Bufo stejnegeri* groups (Amphibia, Anura): a list of available and valid names and redescription of some name-bearing types. *J. South Asian nat. Hist.*, 4 (2): 133–180.
- Dubois, A. & Ohler, A., 2001. Systematics of the genus *Philautus* Gistel, 1848 (Amphibia, Anura, Ranidae, Rhacophorinae): some historical and metataxonomic comments. *J. South Asian nat. Hist.*, 5 (2): 109–122.
- Duellman, W. E., 1993. Amphibian species of the world: additions and corrections. *Univ. Kansas Mus. nat. Hist. special Publ.*, 21: [i-ii] + i-iii + 1–372.
- Duellman, W. E. & Trueb, L., 1985. *Biology of amphibians*. New York, McGraw-Hill, '1986': i-xix + 1–670.
- Duméril, A.-M.-C. & Bibron, G., 1841. *Erpétologie générale ou histoire naturelle complète des Reptiles*. Tome 8. Paris, Roret: i-vii + 1–792.
- Duncan, F. M., 1937. On the dates of publication of the Society's *Proceedings*, 1859–1926. *Proc. zool. Soc. London*, 107 (A): 71–84.
- Dutta, S. K., 1985. Replacement names for two Indian species of *Philautus* (Anura: Rhacophoridae). *J. Bombay nat. Hist. Soc.*, 82 (1): 219–220.
- Dutta, S. K., 1992. Amphibians of India: updated species list with distribution record. *Hamadryad*, 17: 1–13.
- Dutta, S. K., 1997. *Amphibians of India and Sri Lanka. (Checklist and bibliography)*. Bhubaneswar, Odyssey Publishing House: [i-iii] + i-xiii + 1–342 + i-xxii.
- Dutta, S. K. & Manamendra-Arachchi, K., 1996. *The amphibian fauna of Sri Lanka*. Colombo, Wildlife Heritage Trust of Sri Lanka: 1–232.
- Emerson, S. B., 1996. Phylogenies and physiological processes. The evolution of sexual dimorphism in Southeast Asian frogs. *Syst. Biol.*, 45 (3): 278–289.
- Emerson, S. B. & Berrigan, D., 1993. Systematics of Southeast Asian ranids: multiple origins of voicelessness in the subgenus *Limnonectes* (Fizinger). *Herpetologica*, 49 (1): 22–31.
- Emerson, S. B. & Ward, R., 1998. Male secondary sexual characteristics, sexual selection, and molecular divergence in fanged ranid frogs of Southeast Asia. *Zool. J. Linn. Soc.*, 122: 537–553.
- Fei, L. (ed.), 1999. *Atlas of amphibians of China*. Zhengzhou (China), Henan Press of Science and Technology: [i-ii] + 1–432. [In Chinese.]
- Fei, L., Ye, C. & Huang, Y., 1991. *Key to Chinese Amphibia*. Chongqing, Editions of Sciences and Techniques: [i-iv] + 1–2 + 1–364. [In Chinese.]
- Ferguson, W., 1876. Singular Ceylonese frogs. *Ann. Mag. nat. Hist.*, (4), 18: 356–357.
- Forcart, L., 1946. Katalog der Typusexemplare in der Amphibiensammlung des Naturhistorischen Museums zu Basel. *Verh. naturf. Ges. Basel*, 57: 118–142.
- Frost, D. R. (ed.), 1985. *Amphibian species of the world*. Lawrence, Allen Press & Assoc. Syst. Coll.: [i-iv] + i-v + 1–732.
- Gistel, J., 1848. *Naturgeschichte des Thierreichs für höhere Schulen*. Stuttgart, Hoffmann: i-xi + 1–216 + i-iv, pl. 1–32.
- Glaw, F., Köhler, J., Lötters, S. & Vences, M., 1998. Vorläufige Liste und Bibliographie neubeschriebener Amphibienarten und -unterarten von 1993 bis 1997. *Elaphe*, 6 (1): i-xxiv.
- Gorham, S. W., 1974. *Checklist of world amphibians up to January 1, 1970*. Saint-John, The New Brunswick Museum: 1–173.
- Guibé, J., 1950. *Catalogue des types d'amphibiens du Muséum national d'Histoire naturelle*. Paris, Imprimerie nationale: 1–71.
- Günther, A., 1859. *Catalogue of the Batrachia Salientia in the collection of the British Museum*. London, Taylor & Francis: i-xvi + 1–160, pl. I-XII.
- Günther, A., 1864. *The reptiles of British India*. London, Ray Society: i-xxvii + 1–452, pl. 1–26.
- Günther, A., 1869. First account of species of tailless batrachians added to the collection of the British Museum. *Proc. zool. Soc. Lond.*, 1868 (3): 478–490, pl. 37–40.
- Günther, A., 1872a. Descriptions of some Ceylonese reptiles and batrachians. *Ann. Mag. nat. Hist.*, (4), 9: 85–88.
- Günther, A., 1872b. On the reptiles and amphibians of Borneo. *Proc. zool. Soc. Lond.*, 1872: 586–600, pl. 35–40.
- Günther, A., 1876a. Third report on collections of Indian reptiles obtained by the British Museum. *Proc. zool. Soc. Lond.*, 1875 (4): 567–577, pl. 63–66.
- Günther, A., 1876b. Notes on the mode of propagation of some Ceylonese tree-frogs, with description of two new species. *Ann. Mag. nat. Hist.*, (4), 17: 377–380, pl. 20 fig. C.
- Hallowell, E., 1844. Description of new species of African reptiles. *Proc. Acad. nat. Sci. Phila.*, 2: 58–62.
- Hallowell, E., 1861. Report upon the Reptilia of the North Pacific Exploring Expedition, under command of Capt. John Rogers, U. S. N. *Proc. Acad. nat. Sci. Phila.*, 1860: 480–510. [For publication date, see Zhao & Adler, 1993: 374].
- Häupl, M., Tiedemann, F. & Grillitsch, H., 1994. Katalog der Typen der herpetologischen Sammlung nach dem Stand vom 1. Jänner 1994. Teil I. Amphibia. *Kat. wiss. Samml. naturhist. Mus. Wien*, 9, *Vertebrata* (3): 1–42.
- Hillis, D. M. & De Sá, R., 1988. Phylogeny and taxonomy of the *Rana palmipes* group (Salientia: Ranidae). *Herp. Mon.*, 2: [i] + 1–26.
- Holynski, R. B., 1994. Structure and function or: what kind of nomenclatural regulations do we need? *Crystal*, Göd, Hungary, (ser. Zool.), 2: 1–50.
- Hu, S.-Q., Fei, L. & Ye, C.-Y., 1978. Three new amphibian species in China. *Mater. herp. Res.*, Chengdu, 4: 20.



- [In Chinese].
- Hu, S.-C., Tian, W.-S. & Wu, G.-F., 1981. Three new species of amphibians from Guangxi. *Acta herp. sinica*, 5: 111–120. [In Chinese].
- Illiger, J. K. W., 1798. *Verzeichniss der Käfer Preussens*. Halle, Johann Jacob Gebauer: i-xlii + 1–510.
- Inger, R. F., 1954. Systematics and zoogeography of Philippine amphibia. *Fieldiana: Zool.*, 33: 181–531.
- Inger, R. F., 1966. The systematics and zoogeography of the Amphibia of Borneo. *Fieldiana: Zool.*, 52: 1–402.
- Inger, R. F., 1985. Tadpoles of the forested regions of Borneo. *Fieldiana: Zool.*, (n.s.), 26: i-v + 1–89.
- Inger, R. F., 1989. Four new species of frogs from Borneo. *Malayan Nature J.*, 42: 229–243.
- Inger, R. F. & Dutta, S. K., 1986. An overview of the amphibian fauna of India. *J. Bombay nat. Hist. Soc.*, 83 (suppl.): 135–146.
