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CHECKLIST OF THE FROGS OF BORNEO

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ABSTRACT.- A checklist of the frogs of Borneo has been compiled based primarily on specimens examined, but also including literature records where those cover divisions of Borneo from which we have not seen material. The known anuran fauna of Borneo now includes 138 species, an increase of almost 50% over the number listed in the monograph on Bornean Amphibia (Inger, 1966). Besides new species, the past three decades have produced significant changes in taxonomic relations and expansion of known distributions of many species.

INTRODUCTION

Since publication of the monograph on amphibians of Borneo (Inger, 1966), there has been a remarkable growth in the number of persons working on that fauna and a corresponding increase in the number of species known to occur in Borneo. Researchers from Malaysia, Brunei, England, Germany, Indonesia, Japan, and the United States have contributed to an increase in our knowledge: many new species have been described, definitions of many species have altered, and the taxonomic status and nomenclature of other species have changed. The number of Bornean species of anurans was 92 in 1966; the number now stands at 138. Although the list of species will certainly continue to grow, it seems appropriate to prepare a checklist at this time to make the current state of information available for the general community and for biogeographic and ecological projects proposed or underway.

In this checklist, references under each species have the following sequence: (1) the original source with type locality; (2) first use of the present combination of generic and specific names (if different from the original); (3) the name used in the 1966 monograph; (4) synonyms. Distributions are given by political divisions of Borneo. Where no reference is cited for a distribution, it is understood that we have examined specimens from the states listed. Otherwise a reference is given.

The majority of recent nomenclatural changes proposed have appeared in two publications (Dubois, 1987, 1992). For reasons given in a separate paper (Inger, 1996), we believe some

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of those changes are ill-founded and are not adopted in this checklist. Specifically, we believe Dubois's placement of the species formerly known as *Rana cancrivora*, *R. limnocharis*, *R. finchi*, *R. palavanensis* in the genus *Limnonectes* Fitzinger is based on a non-phylogenetic, incomplete, phenetic analysis. Pending a thorough cladistic analysis involving these and other species, we list these species under the genus *Rana* rather than contribute to a mistaken classification. Also, in the paper referred to above, we discuss reasons for rejecting Dubois's redistribution of species in the genera *Occidozyga* and *Phrynoglossus*.

FAMILY BOMBINATORIDAE

***Barbourula kalimantanensis* Iskandar**

Barbourula kalimantanensis Iskandar, 1978: 565—Nanga Sayan, 33 km south of Nanga Pinoh, West Kalimantan.

Distribution: West Kalimantan (Iskandar, 1978).

FAMILY MEGOPHRYIDAE

***Leptobrachella baluensis* Smith**

Leptobrachella baluensis Smith, 1931: 12—Kamboranga, Mount Kinabalu, Sabah.
Nesobia mjobergi (part) Inger, 1966: 49.

Distribution: Sabah, Sarawak (Dring, 1984a)

***Leptobrachella brevicrus* Dring**

Leptobrachella brevicrus Dring, 1984a: 98—Mt. Mulu, Fourth Division, Sarawak.

Distribution: Sarawak (Dring, 1984a).

***Leptobrachella mjobergi* Smith**

Leptobrachella mjobergi Smith, 1925b: 28—Mt. Gadin, Sarawak.
Nesobia mjobergi (part) Inger, 1966: 49.

Distribution: Kalimantan, Sarawak.

***Leptobrachella parva* Dring**

Leptobrachella parva Dring, 1984a: 89—Mt. Mulu, Fourth Division, Sarawak.
Nesobia mjobergi (part) Inger, 1966: 49.

Distribution: Sabah, Sarawak.

***Leptobrachella palmata* Inger & Stuebing**

Leptobrachella palmata Inger & Stuebing, 1991: 101—Sungai Liwagu, Lipaso Forest Reserve, Labuk and Sugut District, Sabah.

Distribution: Sabah.

***Leptobrachella serasanae* Dring**

Leptobrachella serasanae Dring, 1984a: 101—Sirhassen Island (Serasan Island), South Natuna Islands, Indonesia.

Distribution: Sarawak. Also known from Natuna Islands (Dring, 1984a).

***Leptobrachium abbotti* (Cochran)**

Megophrys abbotti Cochran, 1926: 446—Balikpapan, Borneo.
Leptobrachium abbotti Inger, et al., 1995: 125.
Leptobrachium hasselti (part) Inger, 1966: 29.

Distribution: Brunei, Kalimantan, Sabah, Sarawak.

***Leptobrachium hendricksoni* Taylor**

Leptobrachium hendricksoni Taylor, 1962: 308—Bhetong, Yala, Thailand.
Leptobrachium hasselti (part) Inger, 1966: 29.

Distribution: Sarawak. Thailand, peninsular Malaysia (Taylor, 1962).

***Leptobrachium montanum* Fischer**

Leptobrachium montanum Fischer, 1885: 44.

Distribution: Kalimantan, Sabah, Sarawak.

***Leptobrachium nigrops* Berry & Hendrickson**

Leptobrachium nigrops Berry & Hendrickson, 1963: 644—Nee Soon, Singapore; Inger, 1966: 37.

Distribution: Sarawak. Singapore, peninsular Malaysia (Berry and Hendrickson, 1963).

***Leptolalax dringi* Dubois**

Leptolalax dringi Dubois, 1987: 13—Mount Mulu, Sarawak.

Distribution: Sabah, Sarawak.

***Leptolalax gracilis* (Günther)**

Leptobrachium gracilis Günther, 1872: 598—Matang, Sarawak; Inger, 1966: 24.
Leptolalax gracile Dubois, 1980: 476.

Distribution: Kalimantan, Sarawak.

