

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Nomenclature Committee
Fauna

Lima (Peru), 10 July 2006

AMPHIBIAN REFERENCE UPDATE

1. This document has been submitted by the zoologist of the Nomenclature Committee.
2. An extract from the current online reference "D.R. FROST, Amphibian Species of the World, Version 3.0 as of 2004" (see following pages) has been produced for the CITES listed species. Comparing it to the *Taxonomic Checklist of CITES listed Amphibians* provided by the former zoological Co-Chair of the Nomenclature Committee which was based on the FROST online-version 2.21 of 2002 the following nomenclature changes have been identified:

Present Reference as adopted under Resolution Conf. 12.11 (Rev. CoP13)	Frost (2004): Amphibian Species of the World
<i>Epipedobates femoralis</i>	<i>Allobates femoralis</i>
<i>Epipedobates zaparo</i>	<i>Allobates zaparo</i>
not included	<i>Dendrobates amazonicus</i>
not included	<i>Dendrobates duellmani</i>
not included	<i>Dendrobates flavovittatus</i>
<i>Dendrobates labialis</i>	<i>Epipedobates labialis</i>
not included	<i>Dendrobates rubrocephalus</i>
included in <i>Dendrobates imitator</i>	<i>Dendrobates sirensis</i>
included in <i>Dendrobates ventrimaculatus</i>	<i>Dendrobates variabilis</i>
included in <i>Epipedobates tricolor</i>	<i>Epipedobates anthonyi</i>
not included	<i>Epipedobates pongoensis</i>
<i>Minyobates</i> spp.	all species transferred to genus <i>Dendrobates</i>

3. The participants in the meeting are invited to comment on the reference, which will be proposed for adoption at the 14th meeting of the Conference of the Parties.

Taxonomic Checklist of CITES listed Amphibians

- Draft -

Information extracted from

FROST, D. R. (2004)
"Amphibian Species of the World, an online Reference"
V. 3.0 (as of April 7 2006)

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Taxonomic Checklist of CITES listed Amphibian Species

<http://research.amnh.org/herpetology/amphibia/index.php>

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Species listed by CITES:

Order	Family	Genus	Species	CITES App.	
Anura	Bufonidae	Altiphrynoides	malcolmi	I	
		Atelopus	zeteki	I	
		Bufo	periglenes	I	
			superciliaris	I	
		Nectophrynoides	asperginis	I	
			cryptus	I	
			minutus	I	
			tornieri	I	
			viviparus	I	
			wendyae	I	
			Nimbaphrynoides	liberiensis	I
			occidentalis	I	
		Spinophrynoides	osgoodi	I	
		Dendrobatidae	Allobates	femoralis	II
				zaparo	II
	Dendrobates		abditus	II	
			altobueyensis	II	
			amazonicus	II	
			arboreus	II	
			auratus	II	
			azureus	II	
			biolat	II	
			bombetes	II	
			captivus	II	
			castaneoticus	II	
			claudiae	II	
			duellmani	II	
	fantasticus	II			
	flavovittatus	II			
fulguritus	II				
galactonotus	II				
granuliferus	II				
histrionicus	II				
imitator	II				
lamasi	II				
lehmanni	II				
leucomelas	II				
minutus	II				
mysteriosus	II				

Order	Family	Genus	Species	CITES App.
			occultator	II
			opisthomelas	II
			pumilio	II
			quinquevittatus	II
			reticulatus	II
Anura	Dendrobatidae	Dendrobates	rubrocephalus	II
			sirensis	II
			speciosus	II
			steyermarki	II
			tinctorius	II
			truncatus	II
			vanzolinii	II
			variabilis	II
			ventrimaculatus	II
			vicentei	II
			viridis	II
			violensis	II
		Epipedobates	andinus	II
			anthonyi	II
			bassleri	II
			bilinguis	II
			bolivianus	II
			boulengeri	II
			braccatus	II
			cainarachi	II
			erythromos	II
			espinosai	II
			flavopictus	II
			hahneli	II
			ingeri	II
			labialis	II
			macero	II
			maculatus	II
			myersi	II
			parvulus	II
			petersi	II
			pictus	II
			planipaleae	II
			pongoensis	II
			pulchripectus	II
			rubriventris	II
			rufulus	II
			silverstonei	II
			simulans	II
			smaragdinus	II
			tricolor	II
		trivittatus	II	
Phyllobates	aurotaenia	II		
	bicolor	II		

Order	Family	Genus	Species	CITES App.
			lugubris	II
			terribilis	II
			vittatus	II
	Mantellidae	Mantella	aurantiaca	II
			baroni	II
			bernhardi	II
			betsileo	II
			cowanii	II
			crocea	II
			expectata	II
			haraldmeieri	II
			laevigata	II
			madagascariensis	II
manery	II			
milotympanum	II			
Anura	Mantellidae	Mantella	nigricans	II
			pulchra	II
			viridis	II
	Microhylidae	Dyscophus	antongilii	I
			Scaphiophryne	gottlebei
	Ranidae	Euphlyctis	hexadactylus	II
		Hoplobatrachus	tigerinus	II
	Rheobatrachidae	Rheobatrachus	silus	II
vitellinus			II	
Urodela	Ambystomidae	Ambystoma	dumerilii	II
			mexicanum	II
	Cryptobranchidae	Andrias	davidianus	I
			japonicus	I

Amphibia, Anura, Bufonidae

Altiphrynoides Dubois, 1987

Altiphrynoides malcolmi (Grandison, 1978)

- *Nectophrynoides malcolmi* Grandison, 1978, Monit. Zool. Ital., N.S., Suppl., 11: 124. Holotype: BMNH 1975.1961, by original designation. Type locality: "6-8 km SE Goba, road to Maslo, Balé Province, Ethiopia, 06° 59' N-40° 01' E, elevation 3200 m".
- *Altiphrynoides malcolmi* — Dubois, 1987 "1986", Alytes, 5: 27.

Distribution: Bale Mountains at altitudes of 3200-4000 m, Bale Province, Ethiopia.

Comment: See Largen, 2001, *Tropical Zool.*, 14: 326, for comments on distribution.

Atelopus Dumeril and Bibron, 1841

Atelopus zeteki Dunn, 1933

- *Atelopus varius zeteki* Dunn, 1933, Occas. Pap. Boston Soc. Nat. Hist., 8: 71. Holotype: MCZ 16018, by original designation. Type locality: "El Valle [del Antón]", Panama.
- *Atelopus zeteki* — Kim, Brown, Mosher, and Fuhrman, 1975, Science, 189: 152. Lynch, 1993, *Alytes*, 11: 77-87.

Distribution: Cerro Campana-Valle de Antón region of western Panama in lowland rainforest.

Comment: In the *Atelopus ignescens* group of Lynch, 1993, *Alytes*, 11: 77-87. Skin alkaloid evidence provided by Kim, Brown, Mosher, and Fuhrman, 1975, *Science*, 189: 151-152, suggested that *Atelopus varius zeteki* Dunn, 1933, is a distinct species. See comments by Savage, 2002, *Amph. Rept. Costa Rica*, : 191, on the distinctiveness of this taxon from *Atelopus varius*.

Bufo Laurenti, 1768

Bufo periglenes Savage, 1967

- *Bufo periglenes* Savage, 1967 "1966", Rev. Biol. Tropical, 14: 153. Holotype: LACM 1893, by original designation. Type locality: "Costa Rica: Provincia de Alajuela: Cantón de San Carlos: Cordillera de Tilarán, 2 miles ENE of Monteverde, Provincia de Puntarenas; 1590 meters". Savage, 1974, *Rev. Biol. Tropical*, 22: 98, commented on the type locality.

Distribution: Restricted to the lower montane zone on both slopes along the continental divide between Puntarenas and Alajuela Provinces, Costa Rica, generally north and east of Monteverde, 1500-620 m elevation.

Comment: In the *Bufo periglenes* group of Martin, 1972, *In Blair (ed.), Evol. Genus Bufo*, : 53. See account by Savage, 2002, *Amph. Rept. Costa Rica*, : 202-203. Extinct according to Pounds, Fogden, Savage, and Gorman, 1997, *Conserv. Biol.*, 11: 1307-1322.

Bufo superciliaris Boulenger, 1888

- *Bufo superciliaris* Boulenger, 1888 "1887", Proc. Zool. Soc. London, 1887: 565. Syntypes: BMNH 1947.2.21.41-49 (formerly 87.12.21.10-18). Type locality: "Rio del Rey, Cameroons", Africa.

- *Bufo laevis* Werner, 1897, Sitzungsber. Akad. Wiss. München, 27: 212. Holotype: ZMH. Type locality: "Kamerun". Synonymy by Andersson, 1905, Ark. Zool., 2: 26.
- *Bufo superciliosus* — Werner, 1897, Sitzungsber. Akad. Wiss. München, 27: 214. Incorrect subsequent spelling.
- *Bufo Chevalieri* Mocquard, 1908, Bull. Mus. Natl. Hist. Nat. Paris, 14: 262. Holotype: MNHN 08.33, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 12. Type locality: "Côte-d'Ivoire". Synonymy; without discussion, by Tandy and Keith, 1972, In Blair (ed.), Evol. Genus Bufo, : 160.

Distribution: Ivory Coast eastward to northern Dem. Rep. Congo, Equatorial Guinea, and Gabon.

Comment: See account in Perret, 1966, Zool. Jahrb., Jena, Abt. Syst., 93: 312-313. In the *Bufo superciliaris* group of Martin, 1972, In Blair (ed.), Evol. Genus Bufo, : 62, and Tandy and Keith, 1972, In Blair (ed.), Evol. Genus Bufo, : 160. Gabon records by Lötters, Gossmann, Obame, and Böhme, 2001, Herpetofauna, Weinstadt, 23: 22, and Frétey and Blanc, 2001, Bull. Soc. Zool. France, 126: 380, reported this species from Gabon.

***Nectophrynooides* Noble, 1926**

***Nectophrynooides asperginis* Poynton, Howell, Clarke and Lovett 1999**

- *Nectophrynooides asperginis* Poynton, Howell, Clarke, and Lovett, 1999 "1998", Afr. J. Herpetol., 47: 61. Holotype: BMNH 1998.136. Type locality: "Kihansi River Gorge upper falls spray wetland, Udzungwa Mountains, Tanzania, ± 8° 35' S 35° 51' E, 940 m elevation".

Distribution: Known only from the type locality in the Udzungwa Mountains, Tanzania.

Comment: -

***Nectophrynooides cryptus* Perret, 1971**

- *Nectophrynooides cryptus* Perret, 1971, Ann. Fac. Sci. Cameroun, 6: 104. Holotype: MCZ 12480, by original designation. Type locality: "Nyingwa, Monts Uluguru, 7 10' S: 37 40' E, Tanzanie, 2,200 m".

Distribution: Uluguru Mountains above 2000 m.

Comment: Discussed by Perret, 1972, Ann. Fac. Sci. Cameroun, 11: 93-119.

***Nectophrynooides minutus* Perret, 1972**

- *Nectophrynooides minutus* Perret, 1972, Ann. Fac. Sci. Cameroun, 11: 106. Holotype: MCZ 12463, by original designation. Type locality: "Bagilo, Monts Uluguru, 2200 m d'altitude, 7-10 S, 37-40 E, Tanzanie".

Distribution: Known only from the type locality (Uluguru Mts., Tanzania).

Comment: -

***Nectophrynoides tornieri* (Roux, 1906)**

- *Nectophryne tornieri* Roux, 1906, Proc. Zool. Soc. London, 1906: 63. Syntypes: BMNH (1 specimen) and NHMB (1 specimen), by original designation. NHMB 2384, considered holotype by XXX. Type locality: "Ukami, [Uluguru Mountains,] German East Africa [= Tanzania]".
- *Nectophrynoides tornieri* — Barbour and Loveridge, 1928, Mem. Mus. Comp. Zool., 50: 188. Perret, 1971, Ann. Fac. Sci. Cameroun, 6: 100.

Distribution: East Usambaras through to the Udzungwas between about 1500 m and 500 m in forest to forest margins, Tanzania.

Comment: -

***Nectophrynoides viviparus* (Tornier, 1905)**

- *Pseudophryne vivipara* Tornier, 1905, Sitzungsber. Preuss. Akad. Wiss. Berlin, 39: 855. Syntypes: ZMB (lost?) and (according to museum records) BM 1935.2.8.4; MHNG 1221.55 designated neotype in error by Perret, 1972, Ann. Fac. Sci. Cameroun, 11: 112, who apparently did not realize that a syntype survived in the BM according to implication of Poynton, 1996, Bull. Zool. Nomencl., 53: 229. Type localities: "Daressalam; . . . Rungwe und im Kingagebirge", Tanzania; invalid neotype not selected from original type locality but "Morogoro, Mt Uluguru, Tanzanie".
- *Nectophryne werthi* Nieden, 1911 "1910", Sitzungsber. Ges. Naturforsch. Freunde Berlin, 1910: 439. Syntypes: ZMB (7 specimens). Type locality: "Dar es Salaam", Tanzania. Synonymy by Perret, 1972, Ann. Fac. Sci. Cameroun, 11: 93-119.
- *Tornieriobates vivipara* — Miranda-Ribeiro, 1926, Arq. Mus. Nac., Rio de Janeiro, 27: 19.
- *Nectophrynoides vivipara* — Noble, 1926, Am. Mus. Novit., 212: 15. Barbour and Loveridge, 1928, Mem. Mus. Comp. Zool., 50: 191.
- *Nectophrynoides viviparus* — Perret, 1971, Ann. Fac. Sci. Cameroun, 6: 99.

Distribution: Mountains of central to southwestern Tanzania.

Comment: -

***Nectophrynoides wendyae* Clarke, 1988**

- *Nectophrynoides wendyae* Clarke, 1988, Tropical Zool., 1: 171. Holotype: BMNH 1986.565, by original designation. Type locality: "Uzungwe Scarp Reserve, 1650 m, Iringa Region, Uzungwe Mountains, Tanzania".
- *Nectophrynoides wendyi* — Graybeal and Cannatella, 1995, Herpetologica, 51: 123. Unjustified emendation.

Distribution: Known only from the type locality (Udzungwa Mts., Tanzania).

Comment: -

***Nimbaphrynoides* Dubois, 1987**

***Nimbaphrynoides liberiensis* (Xavier, 1979)**

- *Nectophrynoides liberiensis* Xavier, 1979 "1978", Bull. Soc. Zool. France, 103: 432. Holotype: MNHNP 1978.3088, by original designation. Type locality: "au plateau de la mine à 1290 m d'altitude, Monts Nimba, Liberia".
- *Nimbaphrynoides liberiensis* — Dubois, 1987 "1986", Alytes, 5: 27.

Distribution: Mt. Nimba region of Liberia.

Comment: -

***Nimbaphrynoides occidentalis* (Angel, 1943)**

- *Nectophrynoides occidentalis* Angel, 1943, Bull. Mus. Natl. Hist. Nat. Paris, Ser. 2, 15: 167. Holotype: MNHNP 44149, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 16. Type locality: "Serengbara (forêt primaire) près du Mont Nimba", Guinea.
- *Nimbaphrynoides occidentalis* — Dubois, 1987 "1986", Alytes, 5: 27.

Distribution: Mt. Nimba region of the Ivory Coast and Guinea.

Comment: -

***Spinophrynoides* Dubois, 1987**

***Spinophrynoides osgoodi* (Loveridge, 1932)**

- *Bufo osgoodi* Loveridge, 1932, Occas. Pap. Boston Soc. Nat. Hist., 8: 47. Holotype: FMNH 12529, by original designation. Type locality: "Ethiopia If it is a mountain form it probably came from the Gedeb Mountains of Bali, just south of the western branch of the Webi Shebili River, in deep forest and . . . from eight to ten thousand feet".
- *Nectophrynoides osgoodi* — Grandison, 1978, Monit. Zool. Ital., N.S., Suppl., 11: 136.
- *Spinophrynoides osgoodi* — Dubois, 1987 "1986", Alytes, 5: 26.

Distribution: Mountains of south-central Ethiopia (Arussi, Balé, and Sidamo provinces).

Comment: See Largen, 2001, Tropical Zool., 14: 326-327, for comments on distribution.

Amphibia, Anura, Dendrobatidae

Allobates Zimmermann and Zimmermann, 1988

Allobates femoralis (Boulenger, 1884)

- *Prostherapis femoralis* Boulenger, 1884 "1883", Proc. Zool. Soc. London, 1883: 635. Syntypes: BM 1947.2.14.21-22; BM 1947.2.14.21 designated lectotype by Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 31. Type locality: "Yurimaguas, Huallaga River, [Loreto,] Northern Peru".
- *Phyllobates femoralis* — Barbour and Noble, 1920, Bull. Mus. Comp. Zool., 63: 401. Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 5.
- *Dendrobates femoralis* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates femoralis* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.
- *Allobates femoralis* — Zimmermann and Zimmermann, 1988, Salamandra, 24: 137. Clough and Summers, 2000, Biol. J. Linn. Soc., 70: 515-540.

Distribution: Lowland forests of Guyana, Surinam, and French Guiana, and of the Amazon drainage of Venezuela, Colombia, Ecuador, Peru, Bolivia, and Brazil; dense forests of the Napo and Pastaza drainages of Ecuador, east of the Andes; southern Cordillera Oriental of Peru.

Comment: See comment under *Phyllobates aurotaenia*. See De la Riva, Köhler, Lötters, and Reichle, 2000, Rev. Esp. Herpetol., 14: 29, for Bolivian record. Clough and Summers, 2000, Biol. J. Linn. Soc., 70: 515-540, suggested that *Allobates* is the sister taxon of the remaining toxic dendrobatids, and likely a species complex. Lescure and Marty, 2000, Collect. Patrimoines Nat., Paris, 45: 94-95, provided a brief account (as *Epipedobates femoralis*) and photo. Schulte, 1999, Pfeilgiftfrösche, : 253-260, provided an account.

Allobates zaparo (Silverstone, 1976)

- *Phyllobates zaparo* Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 33. Holotype: KU 120669, by original designation. Type locality: "2 km west of Canelos, Provincia de Pastaza, Ecuador, 580 m."
- *Dendrobates zaparo* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates zaparo* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.
- *Allobates zaparo* — Vences, Kosuch, Boistel, Haddad, La Marca, and Lötters, 2003, Organisms Divers. Evol., 3: 215.

Distribution: Dense forests of the Napo and Pastaza drainages of Ecuador, east of the Andes; southern Cordillera Oriental of Peru.

Comment: Formerly in the *Epipedobates tricolor* group (formerly *Epipedobates femoralis* group prior to its transfer to *Allobates* by Vences, Kosuch, Boistel, Haddad, La Marca, and Lötters, 2003, Organisms Divers. Evol., 3: 215; see comment under *Epipedobates*). See Schulte, 1987, Sauria, Berlin, 9: 17-18, for Peruvian record. Schulte, 1999, Pfeilgiftfrösche, : 214-216, provided an account.

Dendrobates Wagler, 1830

Incertae sedis

Dendrobates riverimus Schulte, 1999, Pfeilgiftfrösche: 21. *Nomen nudum*. See Lötters and Vences, 2001 "2000", Salamandra, 36: 247-260.

Dendrobates fantasticus-imitator Schulte, 1999, Pfeilgiftfrösche: 21. *Nomen nudum*. See Lötters and Vences, 2001 "2000", Salamandra, 36: 247-260.

Dendrobates enigmaticus Schulte, 1999, Pfeilgiftfrösche: 146. Unavailable name by reason of being coined provisionally. See Lötters and Vences, 2001 "2000", *Salamandra*, 36: 247-260.