- Inger, R. F., Orlov, N. & Darevsky, I., 1999. Frogs of Vietnam: a report on new collections. *Fieldiana: Zool.*, (n.s.), 92: i-iv + 1–46.
- Inger, R. F., Shaffer, H. B., Koshy, M. & Bakde, R., 1984. A report on a collection of amphibians and reptiles from the Ponmudi, Kerala, South India. (Continued). *J. Bombay nat. Hist. Soc.*, 81 (3): 551–570, pl. IV-V.
- Inger, R. F. & Stuebing, R. B., 1996. Two new species of frogs from southeastern Sarawak. *Raffles Bull. Zool.*, 44 (2): 543–549.
- Inger, R. F., Stuebing, R. B. & Tan, F. L., 1995. New species and new records of anurans from Borneo. *Raffles Bull. Zool.*, 43 (1): 115–131.
- Jerdon, T. C., 1853. Catalogue of reptiles inhabiting the Peninsula of India. (Continued from p. 479). *J. asiat. Soc. Bengal*, 22: 522–534.
- Jerdon, T. C., 1870. Notes on Indian herpetology. *Proc. asiat. Soc. Bengal*, 1870: 66–85.
- Jiang, S., Hu, S. & Zhao, E., 1987. The approach of the phylogenetic relationship and the supraspecific classification of 14 Chinese species of treefrogs (Rhacophoridae). *Acta zool. sinica*, (2), 6 (1): 27–42. [In Chinese].
- Karsen, S. J., Lau, M. W.-N. & Bogadek, A., 1986. *Hong Kong amphibians and reptiles*. Hong Kong, Urban Council: [i-vii] + 1–136.
- Kelaart, E. F., 1853. *Prodromus faunae zeylanicae; being contributions to the zoology of Ceylon*. Colombo, printed for the author: [i-vii] + i-xxxiii + 1–197 + 1–62 + [i-iv]. [For publication date, see Pethiyagoda & Manamendra-Arachchi, 1997: 8–11].
- Kelaart, E. F., 1854a. Descriptions of new species of Ceylon reptiles. *Ann. Mag. nat. Hist.*, (2), 13 (77): 407–408.
- Kelaart, E. F., 1854b. *Prodromus faunae zeylanicae; being contributions to the zoology of Ceylon*. Vol. II, part I. Colombo, printed at the government press: 1–23 + 1–31 + i-xvi. [For publication date, see Pethiyagoda & Manamendra-Arachchi, 1997: 8–11].
- Kim, J., 1996. General inconsistency conditions for maximum parsimony: effects of branch lengths and increasing numbers of taxa. *Syst. Biol.*, 45 (3): 363–374.
- Kirtisinghe, P., 1946. The presence in Ceylon of a frog with direct development on land. *Ceylon J. Sci.*, (B), 23: 109–112.
- Kirtisinghe, P., 1957. *The Amphibia of Ceylon*. Colombo: i-xiii + 1–112, 1 pl.
- Kou, Z.-T., 1990. A new species of genus *Philautus* (Amphibia: Rhacophoridae) from Yunnan, China. In: E. Zhao (ed.), *From water onto land*, Beijing, China Forestry Press: 210–212.
- Kuhl, H. & Van Hasselt, J. C., 1822. Uittreksels uit brieven van de Heeren Kuhl en Van Hasselt, aan de Heeren C. J. Temminck, Th. Van Swinderen en W. De Haan. *Algemeene Konst- en Letter-Bode*, 7: 99–104.
- Kuramoto, M. & Wang, C.-S., 1987. A new rhacophorid treefrog from Taiwan, with comparisons to *Chirixalus eiffingeri* (Anura, Rhacophoridae). *Copeia*, 1987 (4): 931–942.
- Laurent, R., 1943. Contribution à l'ostéologie et à la systématique des Rhacophorides non africains. *Bull. Mus. r. Hist. nat. Belg.*, 19 (28): 1–16, pl. I-II.
- Laurent, R., 1951. Sur la nécessité de supprimer la famille des Rhacophoridae mais de créer celle des Hyperoliidae. *Rev. Zool. Bot. afr.*, 45: 116–122.
- Laurent, R., 1986. Sous-classe des Lissamphibiens (Lissamphibia). Systématique. In: P.-P. GRASSÉ & M. DELSOL (ed.), *Traité de Zoologie*, 14, *Amphibiens*, fasc. I-B, Paris, Masson: 594–796.
- Leach, W., 1830. Crustaceology. *Brewster's Edinb. Enc.*, 1814, 7: 402. [Not seen].
- Lecointre, G., Philippe, H., Lê, H. L. V. & Le Guyader, H., 1993. Species sampling has a major impact on phylogenetic inference. *Molec. Phylogenetics Evol.*, 2 (3): 205–224.
- Lichtenstein, H., Weinland, D. & Von Martens, E., 1856. *Nomenclator Reptilium et Amphibiorum Musei zoologici Berlinensis*. Berlin, Königlichen Akademie der Wissenschaften: i-iv + 1–48.
- Liem, S. S., 1970. The morphology, systematics, and evolution of the Old World treefrogs (Rhacophoridae and Hyperoliidae). *Fieldiana: Zool.*, 57: i-vii + 1–145.
- Liu, C.-C. & Hu, S.-C., 1961. *The tailless amphibians of China*. Beijing, Science Press: [i-ii] + i-xvi + 1–364, pl. 1–6 + 1–28. [In Chinese].
- Liu, C.-C. & Hu, S.-C., 1962. A herpetological report of Kwangsi. *Acta zool. sin.*, 14 (suppl.): 73–104. [In Chinese.]
- Liu, C.-C., Hu, S.-C., Fei, L. & Huang, C.-C., 1973. On collections of amphibians from Hainan Island. *Acta zool. sin.*, 19 (4): 385–404. [In Chinese.]
- Malkmus, R. & Riede, K., 1996a. Die Baumfrösche der Gattung *Philautus* vom Mount Kinabalu. Teil I. Überblick und die *aurifasciatus*-Gruppe mit Beschreibung einer neuen Art (*Philautus saueri* n. sp.). *Sauria*, 18 (1): 27–37.
- Malkmus, R. & Riede, K., 1996b. Die Baumfrösche der Gattung *Philautus* vom Mount Kinabalu. Teil II. Die *vermiculatus*-Gruppe mit Beschreibung einer neuen Unterart (*Philautus aurantium gunungensis* n. ssp.) und die *hosei*-Gruppe. *Sauria*, 18 (2): 21–28.
- Malnate, E. V., 1971. A catalog of primary types in the

- herpetological collections of the Academy of Natural Sciences, Philadelphia (ANSP). *Prod. Acad. nat. Sci. Phila.*, 123: 345–375.
- Marmayou, J., Dubois, A., Ohler, A., Pasquet, E. & Tillier, A., 2000. Phylogenetic relationships in the Ranidae (Amphibia, Anura): independent origin of direct development in the genera *Philautus* and *Taylorana*. *C. r. Acad. Sci.*, in press.
- Martin, A. A. & Watson, G. F., 1971. Life history as an aid to generic delimitation in the family Hylidae. *Copeia*, 1971: 78–89.
- Mayr, E., 1997. *This is biology. The science of the living world*. Cambridge, Mass. & London, Belknap Press: i-xvii + 1–327.
- McCoy, C. J. & Richmond, N. D., 1966. Herpetological type-specimens in Carnegie Museum. *Ann. Carnegie Mus.*, 38: 233–264.
- Mertens, R., 1922. Verzeichnis der Typen in der herpetologischen Sammlung des Senckenbergischen Museum. *Senckenbergiana*, 4: 162–183.
- Mertens, R., 1967. Die herpetologische Sektion des Natur-Museums und Forschungs-Institutes Senckenberg in Frankfurt a. M. nebst einem Verzeichnis ihrer Typen. *Senckenbergiana biologica*, 48: 1–106.