***Leptolalax pictus* Malkmus**

Leptolalax pictus Malkmus, 1992: 3—Sungai Langanan, Sabah.

Distribution: Sabah.

***Megophrys baluensis* (Boulenger)**

Leptobrachium baluensis Boulenger, 1899: 453—Mt. Kinabalu, Sabah.
Megophrys baluensis Smith, 1931: 30; Inger, 1966: 46 (part).

Distribution: Sabah.

***Megophrys dringi* Inger, Stuebing & Tan**

Megophrys dringi Inger et al., 1995: 116—Mt. Mulu, Sarawak.

Distribution: Sarawak.

***Megophrys edwardinae* Inger**

Megophrys edwardinae Inger, 1989: 230—Nanga Tekalit, Kapit District, Sarawak.
Megophrys baluensis (part) Inger, 1966: 46.

Distribution: Sabah, Sarawak.

***Megophrys nasuta* (Schlegel)**

Ceratophryne nasuta Schlegel, 1858: 57—Sumatra.

Megophrys nasuta Smith, 1930: 132.

Megophrys monticola nasuta Inger, 1966: 41.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia, Sumatra, Singapore.

FAMILY BUFONIDAE

***Ansonia albomaculata* Inger**

Ansonia albomaculata Inger, 1960: 489—headwaters of Baleh River, Sarawak; Inger, 1966:98.

Distribution: Kalimantan, Sarawak.

***Ansonia fuliginea* (Mocquard)**

Bufo fuligineus Mocquard, 1890: 158—North Borneo.

Ansonia fuliginea Inger, 1966: 102.

Nectophryne altitudinis Smith, 1931: 14.

Distribution: Sabah.

***Ansonia guibei* Inger**

Ansonia guibei Inger, 1966: 104—Mesilau Cave, Mt. Kinabalu, Sabah.

Distribution: Sabah.

***Ansonia hanitschi* Inger**

Ansonia hanitschi Inger, 1960: 484—Mt. Kina Balu, Sabah; Inger, 1966: 106.

Distribution: Sabah, Sarawak (Dring *in* Anderson et al., 1982)

***Ansonia latidisca* Inger**

Ansonia latidisca Inger, 1966: 108—Mt. Damus, Sambas, Kalimantan.

Distribution: Kalimantan.

***Ansonia leptopus* (Günther)**

Bufo leptopus Günther, 1872: 598—Matang, Sarawak.

Ansonia leptopus (part) Inger, 1960: 479; Inger, 1966: 110.

Ansonia longidigita gryllivoca Inger, 1960: 483—Sungai Tawan, Kalibakan, Sabah.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia (Grandison, 1972).

***Ansonia longidigita* Inger**

Ansonia longodigita longidigita Inger, 1960: 480—Mt. Kinabalu, Sabah; Inger, 1966: 111.

Distribution: Sabah, Sarawak.

***Ansonia minuta* Inger**

Ansonia minuta Inger, 1960: 493—Matang, Sarawak; Inger, 1966: 101.

Distribution: Kalimantan, Sarawak.

***Ansonia platysoma* Inger**

Ansonia platysoma Inger, 1960: 487—Sungai Liudan, Bundu Tuhan, Sabah; Inger, 1966: 102.

Distribution: Sabah, Sarawak (Dring *in* Anderson et al., 1982).

***Ansonia spinulifer* (Mocquard)**

Bufo spinulifer Mocquard, 1890: 160—Mt. Kinabalu.

Ansonia spinulifer Inger & Dring, 1988: 469.

Ansonia leptopus (part) Inger, 1966: 110.

Distribution: Sabah, Sarawak.

***Ansonia torrentis* Dring**

Ansonia torrentis Dring, 1984b: 103—Mt. Mulu, Sarawak.

Distribution: Sarawak (Dring, 1984b).

***Bufo asper* Gravenhorst**

Bufo asper Gravenhorst, 1829: 58—Java; Inger, 1966: 66.

Nectes obscurus Barbour, 1904: 51—Sarawak.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Burma, Thailand, peninsular Malaysia, Sumatra, Java.

***Bufo divergens* Peters**

Bufo divergens Peters, 1871: 579—Sarawak.

Bufo biporcatus divergens Inger, 1966: 60.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Sumatra, Natuna Islands.

***Bufo juxtasper* Inger**

Bufo juxtasper Inger, 1964: 154—Kalabakan, Tawau District, Sabah; Inger, 1966: 69.

Distribution: Kalimantan, Sabah, Sarawak. Sumatra.

***Bufo melanostictus* Schneider**

Bufo melanostictus Schneider, 1799: 216—East Indies; Inger, 1966: 70.

Distribution: Kalimantan, Sarawak. India to China to Lesser Sundas.

***Bufo quadriporcatus* Boulenger**

Bufo quadriporcatus Boulenger, 1887a: 347—Malacca, Malaya; Inger, 1966: 63.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia, Sumatra.

***Leptophryne borbonica* (Tschudi)**

Hylaplesia borbonica Tschudi, 1839: 70—Java.

Leptophryne borbonica Dubois, 1982: 173.

Cacophryne borbonica Inger, 1966: 75.

Bufo jerboa Boulenger, 1890b: 328—southeastern Borneo.

Nectophryne sumatrana van Kampen, 1910: 19—Bandar Bahru, Sumatra.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia, Thailand, Sumatra, Java.

***Pedostibes everetti* (Boulenger)**

Nectophryne everetti Boulenger, 1896b: 450—Mt. Kinabalu, Sabah.

Pedostibes everetti Barbour, 1938: 51; Inger, 1966: 90.

Distribution: Sabah.

***Pedostibes hosii* (Boulenger)**

Nectophryne hosii Boulenger, 1892: 508—Mt. Dulit, Sarawak.