***Dendrobates abditus* Myers and Daly, 1976**

- *Dendrobates abditus* Myers and Daly, 1976, Occas. Pap. Mus. Nat. Hist. Univ. Kansas, 59: 1. Holotype: AMNH 89603, by original designation. Type locality: "lower montane rain forest at 1700 meters elevation, south-west of the Río Azuela bridge on the Quito--Lago Agrio road, eastern base of Volcán Reventador, Napo Province, Ecuador (latitude 0° 05´ S, longitude 77° 37´ W)".
- *Minyobates abditus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates abditus* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11. by implication.

Distribution: Known only from the type locality (Napo, Ecuador).

Comment: In the *Dendrobates minutus* group sensu Myers, 1982, *Am. Mus. Novit.*, 2721: 1-23 (= *Minyobates*).

***Dendrobates altobueyensis* Silverstone, 1975**

- *Dendrobates altobueyensis* Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 27. Holotype: LACM 71972, by original designation. Type locality: "summit marker of Alto del Buey, Departamento del Chocó, Colombia, 1070 m."
- *Minyobates altobueyensis* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates altobueyensis* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11. by implication.

Distribution: 985-1070 m elevation on the Alto del Buey, a mountain in the Serranía de Baudó, Chocó, Colombia.

Comment: In the *Dendrobates minutus* group sensu Myers, 1982, *Am. Mus. Novit.*, 2721: 1-23 (= *Minyobates*).

***Dendrobates amazonicus* Schulte, 1999**

- *Dendrobates amazonicus* Schulte, 1999, Pfeilgiftfrösche: 32. Holotype: MHNSM (formerly Rainer Schulte Collection BD 3P), by original designation. Type locality: "Bosque UNAP, Iquitos (Peru), ca. 130 m NN".

Distribution: Vicinity of the type locality (near Iquitos) in northeastern Amazonian Peru.

Comment: Most closely related to *Dendrobates variabilis* according to the original publication. Lötters and Vences, 2001 "2000", *Salamandra*, 36: 247-260, questioned the status of this taxon with respect to *Dendrobates igneus* and *Dendrobates ventrimaculatus*.

***Dendrobates arboreus* Myers, Daly, and Martinez, 1984**

- *Dendrobates arboreus* Myers, Daly, and Martinez, 1984, Am. Mus. Novit., 2783: 5. Holotype: AMNH 116724, by original designation. Type locality: "in cloud forest at 1120 m. elevation on the continental divide above the upper Quebrada de Arena, at longitude 82° 12´ 31" W, on the border between the provinces of Chiriquí and Bocas del Toro, Panama".

Distribution: Region of the type locality (Panama).

Comment: In the *Dendrobates histrionicus* group, according to the original publication.

***Dendrobates auratus* (Girard, 1855)**

- *Phyllobates auratus* Girard, 1855 "1854", Proc. Acad. Nat. Sci. Philadelphia, 7: 226. Holotype: not stated; probably USNM 10307 according to Dunn, 1941, Copeia, 1941D: 88; stated to be USNM 10307 by Cochran, 1961, Bull. U.S. Natl. Mus., 220: 69. Type locality: "Island of Taboga, in the Bay of Panama".
- *Dendrobates latimaculatus* Günther, 1859 "1858", Cat. Batr. Sal. Coll. Brit. Mus.: 125. Holotype: BM 52.12.11.8, according to Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 40. Type locality: "Isthmus of Darien [Panama]". Tentative synonymy by Taylor, 1952, Univ. Kansas Sci. Bull., 35: 635. Synonymy by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11, 40.
- *Hylaplesia aurata* — Cope, 1863, Proc. Acad. Nat. Sci. Philadelphia, 15: 49.
- *Dendrobates tinctorius* var. *auratus* — Steindachner, 1864, Verh. Zool. Bot. Ges. Wien, 14: 261.
- *Dendrobates trivittatus* var. *aurata* — Peters, 1873, Monatsber. Preuss. Akad. Wiss. Berlin, 1873: 618.
- *Dendrobates amoenus* Werner, 1901, Verh. Zool. Bot. Ges. Wien, 51: 627. Holotype: NHMW 16514 (formerly 1904.111.95) according to Dunn, 1941, Copeia, 1941: 88, and Häupl and Tiedemann, 1978, Kat. Wiss. Samml. Naturhist. Mus. Wien, 2: 16 (formerly in Zoologisches Museum Königsberg, Germany). Type locality: "Costa Rica". Synonymy by Dunn, 1941, Copeia, 1941: 88; Savage, 1968, Copeia, 1968: 759-760.
- *Dendrobates auratus* — Dunn, 1931, Occas. Pap. Boston Soc. Nat. Hist., 5: 393. Cochran, 1961, Living Amph. World, : 107.
- *Hylaplesia tinctoria latimaculata* — Dunn, 1941, Copeia, 1941: 88. Attributed incorrectly to Günther, 1859 "1858", Cat. Batr. Sal. Coll. Brit. Mus., : 125.
- *Dendrobates tinctorius auratus* — Laurent, 1942, Bull. Mus. R. Hist. Nat. Belg., 18: 12.

Distribution: Humid lowlands from southern Nicaragua to the Golfo de Urabá in Colombia on the Caribbean and on the Pacific versant from southwestern Costa Rica through Panama to the lower Atrato River drainage of western Colombia, 0-800 m elevation; introduced in Oahu, Hawaii, USA.

Comment: In the *Dendrobates tinctorius* group. See account by Savage, 1968, Copeia, 1968: 759-760, and Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 40. See account by Savage, 2002, Amph. Rept. Costa Rica, : 383-384.

***Dendrobates azureus* Hoogmoed, 1969**

- *Dendrobates azureus* Hoogmoed, 1969, Zool. Meded., Leiden, 44: 134. Holotype: RMNH 13837A, by original designation. Type locality: "Sipaliwini, forest island on western slope Vier Gebroeders Mountain, 2° N 55° 58' W, Surinam".

Distribution: Known only from the vicinity of the type locality (Surinam).

Comment: In the *Dendrobates tinctorius* group. Possibly derived from *Dendrobates tinctorius*, according to Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 43.

***Dendrobates biolat* Morales, 1992**

- *Dendrobates biolat* Morales, 1992, Caribb. J. Sci., 28: 195. Holotype: MHNSM 7143, by original designation. Type locality: "Pakitza, 11° 56' S, 71° 18' W, 340 m de elevación, Reserva de la Biosfera del Manu, Provincia de Tahuamanu, Madre de Dios, Perú".

Distribution: Region of the type locality, Madre de Dios, Peru.

Comment: In the *Dendrobates quinquevittatus* group, according to the original publication. De la Riva, Köhler, Lötters, and Reichle, 2000, Rev. Esp. Herpetol., 14: 57, and Köhler, 2000, Bonn. Zool. Monogr., 48: 69, consider this species possibly to occur in Bolivia. Schulte, 1999, Pfeilgiftfrösche, : 121-126, provided an account

***Dendrobates bombetes* Myers and Daly, 1980**

- *Dendrobates bombetes* Myers and Daly, 1980, Am. Mus. Novit., 2692: 2. Holotype: AMNH 102601, by original designation. Type locality: "mountains above south side of Lago de Calima, 1580-1600 meters elevation, about 2 km airline southwest of Puente Tierra (village), Department of Valle del Cauca, Colombia. The locality is roughly 50 km north of Cali, on the mountain above kilometer post 23 on the present Loboguerrero---Bugá road (about 3° 52' N, 76° 25' W)".
- *Minyobates bombetes* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates bombetes* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11. by implication.

Distribution: Western slope of the Western Andes (Valle del Cauca) and western slope of the Central Andes (Quindío), Colombia, 1580-2100 m elevation.

Comment: In the *Dendrobates minutus* group sensu Myers, 1982, Am. Mus. Novit., 2721: 1-23 (= *Minyobates*).

***Dendrobates captivus* Myers, 1982**

- *Dendrobates captivus* Myers, 1982, Am. Mus. Novit., 2721: 14. Holotype: AMNH 42963, by original designation. Type locality: "mouth of the Río Santiago, 580 feet (177 m.) elevation, Department of Amazonas, Peru. The Río Santiago flows into the Río Marañón at about 4° 26' S, 77° 38' W".

Distribution: Known only from the type locality (Amazonas, Peru).

Comment: In the *Dendrobates captivus* group; see comment under *Dendrobates mysteriosus*. Myers, 1982, Am. Mus. Novit., 2721: 22, suggested that *Dendrobates mysteriosus* and *Dendrobates captivus* are sister-species. Schulte, 1999, Pfeilgiftfrösche, : 143-146, provided an account.

***Dendrobates castaneoticus* Caldwell and Myers, 1990**

- *Dendrobates castaneoticus* Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 1. Holotype: MZUSP 64775, by original designation. Type locality: "primary lowland forest near Cachoeira Juruá, Rio Zingu, State of Pará, Brazil....approximately 03° 22' S, 51° 51' W ... within a loop of the Rio Xingu, about 220 km S of its junction with the Rio Amazonas".

Distribution: Known only from the type locality and from Taperinha, near 300 km to the northwest of the type locality (Pará, Brazil).

Comment: Posited to be the sister-taxon of *Dendrobates quinquevittatus* in the original publication.

***Dendrobates claudiae* Junger, Lötters, and Jörgens 2000**

- *Dendrobates claudiae* Junger, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 12. Holotype: ZFMK 73561, by original designation. Type locality: "Panamá: Provincia Bocas del Toro: Festland westlich der Island Loma partida (82° 11' W/09° 09' N".

Distribution: Known only from the region of the type locality in the province of Bocas del Toro, Panama.

Comment: In the *Dendrobates minutus* group according to the original publication.

***Dendrobates duellmani* Schulte, 1999**

- *Dendrobates duellmani* Schulte, 1999, Pfeilgiftfrösche: 69. Holotype: KU 221832, by original designation. Type locality: "San Jacinto, 2 km, nahe der ekuadorianischen Grenze, Loreto, Peru".

Distribution: Northeastern Amazonian Peru.

Comment: -

***Dendrobates fantasticus* Boulenger, 1884**

- *Dendrobates fantasticus* Boulenger, 1884 "1883", Proc. Zool. Soc. London, 1883: 636. Syntypes: BM 1947.2.15.1-4; BM 1947.2.15.4 designated lectotype by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 35. Type locality: "Yurimaguas, Huallaga River, [Loreto,] Northern Peru".
- *Dendrobates phantasticus* — Werner, 1901, Verh. Zool. Bot. Ges. Wien, 51: 631. Unjustified emendation.

Distribution: Known only from the type locality (Loreto, Peru).

Comment: Forms a monophyletic group with *Dendrobates quinquevittatus*, *Dendrobates reticulatus*, and *Dendrobates vanzolinii* according to Myers, 1982, Am. Mus. Novit., 2721: 17, who also removed *Dendrobates fantasticus* from the synonymy of *Dendrobates quinquevittatus*. In the *Dendrobates minutus* group of Silverstone (much of which is sometimes in *Minyobates*). In the more restrictive *Dendrobates quinquevittatus* group of Myers, 1982, Am. Mus. Novit., 2721: 2, and Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 1-21. Schulte, 1999, Pfeilgiftfrösche, : 56-69, provided an account.

***Dendrobates flavovittatus* Schulte, 1999**

- *Dendrobates flavovittatus* Schulte, 1999, Pfeilgiftfrösche: 80. Holotype: RAINER SCHULTE COLLECTION BD 10H, by original designation. Type locality: "INIBICO-Labor, Boca des Río Tahuayo, Nordufer, 120 m NN", Peru.

Distribution: Vicinity of the type locality in Northeastern Amazonian Peru.

Comment: Related to *Dendrobates quinquevittatus* according to the original publication.

***Dendrobates fulguritus* Silverstone, 1975**

- *Dendrobates fulguritus* Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 28. Holotype: LACM 42319, by original designation. Type locality: "Playa de Oro, Departamento del Chocó, Colombia, 160 m."

- *Minyobates fulguritus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates fulguritus* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11.

Distribution: East-central Panama to northwestern Colombia (Chocó, Risaralda), 160-800 m elevation.

Comment: In the *Dendrobates minutus* group sensu Myers, 1982, Am. Mus. Novit., 2721: 1-23 (= *Minyobates*).

***Dendrobates galactonotus* Steindachner, 1864**

- *Dendrobates galactonotus* Steindachner, 1864, Verh. Zool. Bot. Ges. Wien, 14: 260. Holotype: NHMW 19189, according to Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 44. Type locality: "Rio do Muría bei Sitio do S'Pedro Gurção, nördlich von Vigia zur F. reguezia [= Freguenzia]", Pará, Brazil. Name attributed by Steindachner to Fitzinger, but clearly Steindachner is responsible for the description.
- *Dendrobates paraensis* Boulenger, 1913, Proc. Zool. Soc. London, 1913: 1028-29. Syntypes: BM (8 specimens), by original designation. Type locality: "Para", Brazil. Bokermann, 1966, Lista Anot. Local. Tipo Anf. Brasil., : 34, suggested the type locality as "provavelmente Belém". Synonymy by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11; Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 27.

Distribution: Lowland forests of southern tributaries of the Amazon, from the Rio Tapajós east to the mouth of the Amazon, Brazil.

Comment: In the *Dendrobates tinctorius* group. See account by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 44-45.

***Dendrobates granulifer* Taylor, 1958**

- *Dendrobates granuliferus* Taylor, 1958, Univ. Kansas Sci. Bull., 39: 10. Holotype: KU 43874, by original designation. Type locality: "on low mountains, north of the Rio Diquis, about 3 miles north of Palmar [Norte], [Cantón de Osa,] Puntarenas Province, Costa Rica". Savage, 1974, Rev. Biol. Tropical, 22: 101, commented on the type locality.
- *Dendrobates granulifer* — Duellman, 1993, Univ. Kansas Mus. Nat. Hist. Spec. Publ., 21: 60. Unjustified emendation.

Distribution: Lowland forests of the Golfo Dulce region of the Pacific coast of Costa Rica.

Comments: In the *Dendrobates histrionicus* group of Myers, Daly, and Martinez, 1984, Am. Mus. Novit., 2783: 19. See accounts by Savage, 1968, Copeia, 1968: 760, and Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 36-37. See account by Savage, 2002, Amph. Rept. Costa Rica, : 384-386 (who discussed natural and introduced populations within Costa Rica).

***Dendrobates histrionicus* Berthold, 1845**

- *Hylaplesia de Cocteau* Duméril and Bibron, 1841, Erp. Gen., 8: 653. Manuscript name coined as a synonym of *Dendrobates tinctorius*.
- *Dendrobates histrionicus* Berthold, 1845, Nachr. Ges. Wiss. Göttingen, 1845: 43. Syntypes: ZFMK 28119-21, 28123, AMNH 140863 (formerly ZFMK 28122); ZFMK 28123 designated lectotype by Myers and Böhme, 1996, Am. Mus. Novit., 3185: 8. Type locality: "Neu-Granada Provinz Popayan"; clarified by Myers and Böhme, 1996, Am. Mus. Novit., 3185: 17, to "Pacific versant northwestern Colombia, probably upper Rio San Juan drainage in the present-day Department of Risaralda" western Colombia.
- *Dendrobates tinctorius* var. *cocteani* Steindachner, 1864, Verh. Zool. Bot. Ges. Wien, 14: 261. Incorrect subsequent spelling of *cocteau*.

- *Dendrobates tinctorius cocteau* — Boulenger, 1913, Proc. Zool. Soc. London, 1913: 1027. Unjustified emendation. Status distinct from *Dendrobates tinctorius tinctorius* rejected by Laurent, 1942, Bull. Mus. R. Hist. Nat. Belg., 18: 1-20.
- *Dendrobates tinctorius var. coctaei* — Boulenger, 1913, Proc. Zool. Soc. London, 1913: 1027. Unjustified emendation of *cocteau*.
- *Dendrobates tinctorius wittei* Laurent, 1942, Bull. Mus. R. Hist. Nat. Belg., 18: 12. Holotype: MRHN I.G. 1942, Reg. 62b; subsequently reported as IRSNB 1.038 by Lang, 1990, Doc. Trav., Inst. R. Sci. Nat. Belg., 59: 7. Type locality: "'Los Mangos' (Colombie)". Synonymy by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.
- *Dendrobates tinctorius histrionicus* — Laurent, 1942, Bull. Mus. R. Hist. Nat. Belg., 18: 12.
- *Dendrobates histrionica* — Dunn, 1944, Caldasia, 2: 520.
- *Dendrobates histrionicus sylvaticus* Funkhouser, 1956, Zoologica, New York, 41: 73. Holotype: CAS-SU 10568, by original designation. Type locality: "Hacienda Espinosa, elevation about 1,000 ft., 9 km. west of Santo Domingo de los Colorados, Province of Pichincha, north-western Ecuador".
- *Dendrobates histrionicus confluens* Funkhouser, 1956, Zoologica, New York, 41: 75. Holotype: CAS-SU 13151, by original designation. Type locality: "La Ciudad (de Madrigar), lying in the pass through the western Cordillera of the Río Patia, Department of Nariño, southwestern Colombia (approximately Long. 77° 30' W. X Lat. 1° 46' N.), at an elevation of ± 600 mtr."
- *Dendrobates tinctorius confluens* — Cochran and Goin, 1970, Bull. U.S. Natl. Mus., 288: 32.

Distribution: Chocóan region of western Colombia and northwestern Ecuador, below 1000 m elevation.

Comment: In the *Dendrobates histrionicus* group.

***Dendrobates imitator* Schulte, 1986**

- *Dendrobates imitator* Schulte, 1986, Sauria, Berlin, 8: 11. Holotype: MHNJP 10501, by original designation. Type locality: "km 33, Carretera Tarapoto-Yurimaguas, Departamento San Martín, Peru. 550 m leg."
- *Dendrobates imitator yurimaguensis-imitator* Schulte, 1999, Pfeilgiftfrösche: 94. Nomen nudum. See Lötters and Vences, 2001 "2000", Salamandra, 36: 247-260.
- *Dendrobates imitator intermedius* Schulte, 1999, Pfeilgiftfrösche: 93. Holotype: Rainer Schulte Collection BD 27, by original designation. Type locality: "Huallaga Canyon, Region San Martín, Peru, 200 m NN".
- *Dendrobates imitator yurimaguensis* Schulte, 1999, Pfeilgiftfrösche: 104. Holotype: Rainer Schulte Collection BD 40, by original designation. Type locality: "Tieflandurwald des Río Shanusi-Paranapura Refugiums, Alto Amazonas (Peru). Ca. 180-300 m NN". Distinctiveness from *Dendrobates imitator imitator* rejected by Lötters and Vences, 2001 "2000", Salamandra, 36: 247-260, and Lötters, Reichle, and Jungfer, 2003, J. Nat. Hist., 37: 1899-1911.

Distribution: Eastern foothills of Andes (Huánuco, Peru).

Comment: In the *Dendrobates quinquevittatus* group. Schulte, 1999, Pfeilgiftfrösche, : 88-110, provided an account.

***Dendrobates lamasi* Morales, 1992**

- *Dendrobates lamasi* Morales, 1992, Caribb. J. Sci., 28: 191. Holotype: MHNSM 1461, by original designation. Type locality: "Bosque Castilla, NW de Iscozacín, 10° 10' S, 75° 15' W, 345 m de elevación, Provincia de Huancabamba, Pasco, Perú".

Distribution: Wet forest in the provinces of Pasco and Huánuco, Peru.

Comment: In the *Dendrobates quinquevittatus* group according to the original publication. Schulte, 1999, Pfeilgiftfrösche, : 115-121, provided an account

***Dendrobates lehmanni* Myers and Daly, 1976**

- *Dendrobates lehmanni* Myers and Daly, 1976, Bull. Am. Mus. Nat. Hist., 157: 240. Holotype: AMNH 88153, by original designation. Type locality: "in montane forest approximately 13 km west of Dagua (town), 850-1200 meters elevation on south-facing versant of upper Río Anchicayá drainage, Department of Valle, Colombia".