- Mocquard, F., 1890. Recherches sur la faune herpétologique de Bornéo et de Palawan. *Nouv. Arch Mus. Hist. nat.*, (3), 2: 115–168, pl. 7–11.
- Mocquard, F., 1892. Voyage de M. Chaper à Bornéo. Nouvelle contribution à la faune herpétologique de Bornéo. *Mém. Soc. zool. France*, 5: 190–206, pl. 7.
- Müller, F., 1883. Dritter Nachtrag zum Katalog der herpetologischen Sammlung des Basler Museums. *Verh. naturf. Ges. Basel*, 7: 274–297, pl. 5.
- Müller, F., 1885. Viertes Nachtrag zum Katalog der herpetologischen Sammlung des Basler Museums. *Verh. naturf. Ges. Basel*, 7: 668–717, pl. 9–11.
- Müller, F., 1887. Fünftes Nachtrag zum Katalog der herpetologischen Sammlung des Basler Museums. *Verh. naturf. Ges. Basel*, 8 (2): 249–296, pl. 1–3.
- Noble, G. K., 1931. *The biology of the Amphibia*. New York, Dover: i-xviii + 1–577.
- Ogilby, W., 1837. Remarks upon some rare or undescribed ruminants in the Society's collection. *Proc. zool. Soc. London*, 1836: 119–121.
- Ohler, A., 1996. Valid name and holotype of the Malagasy frog currently known as *Boophis granulatus* (Guibé, 1975) (Amphibia, Anura). *Copeia*, 1996 (4): 1010–1012.
- Ohler, A., 1999. The identity of *Dendrobatorana* Ahl, 1927 (Amphibia, Ranoidea). *Mitt. Mus. Nat. Berlin, Zool.*, 75 (1): 37–45.
- Ohler, A., Marquis, O., Swan, S. & Grosjean, S., 2000. Amphibian biodiversity of Hoang Lien Nature Reserve (Lao Cai Province, northern Vietnam) with description of two new species. *Herpetozoa*, 13 (1–2): 71–87.
- Peters, W., 1860. Über einige interessante Amphibien, welche von dem durch seine zoologischen Schriften rühmlichst bekannten österreichischen Naturforscher Professor Schmarada während seiner auf mehrere Welttheile ausgedehnten, besonders auf wirbellose Thiere gerichteten, naturwissenschaftlichen Reise, mit deren Veröffentlichung Hr. Schmarada gegenwärtig in Berlin beschäftigt ist, auf der Insel Ceylon gesammelt wurden. *Monatsb. Akad. Wiss. Berlin*, 1860: 182–186.
- Peters, W., 1863. Fernere Mittheilungen über neue Batrachier. *Mber. Akad. Wiss. Berl.*, 1863: 445–470.
- Peters, W., 1867. Herpetologische Notizen. *Mber. Akad. Wiss. Berl.*, 1867: 13–37.
- Peters, W., 1871. Über neue Reptilien aus Ostafrika und Sarawak (Borneo), vorzüglich aus der Sammlung des Hrn. Marquis J. Doria zu Genua. *Mber. Akad. Wiss. Berlin*, 36: 566–581.
- Peters, W., 1872. Übersicht der von den Herren M.<sup>se</sup> G. Doria und D.<sup>r</sup> O. Beccari in Sarawack auf Borneo von 1865 bis 1868 gesammelten Amphibien. *Ann. Mus. civ. Stor. Nat. Genova*, (1), 3: 27–45, pl. 2–6.
- Peters, W., 1875. Über die von Hrn. Professor Dr. R. Buchholz in Westafrika gesammelten Amphibien. *Mber. Akad. Wiss. Berl.*, 1875: 196–212, pl. 1–3.
- Pethiyagoda, R. & Manamendra-Arachchi, K., 1997. The life and work of Edward Fredric Kelaart. *J. South Asian nat. Hist.*, 2 (2): 217–246.
- Pethiyagoda, R. & Manamendra-Arachchi, K., 1998. Evaluating Sri Lanka's amphibian diversity. *Occ. Pap. Wildlife Heritage Trust*, 2: 1–12.
- Pillai, R. S. & Chanda, S. K., 1973. *Philautus shillongensis*, a new frog (Ranidae) from Meghalaya, India. *Proc. indian Acad. Sci.*, (B), 78 (1): 30–36.
- Poe, S. & Swofford, D. L., 1999. Taxon sampling revisited. *Nature*, 398: 299–300.
- Pope, C. H., 1931. Notes on amphibians from Fukien, Hainan and other parts of China. *Bull. am. Mus. Nat. Hist.*, 61: 397–611, pl. 1–10.
- Pope, C. H. & Boring, A. M., 1940. A survey of Chinese Amphibia. *Peking nat. Hist. Bull.*, 15: 13–86, 1 map.
- Rao, C. R. N., 1915. The larva of *Rhacophorus pleurostictus*, Boul. *Rec. indian Mus.*, 11: 349–351.
- Rao, C. R. N., 1937. On some new forms of Batrachia from S. India. *Proc. indian Acad. Sci.*, (B), 6: 387–427, pl. 21–31.
- Richards, C. M. & Moore, W. S., 1998. A molecular phylogenetic study of the Old World treefrog family Rhacophoridae. *Herp. J.*, 8: 41–46.
- Roonwal, M. L. & Kripalani, M. B., 1966. A new frog, *Philautus cherrapunjiae* (family Ranidae) from Assam, India, with field observations on its behaviour and metamorphosis. *Rec. indian Mus.*, '1961', 59 (4): 325–334, pl. 24. [Publication date: 31 March 1966, according to note printed on front cover of author's copy reprint].
- Roux, J., 1928. Reptiles et amphibiens de l'Inde méridionale. *Rev. suisse Zool.*, 35: 439–471.
- Sarkar, A. K., Biswas, M. L. & Ray, S., 1992. Fauna of West Bengal: Amphibia. *State Fauna Series*, 3 (2): 67–100. [Not seen, cited after Dutta, 1997: 100, 308].
- Sarkar, A. K. & Sanyal, D. P., 1985. Amphibia. *Rec. zool. Surv. India*, 82: 285–295, pl. 1.
- Schiøtz, A., 1999. *Treefrogs of Africa*. Frankfurt am Main, Chimaira: 1–352.

- Schlegel, H., 1837. *Abbildungen neuer oder unvollständig bekannter Amphibien*. [First part.] Düsseldorf, Arnz & Comp.: 1–31, pl. 1–10.
- Schmidt, O., 1857. Diagnosen neuer Frosche des zoologischen Cabinets zu Krakau. *Sber. k. Akad. Wiss. Math.-Nat. Kl.*, 24: 10–15.
- Schuchert, C. & Buckman, S. S., 1905. The nomenclature of types in natural history. *Ann. Mag. nat. Hist.*, (7), 16: 102–104.
- Sclater, W. L., 1892a. On some specimens of frogs in the Indian Museum, Calcutta, with descriptions of several new species. *Proc. zool. Soc. Lond.*, 1892: 341–348, pl. XXIV.
- Sclater, W. L., 1892b. *List of the Batrachia in the Indian Museum*. London, Taylor & Francis: i-viii + 1–43.
- Shreve, B., 1940. A new *Rhacophorus* and a new *Philautus* from Ceylon. *Proc. biol. Soc. Washington*, 53: 105–107.
- Siedlecki, M., 1909. Zur Kenntnis des javanischen Flugfrosches. *Biol. Centralblatt*, 29: 704–714, pl. 7–8.
- Simpson, G. G., 1940. Types in modern taxonomy. *American Journal of Science*, 238: 413–431.
- Slevin, J. R. & Leviton, A. E., 1956. Holotype specimens of reptiles and amphibians in the collection of the California Academy of Sciences. *Proc. Calif. Acad. Sci.*, (4), 28: 529–560.