Pedostibes hosii Barbour, 1938: 51; Inger, 1966: 93.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia (Berry, 1975), Sumatra, Thailand.

***Pedostibes maculatus* (Mocquard)**

Nectophryne maculata Mocquard, 1890: 162—Mt. Kinabalu, Sabah.

Pedostibes maculatus Inger, 1966: 92.

Distribution: Sabah.

***Pedostibes rugosus* Inger**

Pedostibes rugosus Inger, 1958: 476—Sungai Menuang, Sarawak; Inger, 1966: 96.

Distribution: Kalimantan, Sabah, Sarawak.

***Pelophryne api* Dring**

Pelophryne api Dring, 1984b: 107—Mt. Api, Gunong Mulu National Park, Sarawak.

Distribution: Sarawak.

***Pelophryne brevipes* (Peters)**

Hylaplesia brevipes Peters, 1867: 34—Zamboanga, Mindanao, Philippine Islands.

Pelophryne brevipes Barbour, 1938: 194; Inger, 1966: 85(part).

Distribution: Kalimantan, Sarawak. Peninsular Malaysia (Berry, 1975), Aur Island, Natuna Islands, Sumatra.

***Pelophryne exigua* (Boettger)**

Nectophryne exigua Boettger, 1901: 394—Baram River, Sarawak.

Pelophryne brevipes (part) Inger, 1966: 85.

Distribution: Sarawak.

***Pelophryne guentheri* (Boulenger)**

Nectophryne guentheri Boulenger, 1882: 280—Matang, Sarawak.

Pelophryne guentheri Barbour, 1938: 193; Inger, 1966: 84.

Distribution: Sarawak.

***Pelophryne macrotis* (Boulenger)**

Nectophryne macrotis Boulenger, 1895: 171—Akar River, Sarawak.

Pelophryne macrotis Barbour, 1938: 191; Inger, 1966: 88.

Distribution: Sarawak.

***Pelophryne misera* (Mocquard)**

Nectophryne misera Mocquard, 1890: 161—North Borneo.

Pelophryne misera Barbour, 1938: 193; Inger, 1966: 88.

Distribution: Sabah.

***Pseudobufo subasper* Tschudi**

Pseudobufo subasper Tschudi, 1839: 87—Borneo; Inger, 1966: 113.

Pseudobufo weneri van Kampen, 1905: 711—Indragiri, Sumatra.

Distribution: Kalimantan, Sumatra, Peninsular Malaysia.

FAMILY MICROHYLIDAE

***Calluella brooksii* (Boulenger)**

Colpoglossus brooksii Boulenger, 1904:43—Bidi, Sarawak.
Calluella brooksi Inger, 1966: 119.

Distribution: Kalimantan, Sarawak.

***Calluella flava* Kiew**

Calluella flava Kiew, 1984b: 163—Mt. Mulu National Park, Sarawak.

Distribution: Sarawak.

***Calluella smithi* (Barbour & Noble)**

Calliglutus smithi Barbour & Noble, 1916: 21—Limbang River District, Sarawak.
Calluella smithi Inger, 1966: 120.
Colpoglossus smithi Parker, 1934: 32.

Distribution: Sabah, Sarawak.

***Chaperina fusca* Mocquard**

Chaperina fusca Mocquard, 1892: 35—Sintang, West Kalimantan; Inger, 1966: 140.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia, Philippine Islands.

***Gastrophrynoidea borneensis* (Boulenger)**

Engystoma borneense Boulenger, 1897: 108—Baram District, Sarawak.
Gastrophrynoidea borneensis Noble, 1926: 22; Inger, 1966: 144.

Distribution: Sarawak.

***Kalophrynus baluensis* Kiew**

Kalophrynus baluensis Kiew, 1984c: 152—Kemburongoh, Mt. Kinabalu, Sabah.

Distribution: Sabah.

***Kalophrynus heterochirus* Boulenger**

Kalophrynus heterochirus Boulenger, 1900a: 186—Limbang, Sarawak.
Kalophrynus heterochirus Inger, 1966: 129.
Kalophrynus bunguranum (part) Parker, 1934: 100.

Distribution: Kalimantan, Sabah, Sarawak.

***Kalophrynus intermedius* Inger**

Kalophrynus intermedius Inger, 1966: 131—Nanga Tekalit, Kapit District, Sarawak.

Distribution: Sarawak.

***Kalophrynus nubicola* Dring**

Kalophrynus nubicola Dring, 1984b: 109—Camp Four, Mt. Mulu National Park, Sarawak.

Distribution: Sarawak.

***Kalophrynus pleurostigma* Tschudi**

Kalophrynus pleurostigma Tschudi, 1839: 86—Sumatra.
Kalophrynus pleurostigma pleurostigma Inger, 1966: 132.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia, Sumatra, Philippine Islands (Parker, 1934).

***Kalophrynus punctatus* Peters**

Calophrynus punctatus Peters, 1871: 579—Sarawak.

Kalophrynus punctatus Inger, 1966: 136.

Distribution: Kalimantan, Sarawak.

***Kalophrynus subterrestris* Inger**

Kalophrynus subterrestris Inger, 1966: 137—Labang, Bintulu District, Sarawak.

Distribution: Sabah, Sarawak.

***Kaloula baleata* (Müller)**

Bombinator baleatus Müller, 1836: 96—Krawang, Java.

Kaloula baleata Günther, 1858: 122.

Kaloula baleata baleata Inger, 1966: 123.

Distribution: Kalimantan, Sabah, Sarawak. Malay Peninsula to Lesser Sundas, Sulawesi, Palawan.

***Kaloula pulchra* Gray**

Kaloula pulchra Gray, 1831: 38—China.

Kaloula pulchra pulchra Inger, 1966: 121.