Distribution: Western slope of the Western Andes in Valle del Cauca, Colombia, 850-1200 m elevation.

Comment: In the *Dendrobates histrionicus* group of Myers, Daly, and Martinez, 1984, Am. Mus. Novit., 2783: 19. Lötters, 1992, Salamandra, 28: 138-144, doubted the distinction of this species from *Dendrobates histrionicus*.

***Dendrobates leucomelas* Steindachner, 1864**

- *Dendrobates leucomelas* Steindachner, 1864, Verh. Zool. Bot. Ges. Wien, 14: 260. Holotype: NHMW 19188, according to Häupl and Tiedemann, 1978, Kat. Wiss. Samml. Naturhist. Mus. Wien, 2: 16, and Häupl, Tiedemann, and Grillitsch, 1994, Kat. Wiss. Samml. Naturhist. Mus. Wien, 9: 20. Type locality: "Columbien" (= Colombia).

Distribution: Guianan Orinoco drainage of Venezuela north to the Río Orinoco, east into Guyana to the Essequibo River, south into extreme northern Brazil, and west into eastern Amazonian Colombia.

Comment: In the *Dendrobates histrionicus* group of Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21; excluded from this group by Myers and Daly, 1979, Am. Mus. Novit., 2674: 18 on the basis of call data. See accounts by Rivero, 1961, Bull. Mus. Comp. Zool., 126: 168-169, Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 26; and Hoogmoed and Gorzula, 1979, Zool. Meded., Leiden, 54: 188-189. See distributional comments by Gorzula and Señaris, 1999 "1998", Scient. Guaianae, 8: 24-25. Barrio-Amorós, 1999 "1998", Acta Biol. Venezuelica, 18: 35-41, discussed the Venezuelan distribution.

***Dendrobates minutus* Shreve, 1935**

- *Dendrobates minutus minutus* Shreve, 1935, Occas. Pap. Boston Soc. Nat. Hist., 8: 212-213. Holotype: MCZ 15288, by original designation. Type locality: "Barro Colorado Island, Panama Canal Zone".
- *Dendrobates shrevei* Dunn, 1940, Proc. Acad. Nat. Sci. Philadelphia, 92: 109. Holotype: ANSP 21791, by original designation. Type locality: "Cerro Campaña, Prov. Panama (east of the Canal Zone), 3000 feet elevation". Synonymy by Savage, 1968, Copeia, 1968: 760; Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 30.
- *Minyobates minutus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates minutus* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11.

Distribution: Central Panama to midway down the Pacific coast of Colombia, below 1000 m elevation.

Comments: See accounts by Savage, 1968, Copeia, 1968: 760-761; and Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 30-31, as *Dendrobates minutus*. In the *Dendrobates minutus* group sensu Myers, 1982, Am. Mus. Novit., 2721: 1-23 (= *Minyobates*).

***Dendrobates mysteriosus* Myers, 1982**

- *Dendrobates mysteriosus* Myers, 1982, Am. Mus. Novit., 2721: 18. Holotype: AMNH 55349, by original designation. Type locality: "vicinity of Santa Rosa, 3000 feet (ca. 900 m.) elevation, upper Río Marañón drainage, Department of Cajamarca, Peru. The type locality lies in the hills northwest of the confluence of the Río Chinchipe with the Río Marañón, at about 5° 22' S, 78° 41' W".

Distribution: Known only from two localities in Peru (type locality and the Cordillera del Condor).

Comments: Provisionally assigned to the *Dendrobates captivus* group by Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 11. See Schulte, 1990, Bol. Lima, 12: 57-68, for second locality and discussion of relationships. Schulte, 1999, Pfeilgiftfrösche, : 148-157, provided an account.

***Dendrobates occultator* Myers and Daly, 1976**

- *Dendrobates occultator* Myers and Daly, 1976, Bull. Am. Mus. Nat. Hist., 157: 244. Holotype: AMNH 88143, by original designation. Type locality: "La Brea, 50 meters elevation, on the Río Patia (= upper tributary Río Saija), at an estimated 15 km by river below mouth of Quebrada Guanguí, Department of Cauca, Colombia".

Distribution: Western slope of the Western Andes in Cauca, Colombia, 50-200 m elevation.

Comment: Considered to be a derivative of *Dendrobates histrionicus* in the original publication; in the *Dendrobates histrionicus* group of Myers, Daly, and Martinez, 1984, Am. Mus. Novit., 2783: 19.

***Dendrobates opisthomelas* Boulenger, 1899**

- *Dendrobates opisthomelas* Boulenger, 1899, Ann. Mag. Nat. Hist., Ser. 7, 3: 275. Syntypes: BM 1947.2.15.21-34; BM 1947.2.15.29 designated lectotype by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 32. Type locality: "Santa Inés, N. of Medellín, [Departamento Antioquia,] Republic of Colombia, altitude 3800 feet [1160 m]".
- *Minyobates opisthomelas* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates opisthomelas* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11. by implication.

Distribution: Northern Cordillera Occidental and Central of Colombia (Antioquia) to the eastern slope of the Cordillera Central in Caldas, Colombia, 1160-2200 m elevation.

Comment: In the *Dendrobates minutus* group sensu Myers, 1982, Am. Mus. Novit., 2721: 1-23 (= *Minyobates*).

***Dendrobates pumilio* Schmidt, 1857**

- *Dendrobates pumilio* Schmidt, 1857, Sitzungsber. Akad. Wiss. Wien, Phys. Math. Naturwiss. Kl., 24: 12. Holotype: KM 1018/1346; lost according to Savage, 1968, Copeia, 1968: 762; Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 37. Type locality: "Neu-Granada"; restricted to "der Weg zwischen Bocca del toro und dem Vulcan Chiriqui [Panama]...zwischen 5000' und 7000' Höhe" [Polish feet, therefore = 1150-1160 m, according to Savage, 1970, Proc. California Acad. Sci., Ser. 4, 38: 273-288] by Schmidt, 1858, Denkschr. Akad. Wiss. Wien, Math. Naturwiss. Kl., 14: 249.
- *Hylaplesia pumilio* — Günther, 1859 "1858", Cat. Batr. Sal. Coll. Brit. Mus.: 126.
- *Dendrobates typographus* Keferstein, 1867, Nachr. Ges. Wiss. Göttingen, 18: 360. Holotype: ZFMK 28115 ; by implication according to Böhme and Bischoff, 1984, Bonn. Zool. Monogr., 19:

179. Type locality: "Costarica". Synonymy by Dunn, 1941, *Copeia*, 1941: 88; Savage, 1968, *Copeia*, 1968: 761; Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 11.
- *Dendrobates ignitus* Cope, 1874, *Proc. Acad. Nat. Sci. Philadelphia*, 26: 68. Syntypes: ANSP 2724-29, according to Dunn and Stuart, 1951, *Copeia*, 1951: 58, and Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 37. Only one specimen noted in description. Type locality: "region of Nicaragua". Dunn and Stuart, 1951, *Copeia*, 1951: 58, noted that the data "Machuca", Nicaragua. Synonymy with *Dendrobates typographus* by Cope, 1875 "1876", *J. Acad. Nat. Sci. Philadelphia*, Ser. 2, 8: 102; Boulenger, 1882, *Cat. Batr. Sal. Coll. Brit. Mus.*, Ed. 2, : 148; and Werner, 1901, *Verh. Zool. Bot. Ges. Wien*, 51: 631. Synonymy by Savage, 1968, *Copeia*, 1968: 761; Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 11.
 - *Hylaplesia typographa* — Brocchi, 1882, *Miss. Scient. Mex. Amer. Centr., Rech. Zool.*, 3(2, livr. 2): 88. Günther, 1900, *Biol. Centr. Amer., Rept. Batr.*, Part 153, : 207.
 - *Hylaplesia ignita* — Knauer, 1883, *Naturgesch. Lurche*: 112.
 - *Dendrobates typographicus* — Oertter, 1951, *Aquar. Terrar. Z.*, 4: 48-49. Incorrect subsequent spelling.
 - *Dendrobates galindoi* Trapido, 1953, *Fieldiana, Zool.*, 34: 182. Holotype: FMNH 71053, by original designation. Type locality: "altitude 20 feet ... at the edge of the village of Bastimentos, island of Bastimento, Bocas del Toro Province, Republic of Panama". Synonymy by Savage, 1968, *Copeia*, 1968: 761; Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 27.

Distribution: Lowland forests of the Caribbean drainage of Central America, from eastern Nicaragua to western Panama.

Comment: In the *Dendrobates pumilio* group of Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21; in the *Dendrobates histrionicus* group by Myers, Daly, and Martinez, 1984, *Am. Mus. Novit.*, 2783: 19. See accounts by Savage, 1968, *Copeia*, 1968: 761-762, and Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 37-39. See account by Savage, 2002, *Amph. Rept. Costa Rica*, : 386-388.

***Dendrobates quinquevittatus* Steindachner, 1864**

- *Dendrobates quinquevittatus* Jan, 1857, *Cenni Mus. Civ. Milano*: 53. Type(s): MSNM. Type locality: not stated. *Nomen nudum* attributed to Fitzinger and Tschudi, presumably on the basis of label names.
- *Dendrobates tinctorius* var. *quinquevittatus* Steindachner, 1864, *Verh. Zool. Bot. Ges. Wien*, 14: 260. Holotype: NHMW 16517, according to Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 1-55. Type locality: "Salto do Girao" (= Salto do Jirau), Rondônia, Brazil. Recognizability of this taxon questioned by Gorham, 1974, *Checklist World Amph.*, : 114.
- *Dendrobates tinctorius igneus* Melin, 1941, *Göteborgs K. Vetensk. Vitterh. Samh. Handl.*, Ser. B, 1: 66. Syntypes: NHMG (2 specimens). Type locality: "Rio Itaya (near Iquitos), Perú". Synonymy by Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 11.
- *Dendrobates quinquevittatus* — Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 11.

Distribution: Southern Amazonia, in the Rio Madeira drainage of western Brazil; known definitely only from Rondônia and in adjacent Amazonas.

Comment: In the *Dendrobates minutus* group of Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21 (much of which is now in *Minyobates*); in the more exclusive *Dendrobates quinquevittatus* group of Myers, 1982, *Am. Mus. Novit.*, 2721: 2, and Caldwell and Myers, 1990, *Am. Mus. Novit.*, 2988: 1-21. Synonymy and account available in Caldwell and Myers, 1990, *Am. Mus. Novit.*, 2988: 1-21. Most records of this species before 1990 refer to *Dendrobates ventrimaculatus* see Caldwell and Myers, 1990, *Am. Mus. Novit.*, 2988: 1-21. See also Martins and Haddad, 1990, *Mem. Inst. Butantan, São Paulo*, 52: 53-56, for discussion of identity. See comment under *Dendrobates fantasticus*. De la Riva, Köhler, Lötters, and Reichle, 2000, *Rev. Esp. Herpetol.*, 14: 57, and Köhler, 2000, *Bonn. Zool. Monogr.*, 48: 69, consider this species possibly to occur in Bolivia. Schulte, 1999,

Pfeilgiftfrösche, : 76-80, provided an account and provided a record for Peru, which was doubted by Lötters and Vences, 2001 "2000", *Salamandra*, 36: 247-260.

***Dendrobates reticulatus* Boulenger, 1884**

- *Dendrobates reticulatus* Boulenger, 1884 "1883", Proc. Zool. Soc. London, 1883: 635. Syntypes: BM; BM 1947.2.5.10 designated lectotype by Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 35. Type locality: "Yurimaguas, Huallaga River, [Loreto,] Northern Peru".

Distribution: Type locality and possibly a locality in northwestern Loreto, Peru (see comment).

Comment: In the *Dendrobates minutus* group of Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21; in the less inclusive *Dendrobates quinquevittatus* group of Myers, 1982, *Am. Mus. Novit.*, 2721: 1-23. Myers and Daly, 1980, *Am. Mus. Novit.*, 2692: 1, removed this species from the synonymy of *Dendrobates quinquevittatus*. See also Caldwell and Myers, 1990, *Am. Mus. Novit.*, 2988: 1-21. See comment under *Dendrobates fantasticus*. Zimmermann and Zimmermann, 1984, *Aquar. Mag.*, Stuttgart, 1984: 41, mapped an unstated locality other than the type locality. See Myers, 1982, *Am. Mus. Novit.*, 2721: 3-4, who provided another locality with explicit data. Schulte, 1999, *Pfeilgiftfrösche*, : 49-56, provided an account.

***Dendrobates rubrocephalus* Schulte, 1999**

- *Dendrobates rubrocephalus* Schulte, 1999, Pfeilgiftfrösche: 138. Holotype: Rainer Schulte Collection BD 5H, to be deposited in the MHNSM, by original designation. Type locality: "Ceja de Selva, Ostandenabhang und vielleicht vorgelagerte Ostkordilleren, Dep. Pasco und Junin, Höhe vermutlich zwischen 600 und 1500 m."

Distribution: Vicinity of the type locality (Ceja de Selva), Pasco and Junin, Peru.

Comments: Most similar to *Dendrobates sirensis* according to the original publication.

***Dendrobates sirensis* Aichinger, 1991**

- *Dendrobates sirensis* Aichinger, 1991, Herpetologica, 47: 1. Holotype: NHMW 31892, by original designation. Type locality: "on a horizontal tree 1.2 m above a stream in the Serranía de Sira, Río Lullapichis drainage, 750 m, Departamento Huánuco, Peru (9° 28' S, 74° 47' W)".

Distribution: Known only from the type locality in the Serranía de Sira, Río Lullapichis drainage, 750 m, Departamento Huánuco, Peru.

Comment: In the *Dendrobates quinquevittatus* group. Schulte, 1999, *Pfeilgiftfrösche*, : 88-110, provided an account and removed this taxon from the synonymy of *Dendrobates imitator*, where it had been placed by XXX.

***Dendrobates speciosus* Schmidt, 1857**

- *Dendrobates speciosus* Schmidt, 1857, Sitzungsber. Akad. Wiss. Wien, Phys. Math. Naturwiss. Kl., 24: 12. Syntypes: KM 1017/1345 (9 specimens), lost according to Savage, 1970, *Proc. California Acad. Sci.*, Ser. 4, 38: 273-288, who noted one additional syntype in the NHMW; Häupl and Tiedemann, 1978, *Kat. Wiss. Samml. Naturhist. Mus. Wien*, 2: 16, and Häupl and Tiedemann, 1978, *Kat. Wiss. Samml. Naturhist. Mus. Wien*, 2: 16, recorded two specimens, NHMW 16518 and 16513, as syntypes. Type locality: "Neu-Granada"; restricted to "der Weg

zwischen Bocca del toro und dem Vulcan Chiriqui [Panama]...zwischen 5000´ und 7000´ [Polish feet, therefore = 1150-1160 m, according to Savage, 1970, Proc. California Acad. Sci., Ser. 4, 38: 273-288] Höhe" by Schmidt, 1858, Denkschr. Akad. Wiss. Wien, Math. Naturwiss. Kl., 14: 249.

- *Hylaplesia speciosa* — Günther, 1859 "1858", Cat. Batr. Sal. Coll. Brit. Mus.: 126.
- *Dendrobates speciosus* — Savage, 1968, Copeia, 1968: 763, Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.

Distribution: Cloud forest at 1140-1410 m at eastern end of Cordillera de Talamanca in western Panama.

Comments: In the *Dendrobates pumilio* group of Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21; in the *Dendrobates histrionicus* group of Myers, Daly, and Martinez, 1984, Am. Mus. Novit., 2783: 19. See accounts by Savage, 1968, Copeia, 1968: 763, Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 39. See also Edwards, Daly, and Myers, 1988, Lloydia, J. Nat. Prod., 51: 1188-1189.

***Dendrobates steyermarki* Rivero, 1971**

- *Dendrobates steyermarki* Rivero, 1971, Kasmera, 3: 390. Holotype: UPRM 3399, by original designation. Type locality: "Cerro Yapacana, 1.200 m., Territorio Federal Amazonas, Venezuela".
- *Minyobates steyermarki* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates steyermarki* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11. by implication.

Distribution: Cerro Yapacana, 600-1200 m elevation, Amazonas, Venezuela.

Comments: See account (under *Dendrobates steyermarki*) by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 36. In the *Dendrobates minutus* group sensu Myers, 1982, Am. Mus. Novit., 2721: 1-23 (= *Minyobates*). See comment on distribution by Gorzula and Señaris, 1999 "1998", Scient. Guianae, 8: 27 (as *Minyobates steyermarki*).

***Dendrobates tinctorius* (Schneider, 1799)**

- *Calamita tinctorius* Schneider, 1799, Hist. Amph. Nat.: 175. Type(s): not designated or known to exist; LACM 43927 designated neotype by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 47. Type locality: "Americae meridionalis"; neotype from "lower Rivière Matarony (Approuague drainage), Bruynzeel lumber camp, French Guiana, 35 m." (see comment).
- *Hyla tinctoria* — Daudin, 1800, Hist. Nat. Quad. Ovip., Livr. 1: 7. Latreille In Sonnini de Manoncourt and Latreille, 1801 (An. X), Hist. Nat. Rept., 2, : 170; Daudin, 1802 (An. XI), Hist. Nat. Rain. Gren. Crap., Quarto, : 25.
- *Rana tinctoria* — Shaw, 1802, Gen. Zool., 3(1): 135.
- *Calamita tinctorius* — Merrem, 1820, Tent. Syst. Amph.: 169.
- *Hylaplesia tinctoria* — Boie in Schlegel, 1826, Bull. Sci. Nat. Geol., Ser. 2, 9: 239.
- *Dendrobates tinctorius* — Wagler, 1830, Nat. Syst. Amph.: 202. Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2, : 143.
- *Dendrobates tinctorius* var. *daudini* Steindachner, 1864, Verh. Zool. Bot. Ges. Wien, 14: 262. Types: based on animal figured by Daudin, 1802 (An. XI), Hist. Nat. Rain. Gren. Crap., Quarto, : pl. 8, fig. 1, by original designation. Type locality: not designated. Synonymy by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.
- *Dendrobates machadoi* Bokermann, 1958, Neotropica, 4: 73. Holotype: WCAB 3083 (now in MZUSP), by original designation. Type locality: "Serra do Navio, Territorio Federal de Amapa, Brasil". Synonymy by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.
- *Dendrobates tinctorum* — Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11. *Lapsus.*

Distribution: Lowland forests of the Guianas and adjacent Brazil.

Comments: In the *Dendrobates tinctorius* group. The nomenclatural history of this species was reviewed by Lescure, 1976, Bull. Mus. Natl. Hist. Nat. Paris, Ser. 3, Zool., 377: 484-486. Hoogmoed, 1971, Aquar. Terrar. Z., 24: 1-7, discussed distribution in Surinam. Problems associated with the neotype designation were discussed by Lescure, 1982, Bull. Zool. Nomencl., 39: 267. See account by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 45-49. Lescure and Marty, 2000, Collect. Patrimoines Nat., Paris, 45: 88-91, provided a brief account and photo.

***Dendrobates truncatus* (Cope, 1861)**

- *Phyllobates truncatus* Cope, 1861 "1860", Proc. Acad. Nat. Sci. Philadelphia, 12: 372. Syntypes: ANSP 2251-52, according to Malnate, 1971, Proc. Acad. Nat. Sci. Philadelphia, 123: 353. Type locality: "New Grenada" (= Colombia).
- *Hylaplesia truncata* — Cope, 1863, Proc. Acad. Nat. Sci. Philadelphia, 15: 49.
- *Dendrobates truncatus* — Cope, 1867, J. Acad. Nat. Sci. Philadelphia, Ser. 2, 6: 197.