- Smith, H. M. & Perez-Higareda, G., 1986. Nomenclatural name-forms. *Syst. Zool.*, 35: 421–422.
- Smith, H. M. & Smith, R. B., 1973. Chresonymy ex synonymy. *Syst. Zool.*, '1972', 21: 445.
- Smith, M. A., 1922. On a collection of reptiles and batrachians from the mountains of Pahang, Malay Peninsula. *J. fed. malay St. Mus.*, 10 (4): 263–282.
- Smith, M. A., 1924. New tree-frogs from Indo-China and the Malay Peninsula. *Proc. zool. Soc. London*, 1924: 225–234, pl. 1–3.
- Smith, M. A., 1925. On a collection of reptiles and amphibians from Mt. Murud, Borneo. *Sarawak Mus. J.*, 3: 1–10, pl. 1.
- Smith, M. A., 1930. The Reptilia and Amphibia of the Malay Peninsula. *Bull. Raffles Mus.*, 3: [i-ii] + i-xviii + 1–149.
- Smith, M. A., 1931. The herpetology of Mt. Kinabalu, North Borneo, 13,455 ft. *Bull. Raffles Mus.*, 5: 8–32, pl. 1–2.
- Smith, M. A., 1940. The amphibians and reptiles obtained by Mr. Ronald Kaulback in Upper Burma. *Rec. indian Mus.*, 42: 465–486, pl. 8.
- Smith, M. A., 1953. Description of a new species of frog of the genus *Philautus*. *Ann. Mag. nat. Hist.*, (12), 6: 477–478.
- Söderberg, R., 1919. Results of Dr. E. Mjöberg's Swedish scientific expeditions to Australia 1910–1913. XVIII. Studies of the bords in north west Australia. *Kungliga Svenska Vetenskapsakademiens Handlingar*, '1918', 52 (17): 1–116.
- Stejneger, L., 1905. Three new frogs and one new gecko from the Philippine Islands. *Proc. U. S. natn. Mus.*, 28: 343–348.
- Stejneger, L., 1907. Herpetology of Japan and adjacent territory. *Bull. U. S. nat. Mus.*, 58: i-xx + 1–577, pl. I–XXXV.
- Stoliczka, F., 1870. Note on three species of Batrachia from Moulmein. *Proc. asiat. Soc. Beng.*, 1870: 272–276.
- Stoliczka, F., 1872. Observations on Indian Batrachia. *Proc. asiat. Soc. Beng.*, 1872: 101–113.
- Taylor, E. H., 1920. Philippine Amphibia. *Philipp. J. Sci.*, 16 (3): 213–359, pl. 1–10.
- Taylor, E. H., 1922a. Additions to the herpetological fauna of the Philippine Islands. I. *Philipp. J. Sci.*, 21 (2): 161–206, pl. 1–7.
- Taylor, E. H., 1922b. Additions to the herpetological fauna of the Philippine Islands. II. *Philipp. J. Sci.*, 21 (3): 257–303, pl. 1–4.
- Taylor, E. H., 1962. The amphibian fauna of Thailand. *Univ. Kansas Sci. Bull.*, 63: 265–599.
- Theobald, W., 1868. Catalogue of reptiles in the Museum of the Asiatic Society of Bengal. *J. asiat. Soc. Bengal*, 37, suppl.: i-vi + 7–88 + i-iii, 4 pl.
- Tiwari, S. K., 1991. *Zoogeography of Indian amphibians. Distribution, diversity and spatial relationship*. New Delhi, Today & Tomorrow's Printers & Publishers: [i-iv] + 1–187.
- Tschudi, J. J., 1838. *Classification der Batrachier, mit Berücksichtigung der fossilen Thiere dieser Abtheilung der Reptilien*. Neuchâtel, Petitpierre: i-ii + 1–98, pl. 1–6.
- Van Kampen, P. N., 1907. Amphibien des indischen Archipels. In: M. Weber (ed.), *Zoologische Ergebnisse einer Reise in Niederländisch Ost-Indien*, 4, Leiden, Brill: 383–418, pl. 16.
- Van Kampen, P. N., 1909. Beitrag zur Kenntnis der Amphibienlarven des indischen Archipels. *Natuurkundig Tijdschrift Ned.-Indië*, 69: 25–48, pl. 2.
- Van Kampen, P. N., 1912. Javanische Amphibien, gesammelt von Edw. Jacobson. *Notes from the Leyden Museum*, 34: 75–79.
- Van Kampen, P. N., 1923. *The Amphibia of the Indo-Australian archipelago*. Leiden, Brill: i-xii + 1–304.
- Van Tuijl, L., 1995. Revised catalogue of the type specimens of recent amphibians and reptiles in the 'Zoologisch Museum', University of Amsterdam, the Netherlands. *Bull. zool. Mus. Univ. Amsterdam*, 14 (8): 125–141.
- Wolf, S., 1936. Revision der Untergattung *Rhacophorus* (ausschliesslich der Madagaskar-Formen). *Bull. Raffles Mus.*, 12: 137–217.
- Yang, D.-T., Su, C.-Y. & Li, S.-M., 1979. New species and new subspecies of amphibians and reptiles from Gaoligong Shan, Yunnan. *Acta zootaxonomica sinica*, 4 (2): 185–188. [In Chinese].
- Ye, C., Fei, L. & Hu, S., 1993. *Rare and economic amphibians of China*. Chengdu, Sichuan Publishing House of Science and Technology: [i-iii] + 1–2 + 1–2 + 1–7 + 412. [In Chinese].
- Ye, C. & Hu, S., 1984. A new species of *Philautus* (Anura: Rhacophoridae) from Xizang autonomous region. *Acta herp. sinica*, 3 (4): 67–69. [In Chinese].
- Zhao, E.-M. & Adler, K., 1993. *Herpetology of China*. Oxford, Ohio, U.S.A., Society for the Study of Amphibians and Reptiles: 1–522 + [i-v], pl. I–XLVIII + 1.