Distribution: Kalimantan, Sabah. China to Singapore, Sumatra, Sulawesi.

***Metaphrynella sundana* (Peters)**

Calophyla sundana Peters, 1867: 35—Pontianak, Kalimantan.

Metaphrynella sundana Parker, 1934: 108; Inger, 1966: 143.

Distribution: Kalimantan (Perker, 1934), Sabah, Sarawak.

***Microhyla berdmorei* (Blyth)**

Engystoma berdmorei Blyth, 1856: 720—Pegu, Burma.

Microhyla berdmorei Boulenger, 1882: 166; Inger, 1966: 149.

Distribution: Kalimantan, Sabah, Sarawak. Burma (Parker, 1934), Thailand, Sumatra.

***Microhyla borneensis* Parker**

Microhyla borneensis Parker, 1926: 473—Bidi, Sarawak; Inger, 1966: 151.

Distribution: Sabah, Sarawak.

***Microhyla maculifera* Inger**

Microhyla maculifera Inger, 1989: 233—Danum Valley Field Centre, Sabah.

Distribution: Sabah.

***Microhyla perparva* Inger & Frogner**

Microhyla perparva Inger & Frogner, 1979: 318—Labang Forest Reserve, Bintulu District, Sarawak.

Distribution: Sabah, Sarawak.

***Microhyla petrigena* Inger & Frogner**

Microhyla petrigena Inger & Frogner, 1979: 315—Nanga Tekalit, Kapit District, Sarawak.

Distribution: Sabah, Sarawak.

FAMILY RANIDAE

***Hoplobatrachus rugulosus* (Wiegmann)**

Rana rugulosa Wiegmann, 1835: 258—Cape Syng-More, Macao, China.

Hoplobatrachus rugulosus Dubois, 1992: 315.

Distribution: Sabah. A recent introduction. China, Burma, Thailand, Vietnam.

***Huia cavitympanum* (Boulenger)**

Rana cavitympanum Boulenger, 1893: 525—Kinabalu, Sabah.

Huia cavitympanum Yang, 1991: 29.

Amolops cavitympanum Inger, 1966: 260.

Distribution: Kalimantan, Sabah, Sarawak.

***Ingerana baluensis* (Boulenger)**

Cornufer baluensis Boulenger, 1896b: 449—Mount Kinabalu, Sabah.

Ingerana baluensis Dubois, 1987: 65.

Micrixalus baluensis Inger, 1966: 255.

Rana sariba Shelford, 1905: 209—Mount Saribau, Sarawak.

Ingerana sariba Dubois, 1987: 65.

Distribution: Sabah, Sarawak.

***Limnonectes ibanorum* (Inger)**

Rana ibanorum Inger, 1964: 151—juncture of Baleh and Putai Rivers, Sarawak; Inger, 1966: 191.

Limnonectes (Limnonectes) ibanorum Dubois, 1987: 63.

Distribution: Kalimantan, Sarawak.

***Limnonectes ingeri* (Kiew)**

Rana ingeri Kiew, 1978: 223—Sepupok River, Niah, Fourth Division, Sarawak.

Limnonectes (Limnonectes) ingeri Dubois, 1987: 63.

Rana macrodon (part) Inger, 1966: 208.

Distribution: Brunei, Kalimantan, Sabah, Sarawak.

***Limnonectes kenepaiensis* (Inger)**

Rana paramacrodon kenepaiensis Inger, 1966: 232—Merkata, Kenepai Mountains, western Kalimantan.

Limnonectes (Limnonectes) kenepaiensis Dubois, 1987: 63.

Distribution: Kalimantan, Sarawak.

***Limnonectes kuhlii* (Tschudi)**

Rana kuhlii Tschudi, 1839: 40—Java; Inger, 1966: 196.

Limnonectes kuhlii Fitzinger, 1843: 31.

Rana conspicillata Günther, 1872: 597—Matang, Sarawak.

Rana paradoxa Mocquard, 1890: 148—Kina Balu, Sabah.

Limnonectes (Limnonectes) kuhlii Dubois, 1987: 63.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Southern China, southeastern Asia, Greater Sundas.

Comment: Iskandar (in prep.) believes that Bornean *kuhlii* are not conspecific with those from Java and that there may be more than one species on Borneo. *Rana conspicillata* Günther is an available name for the Bornean population.

***Limnonectes laticeps* (Boulenger)**

Rana laticeps Boulenger, 1882: 20—Khasi Hills, Assam; Inger, 1966: 202.

Limnonectes (Limnonectes) laticeps Dubois, 1987: 63.

Distribution: Sarawak. Assam, Thailand, Malaya.

***Limnonectes leporina* (Andersson)**

Rana macrodon var. *leporina* Andersson, 1923: 123—Tumbang Maruwei, Kalimantan.

Rana blythi (part) Inger, 1966: 162.

Distribution: Brunei, Kalimantan, Sabah, Sarawak.

Comment: We have examined the type of *leporina* Andersson; it is identical to all Bornean frogs previously named *blythi* Boulenger, but is not conspecific with *blythi* from the Malay Peninsula.

***Limnonectes malesiana* (Kiew)**

Rana malesiana Kiew, 1984a: 154—Bukit Timah, Singapore.

Distribution: Sarawak. Malaya, Singapore, Greater Sunda Islands.

***Limnonectes paramacrodon* (Inger)**

Rana paramacrodon Inger, 1966: 228—Sungai Tawan, Kalabakan, Tawau District, Sabah.

Limnonectes (Limnonectes) paramacrodon Dubois, 1987: 63.

Distribution: Brunei, Sabah, Sarawak. Malaya (Kiew, 1984b), Singapore.