Distribution: Rio Magdalena drainage from Chaparral north to the Caribbean coast, and in the lowlands around the northern ends of the central and western Andes, west to the Golfo de Urabá, Colombia, 530-800 m elevation.

Comments: In the *Dendrobates tinctorius* group. See account by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 49-50.

***Dendrobates vanzolinii* Myers, 1982**

- *Dendrobates vanzolinii* Myers, 1982, Am. Mus. Novit., 2721: 9. Holotype: MZUSP 51597, by original designation. Type locality: "at Pôrto Walter on the Rio Juruá, Territory [state] of Acre, Brazil (8° 16' S, 72° 46' W)".

Distribution: East-central Peru and adjacent Brazil.

Comments: In the *Dendrobates minutus* group of Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21; in the less inclusive *Dendrobates quinquevittatus* group of Myers, 1982, Am. Mus. Novit., 2721: 2, and Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 1-21. See comment under *Dendrobates fantasticus*. De la Riva, Köhler, Lötters, and Reichle, 2000, Rev. Esp. Herpetol., 14: 57, and Köhler, 2000, Bonn. Zool. Monogr., 48: 69, consider this species possibly to occur in Bolivia. Schulte, 1999, Pfeilgiftfrösche, : 110-115, provided an account

***Dendrobates variabilis* Zimmermann und Zimmermann, 1988**

- *Dendrobates variabilis* Zimmermann and Zimmermann, 1988, Salamandra, 24: 132. Holotype: SMNS 7054, by original designation. Type locality: "Departamento San Martin, Peru"; restricted to "Km 27 of the road from Tarapoto to Yurimaguas", Peru, by Henle, 1992, Bonn. Zool. Beitr., 43: 79-129.

Distribution: *Dendrobates variabilis* Zimmermann and Zimmermann, 1988, Salamandra, 24: 132. Holotype: SMNS 7054, by original designation. Type locality: "Departamento San Martin, Peru"; restricted to "Km 27 of the road from Tarapoto to Yurimaguas", Peru, by Henle, 1992, Bonn. Zool. Beitr., 43: 79-129.

Comments: Removed from the synonymy of *Dendrobates ventrimaculatus* by Schulte, 1999, Pfeilgiftfrösche, : 39, and Symula, Schulte, and Summers, 2001, Proc. R. Soc. London, Ser. B, Biol. Sci., 268: 2415-2421, where it had been placed by Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 1. See comment under *Dendrobates ventrimaculatus*. Schulte, 1999, Pfeilgiftfrösche, : 39-49, provided an account.

***Dendrobates ventrimaculatus* Shreve, 1935**

- *Dendrobates minutus ventrimaculatus* Shreve, 1935, Occas. Pap. Boston Soc. Nat. Hist., 8: 213. Holotype: MCZ 19734, by original designation. Type locality: "Sarayacu, Ecuador".
- *Dendrobates ventrimaculatus* — Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 1.

Distribution: Amazon drainage of Colombia, Ecuador, Peru, and Brazil, from the foothills of the Andes east to the mouth of the Amazon and north into French Guiana.

Comments: In the *Dendrobates minutus* group of Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21 (much of which is now in *Minyobates*); in the less inclusive *Dendrobates quinquevittatus* group of Myers, 1982, Am. Mus. Novit., 2721: 2, and Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 1-21 (who removed this species from the synonym of *Dendrobates quinquevittatus*, where it had been placed by XXX). See comment under *Dendrobates quinquefasciatus*. Lescure and Marty, 2000, Collect. Patrimoines Nat., Paris, 45: 92-93, provided a brief account and photo. Symula, Schulte, and Summers, 2001, Proc. R. Soc. London, Ser. B, Biol. Sci., 268: 2415-2421, suggested that *Dendrobates ventrimaculatus* is composed of two cryptic species, one of which is more closely related to *Dendrobates variabilis*. Schulte, 1999, Pfeilgiftfrösche, : 129-134, provided an account

***Dendrobates vicentei* Jungfer, Weygoldt, and Juraske, 1996**

- *Dendrobates vicentei* Jungfer, Weygoldt, and Juraske, 1996, Herpetofauna, Weinstadt, 18: 18. Holotype: ZFMK 61100, by original designation. Type locality: "Aus dem Fussweg von El Copé nach Río Blanco del Norte, Passhöhe der Kontinentscheide etwa 1 km östlich des Cerro Blanco, etwa 8° 40' N, 80° 36' W, 912 m NN, Porvincia de Coclé, Panamá".

Distribution: Caribbean versant of the provinces of Veraguas and Coclé and the upper reaches of Pacific versant in Coclé, central Panama.

Comments: In the *Dendrobates histrionicus* group according to the original publication.

***Dendrobates viridis* Myers and Daly, 1976**

- *Dendrobates viridis* Myers and Daly, 1976, Bull. Am. Mus. Nat. Hist., 157: 247. Holotype: AMNH 88133, by original designation. Type locality: "in montane forest approximately 13 km west of Dagua (town), 850-1200 meters elevation on south-facing versant of upper Río Anchicayá drainage, Department of Valle, Colombia".
- *Minyobates viridis* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 304.
- *Dendrobates viridis* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11. by implication.

Distribution: Western slope of the Cordillera Occidental of Colombia (Cauca and Valle del Cauca), 100-1200 m elev.

Comments: See Myers and Daly, 1976, Bull. Am. Mus. Nat. Hist., 157: 249, for speculation on distribution. In the *Dendrobates minutus* group sensu Myers, 1982, Am. Mus. Novit., 2721: 1-23 (= *Minyobates*).

***Dendrobates virolensis* (Ruiz-Carranza and Ramirez-Pinilla, 1992)**

- *Minyobates virolinensis* Ruiz-Carranza and Ramirez-Pinilla, 1992, Lozania, 61: 2. Holotype: ICN 16145, by original designation. Type locality: "Colombia, Departamento de Santander, vertiente occidental de la Cordillera Oriental, Municipio de Charalá, Virolín (= Inspección de Policía de Cañaverales), Vereda "El Reloj", 6° 13´ latitud N, 73° 05´ W de Greenwich, 1750 m de altitud."
- *Dendrobates virolinensis* — Jungfer, Lötters, and Jörgens, 2000, Herpetofauna, Weinstadt, 22: 11. by implication.

Distribution: Western slope of the Eastern Andes (Cundinamarca and Santander), Colombia, 1300-1850 m elevation.

Comments: Related to *Minyobates abditus*, *Minyobates bombetes*, and *Minyobates opisthomelas*, according to the original publication. In the *Dendrobates minutus* group sensu Myers, 1982, Am. Mus. Novit., 2721: 1-23 (= *Minyobates*).

***Epipedobates* Myers, 1987**

***Epipedobates andinus* Myers and Burrowes, 1987**

- *Epipedobates andinus* Myers and Burrowes, 1987, Am. Mus. Novit., 2899: 2 (see comment). Holotype: IND-AN 1556, by original designation. Type locality: "in montane forest at 1780 m elev., in the Reserva Natural La Planada (approx. 1° 10´ N, 78° 00´ W), Municipio de Ricuarte, Departament of Nariño, Colombia."
- *Dendrobates andinus* — Myers and Burrowes, 1987, Am. Mus. Novit., 2899: 2. Alternative combination.

Distribution: Western slope of the Western Andes, Nariño, Colombia, 700-2020 m elevation.

Comments: Most closely related to *Epipedobates erythromos*, according to the original publication. Although named as *Denndrobates andinus* in the description, in a note added in proof, the name was changed to *Epipedobates andinus*. Inasmuch as page priority does not exist, the first use of the name must be taken as *Epipedobates andinus*.

***Epipedobates anthonyi* (Noble, 1921)**

- *Phyllobates anthonyi* Noble, 1921, Am. Mus. Novit., 29: 5. Holotype: AMNH 13739. Type locality: "small stream at Salvias, Prov. del Oro, Ecuador".
- *Colostethus anthonyi* — Edwards, 1971, Proc. Biol. Soc. Washington, 84: 148.
- *Phyllobates anthonyi* — Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 5.
- *Dendrobates anthonyi* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates anthonyi* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Southwestern Ecuador and northwestern Peru, west of the Andes, 153-1387 m elevation.

Comment: Removed from the synonymy of *Epipedobates tricolor* by Schulte, 1999, Pfeilgiftfrösche, : 271, where it had been placed by Henle, 1992, Bonn. Zool. Beitr., 43: 79-129, and Duellman and Wild, 1993, Occas. Pap. Mus. Nat. Hist. Univ. Kansas, 157: 1-53.

***Epipedobates bassleri* (Melin, 1941)**

- *Dendrobates bassleri* Melin, 1941, Göteborgs K. Vetensk. Vitterh. Samh. Handl. ., Ser. B, 1: 65. Holotype: NHMG 511. Type locality: "Roque, [San Martín,] Peru [1097 m]".
- *Phyllobates bassleri* — Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.

- *Dendrobates bassleri* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates bassleri* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.
- *Phobobates bassleri* — Zimmermann and Zimmermann, 1988, Salamandra, 24: 125-160.

Distribution: Amazon drainage of Peru, from the eastern foothills of the Andes east to the Río Huallaga, 274-1097 m elev.

Comment: In the *Epipedobates trivittatus* group. Schulte, 1999, Pfeilgiftfrösche, : 180-186, provided an account.

***Epipedobates bilinguis* Jungfer, 1989**

- *Epipedobates bilinguis* Jungfer, 1989, Salamandra, 25: 86. Holotype: ZFMK 49073, by original designation. Type locality: "Ecuador: Napo: 10 km N Puerto Francisco de Orellana (= Coca)".

Distribution: Vicinity of the type locality (Napo, Ecuador).

Comment: The species had previously been confused with *Epipedobates parvulus* according to the original publication.

***Epipedobates bolivianus* (Boulenger, 1902)**

- *Prostherapis bolivianus* Boulenger, 1902, Ann. Mag. Nat. Hist., Ser. 7, 10: 397. Syntypes: BM 1947.2.13.89-90 (San Carlos), 1947.2.13.91 (San Ernesto); BM 1947.2.13.89 designated lectotype by Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 35. Type locality: "San Carlos, [La Paz,] Bolivia, 1200 m. and...S. Ernesto, [La Paz,] Bolivia, 800 m."; restricted to San Carlos, La Paz, Bolivia, by lectotype designation.
- *Phyllobates bolivianus* — Barbour and Noble, 1920, Bull. Mus. Comp. Zool., 63: 401. Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 5.
- *Colostethus bolivianus* — Edwards, 1971, Proc. Biol. Soc. Washington, 84: 148. Rivero, 1990 "1988", Mem. Soc. Cienc. Nat. La Salle, 48: 3-32.
- *Dendrobates bolivianus* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates bolivianus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Amazon drainage of Bolivia, 800-1200 m elev.

Comment: In the *Epipedobates pictus* group. Considered to be in *Colostethus*, but not assigned to species group by Rivero, 1990 "1988", Mem. Soc. Cienc. Nat. La Salle, 48: 3-32. See account by Gonzales, Lötters, and Reichle, 2000 "1999", Herpetozoa, 12: 179-186. Schulte, 1999, Pfeilgiftfrösche, : 243-245, provided an account.

***Epipedobates boulengeri* (Barbour, 1909)**

- *Prostherapis femoralis* Barbour, 1905, Bull. Mus. Comp. Zool., 46: 101. Syntypes: MCZ 2422 (originally 22 specimens, some of which sent to other museums), USNM 52406 and USNM 118232-33 (according to Cochran, 1961, Bull. U.S. Natl. Mus., 220: 71), BM 1947.2.13.92-93, UMMZ 48070; BM 1947.2.13.93 designated lectotype by Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 29. Type locality: "Gorgona Island", Departamento Nariño, Colombia. Junior homonym of *Prostherapis femoralis* Boulenger, 1884 "1883".
- *Prostherapis boulengeri* Barbour, 1909, Proc. Biol. Soc. Washington, 22: 87. Replacement name for *Prostherapis femoralis* Barbour, 1905.
- *Phyllobates boulengeri* — Barbour and Noble, 1920, Bull. Mus. Comp. Zool., 63: 402. Parker, 1926, Ann. Mag. Nat. Hist., Ser. 9, 17: 553; Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 5.
- *Colostethus boulengeri* — Savage, 1968, Copeia, 1968: 757.

- *Dendrobates boulengeri* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates boulengeri* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Dense, wet forests of Gorgona I. and the wet southern Chocóan region from the lower San Juan drainage of western Colombia south to northwestern Ecuador.

Comment: Lötters, Reichle, and Jungfer, 2003, *J. Nat. Hist.*, 37: 1899-1911, suggested on the basis of call evidence that this name covers at least two species. Vences, Kosuch, Boistel, Haddad, La Marca, and Lötters, 2003, *Organisms Divers. Evol.*, 3: 219, suggested that this species is imbedded phylogenetically within *Epipedobates* but retained it in *Colostethus*.

***Epipedobates braccatus* (Steindachner, 1864)**

- *Dendrobates braccatus* Steindachner, 1864, Verh. Zool. Bot. Ges. Wien, 14: 259. Syntypes: NHMW 3818.1-2; NHMW 3818.1 designated lectotype by Silverstone, 1976, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 27: 42. Type locality: São Vicente, Mato Grosso, Brazil. Given as "Chapada dos Guimarães (= Chapada), Mato Grosso", Brazil, by Bokermann, 1966, *Lista Anot. Local. Tipo Anf. Brasil.*, : 33. Name attributed by Steindachner to Fitzinger, but clearly Steindachner is responsible for the description.
- *Dendrobates braccatus* Cope, 1887, Proc. Am. Philos. Soc., 24: 53-54. Holotype: ANSP 13414. Type locality: "at or near ... Chupada [= Chapada dos Guimarães], thirty miles north-east of Cuyabá, and near the headwaters of the Xingu, an important tributary of the Amazon", Mato Grosso, Brazil. Synonymy by Haddad and Martins, 1994, *Herpetologica*, 50: 282-295. Junior homonym of *Dendrobates braccatus* Steindachner, 1864.
- *Dendrobates pictus braccatus* — Lutz, 1952, Mem. Oswaldo Cruz, Rio de Janeiro, 50: 601.
- *Epipedobates braccatus* — Martins and Sazima, 1989, Ciencia Hoje, 9: 34.

Distribution: Known only from the type locality (Chapada dos Guimarães, Mato Grosso), from two nearby localities (Barra do Bugres and Cáceres, Mato Grosso), from Aquidauana, Mato Grosso do Sul, and from Santa Rita do Araguaia, Goiás, Brazil.

Comment: See account by Haddad and Martins, 1994, *Herpetologica*, 50: 282-295. De la Riva, Köhler, Lötters, and Reichle, 2000, *Rev. Esp. Herpetol.*, 14: 58, and Köhler, 2000, *Bonn. Zool. Monogr.*, 48: 69, consider this species possibly to occur in Bolivia.

***Epipedobates cainarachi* Schulte, 1989**

- *Epipedobates cainarachi* Schulte, 1989, Bol. Lima, 11: 41 (May). Holotype: AMNH (Rainer Schulte Collection 10550). Type locality: "el valle del Alto Río Cainarachi del centro de la Cordillera Oriental a la altura del km 33 de la carretera Tarapoto-Yurimaguas", Departamento San Martín, Peru.
- *Epipedobates ardens* Jungfer, 1989, Salamandra, 25: 89. Holotype: ZFMK 490843, by original designation. Type locality: "Peru: Departamento San Martín: Carratera [sic] Tarapoto-Yurimaguas, km 28, ca. 600 m Meershöhe". Synonymy by Duellman, 1993, *Univ. Kansas Mus. Nat. Hist. Spec. Publ.*, 21: 63.

Distribution: Lowlands adjacent to the northern end of the Eastern Andes in Amazonian Peru.

Comment: Related to *Epipedobates petersi* according to the original publication. Schulte, 1999, *Pfeilgiftfrösche*, : 199-203, provided an account.

***Epipedobates erythromos* (Vigle and Miyata, 1980)**

- *Dendrobates erythromos* Vigle and Miyata, 1980, Breviora, 459: 2. Holotype: MCZ 96384, by original designation. Type locality: "Centro Científico, Río Palenque, 47 km S of Santo Domingo de los Colorados, Provincia Pichincha, Ecuador, 170 m".
- *Epipedobates erythromos* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Known only from the type locality (Pichincha, Ecuador).

Comment: In the *Epipedobates pictus* group. Possibly conspecific with the type of *Colostethus whymperei* according to Coloma, 1995, Misc. Publ. Mus. Nat. Hist. Univ. Kansas, 87: 55.

***Epipedobates espinosai* (Funkhouser, 1956)**

- *Phyllobates espinosai* Funkhouser, 1956, Zoologica, New York, 41: 76. Holotype: CAS-SU 10577, by original designation. Type locality: "Hacienda Espinosa, elevation about 1,000 ft., 9 km. west of Santo Domingo de los Colorados, Province of Pichincha, northwestern Ecuador".
- *Dendrobates espinosai* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates espinosai* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Wet Chocoran region of the Andes in northwestern Ecuador.

Comment: In the *Epipedobates tricolor* group (formerly *Epipedobates femoralis* group; see comment under *Epipedobates*).

***Epipedobates flavopictus* (Lutz, 1925)**

- *Hylaplesia flavopicta* Lutz, 1925, C. R. Seances Soc. Biol., Paris, 93: 139. Syntypes: not stated, by museum records AL-MNRJ 853-854 and USNM 96986; implied lectotype designation by Lutz, 1952, Mem. Oswaldo Cruz, Rio de Janeiro, 50: 597. Type locality: "Bello Horizonte", Minas Gerais, Brazil.
- *Dendrobates pictus flavopictus* — Lutz, 1952, Mem. Oswaldo Cruz, Rio de Janeiro, 50: 597.
- *Dendrobates flavopictus* — Cochran, 1955 "1954", Bull. U.S. Natl. Mus., 206: 8.
- *Epipedobates flavopictus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Southeastern (Minas Gerais, Goiás, and Tocantins), northern (Pará), and northeastern (Maranhão), Brazil.

Comment: See account by Haddad and Martins, 1994, Herpetologica, 50: 282-295.

***Epipedobates hahneli* (Boulenger, 1884)**

- *Dendrobates hahneli* Boulenger, 1884 "1883", Proc. Zool. Soc. London, 1883: 636. Syntypes: BM (several specimens), BM 1947.2.15.17 designated lectotype by Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 42. Type locality: "Yurimaguas, Huallaga River, [Loreto,] Northern Peru".
- *Dendrobates pictus hahneli* — Lutz, 1952, Mem. Oswaldo Cruz, Rio de Janeiro, 50: 601.
- *Epipedobates hahneli* — Martins and Sazima, 1989, Ciencia Hoje, 9: 34. Haddad and Martins, 1994, Herpetologica, 50: 282-295.
- *Epipedobates hahneli hahneli* — Schulte, 1999, Pfeilgiftfrösche: 233.

Distribution: Amazonian lowlands of Amazonian Peru, Colombia, Bolivia, Brazil, French Guiana, and likely adjacent Surinam.

Comment: See account by Haddad and Martins, 1994, *Herpetologica*, 50: 282-295, who noted that a similar, apparently unnamed, species occurs in the Amazonian lowlands of Peru, and that the review of *Phyllobates pictus* by Lescure, 1976, *Bull. Mus. Natl. Hist. Nat. Paris, Ser. 3, Zool.*, 377: 487-488, is likely based on this species. See Silverstone, 1976, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 27: 42, who regarded this species as a pattern class of *Phyllobates pictus*. See De la Riva, Marquez, and Bosch, 1996, *J. Nat. Hist.*, 30: 1413-1420, for Bolivian record and discussion of taxonomic uncertainty regarding this and related species. Köhler and Lötters, 1999, *Bonn. Zool. Beitr.*, 48: 259-273, also note a Bolivian record. Lescure and Marty, 2000, *Collect. Patrimoines Nat.*, Paris, 45: 96-97, provided a brief account and photo. Schulte, 1999, *Pfeilgiftfrösche*, : 227-235, provided an account.