## Index to scientific names

- Amo* 4  
*Amolops* 4, 28, 40, 58  
*Amolops marmoratus* 40  
*Amolops (Amolops) marmoratus* 28, 40, 97–98  
*Buergeria* 5, 8, 19, 31  
*Buergeria japonica* 19, 31, 98  
*Buergeria macropus* 19  
*Chirixalus* 3–4, 8, 32, 34, 40, 44, 47, 52–54, 57–58  
*Chirixalus cherrapunjiae* 54, 97  
*Chirixalus doriae* 34, 97  
*Chirixalus hansenae* 47, 98  
*Chirixalus idiotocus* 7, 57–58, 98  
*Chirixalus laevis* 43–44, 98  
*Chirixalus nongkhorensis* 47, 99  
*Chirixalus palpebralis* 44, 99  
*Chirixalus romeri* 52–53, 99  
*Chirixalus shyamrupus* 58, 99  
*Chirixalus simus* 40, 99  
*Chirixalus vittatus* 32, 100  
*Cornufer* 4, 38  
*Cornufer guentheri* 4  
*Cornufer worcesteri* 4, 38, 53, 96, 100  
*Dendrobatorana* 7  
*Dicroglossinae* 4, 42–43, 61  
*Gorhixalus* 5–7, 35, 57, 84  
*Hazelia* 31, 38, 41–42  
*Hazelia spinosa* 41, 99  
*Hyla* 4, 12–13  
*Hyla aurifasciata* 12, 40, 62, 65, 86–87, 97, 100  
*Hylambates dorsalis* 7  
*Hylarana* 49  
*Hylarana* section 6  
*Hylidae* 4  
*Hyperoliidae* 4, 13  
*Hyperoliinae* 13  
*Hyperolius* 13  
*Hyperolius concolor* 13, 97  
*Indirana* 8, 26, 50–51, 56  
*Indirana diplosticta* 26, 97  
*Indirana longicrus* 50–51, 56, 97–98  
*Indirana tenuilingua* 51  
*Ixalis glandulosa* 14, 89  
*Ixalus* 1, 4, 8, 12–13, 16–41, 49, 86, 97  
*Ixalus acutirostris* 11, 21, 38, 43, 86, 97  
*Ixalus adspersus* 24, 71, 86, 97  
*Ixalus annandalii* 38, 54, 80–81, 87, 97, 100  
*Ixalus argus* 40, 58, 97  
*Ixalus asper* 6, 8–9, 31–32, 45, 97  
*Ixalus aurifasciatus* 87  
*Ixalus beddomii* 11, 14, 26–27, 87, 97  
*Ixalus bombayensis* 41, 87, 97  
*Ixalus brevipes* 39, 96–97  
*Ixalus carinensis* 33, 75, 77, 88, 97, 100  
*Ixalus castanomerus* 36, 38, 93, 97  
*Ixalus chalazodes* 26, 88, 97  
*Ixalus cinerascens* 11, 23, 88, 97  
*Ixalus concolor* 13, 97  
*Ixalus cornutus* 41, 88, 97  
*Ixalus diplostictus* 8, 26, 97  
*Ixalus femoralis* 20, 25, 27, 29, 89, 97  
*Ixalus fergusonii* 27, 29, 46, 72, 89, 97, 100  
*Ixalus fimbriatus* 24, 85, 97  
*Ixalus flaviventris* 29–30, 56, 71, 73, 89, 97, 100  
*Ixalus flavosignatus* 8, 33, 97  
*Ixalus fuscus* 8, 29, 97  
*Ixalus garo* 41, 89, 97  
*Ixalus glandulosa* 89  
*Ixalus glandulosus* 9, 14–15, 23, 25, 31, 46, 63, 65, 89, 98, 100  
*Ixalus glandulosus* 89  
*Ixalus granulatus* 32, 98  
*Ixalus guttatus* 18, 98  
*Ixalus halyi* 37, 91, 98  
*Ixalus horridus* 8, 37, 98  
*Ixalus hypomelas* 27, 90, 98  
*Ixalus jacobsoni* 39, 90, 98  
*Ixalus japonicus* 8–9, 11, 19, 31, 98  
*Ixalus jerdonii* 25–26, 28, 88, 98  
*Ixalus kakhienensis* 28, 98  
*Ixalus kempiae* 41, 90, 98  
*Ixalus larutensis* 36, 79, 93, 98, 100  
*Ixalus lateralis* 23–24, 98  
*Ixalus latopalmaris* 32, 98  
*Ixalus leitensis* 35, 91, 98  
*Ixalus leucorhinus* 17, 23, 25, 28, 37, 40, 45, 91, 98  
*Ixalus leucorhinus* var. *temporalis* 95  
*Ixalus longicrus* 34, 50–51, 56, 76–77, 91, 98, 100  
*Ixalus macropus* 21–22, 31–32, 85, 98  
*Ixalus mindorensis* 35, 77–78, 94, 98, 100  
*Ixalus montanus* 25, 42, 47, 50–51, 56, 70–71, 95, 98, 100  
*Ixalus nasutus* 22, 92, 99  
*Ixalus natator* 18, 32–33, 99  
*Ixalus natator nubilus* 33  
*Ixalus nubilus* 33, 99  
*Ixalus opisthorhodus* 8, 22, 99  
*Ixalus oxyrhynchus* 25, 91, 99  
*Ixalus pallidipes* 39, 92, 99  
*Ixalus parvulus* 34, 38, 75, 77, 93, 99–100  
*Ixalus petersi* 9, 35–36, 38, 93, 99–100  
*Ixalus pictus* 8, 24, 39, 99  
*Ixalus poecilopleurus* 8, 17, 99  
*Ixalus pulchellus* 25, 89, 99  
*Ixalus pulcher* 9, 14–15, 31, 46, 75, 89, 99–100  
*Ixalus punctatus* 9, 23, 70, 95, 99–100  
*Ixalus sarasinorum* 21, 32, 85, 99  
*Ixalus schmackeri* 33, 35  
*Ixalus schmardae* 17  
*Ixalus schmardanus* 17  
*Ixalus semifasciatus* 13, 87  
*Ixalus semiruber* 40, 91, 99  
*Ixalus semirubra* 40, 91  
*Ixalus signatus* 30, 74, 77, 94, 99–100  
*Ixalus silvaticus* 8, 30, 99  
*Ixalus stictomerus* 27, 94, 99  
*Ixalus temporalis* 6, 20, 86, 95, 100  
*Ixalus tinniense* 9, 24, 95

- Ixalus travancoricus* 33, 95, 100  
*Ixalus tuberculatus* 28, 44, 95, 100  
*Ixalus variabilis* 13, 15–16, 18, 65, 67, 96, 100  
*Ixalus vermiculatus* 11, 37, 39, 77, 81, 96, 100  
*Ixalus vittatus* 8, 32, 100  
*Ixalus vittiger* 35, 96, 100  
*Ixalus warszewitschii* 18, 100  
*Ixalus wynaadensis* 96  
*Kirtixalus* 5–7, 16–17, 19–22, 24–25, 28–29, 32, 34, 37, 39, 46, 52, 84  
*Leptobranchella mjobergi* 60  
*Leptobranchium monticola* 23  
*Leptomantis* 12, 21, 43, 53  
*Leptomantis bimaculata* 21, 43, 97  
*Limnodytes phyllophila* 22  
Mantellinae 6  
Megophryinae 23–24  
*Megophrys* 23–24  
*Megophrys lateralis* 23–24  
*Megophrys major* 23  
*Megophrys (Xenophrys) lateralis* 24, 98  
*Micrixalus* 4, 8, 16, 22, 29–30, 49–50  
*Micrixalus elegans* 49, 97  
*Micrixalus fuscus* 29, 97  
*Micrixalus kottigeharensis* 49, 98  
*Micrixalus narainensis* 50, 99  
*Micrixalus phyllophilus* 22, 99  
*Micrixalus sarasinorum* 85  
*Micrixalus saxicola* 16, 99  
*Micrixalus silvaticus* 30, 99  
*Micrixalus swamianus* 49, 99  
*Nyctibatrachus* 28  
*Nyctibatrachus sanctipalustris* 61  
*Nyctixalus* 8, 24, 31, 33, 39, 41–42  
*Nyctixalus anodon* 38–39, 97  
*Nyctixalus flavosignatus* 33, 97  
*Nyctixalus margaritifer* 31, 33, 98  
*Nyctixalus pictus margaritifer* 31, 98  
*Nyctixalus pictus pictus* 24, 99  
*Nyctixalus robinsoni* 40, 87, 99  
*Nyctixalus spinosus* 41–42, 99  
*Orchestes* 4, 86  
*Orchestes aurifasciatus* 87  
Pelobatidae 23–24  
Philautinae 3  
Philautini 4  
*Philautus* 1, 3–62, 84, 86, 97, 100  
*Philautus abditus* 62, 86, 97  
*Philautus acutirostris* 21, 86  