***Meristogenys amoropalamus* (Matsui)**

Amolops amoropalamus Matsui, 1986: 628—Tapai Sia, Sarawak.

Meristogenys amoropalamus Yang, 1991: 33.

Distribution: Kalimantan (Matsui, 1986), Sabah, Sarawak (Matsui, 1986).

***Meristogenys jerboa* (Günther)**

Hylarana jerboa Günther, 1872: 599—Matang, Sarawak.

Meristogenys jerboa Yang, 1991: 34.

Amolops jerboa (part) Inger, 1966: 263.

Distribution: Sarawak.

***Meristogenys kinabaluensis* (Inger)**

Amolops kinabaluensis Inger, 1966: 266—Mt. Kinabalu, Sabah.

Meristogenys kinabaluensis Yang, 1991: 35.

Distribution: Sabah, Sarawak.

***Meristogenys macrophthalmus* (Matsui)**

Amolops macrophthalmus Matsui, 1986: 623—Sg. Pesu, Bintulu District, Sarawak.

Meristogenys macrophthalmus Yang, 1991: 36.

Distribution: Sarawak.

***Meristogenys orphnocnemis* (Matsui)**

Amolops orphnocnemis Matsui, 1986: 625—Bundu Tuhan, Mt. Kinabalu, Sabah.

Meristogenys orphnocnemis Yang, 1991: 36.

Amolops jerboa (part) Inger, 1966: 263.

Distribution: Kalimantan (Matsui, 1986), Sabah.

***Meristogenys phaeomerus* (Inger & Gritis)**

Amolops phaeomerus Inger & Gritis, 1983: 9—Nanga Tekalit, Kapit District, Sarawak.
Meristogenys phaeomerus Yang, 1991: 37.
Amolops jerboa (part) Inger, 1966: 263.

Distribution: Sarawak.

***Meristogenys poecilus* (Inger & Gritis)**

Amolops poecilus Inger & Gritis, 1983: 11—Nanga Tekalit, Kapit District, Sarawak.
Meristogenys poecilus Yang, 1991: 39.
Amolops jerboa (part) Inger, 1966: 263.

Distribution: Sarawak.

***Meristogenys whiteheadi* (Boulenger)**

Rana whiteheadi Boulenger, 1887b: 96—Mount Kinabalu, Sabah.
Meristogenys whiteheadi Yang, 1991: 40.
Amolops jerboa (part) Inger, 1966: 263.
Amolops whiteheadi Inger & Gritis, 1983: 8.

Distribution: Sabah.

***Occidozyga baluensis* (Boulenger)**

Oreobatrachus baluensis Boulenger, 1896a: 401—Mount Kinabalu, Sabah.
Ooeidozyga baluensis Inger, 1966: 238.
Phrynoglossus baluensis Smith, 1931: 15.

Distribution: Brunei, Kalimantan, Sabah, Sarawak.

***Occidozyga laevis* (Günther)**

Oxyglossus laevis Günther, 1858: 7—Philippine Islands.
Ooeidozyga laevis laevis Inger, 1966: 240.
Phrynoglossus laevis Smith, 1931: 16.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Malay Peninsula, Sumatra, Philippine Islands.

***Rana asperate* Inger, Boeadi & Taufik**

Rana asperate Inger et al., 1996: 366—Kalang River, Central Kalimantan.

Distribution: Kalimantan.

***Rana baramica* Boettger**

Rana baramica Boettger, 1901: 391—Baram River, Sarawak; Inger, 1966: 160.
Rana (Hylarana) baramica Boulenger, 1920: 126.
Rana (Hylarana) baramica van Kampen, 1923: 195.
Rana (Pulchrana) baramica Dubois, 1992: 326.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Peninsular Malaysia (Berry, 1975), Singapore, Bangka.

Comment: Two call types and associated differences in perch sites (Stuebing, in litt.) suggest that two sibling species exist.

***Rana cancrivora* (Gravenhorst)**

- Rana cancrivora* Gravenhorst, 1829: 41—Java.
Rana cancrivora cancrivora Inger, 1966: 175.
Rana schlüteri Werner, 1893: 84—Borneo
Rana tigrina var. *angustopalmata* van Kampen, 1907: 388—Tempe, Celebes.
Rana tigrina schlueteri Barbour, 1912: 64.
Rana moodiei Taylor, 1920: 234—Manila, Luzon, Philippine Islands.
Limnonectes (Hoplobatrachus) cancrivorus Dubois, 1987: 60.
Limnonectes (Fejervarya) cancrivorus Dubois, 1992: 315.

Distribution: Kalimantan, Sabah, Sarawak. Malay Peninsula, Java, Sumatra, Lesser Sundas, Philippine Islands.

Comment: Reasons for not following Dubois's generic assignment of this species and *R. limnocharis* are given in the Introduction and elsewhere (Inger, 1996).

***Rana chalconota* (Schlegel)**

- Hyla chalconota* (part) Schlegel, 1837: 23—Java.
Rana chalconota (part) Boulenger, 1882: 66; Inger, 1966: 177.
Polypedates raniceps Peters, 1871: 580—Sarawak.
Rana labialis Boulenger, 1887a: 345—Malacca, Malaya.
Rana (Hylorana) chalconota Boulenger, 1920: 127.
Rana (Hylarana) chalconota van Kampen, 1923: 217.
Rana chalconota raniceps Inger, 1966: 177.
Rana (Chalcorana) chalconota Dubois, 1992: 326.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Thailand, Malaya, Sumatra, Java.

***Rana erythraea* (Schlegel)**

- Hyla erythraea* Schlegel, 1837: 27—Java.
Rana erythraea Boulenger, 1882: 65; Inger, 1966: 183.
Hylarana erythraea Tschudi, 1839: 78.
Rana (Hylorana) erythraea Boulenger, 1920: 125.
Rana (Hylarana) erythraea van Kampen, 1923: 222.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Eastern India, southeastern Asia, Greater Sundas, Philippine Islands.