***Epipedobates ingeri* (Cochran and Goin, 1970)**

- *Dendrobates ingeri* Cochran and Goin, 1970, *Bull. U.S. Natl. Mus.*, 288: 16. Holotype: USNM 146846, by original designation. Type locality: "Aserrío, near Río Pescado, Caquetá, Colombia".
- *Phyllobates ingeri* — Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 11.
- *Dendrobates ingeri* — Myers, Daly, and Malkin, 1978, *Bull. Am. Mus. Nat. Hist.*, 161: 332.
- *Epipedobates ingeri* — Myers, 1987, *Pap. Avulsos Zool.*, São Paulo, 36: 303.

Distribution: Eastern slope of the Eastern Andes, Caquetá, Colombia, below 200 m elevation.

Comment: In the *Epipedobates pictus* group.

***Epipedobates labialis* (Cope, 1874)**

- *Dendrobates labialis* Cope, 1874, *Proc. Acad. Nat. Sci. Philadelphia*, 26: 129. Holotype: presumably in ANSP, not located. Type locality: "Nauta", Loreto, Peru.
- *Hylaplesia labialis* — Knauer, 1883, *Naturgesch. Lurche*: 112.
- *Epipedobates labialis* — Schulte, 1999, *Pfeilgiftfrösche*: 219.

Distribution: Known only from the type locality (Loreto, Peru).

Comment: Status uncertain; Silverstone did not review this species in either of his revisions, listing it only as "*Phyllobates?*"; status uncertain". Schulte, 1999, *Pfeilgiftfrösche*, : 219-220, provided an account and provisionally placed this species in *Epipedobates*.

***Epipedobates macero* Rodriguez and Myers, 1993**

- *Epipedobates macero* Rodriguez and Myers, 1993, *Am. Mus. Novit.*, 3068: 2. Holotype: MHNSM 0726 (formerly MHNJP 2001), by original designation. Type locality: "west side Río Manu across from Cocha Cashu Biological Station, Parque Nacional del Manu, about 380 m elev., Department of Madre de Dios, Peru".

Distribution: Known only from the type locality (Depto. Madre de Dios), another locality about 240 km NNE of the type locality on the Río Manu, and Río Camisea (tributary of the Río Urubamba, upper Ucayali drainage), Peru.

Comment: In the *Epipedobates petersi* group, and similar to *Epipedobates cainarachi* and *Epipedobates petersi*, according to the original publication. See Myers, Rodriguez, and Icochea, 1998, *Am. Mus. Novit.*, 3238: 1-20, for comments on identification and distribution. De la Riva, Köhler, Lötters, and Reichle, 2000, *Rev. Esp. Herpetol.*, 14: 57, and Köhler, 2000, *Bonn. Zool. Monogr.*, 48: 69, consider this species possibly to occur in Bolivia. Schulte, 1999, *Pfeilgiftfrösche*, : 216-219, provided an account.

***Epipedobates maculatus* (Peters, 1873)**

- *Dendrobates trivittatus* var. *maculata* Peters, 1873, Monatsber. Preuss. Akad. Wiss. Berlin, 1873: 617. Type(s): Not designated. ZMB 7815 is considered holotype by museum records (Bauer, Günther, and Klipfel, 1995, In Bauer et al. (eds.), *Herpetol. Contr. W. C. H. Peters*, : 41). Type locality: "Chiriqui", Panama; at the time of the description "Chiriqui" included both Atlantic and Pacific versants of extreme western Panama, according to Myers, 1982, *Am. Mus. Novit.*, 2721: 5.
- *Dendrobates maculatus* — Myers, 1982, Am. Mus. Novit., 2721: 5.
- *Epipedobates maculatus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Known only from the holotype (Panama).

Comment: Of uncertain relationship to other *Epipedobates*. See Myers, 1982, *Am. Mus. Novit.*, 2721: 5-9, for discussion, who removed this taxon from the synonymy of *Dendrobates auratus*, where it had been placed by Dunn, 1931, *Occas. Pap. Boston Soc. Nat. Hist.*, 5: 393.

***Epipedobates myersi* (Pyburn, 1981)**

- *Dendrobates myersi* Pyburn, 1981, Proc. Biol. Soc. Washington, 94: 67. Holotype: UTA A-3989, by original designation. Type locality: "near Wacará (elev. 216 m, long. 69° 53' W, lat. 1° 08' N), Comisaria de Vaupés, Colombia".
- *Epipedobates myersi* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Amazonian Colombia (Caquetá and Vaupés), ca. 200 m elevation.

Comment: In the *Epipedobates tricolor* group (formerly *Epipedobates femoralis* group; see comment under *Epipedobates*).

***Epipedobates parvulus* (Boulenger, 1882)**

- *Dendrobates parvulus* Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2: 145, pl. 12, fig. 6. Syntypes: BM 1947.2.30.89-90; BM 1947.2.30.89 designated lectotype by Silverstone, 1976, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 27: 36. Type locality: "Sarayacu", Pastaza, Ecuador and "Canelos", Pastaza, Ecuador; restricted to Sarayacu, Pastaza, Ecuador, by lectotype designation.
- *Prostherapis festae* Peracca, 1904, Boll. Mus. Zool. Anat. Comp. Univ. Torino, 19: 16. Syntypes: MZUT (3 specimens) according to original description; MZUT An87 (2 specimens), according to Gavetti and Andreone, 1993, *Cat. Mus. Reg. Sci. Nat. Torino*, 10: 84; location of third syntypes unknown. Type locality: "Valle Santiago", eastern Ecuador. See comment regarding type locality by Rivero and Almendáriz, 1992 "1991", *Politecnica, Quito*, 16: 116-117. Synonymy by Coloma, 1995, *Misc. Publ. Mus. Nat. Hist. Univ. Kansas*, 87: 57.
- *Phyllobates festae* — Barbour and Noble, 1920, Bull. Mus. Comp. Zool., 63: 401.
- *Colostethus festae* — Edwards, 1971, Proc. Biol. Soc. Washington, 84: 148.
- *Phyllobates parvulus* — Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.
- *Dendrobates parvulus* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates parvulus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Upper Amazon Basin in southern Ecuador and northern Peru; southern part of the Eastern Andes on the lower eastern slopes in Amazonia, Colombia, 300-1000 m elevation.

Comment: In the *Epipedobates pictus* group. Rivero, 1990 "1988", *Mem. Soc. Cienc. Nat. La Salle*, 48: 3-32, placed *Colostethus festae* in the *Colostethus fuliginosus* group (Group VI). Schulte, 1999, *Pfeilgiftfrösche*, : 261-267, provided an account.

Epipedobates petersi (Silverstone, 1976)

- *Phyllobates petersi* Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 37. Holotype: USNM 166763, by original designation. Type locality: "Santa Isabel (a village on the Río Nevati, a tributary of the Río Pichis, Pachitea drainage, 35 km SE Puerto Bermúdez, 80 km ENE Oxapampa...slightly upriver from the village...), Departamento de Pasco, Perú, 458 m".
- *Dendrobates petersi* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates petersi* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Río Ucayali and Río Huallaga basins of eastern Peru, west to the eastern foothills of the Andes, 274-800 m.

Comment: In the *Epipedobates pictus* group. See comment under *Epipedobates simulans*. Schulte, 1999, Pfeilgiftfrösche, : 193-199, provided an account.

Epipedobates pictus (Tschudi, 1838)

- *Hylaplesia picta* Tschudi, 1838, Classif. Batr.: 28, 71. Syntypes: MNHNP 4910 (2 specimens, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 32); male designated lectotype by Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 42; MNHNP 4910 designated lectotype by Lescure, 1976, Bull. Mus. Natl. Hist. Nat. Paris, Ser. 3, Zool., 377: 487. Type locality: "Santa Cruz", Santa Cruz, Bolivia.
- *Dendrobates pictus* — Duméril and Bibron, 1841, Erp. Gen., 8: 656.
- *Dendrobates eucnemis* Steindachner, 1864, Verh. Zool. Bot. Ges. Wien, 14: 258. Syntypes: NHMW 19190.1-4; NHMW 19190.3 designated lectotype by Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 42. Type locality: Rio Mamoré, Rondônia, Brazil. Name attributed by Steindachner to Fitzinger, but clearly Steindachner is responsible for the description. Synonymy by Lutz, 1952, Mem. Oswaldo Cruz, Rio de Janeiro, 50: 597-607.
- *Dendrobates pictus pictus* — Lutz, 1952, Mem. Oswaldo Cruz, Rio de Janeiro, 50: 601.
- *Dendrobates pictus eucnemis* — Lutz, 1952, Mem. Oswaldo Cruz, Rio de Janeiro, 50: 607.
- *Dendrobates pictus guayanensis* Heatwole, Solano, and Heatwole, 1965, Acta Biol. Venezuelica, 4: 350. Holotype: MBUCV 3112, by original designation. Type locality: "forest between Rancho Alegre and base of Altiplanicie, on trail to Quebrada Cabeza de Burro, 5 km east of Las Chicharras, 47 km north of Tumeremo. Altiplanicie de Nuria, 100-250 m.", Bolívar, Venezuela.
- *Phyllobates pictus* — Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.
- *Dendrobates pictus* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates pictus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Widely distributed in the lowlands of the Departamentos Santa Cruz, Cochabamba, Beni, and La Paz, in eastern Bolivia, and Corumbá and Xavantina, Mato Grosso do Sul, in southwestern Brazil; Departamento Ucayali, Peru, also eastern slope of the Cordillera Oriental (south of Macarena), Amazonia, Colombia, 200-2500 m elevation. Apparently isolated population in Bolívar, Venezuela.

Comment: In the *Epipedobates pictus* group. Noted to be composed of two or more distinct species, according to Caldwell and Myers, 1990, Am. Mus. Novit., 2988: 19, and Henle, 1992, Bonn. Zool. Beitr., 43: 79-129, although these may correspond to those subsequently resurrected by Haddad and Martins, 1994, Herpetologica, 50: 282-295 (who also provided an account). De la Riva, Köhler, Lötters, and Reichle, 2000, Rev. Esp. Herpetol., 14: 30, also note the composite nature of this binomial. See brief account by Köhler, 2000, Bonn. Zool. Monogr., 48: 91-93. See distributional comments by Gorzula and Señaris, 1999 "1998", Scient. Guianae, 8: 26. Schulte, 1999, Pfeilgiftfrösche, : 221-225, provided an account.

***Epipedobates planipaleae* Morales and Velazco, 1998**

- *Epipedobates planipaleae* Morales and Velazco, 1998, Amphibia-Reptilia, 19: 370. Holotype: MUSM 16542, by original designation. Type locality: "quebrada Llamaquizú; a 6 km del pueblo de Oxapampa; 10° 39´ S, 75° 27´ W aprox.; 2,010 m de altitud; ladera occidental del Parque Nacional Yanachaga-Chemillen; provincia de Oxapampa; Pasco, Perú".

Distribution: Known only from the type locality (Pasco, Peru).

Comment: In the *Epipedobates petersi* group according to the original publication.

***Epipedobates pongoensis* Schulte, 1999**

- *Epipedobates pongoensis* Schulte, 1999, Pfeilgiftfrösche: 202. Holotype: Rainer Schulte Collection BE 24 H, to be deposited in the MHNSM, by original designation. Type locality: "Pongo de Aguirre, Rio Huallaga-Canyon zwischen Chazuta und Leticia, Region San Martin, Nord-Ost-Peru. Ca. 220 m N.N.".

Distribution: Known only from the type locality (Pongo de Aguirre, between Chazuta and Leticia, Amazonas, Peru, 220 m elevation).

Comment: -

***Epipedobates pulchripectus* (Silverstone, 1976)**

- *Phyllobates pulchripectus* Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 43. Holotype: LACM 42297, by original designation. Type locality: "Serra do Navio, Territorio do Amapá, Brasil, about 120 m".
- *Dendrobates pulchripectus* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates pulchripectus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Known only from the type locality in the Guiana region of northern Brazil, near the Rio Amapari (tributary of the Rio Araguari), 100-310 m.

Comment: In the *Epipedobates pictus* group.

***Epipedobates rubriventris* Lötters, Debold, Henle, Glaw, and Kneller, 1997**

- *Epipedobates rubriventris* Lötters, Debold, Henle, Glaw, and Kneller, 1997, Herpetofauna, Weinstadt, 19: 26. Holotype: ZFMK 64838, by original designation. Type locality: "Strassenrand der Carretera Central F. Basadre von Tingo Maria nach Pucallpa, ca. 3 km oberhalb des Ortes Prebisto, Tal des Rio Prebisto, Am Osthang der Cordillera Azul, etwa 550 m NN, Departamento Ucayali, Perú".
- *Epipedobates hahneli rubriventris* — Schulte, 1999, Pfeilgiftfrösche: 235. this rejected by Lötters and Vences, 2001 "2000", Salamandra, 36: 247.

Distribution: Eastern versant of the Cordillera Azul, Departamento Ucayali, Peru.

Comment: In the *Epipedobates pictus* group according to the original publication. Schulte, 1999, Pfeilgiftfrösche, : 237-243, provided an account (as *Epipedobates hahneli rubriventris*).

***Epipedobates rufulus* (Gorzula, 1990)**

- *Dendrobates rufulus* Gorzula, 1990 "1988", Mem. Soc. Cienc. Nat. La Salle, 48: 144. Holotype: MNHNLS 10361, by original designation. Type locality: "borde nor-oeste del Amuri-tepui en el Macizo del Chimantá (CHIMANTA XVIII), 05° 22' ---62° 05' W. 2.600 m, Estado Bolívar, Venezuela".
- *Epipedobates rufulus* — Walls, 1994, Jewels of the Rainforest: 26, 241. Myers, 1997, Acta Terramaris, Caracas, 10: 3.

Distribution: Likely endemic to the Chimantá Massif, Bolívar, Venezuela.

Comment: Gorzula and Señaris, 1999 "1998", Scient. Guaianae, 8: 26, placed this species in the *Dendrobates femoralis* group of Silverstone, which is currently equal to *Epipedobates* and *Allobates*. See distributional comments by Gorzula and Señaris, 1999 "1998", Scient. Guaianae, 8: 26 (as *Dendrobates rufulus*).

***Epipedobates silverstonei* (Myers and Daly, 1979)**

- *Dendrobates silverstonei* Myers and Daly, 1979, Am. Mus. Novit., 2674: 2. Holotype: AMNH 91844, by original designation. Type locality: "montane forest of Cordillera Azul, 1330 meters elevation, approximately 30 km airline northeast of Tingo María, Department of Huánuco, Peru. This locality lies alongside the gravel road from Tingo María to Pucallpa, about 5 km by road southwest of the road's crest at 1640 m elevation."
- *Epipedobates silverstonei* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.
- *Phobobates silverstonei* — Zimmermann and Zimmermann, 1988, Salamandra, 24: 125-160.

Distribution: Cordillera Azul, Huánuco, Peru.

Comment: In the *Epipedobates trivittatus* group. Schulte, 1999, Pfeilgiftfrösche, : 186-193, provided an account.

***Epipedobates simulans* Myers, Rodriguez, and Icochea, 1998**

- *Epipedobates simulans* Myers, Rodriguez, and Icochea, 1998, Am. Mus. Novit., 3238: 2. Holotype: MUSM 16996, by original designation. Type locality: "on ridge along Río Távara (trib. Río Tambopata) just below confluence of Río Candamo and Río Huacamayo, about 450 m elev. (13° 31' S, 69° 41' W), Depto. Puno, Peru. The type locality is in the Zona Reservada Tambopata-Candamo".

Distribution: Lower montane Andean forest in the upper Río Madre de Dios watershed, Departamento Puno, Peru.

Comment: Confused with *Epipedobates petersi* prior to description. De la Riva, Köhler, Lötters, and Reichle, 2000, Rev. Esp. Herpetol., 14: 57, and Köhler, 2000, Bonn. Zool. Monogr., 48: 69, consider this species possibly to occur in Bolivia.

***Epipedobates smaragdinus* (Silverstone, 1976)**

- *Phyllobates smaragdinus* Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 44. Holotype: LACM 64435, by original designation. Type locality: "Pan de Azúcar, 39 km NNE Oxapampa, 10° 15' S, 75° 14' W, in the Iscozazin Valley (the Río Iscozazin is a tributary of the Río Palcazú, in the Pachitea drainage), Departamento de Pasco, Perú, 380 m".
- *Dendrobates smaragdinus* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates smaragdinus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.

Distribution: Region of the type locality (Department of Pasco, Peru).

Comment: In the *Epipedobates pictus* group. Schulte, 1999, Pfeilgiftfrösche, : 211-213, provided an account.

Epipedobates tricolor (Boulenger, 1899)

- *Prostherapis tricolor* Boulenger, 1899, Ann. Mag. Nat. Hist., Ser. 7, 4: 455. Syntypes: BM 1947.2.14.16-19; BM 1947.2.14.18 designated lectotype by Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 33. Type locality: "Porvenir, Bolivar, western slope, about 5800 feet [1769 m]", Ecuador.
- *Phyllobates tricolor* — Barbour and Noble, 1920, Bull. Mus. Comp. Zool., 63: 401. Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 6.
- *Dendrobates tricolor* — Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Epipedobates tricolor* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.
- *Colostethus paradoxus* Rivero, 1991, Breviora, 493: 20. Holotype: MCZ 103924, by original designation. Type locality: "Lamtac, Cuenca, 2,535 m, Provincia Azuay, Ecuador". Synonymy by Rivero and Almendáriz, 1992 "1991", Politecnica, Quito, 16: 106; and Duellman and Wild, 1993, Occas. Pap. Mus. Nat. Hist. Univ. Kansas, 157: 1-53.
- *Epipedobates bicolor* — Rivero and Almendáriz, 1992 "1991", Politecnica, Quito, 16: 106. Error for *Epipedobates tricolor*.

Distribution: Southwestern Ecuador and northwestern Peru, west of the Andes, 153-1769 m.

Comment: In the *Epipedobates tricolor* group (formerly *Epipedobates femoralis* group; see comment under *Epipedobates*). Schulte, 1999, Pfeilgiftfrösche, : 267-276, provided an account (as *Epipedobates tricolor* and *Epipedobates anthonyi*).

Epipedobates trivittatus (Spix, 1824)

- *Hyla trivittata* Spix, 1824, Animal. Nova Spec. Nov. Test. Ran. Brasil.: 35. Syntypes: not specifically designated, but including animal figured in pl. 9, fig. 1 of the original publication; 6 specimens including ZSM 43/0 (reported found by Hoogmoed, 1986, Zool. Meded., Leiden, 60: 300) and RMNH 1836 according to Hoogmoed and Gruber, 1983, Spixiana, Suppl., 9: 367; RMNH 1836 designated lectotype by Hoogmoed and Gruber, 1983, Spixiana, Suppl., 9: 367. Type locality: "juxta flumen Teffé" (= Rio Tefé, Brazil).
- *Hyla nigerrima* Spix, 1824, Animal. Nova Spec. Nov. Test. Ran. Brasil.: 36. Syntypes: 5 specimens presumably originally in the ZSM and including animal figured on pl. 9, fig. 2 of the original publication; syntypes in ZSM (now lost) and RMNH (exchanged from ZSM), of which RMNH 1799 designated lectotype by Hoogmoed and Gruber, 1983, Spixiana, Suppl., 9: 367. Type locality: "juxta pagum Ecgá" = Ega, Teffe, Brazil. Synonymy by Peters, 1872, Monatsber. Preuss. Akad. Wiss. Berlin, 1872: 213; Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2, : 144; Hoogmoed and Gruber, 1983, Spixiana, Suppl., 9: 367.
- *Hysaplesia trivittata* — Schlegel, 1826, Bull. Sci. Nat. Geol., Ser. 2, 9: 239.
- *Hysaplesia nigerrima* — Schlegel, 1826, Bull. Sci. Nat. Geol., Ser. 2, 9: 239.
- *Dendrobates nigerrima* — Wagler, 1830, Nat. Syst. Amph.: 202.
- *Dendrobates trivittatus* — Wagler, 1830, Nat. Syst. Amph.: 202. Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11; Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 332.
- *Dendrobates nigerrimus* — Wagler, 1830, Nat. Syst. Amph.: 202.
- *Dendrobates obscurus* Duméril and Bibron, 1841, Erp. Gen., 8: 655. Holotype: MNHNP 4906, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 32. Type locality: unknown. Synonymy by Peters, 1872, Monatsber. Preuss. Akad. Wiss. Berlin, 1872: 212-213; Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2, : 144; Cochran and Goin, 1970, Bull. U.S. Natl. Mus., 288: 14; and Hoogmoed and Gruber, 1983, Spixiana, Suppl., 9: 367.
- *Hyalaplesia trivittatus* — Knauer, 1883, Naturgesch. Lurche: 112.