*Philautus acutus* 57, 86, 97  
*Philautus adpersus* 24, 86  
*Philautus albopunctatus* 53, 86, 97  
*Philautus albopunctatus* group 6, 28, 32, 53, 97  
*Philautus alticola* 47  
*Philautus amoenus* 47, 86, 97  
*Philautus andersoni* 44, 95  
*Philautus andersonii* 28, 95  
*Philautus annadalii* 87  
*Philautus annadelii* 87  
*Philautus annadolii* 87  
*Philautus annandalii* 38, 54, 87  
*Philautus argus* 40, 58  
*Philautus aurantium* 58, 87, 97  
*Philautus aurantium aurantium* 87  
*Philautus aurantium gunungensis* 60, 90, 98  
*Philautus aurifasciatus* 7, 12–13, 39, 58, 87  
*Philautus aurifasciatus* group 6, 12–13, 21, 33–36, 38–39, 41, 43–44, 47, 57, 59–60, 97  
*Philautus banaensis* 5, 51, 80, 83, 87, 97, 100  
*Philautus basilanensis* 43, 86, 97  
*Philautus beddomii* 27, 87  
*Philautus bombavensis* 87  
*Philautus bombayensis* 41, 87  
*Philautus brevipes* 96  
*Philautus bunitus* 59, 88, 97  
*Philautus carinensis* 33, 88  
*Philautus castanomerus* 93  
*Philautus cavirostris* 22, 85  
*Philautus chalazodes* 26, 88  
*Philautus charius* 48, 80, 82, 88, 97, 100  
*Philautus cherrapunjiae* 8, 54, 97  
*Philautus cinerascens* 23  
*Philautus cornutus* 41, 88  
*Philautus crnri* 50–51, 55–56, 97  
*Philautus cruri* 56  
*Philautus disgregus* 58, 88, 97  
*Philautus dubius* 28, 88  
*Philautus elegans* 8, 48–49, 97  
*Philautus emembranatus* 96  
*Philautus eximius* 52, 89, 97  
*Philautus femoralis* 20–21, 89  
*Philautus fergusonianus* 29, 46  
*Philautus fergusonii* 29  
*Philautus flaviventris* 29, 51, 56, 89  
*Philautus gara* 89  
*Philautus garo* 41, 89  
*Philautus gauni* 8, 53, 98  
*Philautus glandulosus* 89  
*Philautus glandulosus* 14–15, 23, 30, 89  
*Philautus gracilipes* 48, 80, 90, 98  
*Philautus gryllus* 44, 90, 98  
*Philautus gunungensis* 60  
*Philautus hansenae* 8, 47, 98  
*Philautus hassanensis* 51, 56, 89, 98  
*Philautus hassannensis* 89  
*Philautus hassonnensis* 89  
*Philautus hazelae* 4, 42, 98  
*Philautus hosei* 84  
*Philautus hosei* group 5–6, 35, 57, 84  
*Philautus hosii* 35, 84  
*Philautus hosii* group 97  
*Philautus hypomelas* 6, 27, 90  
*Philautus idiotocus* 57  
*Philautus ingeri* 5, 56–57, 84, 98  
*Philautus jacobsoni* 39, 90  
*Philautus jerdonii* 25, 88, 90  
*Philautus jinxiuensis* 55, 90, 98  
*Philautus jinxiuensis* group 6, 55, 97  
*Philautus kempiae* 41, 90–91  
*Philautus kempie* 91  
*Philautus kerangae* 57, 91, 98  
*Philautus kottigeharensis* 8, 49, 98

- Philautus laevis* 8, 43, 52, 98  
*Philautus larutensis* 93  
*Philautus leitensis* 35, 91  
*Philautus leucorhincus* 91  
*Philautus leucorhinus* 6, 16–17, 23, 91  
*Philautus lissobranchius* 94  
*Philautus longchuanensis* 55, 91, 98  
*Philautus longicrus* 8, 34, 50–51, 55–56, 91, 98  
*Philautus maosonensis* 48, 91, 98  
*Philautus medogensis* 55, 92, 98  
*Philautus melanensis* 50, 83, 95, 98, 100  
*Philautus menglaensis* 58, 92, 98  
*Philautus microdiscus* 39  
*Philautus microtympanum* 19, 85  
*Philautus mindorensis* 94  
*Philautus mjobergi* 44, 47, 60, 92, 98  
*Philautus mjobergi* 60  
*Philautus mjoebergi* 60, 92, 98  
*Philautus montanus* 8, 25, 42, 47, 51, 56, 83, 89, 98, 100  
*Philautus namdaphaensis* 56, 92, 98  
*Philautus nanus* 22  
*Philautus narainensis* 8, 50, 99  
*Philautus nassutus* 92  
*Philautus nasutus* 6, 22, 92  
*Philautus noblei* 46, 89  
*Philautus nongkhorensis* 8, 47, 99  
*Philautus ocellatus* 54, 92, 99  
*Philautus odontotarsus* 59, 92, 99  
*Philautus odontotarsus* group 6, 57, 59, 97  
*Philautus pallidipes* 39, 92  
*Philautus palpebralis* 7–8, 44, 99  
*Philautus palpebralis* group 6, 44, 48, 52, 54, 97  
*Philautus parkeri* 45  
*Philautus parvulus* 5, 34, 38, 93  
*Philautus petersi* 35–36, 93  
*Philautus pictus* 33  
*Philautus pleurostictus* 20  
*Philautus pleurotaenia* 37  
*Philautus poecilus* 59, 93, 99  
*Philautus polillensis* 4, 43, 60–61, 99  
*Philautus pulcher* 89  
*Philautus pulcherrimus* 14, 89  
*Philautus punctatus* 23  
*Philautus refugii* 59, 93, 99  
*Philautus reticulatus* 20  
*Philautus rhododiscus* 53, 93, 99  
*Philautus rhododiscus* group 6, 53, 55, 58, 97  
*Philautus romeri* 7–8, 52, 99  
*Philautus sanctipalustris* 61, 93, 99  
*Philautus sanctisilvaticus* 61, 93, 99  
*Philautus saueri* 60, 93, 99  
*Philautus schmackeri* 33, 94, 99  
*Philautus shillongensis* 54, 94, 99  
*Philautus shyamrupus* 58, 99  
*Philautus signatus* 30, 94  
*Philautus similis* 43, 94, 99  
*Philautus spiculatus* 8, 47, 99  
*Philautus stellatus* 16  
*Philautus stictomerus* 27, 94  
*Philautus surdus* 19, 53, 94  
*Philautus surdus* group 6, 19, 38, 42, 53, 59, 97  
*Philautus surrufus* 59, 95, 99  
*Philautus swamianus* 8, 49, 99  
*Philautus tectus* 57, 95, 99  
*Philautus tectus* group 6, 57, 97  
*Philautus temporalis* 6, 17, 20, 22, 95  
*Philautus terebrans* 61, 95, 100  
*Philautus tinniensi* 14–15, 24, 26, 50  
*Philautus travancoricus* 33, 95  
*Philautus tuberculatus* 28, 95  
*Philautus tyttus* 52, 96, 100  
*Philautus umbra* 57, 96, 100  
*Philautus variabitis* 96  
*Philautus variabilis* 16, 18, 24, 96  
*Philautus variabilis* 96  
*Philautus vermiculatus* 37, 39, 96  
*Philautus vermiculatus* group 6, 37, 39, 57–60, 62, 97  
*Philautus vittatus* 54  
*Philautus vittiger* 35, 96  
*Philautus williamsi* 42, 94, 100  
*Philautus woodi* 38, 86, 100  
*Philautus worcesteri* 38, 96  
*Philautus wynaadensis* 6, 16–17  
*Philautus zamboangensis* 8, 43, 100  
*Philautus (Gorhixalus)* 5  
*Philautus (Gorhixalus) hosii* 35, 84, 98  
*Philautus (Gorhixalus) ingeri* 57, 84, 98  