***Rana finchi* Inger**

- Rana microdisca finchi* Inger, 1966: 222—Kalabakan, Tawau District, Sabah.
Rana finchi Inger & Voris, 1988: 1060.
Limnonectes (Limnonectes) finchi Dubois, 1987: 63.

Distribution: Sabah.

Comment: Reasons for not accepting Dubois's generic assignment for this species and for *R. palavanensis* Boulenger are given in Inger (1996).

***Rana glandulosa* Boulenger**

- Rana glandulosa* Boulenger, 1882: 73—Sarawak; Inger, 1966: 184.
Rana (Hylorana) glandulosa Boulenger, 1920: 126.
Rana (Hylarana) glandulosa van Kampen, 1923: 194.
Rana (Pulchrana) glandulosa Dubois, 1992: 326.

Distribution: Brunei, Sabah, Sarawak. Thailand, Malaya, Sumatra.

***Rana hosii* Boulenger**

Rana hosii Boulenger, 1891b: 290—Mount Dulit, Sarawak; Inger, 1966: 187.

Rana (Hylorana) hosii Boulenger, 1920: 127.

Rana (Hylarana) hosii van Kampen, 1923: 215.

Rana (Chalcorana) hosii Dubois, 1992: 328.

Distribution: Kalimantan, Sabah, Sarawak. Thailand (Taylor, 1962), peninsular Malaysia, Sumatra, Simalur, Java.

***Rana limnocharis* Boie in Wiegmann**

Rana limnocharis Boie in Wiegmann, 1835: 225—Java.

Rana limnocharis limnocharis Inger, 1966: 205.

Limnonectes (Fejervarya) limnocharis Dubois: 1987: 61.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Southern and eastern Asia, Greater Sundas, Lesser Sundas, Philippine Islands.

Comment: See under *R. cancrivora*.

***Rana luctuosa* (Peters)**

Limnodytes luctuosus Peters, 1871:579—Sarawak.

Rana luctuosa Boulenger, 1882: 68; Inger, 1966: 206.

Rana (Limnodytes) luctuosa Mocquard, 1890: 122.

Rana decorata Mocquard, 1890: 145—Kinabalu, Sabah.

Rana (Hylorana) luctuosa Boulenger, 1920: 126.

Rana (Hylarana) luctuosa van Kampen, 1923: 196.

Rana (Pulchrana) luctuosa Dubois, 1992: 326.

Distribution: Sabah, Sarawak. Peninsular Malaysia.

***Rana nicobariensis* (Stoliczka)**

Hylorana nicobariensis Stoliczka, 1870: 150—Nicobar Islands.

Rana nicobariensis Boulenger, 1885: 389; Inger, 1966: 223.

Rana erythraea var. *elongata* Werner, 1892: 253—Nias.

Rana lemniscata Boettger, 1893: 337—Vulcan Tjisurupan, Java.

Rana (Hylorana) nicobariensis Boulenger, 1920: 125.

Rana sanchezi Taylor, 1920: 256—northern Palawan.

Rana suluensis Taylor, 1920: 264—Tawi-Tawi, Sulu Islands.

Rana (Hylarana) nicobariensis van Kampen, 1923: 224.

Rana nicobariensis nicobariensis Inger, 1954a: 331.

Rana (Sylvirana) nicobariensis Dubois, 1992: 326.

Distribution: Kalimantan, Sabah, Sarawak. Thailand, peninsular Malaysia, Greater Sundas, Philippine Islands, Nicobar Islands.

***Rana palavanensis* Boulenger**

Rana palavanensis Boulenger, 1894: 85—Palawan.

Rana microdisca palavanensis Inger, 1954a: 299; Inger, 1966: 222.

Limnonectes (Limnonectes) palavanensis Dubois, 1987: 63.

Distribution: Kalimantan, Sabah, Sarawak. Palawan.

Comment: see under *R. finchi*.

***Rana picturata* Boulenger**

Rana (Hylorana) picturata Boulenger, 1920: 179—Bidi Caves, Sarawak, Barabas [Barabai], Kalimantan, and Kinabalu, Sabah.

Rana signata signata (part) Inger, 1966: 233.

Rana (Hylarana) signata (part) van Kampen, 1923: 226.

Distribution: Brunei, Kalimantan, Sabah, Sarawak.

***Rana rhacoda* Inger, Boedi & Taufik**

Rana rhacoda Inger et al., 1996: 364—Kallang River, Central Kalimantan.

Distribution: Kalimantan

***Rana signata* (Günther)**

Polypedates signatus Günther, 1872: 600—Matang, Sarawak.

Rana signata Boulenger, 1882: 71.

Rana signata signata Inger, 1966: 233.

Rana obsoleta Mocquard, 1890: 147—Kinabalu, Sabah.

Rana (Hylorana) signata Boulenger, 1920: 126.

Rana (Hylarana) signata (part) van Kampen, 1923: 226.

Rana (Pulchrana) signata Dubois, 1992: 326.

Distribution: Sabah, Sarawak. Peninsular Malaysia, southern Thailand.

***Staurois latopalmaris* (Boulenger)**

Ixalus latopalmaris Boulenger, 1887b: 97—Mount Kinabalu, Sabah.

Staurois latopalmaris Inger, 1966: 252.

Simomantis latopalmaris Boulenger, 1918: 373.

Distribution: Kalimantan, Sabah, Sarawak.

***Staurois natator* (Günther)**

Ixalus natator Günther, 1858: 75—Philippines.

Staurois natator Cope, 1865: 117; Inger, 1966: 245.