- *Dendrobates tetravittatus* Miranda-Ribeiro, 1926, Arq. Mus. Nac., Rio de Janeiro, 27: 180. Holotype: MZUSP. Type locality: "Obidos", Pará, Brazil. Synonymy by Bokermann, 1966, *Lista Anot. Local. Tipo Anf. Brasil.*, : 34; Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 11.
- *Phyllobates trivittatus* — Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 6.
- *Epipedobates trivittatus* — Myers, 1987, Pap. Avulsos Zool., São Paulo, 36: 303.
- *Phobobates trivittatus* — Zimmermann and Zimmermann, 1988, Salamandra, 24: 125-160.

Distribution: Guianas and the Amazon drainage of Brazil, Peru, Bolivia (Pando), Ecuador, Colombia (Putumayo and Amazonia), and Venezuela.

Comment: In the *Epipedobates trivittatus* group. See De la Riva, Köhler, Lötters, and Reichle, 2000, *Rev. Esp. Herpetol.*, 14: 30, for Bolivian record. See distributional comments regarding Venezuela by Gorzula and Señaris, 1999 "1998", *Scient. Guaianae*, 8: 26-27 (as *Phobobates trivittatus*). Schulte, 1999, *Pfeilgiftfrösche*, : 169-180, provided an account. Barrio-Amorós and Fuentes-Ramos, 1999, *Acta Biol. Venezuelica*, 19: 2, reported the species for Venezuela but did not report a precise locality or location of voucher specimen.

***Phyllobates* Duméril and Bibron, 1841**

Incertae sedis

***Phyllobates peruensis* Steindachner, 1867**

***Phyllobates aurotaenia* (Boulenger, 1913)**

- *Dendrobates aurotaenia* Boulenger, 1913, Proc. Zool. Soc. London, 1913: 1029. Holotype: BM 1947.2.15.13. Type locality: "Peña Lisa, Condoto, 300 feet", Departamento Chocó, Colombia.
- *Phyllobates aurotaenia* — Dunn, 1957, Copeia, 1957: 78.

Distribution: Wet forests of the Chocoan region of western Colombia (Chocó and Valle del Cauca) in the Atrato and San Juan drainages, 90-1000 m elevation.

Comment: Removed from the synonymy of *Epipedobates femoralis* (as *Phyllobates femoralis*) by XXX, where it had been placed by Cochran and Goin, 1970, *Bull. U.S. Natl. Mus.*, 288: 40.

***Phyllobates bicolor* Duméril and Bibron, 1841**

- *Phyllobates bicolor* Duméril and Bibron, 1841, Erp. Gen., 8: 638. Holotype: MNHNP 838 according to Guibé, 1950 "1948", *Cat. Types Amph. Mus. Natl. Hist. Nat.*, : 34. Type locality: "l'île de Cuba"; corrected to Colombia by Silverstone, 1976, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 27: 23.
- *Phyllobates melanorrhinus* Berthold, 1845, Nachr. Ges. Wiss. Göttingen, 1845: 43. Syntypes: including ZFMK 28126-27, 28129-31, AMNH 140864 (formerly ZFMK 28128), and AMNH ; ZFMK 28130 designated lectotype by Myers and Böhme, 1996, *Am. Mus. Novit.*, 3185: 5. Type locality: "Neu-Granada Provinz Popayan"; clarified by Myers and Böhme, 1996, *Am. Mus. Novit.*, 3185: 17, to "Pacific versant northwestern Colombia, probably upper Rio San Juan drainage in the present-day Department of Risaralda" western Colombia. Synonymy by Cochran and Goin, 1970, *Bull. U.S. Natl. Mus.*, 288: 36. Myers and Böhme, 1996, *Am. Mus. Novit.*, 3185: 1-20, discussed synonymy.
- *Phyllobates chocoensis* Posada Arango, 1869, Bull. Soc. Med. Allemande Paris, 1869: 206. Types: not stated, although likely originally in MNHNP. Type locality: "forets de la Nouvelle-Grenade Chocó". Synonymy (with *Dendrobates histrionicus*) by Boulenger, 1913, *Proc.*

Zool. Soc. London, 1913: 1028. Synonymy (with *Phyllobates pictus*) by Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 11.

- *Dendrobates tinctorius* var. *chocoensis* — Boulenger, 1913, Proc. Zool. Soc. London, 1913: 1028. Cochran and Goin, 1970, Bull. U.S. Natl. Mus., 288: 26-28. Based on misidentified material.
- *Phyllobates nicefori* Noble, 1923, Am. Mus. Novit., 88: 1. Holotype: AMNH 14028, by original designation. Type locality: "town of Andes [Antioquia], Colombia, South America probably in the vicinity of Medellin". Synonymy by Cochran and Goin, 1970, Bull. U.S. Natl. Mus., 288: 36.
- *Phyllobates melanorhinus* — Gorham, 1963, Canad. Field Nat., 77: 25. .

Distribution: Western flank of the northern part of the Cordillera Occidental, 400-1500m, northwestern Colombia (Chocó and Valle del Cauca).

Comment: See Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 328. See Lötters, Castro-Herrera, Köhler, and Richter, 1997, Rev. Fr. Aquar. Herpetol., 24: 55-58.

***Phyllobates lugubris* (Schmidt, 1857)**

- *Dendrobates lugubris* Schmidt, 1857, Sitzungsber. Akad. Wiss. Wien, Phys. Math. Naturwiss. Kl., 24: 12. Holotype: KM 1016/1347; lost, according to Savage, 1970, Proc. California Acad. Sci., Ser. 4, 38: 279. Type locality: "Neu-Granada"; restricted to "der Weg zwischen Bocca del toro und dem Vulcan Chiriqui [Panama]. . . zwischen 5000´ und 7000´ Höhe" by Schmidt, 1858, Denkschr. Akad. Wiss. Wien, Math. Naturwiss. Kl., 14: 249.
- *Hylaplesia lugubris* — Brocchi, 1882, Miss. Scient. Mex. Amer. Centr., Rech. Zool., 3(2, livr. 2): 88.
- *Dendrobates lugubris* — Werner, 1901, Verh. Zool. Bot. Ges. Wien, 51: 631.
- *Phyllobates beatriciae* Barbour and Dunn, 1921, Proc. Biol. Soc. Washington, 34: 159. Holotype: MCZ 8022. Type locality: "wooded hill back of Victoria farm near Zent not far from Puerto Limon, [Cantón de Matina, Provincia de Limón,] Costa Rica". Savage, 1974, Rev. Biol. Tropical, 22: 111, commented on the type locality. Synonymy by Dunn, 1924, Occas. Pap. Mus. Zool. Univ. Michigan, 151: 5; Taylor, 1952, Univ. Kansas Sci. Bull., 35: 640.
- *Phyllobates lugubris* — Dunn, 1924, Occas. Pap. Mus. Zool. Univ. Michigan, 151: 5. Taylor, 1952, Univ. Kansas Sci. Bull., 35: 640; Silverstone, 1976, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 27: 5.
- *Dendrobates lugubris* — Dunn, 1940, Proc. Acad. Nat. Sci. Philadelphia, 92: 110.

Distribution: Humid lowlands of the Atlantic versant from extreme southeastern Nicaragua to northwestern Panama; one record just west of the Panama Canal.

Comment: See account by Savage, 1968, Copeia, 1968: 763-766; Pacific versant populations formerly associated with this species now regarded as a distinct species, *Phyllobates vittatus*. See account by Savage, 2002, Amph. Rept. Costa Rica, : 389-390.

***Phyllobates terribilis* Myers, Daly, and Malkin, 1978**

- *Phyllobates terribilis* Myers, Daly, and Malkin, 1978, Bull. Am. Mus. Nat. Hist., 161: 313. Holotype: AMNH 88876, by original designation. Type locality: "lowland rain forest at Quebrada Guanguí, about 0.5 km above its junction with Río Patia, 100-200 m elevation, in upper Río Saija drainage, Department of Cauca, Colombia".

Distribution: Region of the type locality (Cauca, Colombia), 100-200 m elevation.

Comment: See Lötters, Castro-Herrera, Köhler, and Richter, 1997, Rev. Fr. Aquar. Herpetol., 24: 55-58.

***Phyllobates vittatus* (Cope, 1893)**

- *Dendrobates tinctorius vittatus* Cope, 1893, Proc. Am. Philos. Soc., 31: 340. Type(s): Not stated; presumably originally in the ANSP, USNM, or Philadelphia Mus. Type locality: "Buenos Ayres", (= Buenos Aires, Cantón de Buenos Aires, Provincia de Puntarenas), Costa Rica. Savage, 1974, *Rev. Biol. Tropical*, 22: 81, commented on the type locality.
- *Phyllobates vittatus* — Silverstone, 1975, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 21: 6, 11.

Distribution: Humid forests of the Golfo Dulce region of the Pacific coast of Costa Rica; expected to occur in immediately adjacent southwestern Panama.

Comment: See comment under *Phyllobates lugubris*. Removed from the synonymy of *Phyllobates lugubris* by Silverstone, 1975, *Sci. Bull. Nat. Hist. Mus. Los Angeles Co.*, 21: 6, where it had been placed by Savage, 1968, *Copeia*, 1968: 745-776. See Ryan, 2002, *Herpetol. Rev.*, 33: 318, for a range extension in Costa Rica and a comment on what this locality implies about the more general distribution.

Amphibia, Anura, Mantellidae

Mantella Boulenger, 1882

Mantella aurantiaca Mocquard, 1900

- *Mantella aurantiaca* Mocquard, 1900, Bull. Soc. Philomath., Paris, Ser. 9, 2: 110. also Mocquard, 1900, Bull. Mus. Natl. Hist. Nat. Paris, 6: 348. Syntypes: MNHNP 1899.412-413, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 33. MNHNP 1899.412 designated lectotype by Vences, Glaw, and Böhme, 1999, Alytes, 17: 40. Type locality: "forêt entre Beforana et Moramanga", Madagascar.
- *Mantella aurantiaca aurantiaca* — Staniszewski, 1996, Reptilian, 4: 16-26. By implication.
- *Mantella aurantiaca rubra* Staniszewski, 1996, Reptilian, 4: 16-26. Type(s): not formally designated although several specimens involved; ZFMK 68868 designated lectotype by Vences, Glaw, and Böhme, 1999, Alytes, 17: 40. Type locality: forests of Anosibe An'Ala; considered to be unknown by Vences, Glaw, and Böhme, 1999, Alytes, 17: 40, who rejected the validity of the taxon.

Distribution: Eastern slopes of central Madagascar in upland wet swamp forests (600-1200 m elevation).

Comment: See account by Blommers-Schlösser, 1979, Beaufortia, 29: 61. In the *Mantella aurantiaca* group of Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. See account by Staniszewski, 2001, Mantellas, : 148-153.

Mantella baroni Boulenger, 1888

- *Mantella baroni* Boulenger, 1888, Ann. Mag. Nat. Hist., Ser. 6, 1: 106. Holotype: BM 1947.2.7.19 (formerly 84.12.22.50) according to Vences, Glaw, and Böhme, 1999, Alytes, 17: 23. Type locality: "Madagascar".
- *Phrynomantis maculatus* Thominot, 1889, Bull. Soc. Philomath., Paris, Ser. 8, 1: 27. Syntypes: MNHNP (4 specimens) according to the original publication; MNHNP 6807a-d (4 specimens) according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 33. MNHNP 1991.2854 (formerly 6807a) designated lectotype by Glaw and Vences, 1994, Fieldguide Amph. Rept. Madagascar, Ed. 2, : 403. Type locality: "l'île de la Réunion"; rendered as "Nosy Komba (dubious)" by Glaw and Vences, 1992, Fieldguide Amph. Rept. Madagascar, : 279. Synonymy (with *Mantella cowanii*) by Guibé, 1964, Senckenb. Biol., 45: 259-264; Guibé, 1978, Bonn. Zool. Monogr., 11: 83. Synonymy with *Mantella baroni* as by Boulenger, 1890, Zool. Rec., 26: 21; (with *Mantella baroni* as *Mantella madagascariensis*) Glaw and Vences, 1994, Fieldguide Amph. Rept. Madagascar, Ed. 2, : 403.

Distribution: East-central Madagascar.

Comment: See Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72, for discussion of confusion surrounding type allocation and nomenclature. Removed from the synonymy of *Mantella cowanii* by Glaw and Vences, 1994, Fieldguide Amph. Rept. Madagascar, Ed. 2, : 403 (as *Mantella madagascariensis*, a *nomen dubium*) where it had been placed by Methuen and Hewitt, 1913, Ann. Transvaal Mus., 4: 57. In the *Mantella cowani* group according to Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas, : 154-158, provided an account.

Mantella bernhardi Vences, Glaw, Peyrieras, Böhme, and Busse, 1994

- *Mantella bernhardi* Vences, Glaw, Peyrieras, Böhme, and Busse, 1994, Aquar. Terrar. Z., 47: 391. Holotype: ZFMK 57164, by original designation. Type locality: "Regenwald nahe Tolongoina, Provinz Fianarantsoa", Madagascar.

Distribution: Known only from the type locality in east-southeast Madagascar.

Comment: Similar to the *Mantella betsileo* according to the original publication. In the *Mantella bernhardi* group of Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 3-72. See Staniszewski, 2001, *Mantellas*, : 159-163.

***Mantella betsileo* (Grandidier, 1872)**

- *Dendrobates betsileo* Grandidier, 1872, *Ann. Sci. Nat., Paris, Ser. 5*, 15: 11. Syntypes: MNHNP 1895.278-279, according to Guibé, 1950 "1948", *Cat. Types Amph. Mus. Natl. Hist. Nat.*, : 33. MNHNP 1895.279 designated lectotype by Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 11. Type locality: "Pays des Betsileos", Madagascar. See Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 12, for discussion of type locality.
- *Dendrobates ebenai* Boettger, 1880, *Zool. Anz.*, 3: 281. Syntypes: (2 specimens in original publication) SMF 1141.1a and MCZ 2165 (according to Barbour and Loveridge, 1929, *Bull. Mus. Comp. Zool.*, 69: 303. SMF 7323 designated lectotype by Mertens, 1967, *Senckenb. Biol.*, 48: 24. Type locality: "insula Nossi Bé", Madagascar. Synonymy by Mocquard, 1909, *Nouv. Arch. Mus. Natl. Hist. Nat. Paris, Ser. 5*, 1: 66; Methuen and Hewitt, 1913, *Ann. Transvaal Mus.*, 4: 57; Guibé, 1978, *Bonn. Zool. Monogr.*, 11: 83.
- *Mantella betsileo* — Boulenger, 1882, *Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2*: 141.
- *Mantella ebenai* — Boulenger, 1882, *Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2*: 141. Werner, 1901, *Verh. Zool. Bot. Ges. Wien*, 51: 633.
- *Mantella attemsi* Werner, 1901, *Verh. Zool. Bot. Ges. Wien*, 51: 627. Syntypes: including NHMW 20837, according to Häupl and Tiedemann, 1978, *Kat. Wiss. Samml. Naturhist. Mus. Wien*, 2: 24, and Häupl, Tiedemann, and Grillitsch, 1994, *Kat. Wiss. Samml. Naturhist. Mus. Wien*, 9: 28, and ZMB 16588 according to Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 12. NHMW 20837 designated lectotype by Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 11. Type locality: "Madagascar oder Nossi-Bé". Synonymy by Guibé, 1964, *Senckenb. Biol.*, 45: 263; Guibé, 1978, *Bonn. Zool. Monogr.*, 11: 83.

Distribution: Northeastern and western Madagascar below 500 m elevation; Nosy Bé I.

Comment: See comment under *Mantella viridis*. In the *Mantella betsileo* group according to Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 3-72. Staniszewski, 2001, *Mantellas*: 164-167, provided an account. Andreone, Glaw, Nussbaum, Raxworthy, Vences, and Randrianirina, 2003, *J. Nat. Hist.*, 37: 2119-2149, discussed the occurrence of this species on Nosy Be.

***Mantella cowanii* Boulenger, 1882**

- *Mantella cowanii* Boulenger, 1882, *Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2*: 471. Syntypes: BM 1947.2.7.4-5. BM 1947.2.7.4 (formerly 82.3.16.38) designated lectotype by Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 27. Type locality: "East Betsileo", Madagascar.

Distribution: Forested areas of the highlands southeast of Ambatolampy and near Antoetra, Madagascar.

Comment: Removed from the synonymy of *Mantella madagascariensis* by Blommers-Schlösser and Blanc, 1991, *Faune de Madagascar*, 75: 270, where it had been placed by Guibé, 1948, *Bull. Mus. Natl. Hist. Nat. Paris, Ser. 2*, 20: 235-238, and Busse, 1981, *Amphibia-Reptilia*, 2: 29 (who also addressed confusion in application of the name *Mantella cowani*). Considered to be likely a color morph of *Mantella baroni* (as *Mantella madagascariensis*) by Glaw and Vences, 1992, *Fieldguide Amph. Rept. Madagascar*, : 165. See comment under *Mantella haraldmeieri*. See Vences, Glaw, Peyrieras, Böhme, and Busse, 1994, *Aquar. Terrar. Z.*, 47: 391, who note that this nominal species covers a number of well differentiated geographic forms. In the *Mantella cowani* group of Vences, Glaw, and Böhme, 1999, *Alytes*, 17: 3-72, who sorted out much of the nomenclatural confusion surrounding this name. Staniszewski, 2001, *Mantellas*: 170-172, provided an account.

***Mantella crocea* Pintak and Böhme, 1990**

- *Mantella crocea* Pintak and Böhme, 1990, Salamandra, 26: 58. Holotype: ZFMK 45007, by original designation. Type locality: "Andasibé (= Périnet), mittleres Ostmadagaskar".

Distribution: Known only from the vicinity of the type locality in east-central Madagascar.

Comment: Similar to the *Mantella betsileo* and *Mantella madagascariensis* species groups according to the original publication. In the *Mantella aurantiaca* group of Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas: 173-175, provided an account.

***Mantella expectata* Busse and Böhme, 1992**

- *Mantella expectata* Busse and Böhme, 1992, Rev. Fr. Aquar. Herpetol., 19: 58. Holotype: ZFMK 53540 by original designation. Type locality: "20 km southeast of Toliara (= Tuléar), W-Madagascar".

Distribution: Morondava and Tuléar regions of western Madagascar.

Comment: In the *Mantella betsileo* group according to Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas: 178-181, provided an account.