*Philautus (Kirtixalus)* 6, 14  
*Philautus (Kirtixalus) cavirostris* 23–24, 85, 97  
*Philautus (Kirtixalus) dubius* 88  
*Philautus (Kirtixalus) fergusonianus* 29, 46–47, 85, 97  
*Philautus (Kirtixalus) jerdonii* 90  
*Philautus (Kirtixalus) microdiscus* 92  
*Philautus (Kirtixalus) microtympanum* 19, 46, 52, 85, 97–98, 100  
*Philautus (Kirtixalus) nanus* 22, 32, 85, 98–99  
*Philautus (Kirtixalus) pleurotaenia* 37, 85, 99  
*Philautus (Kirtixalus) reticulatus* 20, 85, 99  
*Philautus (Kirtixalus) stellatus* 17, 86, 99  
*Philautus (Philautus)* 6  
*Philautus (Philautus) abditus* 62, 86, 97  
*Philautus (Philautus) acutirostris* 21, 38, 43, 86, 97, 100  
*Philautus (Philautus) acutus* 57, 86, 97  
*Philautus (Philautus) adspersus* 24, 86, 97  
*Philautus (Philautus) albopunctatus* 53, 86, 97  
*Philautus (Philautus) amoenus* 47, 86, 97  
*Philautus (Philautus) annandalii* 38, 87, 97  
*Philautus (Philautus) aurantium* 58, 87, 97  
*Philautus (Philautus) aurifasciatus* 12–13, 41, 87, 97  
*Philautus (Philautus) banaensis* 52, 87, 97  
*Philautus (Philautus) beddomii* 27, 87, 97  
*Philautus (Philautus) bombayensis* 41, 87, 97  
*Philautus (Philautus) bunitus* 59, 88, 97  
*Philautus (Philautus) carinensis* 34, 88, 97  
*Philautus (Philautus) chalazodes* 26, 88, 97  
*Philautus (Philautus) charius* 48, 88, 97  
*Philautus (Philautus) cinerascens* 23, 88, 97  
*Philautus (Philautus) cornutus* 41, 88, 97  
*Philautus (Philautus) disgregus* 58, 88, 97  
*Philautus (Philautus) dubius* 26, 29, 88, 97–98  
*Philautus (Philautus) emembranatus* 96  
*Philautus (Philautus) eximius* 52, 89, 97

- Philautus (Philautus) femoralis* 21, 25, 27, 89, 97, 99  
*Philautus (Philautus) flaviventris* 30, 51, 56, 89, 97–98  
*Philautus (Philautus) garo* 41, 89, 97  
*Philautus (Philautus) glandulosus* 15, 31, 46, 89, 98–99  
*Philautus (Philautus) gracilipes* 48, 90, 98  
*Philautus (Philautus) gryllus* 44, 90, 98  
*Philautus (Philautus) gunungensis* 60, 90, 98  
*Philautus (Philautus) hypomelas* 28, 90, 98  
*Philautus (Philautus) jacobsoni* 39, 90, 98  
*Philautus (Philautus) jerdonii* 25, 90, 98  
*Philautus (Philautus) jinxiuensis* 55, 90, 98  
*Philautus (Philautus) kempiae* 41, 90, 98  
*Philautus (Philautus) kerangae* 57, 91, 98  
*Philautus (Philautus) leitensis* 35, 91, 98  
*Philautus (Philautus) leucorhinus* 17, 25, 37, 40, 45, 91, 98–99  
*Philautus (Philautus) lissobranchius* 94  
*Philautus (Philautus) longchuanensis* 55, 91, 98  
*Philautus (Philautus) longicrus* 34, 91, 98  
*Philautus (Philautus) maosonensis* 48, 91, 98  
*Philautus (Philautus) medogensis* 55, 92, 98  
*Philautus (Philautus) menglaensis* 59, 92, 98  
*Philautus (Philautus) microdiscus* 40, 92, 98  
*Philautus (Philautus) mjobergi* 44, 60, 92, 98  
*Philautus (Philautus) namdaphaensis* 56, 92, 98  
*Philautus (Philautus) nasutus* 22, 92, 99  
*Philautus (Philautus) ocellatus* 54, 92, 99  
*Philautus (Philautus) odontotarsus* 59, 92, 99  
*Philautus (Philautus) pallidipes* 39, 92, 99  
*Philautus (Philautus) parvulus* 34, 93, 99  
*Philautus (Philautus) petersi* 36, 38, 93, 97–99  
*Philautus (Philautus) poecilus* 59, 93, 99  
*Philautus (Philautus) rhododiscus* 53, 93, 99  
*Philautus (Philautus) sanctisilvaticus* 61, 93, 99  
*Philautus (Philautus) saueri* 60, 93, 99  
*Philautus (Philautus) schmackeri* 33, 35, 94, 98–99  
*Philautus (Philautus) shillongensis* 54, 94, 99  
*Philautus (Philautus) signatus* 30, 94, 99  
*Philautus (Philautus) similis* 43, 94, 99  
*Philautus (Philautus) stictomerus* 27, 94, 99  
*Philautus (Philautus) surdus* 19, 43, 53, 94, 98–100  
*Philautus (Philautus) surrufus* 59, 95, 99  
*Philautus (Philautus) tectus* 57, 95, 99  
*Philautus (Philautus) temporalis* 20, 95, 100  
*Philautus (Philautus) terebrans* 61, 95, 100  
*Philautus (Philautus) tinniensi* 15, 24, 26, 50, 95, 98–99, 100  
*Philautus (Philautus) travancoricus* 33, 95, 100  
*Philautus (Philautus) tuberculatus* 28, 44, 95, 97, 100  
*Philautus (Philautus) tyttus* 52, 96, 100  
*Philautus (Philautus) umbra* 57, 96, 100  
*Philautus (Philautus) variabilis* 18, 96, 100  
*Philautus (Philautus) vermiculatus* 37, 39, 96–97, 100  
*Philautus (Philautus) vittiger* 35, 96, 100  
*Philautus (Philautus) worcesteri* 38, 53, 96–97, 100  
*Philautus (Philautus) wynaadensis* 16, 96, 100  
*Phyllomedusa* 15–16  
*Phyllomedusa tinniensi* 14–15, 23, 26, 50, 64–65, 95, 100  
*Phyllomedusa wynaadensis* 15–16, 65–66, 96, 100  
*Platymantis* 4, 42–43, 61  
*Platymantis hazelae* 42, 98  
*Platymantis polillensis* 43, 61, 99  
*Platymantis polilloensis* 43, 60, 99  
*Polypedates* 3, 5–6, 12, 14, 16–17, 19–20, 22–23, 25, 42, 47  
*Polypedates cavirostris* 22, 24, 85, 97  
*Polypedates jerdonii* 25–26, 29, 34, 40, 52, 90, 98  
*Polypedates marmoratus* 28  
*Polypedates microtympaanum* 5–6, 14, 18, 25, 37, 46, 52, 68, 71, 84–85, 98, 100  
*Polypedates nanus* 21–22, 32, 69, 71, 85, 98, 100  
*Polypedates pleurostictus* 14, 19–20, 69, 71, 99–100  
*Polypedates reticulatus* 20, 85, 99  
*Polypedates saxicola* 8, 16, 99  
*Polypedates schmarda* 17–18, 99  
*Polypedates schmardana* 17  
*Polypedates stellata* 16  
*Polypedates stellatus* 16, 86, 99  
*Polypedates surdus* 19, 42, 94, 99  
*Polypedates tuberculatus* 28, 44  
*Polypedates variabilis* 6, 13–14, 18, 20, 45, 63, 65, 100  
 Polypedatidae 3  
*Pseudophilautus* 6, 17, 20, 22, 86  
*Pseudophilautus temporalis* 95  
*Rana* 6, 18–19, 31, 49  
*Rana aspera* 31, 45  
*Rana balcanica* 55  
*Rana calcarata* 55  
*Rana esculenta* var. *japonica* 19  
*Rana japonica* 19  