Ixalus guttatus Günther, 1858: 76—Borneo.

Staurois guttatus Boulenger, 1918: 374.

Rana guttatus Smith, 1931: 30.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Philippines.

***Staurois tuberilinguis* Boulenger**

Staurois tuberilinguis Boulenger, 1918: 374—Mount Kinabalu, Sabah; Inger, 1966: 250.

Staurois parvus Inger & Haile, 1960: 273—Meligong, Akah River, Sarawak.

Distribution: Sabah, Sarawak.

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***Nyctixalus pictus* (Peters)**

Ixalus pictus Peters, 1871: 580—Sarawak.

Nyctixalus pictus Dubois, 1981: 257.

Philautus pictus pictus Inger, 1966: 349.

Rhacophorus anodon van Kampen, 1907: 400¹/_m Kaju Taman, Sumatra.

Nyctixalus anodon Dubois, 1981: 257.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Malaysia, Sumatra.

***Philautus acutus* Dring**

Philautus acutus Dring, 1987: 24—Camp Three, Gunung Mulu, Fourth Division, Sarawak.

Distribution: Sarawak.

***Philautus amoenus* Smith**

Philautus amoenus Smith, 1931: 18—Kamboranga, Mount Kinabalu, Sabah; Inger, 1966: 340.

Distribution: Sabah.

***Philautus aurantium* Inger**

Philautus aurantium Inger, 1989: 239—Mendolong, Sipitang District, Sabah.

Distribution: Sabah.

***Philautus bunitus* Inger, Stuebing & Tan**

Philautus bunitus Inger et al., 1995: 127—Mount Lumaku, Sipitang District, Sabah.

Distribution: Sabah.

***Philautus disgregus* Inger**

Philautus disgregus Inger, 1989: 235—Danum Valley Field Centre, Lahad Datu District, Sabah.

Distribution: Sabah.

***Philautus hosii* (Boulenger)**

Rhacophorus hosii Boulenger, 1895: 169—Patah River, Sarawak.

Philautus hosei Liem, 1970: 68.

Rhacophorus hosei Inger, 1966: 304.

Distribution: Sabah, Sarawak.

***Philautus ingeri* Dring**

Philautus ingeri Dring, 1987: 21—Mount Mulu, Fourth Division, Sarawak.

Distribution: Sabah, Sarawak.

***Philautus kerangae* Dring**

Philautus kerangae Dring, 1987: 28—Mount Mulu, Fourth Division, Sarawak.

Distribution: Sarawak.

***Philautus longicrus* (Boulenger)**

Ixalus longicrus Boulenger, 1894: 88—Palawan, Philippines.

Philautus longicrus Taylor, 1920: 303.

Philautus aurifasciatus (part) Inger, 1966: 341.

Distribution: Sabah, Sarawak. Palawan, Philippine Islands.

***Philautus mjobergi* Smith**

Philautus mjobergi Smith, 1925a: 11—Mt. Murud, Sarawak.

Philautus aurifasciatus (part) Inger, 1966: 341.

Distribution: Kalimantan, Sabah, Sarawak.

***Philautus petersi* (Boulenger)**

Ixalus petersi Boulenger, 1900a: 185—Mounts Dulit and Penrissen, Sarawak, and Kinabalu, Sabah.

Philautus petersi van Kampen, 1923: 275.

Philautus aurifasciatus (part) Inger, 1966: 341.

Ixalus larutensis Boulenger, 1900b: 187—Larut Hills, Malaysia.

Ixalus castanomerus Boulenger, 1905: 39—Bukit Kuku, Selangor, Malaysia.

Distribution: Sabah, Sarawak. Peninsular Malaysia.

***Philautus tectus* Dring**

Philautus tectus Dring, 1987: 30—Mount Mulu, Fourth Division, Sarawak.

Philautus aurifasciatus (part) Inger, 1966: 341.

Distribution: Brunei, Sabah, Sarawak.

***Philautus umbra* Dring**

Philautus umbra Dring, 1987: 43—Mount Api, Fourth Division, Sarawak.

Distribution: Sarawak.

***Polypedates colletti* (Boulenger)**

Rhacophorus colletti Boulenger, 1890a: 36—Langkat, Sumatra; Inger, 1966: 290.

Distribution: Sabah, Sarawak. Peninsular Thailand (Smith, 1930), Sumatra (Boulenger, 1890a), Natuna Islands.

***Polypedates leucomystax* (Gravenhorst)**

Hyla leucomystax Gravenhorst, 1829: 36—Java.

Polypedates leucomystax Fitzinger, 1843: 31.

Rhacophorus leucomystax leucomystax Inger, 1966: 307.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Southeast Asia and adjacent islands.

Comment: Matsui et al. (1986) have presented reasons for elevating the subspecies of this widespread treefrog to full species status. Two call types have been recorded in Sabah (Stuebing, personal communication), suggesting the occurrence of two sympatric species in Borneo.

***Polypedates macrotis* (Boulenger)**

Rhacophorus macrotis Boulenger, 1891a: 282—Baram district, Sarawak; Inger, 1966: 313.

Polypedates macrotis Liem, 1970: 98.

Polypedates linki Taylor, 1922b: 276—Jolo, Philippine Islands.

Distribution: Kalimantan, Sabah, Sarawak. Sumatra, Natuna Islands, Philippine Islands.

***Polypedates otilophus* (Boulenger)**

Rhacophorus otilophus Boulenger, 1893: 527—Bongon, Sabah; Inger, 1966: 326.

Polypedates otilophus Liem, 1970: 98.

Distribution: Kalimantan, Sabah, Sarawak.

***Rhacophorus angulirostris* Ahl**

Rhacophorus acutirostris Mocquard, 1890: 151—Mount Kinabalu, Sabah; Inger, 1966: 283.