***Mantella haraldmeieri* Busse, 1981**

- *Mantella madagascariensis haraldmeieri* Busse, 1981, Amphibia-Reptilia, 2: 34. Holotype: ZFMK 53540 by original designation. Type locality: "Fort Dauphin, Süd Madagaskar".
- *Mantella haraldmeieri* — Meier, 1986, Herpetofauna, Weinstadt, 8: 9. Pintak and Böhme, 1990, Salamandra, 26: 58-62; Glaw and Vences, 1992, Fieldguide Amph. Rept. Madagascar, : 166.

Distribution: Anosy Mountains, southeastern Madagascar.

Comment: Placed in the synonymy of *Mantella cowani* by Blommers-Schlösser and Blanc, 1991, Faune de Madagascar, 75: 270, but resurrected by Böhme, Busse, and Glaw, 1993, Amphibia-Reptilia, 14: 269-273. In the *Mantella cowani* group of Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas: 182-185, provided an account.

***Mantella laevigata* Methuen and Hewitt, 1913**

- *Mantella laevigata* Methuen and Hewitt, 1913, Ann. Transvaal Mus., 4: 57. Holotype: TM 10074 (formerly 1214), by original designation; the consideration of MCZ 10815 (on exchange from TM) as a syntype, by Barbour and Loveridge, 1929, Bull. Mus. Comp. Zool., 69: 304, is in error. Type locality: Folohy, eastern Madagascar.

Distribution: Eastern Madagascar.

Comment: Removed from the synonymy of *Mantella cowanii* by Busse, 1981, Amphibia-Reptilia, 2: 27, where it had been placed by Guibé, 1964, Senckenb. Biol., 45: 259-264. Sole member of the *Mantella laevigata* group according to Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas: 186-189, provided an account.

***Mantella madagascariensis* (Grandidier, 1872)**

- *Dendrobates madagascariensis* Grandidier, 1872, Ann. Sci. Nat., Paris, Ser. 5, 15: 10. Syntypes: MNHNP 1895.276-277, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 33. MHNP 1895.276 designated lectotype by Glaw and Vences, 1994, Fieldguide Amph. Rept. Madagascar, Ed. 2, : 403. Type locality: "Forêt d'Ambalavatou, entre Mananzarine et Fianarantsoa", Madagascar.
- *Mantella madagascariensis* — Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2: 141.
- *Mantella loppei* Roux, 1935, Bull. Soc. Zool. France, 60: 441. Holotype: NHMB 4849 according to Forcart, 1946, Verh. Naturforsch. Ges. Basel, 57: 130. Type locality: "Moroulambo, Prov. de Vatomaniry, Est Madagascar". Glaw and Vences, 1994, Fieldguide Amph. Rept. Madagascar, Ed. 2, : 403, considered this name a *nomen dubium*, but used the name tentatively for another species in east-central Madagascar. Daly, Andriamaharavo, Andriantsiferana, and Myers, 1996, Am. Mus. Novit., 3177: 13, considered this application of the name to be dubious practice. Synonymy by Busse, 1981, Amphibia-Reptilia, 2: 32, and (answering previous critics) Vences, Glaw, and Böhme, 1999, Alytes, 17: 37.
- *Mantella madagascariensis madagascariensis* — Busse, 1981, Amphibia-Reptilia, 2: 32.

Distribution: Eastern Madagascar in upland locations.

Comment: Daly, Andriamaharavo, Andriantsiferana, and Myers, 1996, Am. Mus. Novit., 3177: 17-18, rejected the use of this name for reason of being unidentifiable. Vences, Glaw, and Böhme, 1999, Alytes, 17: 37, discussed the issue and suggested that the lectotype is identifiable. In the *Mantella madagascariensis* group of Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas: 190-193, provided an account.

***Mantella manery* Vences, Glaw, and Böhme, 1999**

- *Mantella manery* Vences, Glaw, and Böhme, 1999, Alytes, 17: 15. Holotype: ZIAU (Zoological Institute of Antananarivo University) unnumbered, by original designation. Type locality: "Réserve Naturelle Intégrale Marojezy, near Camp 1, ca. 300 m altitude", Madagascar.

Distribution: Known only of the type locality in the Marojezy Massif, Madagascar.

Comment: In the *Mantella betsileo* group according to the original publication. Staniszewski, 2001, Mantellas: 194-195, provided an account.

***Mantella milotympanum* Staniszewski, 1996**

- *Mantella aurantiaca milotympanum* Staniszewski, 1996, Reptilian, 4: 18. Type(s): not formally designated; specimen figured on p. 18 of original inadvertant description designated lectotype by Vences, Glaw, and Böhme, 1999, Alytes, 17: 44, although they noted that this specimen is presumed lost. Type locality: not designated.
- *Mantella milotympanum* — Vences, Glaw, and Böhme, 1999, Alytes, 17: 44.

Distribution: Fiherenana Valley about 50 km west of Andasibe, Madagascar.

Comment: In the *Mantella aurantiaca* group of Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas: 196-199, provided an account.

***Mantella nigricans* Guibè, 1978**

- *Mantella cowani nigricans* Guibè, 1978, Bonn. Zool. Monogr., 11: 84. Type(s): not designated although several specimens of an assortment of species in MNHNP considered syntypes by museum records; MNHNP 1973.555 designated lectotype by Vences, Glaw, and Böhme, 1999, Alytes, 17: 30. Type locality: "Maroyezi", Madagascar.
- *Mantella madagascariensis nigricans* — Busse, 1981, Amphibia-Reptilia, 2: 32.
- *Mantella nigricans* — Vences, Glaw, and Böhme, 1999, Alytes, 17: 30.

Distribution: Marojezy Massif, northeastern Madagascar.

Comment: In the *Mantella cowani* group of Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Odierna, Vences, Aprea, Lötters, and Andreone, 2001, Zool. Sci., Tokyo, 18: 505-514, provided karyological data in support of the distinctiveness of this species. Staniszewski, 2001, Mantellas: 200-203, provided an account.

***Mantella pulchra* Parker, 1925**

- *Mantella pulchra* Parker, 1925, Ann. Mag. Nat. Hist., Ser. 9, 16: 393. Holotype: BM 1947.2.7.20 (formerly 1925.7.2.58) according to Vences, Glaw, and Böhme, 1999, Alytes, 17: 38. Type locality: "Antsihanaka", Madagascar.
- *Mantella cowani pulchra* — Andreone, 1992, Boll. Mus. Reg. Sci. Nat. Torino, 10: 437.

Distribution: East-central Madagascar.

Comment: Considered a synonym of *Mantella madagascariensis* by Busse, 1981, Amphibia-Reptilia, 2: 29, and likely a color morph of *Mantella madagascariensis* by Glaw and Vences, 1992, Fieldguide Amph. Rept. Madagascar, : 165, and as a subspecies of *Mantella cowani* by Andreone, 1992, Boll. Mus. Reg. Sci. Nat. Torino, 10: 421-450; but recognized subsequently by Glaw and Vences, 1994, Fieldguide Amph. Rept. Madagascar, Ed. 2, : 403. In the *Mantella madagascariensis* group of Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. See comment under *Mantella cowani*. Staniszewski, 2001, Mantellas: 204-207, provided an account.

***Mantella viridis* Pintak and Böhme, 1988**

- *Mantella viridis* Pintak and Böhme, 1988, Salamandra, 24: 119. Holotype: ZFMK 47900, by original designation. Type locality: "südlich Antseranana (= Diego Suarez), Nord-Madagaskar".

Distribution: Known only from the type locality in very northern Madagascar.

Comment: Most similar to *Mantella betsileo* according to the original publication. In the *Mantella betsileo* group according to Vences, Glaw, and Böhme, 1999, Alytes, 17: 3-72. Staniszewski, 2001, Mantellas: 209-211, provided an account.

Amphibia, Anura, Microhylidae

Dyscophus Grandidier, 1872

Dyscophus antongilii Grandidier, 1877

- *Dyscophus insularis* var. *antongilii* Grandidier, 1877, Bull. Soc. Philomath., Paris, Ser. 7, 1: 41. Holotype: MNHNP 1883.2, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 60. Type locality: "baie d'Antongil", Madagascar.
- *Dyscophus insularis* var. *pallidus* Grandidier, 1877, Bull. Soc. Philomath., Paris, Ser. 7, 1: 42. Holotype: MNHNP 1895.293, according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 60. Type locality: "Andovoranto", Madagascar. Synonymy by Mocquard, 1895, Bull. Soc. Philomath., Paris, Ser. 8, 7: 110.
- *Dyscophus sanguineus* Boettger, 1880, Zool. Anz., 3: 567. Syntypes: SMF (2 specimens); SMF 4280 designated lectotype by Mertens, 1967, Senckenb. Biol., 48: 49. Type locality: "Tohizona insulae Madagascar"; given as Foizana [Madagascar] by Parker, 1934, Monogr. Frogs Fam. Microhylidae, : 24. Synonymy by Boulenger, 1882, Zool. Rec., 18: 14; Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2, : 180.
- *Dyscophus antongilii* — Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2: 180.
- *Dyscophus antongilii* var. *pallidus* — Mocquard, 1895, Bull. Soc. Philomath., Paris, Ser. 8, 7: 110.
- *Dyscophus antongilii* — Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat.: 60.
- *Dyscophus antongilii* — Guibé, 1978, Bonn. Zool. Monogr., 11: 93.

Distribution: Northeastern Madagascar.

Comment: -

Scaphiophryne Boulenger, 1882

Scaphiophryne gottlebei Busse and Böhme, 1992

- *Scaphiophryne gottlebei* Busse and Böhme, 1992, Rev. Fr. Aquar. Herpetol., 19: 60. Holotype: ZFMK 53543, by original designation. Type locality: "Montagne de l'Isalo: Vallée des Singes, W-Madagascar".

Distribution: Known only from the vicinity of the type locality (Mt. Isalo, western Madagascar).

Comment: Reported as a tetraploid species by Vences, Aprea, Capriglione, Andreone, and Odierna, 2002, Chromosome Res., 10: 127-136.

Amphibia, Anura, Ranidae

Euphlyctis Fitzinger, 1843

Euphlyctis hexadactylus (Lesson, 1834)

- *Rana hexadactyla* Lesson, 1834, In Bélanger (ed.), Voy. Indes-Orientales N. Eur. Caucase Georgie Perse, Zool.: 331. Type(s): Not stated; presumably originally in MNHNP. Type locality: "Pondichéry"; Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 37, gives data for a paratype (MNHN 4363) as "Bengale" although this is not mentioned in the original publication.
- *Dactylethra bengalensis* Duméril and Bibron, 1841, Erp. Gen., 8: 339. Name attributed incorrectly to Lesson, 1834, In Bélanger (ed.), Voy. Indes-Orientales N. Eur. Caucase Georgie Perse, Zool., : 331 (who used *Bufo bengalensis* Daudin in a different sense). Synonymy by Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2, : 17.
- *Rana cutipora* Duméril and Bibron, 1841, Erp. Gen., 8: 338. Substitute name for *Rana hexadactyla* Lesson, 1834.
- *Rana saparoua* Duméril and Bibron, 1841, Erp. Gen., 8: 338. Substitute name for *Rana hexadactyla* Lesson, 1834.
- *Rana robusta* Blyth, 1855 "1854", J. Asiat. Soc. Bengal, 23: 298. Syntypes: Not stated; ZSIC 9123-24 according to Sclater, 1892, List Batr. Indian Mus., : 2. Type locality: "Ceylon". Synonymy with *Rana cutipora* by Blyth, 1856 "1855", J. Asiat. Soc. Bengal, 24: 720. Synonymy with *Rana hexadactyla* by Günther, 1864, Rept. Brit. India, : 405; Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2, : 17.
- *Phrynoderma cutiporum* — Fitzinger, 1861 "1860", Sitzungsber. Akad. Wiss. Wien, Phys. Math. Naturwiss. Kl., 42: 414.
- *Rana (Rana) hexadactyla* — Boulenger, 1920, Rec. Indian Mus., 20: 5. Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 37.
- *Rana (Dicroglossus) hexadactyla* — Dubois, 1974, Bull. Mus. Natl. Hist. Nat. Paris, Ser. 3, Zool., 213: 341-411.
- *Rana (Euphlyctis) hexadactyla* — Dubois, 1981, Monit. Zool. Ital., N.S., Suppl., 15: 240.
- *Euphlyctis hexadactyla* — Poynton and Broadley, 1985, Ann. Natal Mus., 27: 124. by implication.
- *Occidozyga (Euphlyctis) hexadactyla* — Dubois, 1987 "1986", Alytes, 5: 59.
- *Euphlyctis hexadactylus* — Dubois, 1992, Bull. Mens. Soc. Linn. Lyon, 61: 315.

Distribution: Coast plain of India, from Tripura through Bangladesh to Tamil Nadu; Sri Lanka.

Comment: See accounts by Boulenger, 1920, Rec. Indian Mus., 20: 12; Mondal, 1970, Sci. Cult., Calcutta, 36: 138-143; Kirtisinghe, 1957, Amph. Ceylon, : 26-29, and Dutta and Manamendra-Arachchi, 1996, Amph. Fauna Sri Lanka, : 116-119. Chanda, 2002, Handb. Indian Amph., : 114, provided a brief account (as *Rana hexadactyla*). Schleich, Anders, and Kästle, 2002, In Schleich and Kästle (eds.), Amph. Rept. Nepal, : 79, rejected all records of *Euphlyctis hexadactylus* from Nepal as likely based on misidentified *Euphlyctis cyanophlyctis*. See brief account by Shrestha, 2001, Herpetol. Nepal, : 81-83. Sarkar, Biswas, and Ray, 1992, State Fauna Ser., 3: 84-85, provided a brief account for West Bengal, India.

Hoplobatrachus Peters, 1863

Hoplobatrachus tigerinus (Daudin, 1802)

- *Rana typhonia* Linnaeus, 1758, Syst. Nat., Ed. 10, 1: 211. Type(s): Not designated, presumed lost. Type locality: "America", apparently in error. Synonymy by Andersson, 1900, Bih. K. Svenska Vetensk. Akad. Handl., 26: 1-29, although subsequent workers (until 1989) continued to use this name for the species currently known as *Bufo margaritifer*; this synonymy discussed by Hoogmoed, 1989, In Fontenet (ed.), Treballs Ictiol. Herpetol., 2, : 167-180; and Hoogmoed, 1990, In Peters and Hutterer (eds.), Vert. Tropics, : 113-123. *Nomen oblitum*.

- *Bufo typhonius* — Schneider, 1799, Hist. Amph. Nat.: 207. Concept based on Seba, 1734, Locuplet. Rer. Nat. Thesaur. Descript. Icon. Exp. Univ. Phys. Hist., 1, : pl. 71, fig. 6-8.
- *Rana tigerina* Daudin, 1802 (An. XI), Hist. Nat. Rain. Gren. Crap., Quarto: 62. Holotype: animal figured on pl. 20, of the original; originally in MNHNP (now lost). Type locality: "Bengale", India.
- *Rana tigrina* — Merrem, 1820, Tent. Syst. Amph.: 174. Kelaart, 1852, Prodr. Faunae Zeylan., 1, : 192; Günther, 1859 "1858", Cat. Batr. Sal. Coll. Brit. Mus., : 9. Unjustified emendation.
- *Rana picta* Gravenhorst, 1829, Delic. Mus. Zool. Vratislav., 1: 39. Type(s): "museo Lampeano". Type locality: unknown. Synonymy by Duméril and Bibron, 1841, Erp. Gen., 8, : 376; Günther, 1859 "1858", Cat. Batr. Sal. Coll. Brit. Mus., : 10; provisional synonymy by Boulenger, 1920, Rec. Indian Mus., 20: 17. Primary homonym of *Rana picta* Gravenhorst, 1807, if not identical (see record in *incertae sedis* at level of Anura---DRF.)
- *Osilophus typhonius* — Tschudi, 1838, Classif. Batr.: 52, 89. Based on specimens of *Bufo margaritifer* and never applied to a biological population of *Hoplobatrachus tigerinus*.
- *Cystignathus typhonius* — Duméril and Bibron, 1841, Erp. Gen., 8: 402. Not suggested as a new name and synonym of *Rana fusca* Schneider as posited by Heyer, 1978, Sci. Bull. Nat. Hist. Mus. Los Angeles Co., 29: 30, but a new combination nomenclaturally based on *Rana typhonia* Daudin.
- *Leptodactylus typhonius* — Fitzinger, 1843, Syst. Rept.: XXX. Girard, 1853, Proc. Acad. Nat. Sci. Philadelphia, 6: 420. Based on specimens of *Rana fusca* Schneider.
- *Rana malabarica* Kelaart, 1852, Prodr. Faunae Zeylan., 1: 191. Types: not stated or known to exist. Type locality: "Tincomalie in paddy field and other marshy grounds", Sri Lanka. Considered a synonym of *Rana tigerina* (sensu lato) by Boulenger, 1890, Fauna Brit. India, Rept. Batr., : 449, and Bourret, 1942, Batr. Indochine, : 240. A junior primary homonym of *Rana malabarica* Tschudi.
- *Rana gracilis* var. *pulla* Stoliczka, 1870, J. Asiat. Soc. Bengal, 39: 139. Holotype: ZSIC 3529 according to Sclater, 1892, List Batr. Indian Mus., : 5; lost, according to Dubois, 1984, Alytes, 3: 155. Type locality: "small pool of water at a height of about 2,000 feet on the Penang hill". Preoccupied by *Rana pullus* Smith, 1921. Considered a synonym of *Rana limnocharis* by Boulenger, 1890, Fauna Brit. India, Rept. Batr., : 450, although Sclater, 1892, Proc. Zool. Soc. London, 1892: 344, considered it to be based on a juvenile *Rana tigerina*. Considered a *nomen dubium* by Dubois, 1984, Alytes, 3: 155. Considered *incertae sedis* within *Hoplobatrachus* or *Fejervarya* by Dubois, 1987 "1986", Alytes, 5: 60; without discussion.
- *Otilophus typhonius* — Peters, 1871, Monatsber. Preuss. Akad. Wiss. Berlin, 1871: 403. Based on specimens of *Bufo margaritifer* and never applied to a biological population of *Hoplobatrachus tigerinus*.
- *Oxyrhynchus typhonius* — Jiménez de la Espada, 1875, Vert. Viaje Pacif. Verif. 1862-1865: 178. Based on specimens of *Bufo margaritifer* and never applied to a biological population of *Hoplobatrachus tigerinus*.
- *Oxyrhynchus typhonius* — Jiménez de la Espada, 1875, Vert. Viaje Pacif. Verif. 1862-1865: 178. Based on specimens of *Bufo margaritifer* and never applied to a biological population of *Hoplobatrachus tigerinus*.
- *Leptodactylus typhonius* — Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2: 246.
- *Leptodactylus typhonius* — Boulenger, 1882, Cat. Batr. Sal. Coll. Brit. Mus., Ed. 2: 246. Based on *Rana fusca* Schneider.
- *Rana tigerina* — Barbour, 1912, Mem. Mus. Comp. Zool., 44: 63.
- *Rana (Fejervarya) tigrina* — Bolkay, 1915, Anat. Anz., 48: 175.
- *Rana (Rana) tigrina* — Boulenger, 1920, Rec. Indian Mus., 20: 6.
- *Bufo typhonius typhonius* — Leavitt, 1933, Copeia, 1933: 8. Based on *Bufo margaritifer*.
- *Dicroglossus tigrinus* — Deckert, 1938, Sitzungsber. Ges. Naturforsch. Freunde Berlin, 1938: 138.
- *Rana tigrina tigrina* — Smith, 1940, Rec. Indian Mus., 42: 465-486.
- *Bufo* (= *Otylophus*) *typhonius* — Cei, 1953, Arch. Zool. Ital. Torino, 38: 511. Based on specimens *Bufo margaritifer* and never applied to a population of *Hoplobatrachus tigerinus*.
- *Rana tigerina tigerina* — Mertens, 1969, Stuttgart. Beit. Naturkd., 197: 17.
- *Rana (Dicroglossus) tigerina tigerina* — Dubois, 1974, Bull. Mus. Natl. Hist. Nat. Paris, Ser. 3, Zool., 213: 341-411.
- *Rana (Euphlyctis) tigerina* — Dubois, 1981, Monit. Zool. Ital., N.S., Suppl., 15: 239. by implication.
- *Euphlyctis tigerina* — Poynton and Broadley, 1985, Ann. Natal Mus., 27: 124. by implication.
- *Limnonectes (Hoplobatrachus) tigerinus* — Dubois, 1987 "1986", Alytes, 5: 59.