*Rana macropus* 19, 21, 31, 98  
*Rana tenuilingua* 51  
*Rana warszewitschii* 18  
*Rana (Clinotarsus) curtipes* 6  
*Rana (Tryphlopsis) warszewitschii* 18, 100  
 Ranidae 1, 3–4, 6, 8, 12–62  
 Raninae 4, 8, 16, 18, 22, 29–30, 32–33, 40, 49–50  
 Ranixalinae 8, 26, 28, 51, 56  
 Rhacophoridae 3  
 Rhacophorinae 1, 3–6, 8–9, 12–48, 50–62  
 Rhacophorini 7  
*Rhacophorus* 3–6, 8–9, 12–14, 19–22, 24–25, 28–29, 32, 35, 37, 39–40, 42–48, 52–54  
*Rhacophorus alticola* 42  
*Rhacophorus andersoni* 28, 44, 95, 97  
*Rhacophorus andersonii* 95  
*Rhacophorus anodon* 38, 97  
*Rhacophorus asperrimus* 32, 45, 97  
*Rhacophorus aurifasciatus* 87  
*Rhacophorus bimaculatus* 21  
*Rhacophorus buergeri hosii* 84  
*Rhacophorus buergeri jerdonii* 90  
*Rhacophorus buergeri microtympaanum* 85  
*Rhacophorus buergeri surdus* 94  
*Rhacophorus cavirostris* 22, 85  
*Rhacophorus dimbullae* 52, 85, 97  
*Rhacophorus dubius* 25–26, 28, 88, 97  
*Rhacophorus emembranatus* 53, 96, 97  
*Rhacophorus everetti* 47  
*Rhacophorus everetti macroscelis* 48, 99  
*Rhacophorus fergusonianus* 29, 46, 85, 97  
*Rhacophorus fergusonii* 27, 29, 46, 85, 97

- Rhacophorus gauni* 53  
*Rhacophorus hosei* 84  
*Rhacophorus hosii* 5, 35, 84, 98  
*Rhacophorus jerdoni* 90  
*Rhacophorus jerdonii* 25, 90  
*Rhacophorus leprosus* 41  
*Rhacophorus lissobranchius* 53, 94, 98  
*Rhacophorus macropus* 21, 85  
*Rhacophorus macroscelis* 47  
*Rhacophorus macrotis* 42, 47  
*Rhacophorus malabaricus* 14  
*Rhacophorus malcolmsmithi* 45, 91, 98  
*Rhacophorus microdiscus* 25, 39, 92, 98  
*Rhacophorus microtympaanum* 19, 21, 85  
*Rhacophorus moschatus* 5  
*Rhacophorus nanus* 85  
*Rhacophorus noblei* 45–46, 89, 99  
*Rhacophorus parkeri* 14, 45, 99  
*Rhacophorus pleurostictus* 6, 20, 45  
*Rhacophorus pleurotaenia* 37, 85, 99  
*Rhacophorus pulcher* 31, 46  
*Rhacophorus pulcherrimus* 15, 31, 46, 89, 99  
*Rhacophorus reinwardtii* 5  
*Rhacophorus reticulatus* 20, 85  
*Rhacophorus rugatus* 45, 91, 99  
*Rhacophorus stictomerus* 94  
*Rhacophorus surdus* 94  
*Rhacophorus variabilis* 13, 25, 96  
*Rhacophorus zimmeri* 46, 85, 100  
*Rhacophorus (Leptomantis) bimaculatus* 21, 43, 97, 100  
*Rhacophorus (Leptomantis) gauni* 53–54, 98  
*Rhacophorus (Philautus)* 17, 41  
*Rhacophorus (Philautus) acutirostris* 86  
*Rhacophorus (Philautus) adspersus* 86  
*Rhacophorus (Philautus) alticola* 47, 97  
*Rhacophorus (Philautus) andersoni* 95  
*Rhacophorus (Philautus) annandalii* 87  
*Rhacophorus (Philautus) aurifasciatus* 87, 99  
*Rhacophorus (Philautus) basilanensis* 86  
*Rhacophorus (Philautus) beddomii* 87  
*Rhacophorus (Philautus) bombayensis* 87  
*Rhacophorus (Philautus) brevipes* 96  
*Rhacophorus (Philautus) carinensis* 88  
*Rhacophorus (Philautus) castanomerus* 93  
*Rhacophorus (Philautus) chalazodes* 88  
*Rhacophorus (Philautus) cinerascens* 88  
*Rhacophorus (Philautus) cornutus* 88  
*Rhacophorus (Philautus) dubius* 88  
*Rhacophorus (Philautus) femoralis* 89  
*Rhacophorus (Philautus) flaviventris* 89  
*Rhacophorus (Philautus) garo* 89  
*Rhacophorus (Philautus) glandulosus* 89  
*Rhacophorus (Philautus) gryllus* 90  
*Rhacophorus (Philautus) halyi* 91  
*Rhacophorus (Philautus) hypomelas* 90  
*Rhacophorus (Philautus) jacobsoni* 90  
*Rhacophorus (Philautus) kempiae* 90  
*Rhacophorus (Philautus) larutensis* 93  
*Rhacophorus (Philautus) leitensis* 91  
*Rhacophorus (Philautus) leucorhinus* 91  
*Rhacophorus (Philautus) longicrus* 91  
*Rhacophorus (Philautus) malcolmsmithi* 91  
*Rhacophorus (Philautus) mindorensis* 94  
*Rhacophorus (Philautus) nasutus* 92  
*Rhacophorus (Philautus) noblei* 89  
*Rhacophorus (Philautus) oxyrhynchus* 91  
*Rhacophorus (Philautus) pallidipes* 92  
*Rhacophorus (Philautus) parvulus* 93  
*Rhacophorus (Philautus) petersi* 93  
*Rhacophorus (Philautus) pulcherrimus* 89  
*Rhacophorus (Philautus) rugatus* 91  
*Rhacophorus (Philautus) schmackeri* 94  
*Rhacophorus (Philautus) semiruber* 91  
*Rhacophorus (Philautus) signatus* 94  
*Rhacophorus (Philautus) similis* 94  
*Rhacophorus (Philautus) temporalis* 95  
*Rhacophorus (Philautus) travancoricus* 95  
*Rhacophorus (Philautus) variabilis* 96  
*Rhacophorus (Philautus) vermiculatus* 96  
*Rhacophorus (Philautus) vittiger* 96  
*Rhacophorus (Philautus) williamsi* 94  
*Rhacophorus (Philautus) woodi* 86  
*Rhacophorus (Polypedates)* 17  
*Rhacophorus (Polypedates) fergusonii* 85  
*Rhacophorus (Polypedates) macrotis* 42, 47, 97–98  
*Rhacophorus (Polypedates) microtympaanum* 85  
*Rhacophorus (Rhacophorus)* 16  
*Rhacophorus (Rhacophorus) cavirostris* 85  
*Rhacophorus (Rhacophorus) fergusonianus* 85  
*Rhacophorus (Rhacophorus) hosii* 84  
*Rhacophorus (Rhacophorus) jerdonii* 90  
*Rhacophorus (Rhacophorus) macropus* 85  
*Rhacophorus (Rhacophorus) microdiscus* 92  
*Rhacophorus (Rhacophorus) microtympaanum* 85  
*Rhacophorus (Rhacophorus) pleurotaenia* 85  
*Rhacophorus (Rhacophorus) reticulatus* 85  
*Rhacophorus (Rhacophorus) stellatus* 86  
*Rhacophorus (Rhacophorus) stictomerus* 94  
*Rhacophorus (Rhacophorus) surdus* 94  
*Rhacophorus (Rhacophorus) variabilis* 14, 20, 45, 99–100  
*Rhacophorus (Rhacophorus) zimmeri* 85  
*Staurois* 4, 18, 32–33, 40  
*Staurois latopalpmatus* 32, 98  
*Staurois natator* 18, 32–33, 98–99  
*Staurois sarasinorum* 85  
*Theloderma* 5, 8, 17–18, 32, 37, 45  
*Theloderma asper* 32, 45  
*Theloderma asperrimum* 32  
*Theloderma asperum* 31–32, 45, 97  
*Theloderma horridum* 37, 98  
*Theloderma schmarda* 17–18, 99  
*Theloderma schmardanum* 17  
*Trypheropsis* 18  
*Xenophrys* 24