Rhacophorus angulirostris Ahl, 1927: 45.

Rhacophorus schlegelii angulirostris Wolf, 1936: 189.

Distribution: Sabah. Sumatra.

***Rhacophorus appendiculatus* (Günther)**

Polypedates appendiculatus Günther, 1858: 79—Philippine Islands.
Rhacophorus appendiculatus Boulenger, 1882: 86; Inger, 1966: 285.
Rhacophorus phyllopygus Werner, 1900: 494—Indragiri, Sumatra.
Rhacophorus chaseni Smith, 1924: 226—Teku River, Malay Peninsula.
Rhacophorus appendiculatus chaseni Smith, 1930: 113.
Rhacophorus appendiculatus appendiculatus Wolf, 1936: 161.

Distribution: Brunei, Kalimantan, Sabah, Sarawak. Peninsular Malaysia, Sumatra, Philippine Islands.

***Rhacophorus baluensis* Inger**

Rhacophorus baluensis Inger, 1954b: 250—Bundu Tuhan, Mount Kinabalu, Sabah; Inger, 1966: 289.

Distribution: Sabah, Sarawak (Dring in Anderson et al., 1982).

***Rhacophorus bimaculatus* (Peters)**

Leptomantis bimaculatus Peters, 1867: 32—upper Agusan Valley, Mindanao, Philippine Islands.
Rhacophorus bimaculatus Liem, 1970: 100.
Philautus bimaculatus Inger, 1966: 344.
Philautus zamboangensis Taylor, 1922a: 173—Pasonanca, Mindanao, Philippine Islands.

Distribution: Kalimantan, Sabah, Sarawak. Peninsular Thailand, Singapore, Philippine Islands.

***Rhacophorus dulitensis* Boulenger**

Rhacophorus dulitensis Boulenger, 1892: 507—Mount Dulit, Sarawak; Inger, 1966: 293.
Rhacophorus chiropterus Werner, 1896: 22—North Borneo.

Distribution: Sabah, Sarawak. Sumatra.

***Rhacophorus everetti* Boulenger**

Rhacophorus everetti Boulenger, 1894: 87—Palawan, Philippine Islands; Inger, 1966: 297.
Rhacophorus macroscelis Boulenger, 1896a: 403—Mount Kinabalu, Sabah.
Philautus spiculatus Smith, 1931: 20—Kenokok, Mount Kinabalu, Sabah.
Rhacophorus buergeri everetti Wolf, 1936: 170.
Rhacophorus buergeri hosii (part) Wolf, 1936: 170.
Rhacophorus spiculatus Inger, 1954b: 251.
Rhacophorus everetti macroscelis Inger, 1966: 298.

Distribution: Sabah, Sarawak (Inger and Stuebing, 1992). Philippine Islands.

***Rhacophorus fasciatus* Boulenger**

Rhacophorus fasciatus Boulenger, 1895: 169—Akah River, Sarawak; Inger, 1966: 300.
Rhacophorus shelfordi Boulenger, 1900a: 185—Mount Penrissen, Sarawak.

Distribution: Kalimantan, Sarawak.

***Rhacophorus gauni* (Inger)**

Philautus gauni Inger, 1966: 346—Mengiong River, Kapit District, Sarawak.
Rhacophorus gauni Liem, 1970: 100.

Distribution: Sabah, Sarawak.

***Rhacophorus harrissoni* Inger & Haile**

Rhacophorus harrissoni Inger & Haile, 1960: 270—Ulu Patah, Baram basin, Sarawak; Inger, 1966: 301.

Distribution: Kalimantan, Sabah, Sarawak.

***Rhacophorus kajau* Dring**

Rhacophorus kajau Dring, 1984b: 112—Camp One, Mount Mulu, Fourth Division, Sarawak.

Distribution: Sabah, Sarawak (Dring, 1984b).

***Rhacophorus nigropalmatus* Boulenger**

Rhacophorus nigropalmatus Boulenger, 1895: 170—Akah River, Sarawak; Inger, 1966: 320.

Rhacophorus nigropalmatus nigropalmatus Wolf, 1936: 200.

Distribution: Kalimantan, Sabah, Sarawak. Thailand (Taylor, 1962), peninsular Malaysia, Sumatra.

***Rhacophorus pardalis* Günther**

Rhacophorus pardalis Günther, 1858: 83—Borneo and Philippine Islands.

Rhacophorus pardalis pardalis Inger, 1966: 330.

Rhacophorus pulchellus Werner, 1900: 495—Djapura, Sumatra.

Rhacophorus pardalis pulchellus, Wolf, 1936: 207.

Distribution: Kalimantan, Sabah, Sarawak. Sumatra, Philippine Islands.

***Rhacophorus reinwardtii* (Schlegel)**

Hyla reinwardtii Schlegel, 1837: 105—Java.

Rhacophorus reinwardtii Tschudi, 1839: 73.

Rhacophorus reinwardtii reinwardtii Wolf, 1936: 212.

Distribution: Sabah, Sarawak (Stuebing, pers. comm.). Peninsular Malaysia (Berry, 1975), Java (Schelgel, 1837), Sumatra, Vietnam.

***Rhacophorus rufipes* Inger**

Rhacophorus rufipes Inger, 1966: 333—Labang, Fourth Division, Sarawak.

Distribution: Sabah, Sarawak.

***Theلودerma horridum* (Boulenger)**

Ixalus horridus Boulenger, 1903: 139—Bukit Besar, Pattani, Thailand.

Theلودerma horridum Taylor, 1962: 517.

Philautus horridus Smith, 1926: 80.

Distribution: Sabah. Peninsular Malaysia, Thailand, Siberut (Smith, 1926).

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