- *Tigrina tigrina* — Fei, Ye, and Huang, 1991 "1990", Key to Chinese Amph.: 144. Incorrect subsequent spelling of the species name.
- *Hoplobatrachus tigerinus* — Dubois, 1992, Bull. Mens. Soc. Linn. Lyon, 61: 315.

Distribution: Nepal, Bhutan, Pakistan, and India; Sri Lanka; introduced on Madagascar.

Comment: In the *Hoplobatrachus tigerinus* group of Dubois, 1992, Bull. Mens. Soc. Linn. Lyon, 61: 315 (following Dubois, 1987 "1986", Alytes, 5: 60). Reviewed by Bourret, 1942, Batr. Indochine, : 240-241. See also accounts by Berry, 1975, Amph. Fauna Peninsular Malaysia, : 88-89, Taylor, 1962, Univ. Kansas Sci. Bull., 43: 368-371, and Dubois, 1974, Bull. Mus. Natl. Hist. Nat. Paris, Ser. 3, Zool., 213: 341-411. The unjustified emendation *Rana tigrina* has had widespread use. Zhao and Adler, 1993, Herpetol. China, : 148, noted that previous Chinese records of *Hoplobatrachus tigerinus* (as *Rana tigrina*) were based on specimens of *Hoplobatrachus rugulosus* (formerly known as *Rana tigrina rugulosa*). See account by Dutta and Manamendra-Arachchi, 1996, Amph. Fauna Sri Lanka, : 99-103. Choudhury, Hussain, Buruah, Saikia, and Sengupta, 2002, Hamadryad, 26: 278, commented on the range in Assam, India. Chanda, 2002, Handb. Indian Amph., : 136-141, provided a brief account (as *Rana tigrina*). Anders, 2002, In Schleich and Kästle (eds.), Amph. Rept. Nepal, : 234-243, provided an account for the Nepal population. See brief account by Shrestha, 2001, Herpetol. Nepal, : 78-79. Andreone, Glaw, Nussbaum, Raxworthy, Vences, and Randrianirina, 2003, J. Nat. Hist., 37: 2119-2149, discussed the occurrence of this species on Nosy Be. Sarkar, Biswas, and Ray, 1992, State Fauna Ser., 3: 85-86, provided a brief account for West Bengal, India.

Amphibia, Anura, Rheobatrachidae

Rheobatrachus Liem, 1973

Rheobatrachus silus Liem, 1973

- *Rheobatrachus silus* Liem, 1973, Mem. Queensland Mus., 16: 467. Holotype: QM J22489, by original designation. Type locality: "Kondalilla, 3 km SW. Montville, SE. Queensland, Australia, 500 m above sea level".

Distribution: Rocky mountain streams in the Conondale and Blackall ranges in southeastern Queensland, Australia.

Comment: Reviewed by Tyler, 1983, Gastric-brooding Frog, . Thought to be extinct (see Couper, 1992, Wildl. Aust., 1992: 11-12).

Rheobatrachus vitellinus Mahony, Tyler, and Davies, 1984

- *Rheobatrachus vitellinus* Mahony, Tyler, and Davies, 1984, Trans. R. Soc. S. Aust., 108: 155. Holotype: QM J42529, by original designation. Type locality: "Eungella National Park, 148° 38' 00" E.; 21° 01' 30" S., Queensland", Australia.

Distribution: Known only from the Clarke Range, near Eungella, Queensland, Australia.

Comment: Possibly extinct; no recent sightings (see Couper, 1992, Wildl. Aust., 1992: 10-11, and McDonald, 1990, Trans. R. Soc. S. Aust., 114: 187-194).

Amphibia, Urodela, Ambystomidae

Ambystoma Tschudi, 1838

Ambystoma dumerilii (Dugès, 1870)

- *Siredon dumerilii* Dugès, 1870, Naturaleza, 1: 241. Syntypes: not stated, but presumably originally in MDUG; including USNM 16201-2 (according to Cochran, 1961, Bull. U.S. Natl. Mus., 220: 24) and ANSP 13862, according to Smith and Necker, 1943, An. Esc. Nac. Cienc. Biol., México, 3: 214. Maldonado-Koerdell, 1948, Nat. Hist. Misc., 23: 1-3, noted a probable syntype in the MDUG. Type locality: "laguna de Pátzcuaro", Michoacán, Mexico, 2055 feet altitude.
- *Amblystoma dumerili* — Cope, 1889, Bull. U.S. Natl. Mus., 34: 7.
- *Ambystoma dumerili* — Lafrentz, 1930, Abh. Ber. Mus. Nat. Heimatkd. Magdeburg, 6: 95.
- *Bathysiredon dumerilii* — Dunn, 1939, Not. Nat., Philadelphia, 36: 1.
- *Siredon dumerilii* — Smith, 1939, Field Mus. Nat. Hist. Publ., Zool. Ser., 24: 16.
- *Bathysiredon dumerilii* — Smith and Necker, 1943, An. Esc. Nac. Cienc. Biol., México, 3: 214. Smith and Taylor, 1948, Bull. U.S. Natl. Mus., 194: 7.
- *Bathysiredon dumerilii dumerilii* — Maldonado-Koerdell, 1948, Mem. Rev. Acad. Nac. Cienc. Antonio Alzate, 56: 199. by implication.
- *Bathysiredon dumerilii queretarensis* Maldonado-Koerdell, 1948, Mem. Rev. Acad. Nac. Cienc. Antonio Alzate, 56: 199. Syntypes: MDUG (2 specimens), by original designation. Type locality: "San Juan del Río (Q[uereta]ro)", Mexico.
- *Ambystoma (Bathysiredon) dumerilii* — Tihen, 1958, Bull. Florida State Mus., Biol. Sci., 3: 3, 44.
- *Ambystoma queretarensis* — Smith and Smith, 1976, Synops. Herpetofauna Mex., 4: C-A-20. Status rejected by Brandon, 1992, Cat. Am. Amph. Rept., 532: 1-3.

Distribution: Lake Pátzcuaro (Michoacán) and questionably from San Juan del Río (Queretaro), Mexico.

Comment: See account by Brandon, 1992, Cat. Am. Amph. Rept., 532: 1-3. See comment under *Ambystoma ordinarium*.

Ambystoma mexicanum (Shaw and Nodder, 1798)

- *Gyrinus mexicanus* Shaw and Nodder, 1798, Nat. Miscell., 9: pls. 342 and 343. Holotype: BM, according to the original and Shaw, 1802, Gen. Zool., 3(1), (2): 612, but now lost according to Smith and Taylor, 1948, Bull. U.S. Natl. Mus., 194: 8. Type locality: given both as "Mexicanum" and "Mexico". Restricted to "Xochimilco", Distrito Federal, Mexico, by Smith and Taylor, 1950, Univ. Kansas Sci. Bull., 33: 329. Opinion 1025, Anonymous, 1974, Bull. Zool. Nomencl., 31: 133-134, refused to give precedence of *Salamandra tigrina* Green, 1825, over *Gyrinus mexicanus* Shaw and Nodder, 1789, when treated as synonyms.
- *Siren pisciformis* Shaw, 1802, Gen. Zool., 3(1), (2): 612. Substitute name for *Gyrinus mexicanus* Shaw and Nodder, 1789. Synonym with *Siredon axolotl* by Wagler, 1830, Descript. Icon. Amph., Livr. 2, : 8. Synonymy by Leunis, 1860, Synops. Drei Naturr., Zool., Ed. 2, : 148; Baird, 1850 "1849", J. Acad. Nat. Sci. Philadelphia, Ser. 2, 1: 291; Cope, 1868 "1867", Proc. Acad. Nat. Sci. Philadelphia, 19: 180.
- *Triton mexicanus* — Oppel, 1811, Ordn. Fam. Gatt. Rept.: 81.
- *Philhydrus pisciformis* — Brookes, 1828, Prodr. Synops. Animal.: 16.
- *Hypochton pisciformis* — Gravenhorst, 1829, Delic. Mus. Zool. Vratislav., 1: 90.
- *Siredon axolotl* Wagler, 1830, Nat. Syst. Amph.: 209. also named by Wagler, 1830, Descript. Icon. Amph., Livr. 2, : 8. Type(s): not stated; given as "Museo Parisiensi, Berolinensi ac Monacensi" (Paris Museum, Berlin Museum and Munich Museum) by Wagler, 1830, Descript. Icon. Amph., Livr. 2, : 8, not located by recent authors. Type locality: not stated; given as "Mexico" by Wagler, 1830, Descript. Icon. Amph., Livr. 2, : 8. Synonymy by Leunis, 1844, Synops. Drei Naturr., Zool., Ed. 1, : 148; Leunis, 1860, Synops. Drei Naturr., Zool., Ed. 2, : 148; Baird, 1850 "1849", J. Acad. Nat. Sci. Philadelphia, Ser. 2, 1: 292; Cope, 1868 "1867", Proc. Acad. Nat. Sci. Philadelphia, 19: 180.

- *Axolotus pisciformis* — Cuvier, 1831, Animal Kingdom (M'Murtrie), 2: 89.
- *Phyllhydrus pisciformis* — Gray In Cuvier, 1831, Animal Kingdom (Griffith), 9: 108.
- *Sirenodon pisciformis* — Wiegmann, 1832, In Wiegmann and Ruthe, Handbuch der Zool., Amph.: 204.
- *Stegoporus pisciformis* — Wiegmann, 1832, In Wiegmann and Ruthe, Handbuch der Zool., Amph.: 204.
- *Stegoporus mexicanum* — Wiegmann, 1832, In Wiegmann and Ruthe, Handbuch der Zool., Amph.: 205.
- *Hemitriton (Siredon) mexicanum* — Hoeven, 1833, Handb. Dierkd., 2: 305. by implication.
- *Siredon mexicanus* — Schinz, 1833, Naturgesch. Abbild Rept.: 198. Gistel *In* Gistel and Bromme, 1850, *Handb. Naturgesch.*, : 334.
- *Axolotl pisciformis* — Guérin-Ménéville, 1838, Icon. Regne Animal, 3: 18.
- *Axolotes guttata* Owen, 1844, Ann. Mag. Nat. Hist., Ser. 1, 14: 23. Syntypes: not stated, although likely originally in BMNH. Type locality: "In lacu juxta urbem Mexico" (= in the lake next to the City of Mexico). Synonymy by Baird, 1850 "1849", *J. Acad. Nat. Sci. Philadelphia*, Ser. 2, 1: 292.
- *Siredon mexicanum* — Baird, 1850 "1849", J. Acad. Nat. Sci. Philadelphia, Ser. 2, 1: 292. Smith, 1939, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 24: 16; Smith and Taylor, 1948, *Bull. U.S. Natl. Mus.*, 194: 7.
- *Siredon Humboldtii* Duméril, Bibron, and Duméril, 1854, Erp. Gen., 9: 177. Syntypes: MNHNP, by original designation. Type locality: "Mexique" and "dans le lac qui entoure la ville de Mexico à 1160 toises d'élévation et dans les eaux des ruisseaux des montagnes qui y affluent", Mexico. Named in synonymy with *Gyrinus mexicanus* Shaw, *Siren pisciformis* Shaw, *Hypochthon pisciformis* Gravenhorst, *Axolotes guttatus* Owen, and *Axolotes maculata* Gray. Synonymy by Smith, 1877, *Tailed Amph.*, : 55.
- *Siren axolotl* — Schlegel, 1858, Handl. Dierkd., 2: 61.
- *Stegoporus mexicanus* — Leunis, 1860, Synops. Drei Naturr., Zool., Ed. 2: 148.
- *Axoloteles guttatus* — Wood, 1863, Ill. Nat. Hist., 3: 183.
- *Siredon spec.? var. alba* Duméril, 1869, Nouv. Arch. Mus. Hist. Nat. Paris, 5: 48. Holotype: presumably deposited in MNHNP. Type locality: "Mexique". Synonymy by Smith, 1969, *BioScience*, 19: 108. See comments provided by Thireau, 1987, *Bull. Liaison Mus. Hist. Nat., Suppl.*, 71: 1.
- *Siredon pisciformis* — Wiedersheim, 1877, Morphol. Jahrb., 3: 459.
- *Amblystoma weismanni* Wiedersheim, 1879, Z. Wiss. Zool., Leipzig, 32: 216. Type(s): not stated or known to exist. Type locality: not stated, but implied to be from Mexico. Synonymy (with *Ambystoma tigrinum*) by Cope, 1889, *Bull. U.S. Natl. Mus.*, 34: 68; synonymy (with *Ambystoma mexicanum*) by Smith, 1969, *BioScience*, 19: 596.
- *Ambystoma mexicanum* — Garman, 1884, Bull. Essex Inst., 16: 36. by implication.
- *Siredon edule* Dugès, 1888, Natureza, Ser. 2, 1: 144. Types: unknown, according to Smith and Necker, 1943, *An. Esc. Nac. Cienc. Biol., México*, 3: 214, although likely originally MDUG. Type locality: not stated; designated as "Lake Xochimilco, México" by Smith and Necker, 1943, *An. Esc. Nac. Cienc. Biol., México*, 3: 214, who made the synonymy.
- *Ambystoma edule* Dugès, 1888, Natureza, Ser. 2, 1: 144. Alternative name for *Siredon edule*.
- *Ambystoma mexicanum* — Lafrentz, 1930, Abh. Ber. Mus. Nat. Heimatkd. Magdeburg, 6: 95.
- *Ambystoma (Ambystoma) mexicanum* — Tihen, 1958, Bull. Florida State Mus., Biol. Sci., 3: 3, 37.
- *Siredon alba* — Smith, 1969, BioScience, 19: 596.

Distribution: Originally in Lakes Xochimilco and Chalco (and presumably in the connecting lakes Texcoco and Zumpango), Valley of Mexico; known currently only from the southern remnants of Lake Xochimilco.

Comment: See Smith and Smith, 1971, *Synops. Herpetofauna Mex.*, 1, , and Smith and Smith, 1993, *Synops. Herpetofauna Mex.*, 7, for access to all of the literature. Highton, 2000, *In* Bruce et al., *Biol. Plethodontid Salamanders*, : 221, suggested that populations of *Ambystoma mavortium*, *Ambystoma flavipiperatum*, *Ambystoma andersoni*, *Ambystoma amblycephalum*, and *Ambystoma taylori* (i.e., populations from the Rocky Mountains, Great Plains, Sierra Madre Oriental of Mexico, and the central and eastern Mexican Plateau) were likely one species for which the oldest name would be *Ambystoma mexicanum*.

Amphibia, Urodela, Cryptobranchidae

Andrias Tschudi, 1837

Andrias davidianus (Blanchard, 1871)

- *Sieboldia davidiana* Blanchard, 1871, C. R. Seances Soc. Biol., Paris, 73: 79. Holotype: MNHNP 7613 (from 'Thibet oriental'), according to Guibé, 1950 "1948", Cat. Types Amph. Mus. Natl. Hist. Nat., : 6. See also Thireau, 1986, Cat. Types Urodeles Mus. Natl. Hist. Nat., Rev. Crit., : 27, who discussed other specimens erroneously considered types. Type locality: "Thibet orientale"; given as "Tchong-pa" (= Zhongba, now Jiangyou County, Sichuan Province), China by David, 1875, J. Trois. Voy. Explor. Emp. Chinoise, 2, : 20, and Thireau, 1986, Cat. Types Urodeles Mus. Natl. Hist. Nat., Rev. Crit., : 27.
- *Sieboldia davidi* — David, 1875, J. Trois. Voy. Explor. Emp. Chinoise, 1: 326. Unjustified emendation.
- *Megalobatrachus sligoi* Boulenger, 1924, Proc. Zool. Soc. London, 1924: 173. Holotype: presumably BM, although deposition not stated. Type locality: uncertain; presumed in the original to have come from the Chinese mainland near Hong Kong. Synonymy by Thorn, 1968, Salamand. Eur. Asie Afr. Nord, : 110.
- *Megalobatrachus japonicus davidi* — Chang, 1935, Bull. Soc. Zool. France, 60: 350. Chang, 1936, Contr. Etude Morphol. Biol. Syst. Amph. Urodeles Chine, : 82. Incorrect subsequent spelling.
- *Megalobatrachus japonicus davidianus* — Pope and Boring, 1940, Peking Nat. Hist. Bull., 15: 18.
- *Megalobatrachus davidianus* — Liu, 1950, Fieldiana, Zool. Mem., 2: 69.
- *Andrias scheuchzeri davidiana* — Westphal, 1958, Palaeontographica, Abt. A, 110: 36.
- *Andrias davidianus* — Brame, 1967, Herpeton, California, 2: 5. Estes, 1981, Handb. Palaeoherp., 2, : 14.
- *Cryptobranchus davidianus* — Naylor, 1981, Copeia, 1981: 76-86.

Distribution: The mountain streams of China, from Qinghai to southern Shanxi and south to Sichuan, Yunnan, Guangxi, and Guangdong; likely introduced into Taiwan.

Comment: Synonymy and review (as *Megalobatrachus davidianus*) in Liu, 1950, Fieldiana, Zool. Mem., 2: 69-77. Zhao and Adler, 1993, Herpetol. China, : 110, discussed the Taiwanese specimens. See accounts by Yang, 1991, Amph. Fauna of Yunnan, : 28-30, Ye, Fei, and Hu, 1993, Rare and Economic Amph. China, : 65; Fei, 1999, Atlas Amph. China, : 38; and Thorn and Raffaëlli, 2000, Salamand. Ancien Monde, : 147-149. Huang, 1990, Fauna Zhejiang, Amph. Rept., : 17-18, provided an account for Zhejiang (as *Megalobatrachus davidianus*). Zhang and Wen, 2000, Amph. Guangxi, : 19, provided an account for population in Guangxi, China. See also brief account by Zhao and Yang, 1997, Amph. Rept. Hengduan Mountains Region, : 32. Lever, 2003, Naturalized Rept. Amph. World, : 227, regarded the Taiwan population as introduced. Fan, Guo, and Liu, 1998, Amph. Rept. Shanxi Prov., : 43-44, provided an account and the records for Shanxi, China.

Andrias japonicus (Temminck, 1836)

- *Triton japonicus* Temminck, 1836, Coup d'oeil sur la fauna des îles de la Sonde et de l'Empire du Japon: xxvi. Type(s): RMNH and (according to Thireau, 1986, Cat. Types Urodeles Mus. Natl. Hist. Nat., Rev. Crit., : 33) MNHNP 7614; RMNH 2392 designated lectotype by Hoogmoed, 1978, Zool. Meded., Leiden, 53: 102. Type locality: "Japon"; given as mountains of Suzuka, province of Omi, on the way from Tsuchiyama to Sukanoshita, Japan, by XXX. Restricted to "Iga, Honshû", Japan, by Okada, 1934, Copeia, 1934: 16.
- *Megalobatrachus sieboldi* Tschudi, 1837, Neues Jahrb. Mineral. Geogn. Geol. Petrefactenkunde, Stuttgart, 5: 547. Holotype: RMNH. Type locality: Japan. Synonymy by Stejneger, 1907, Bull. U.S. Natl. Mus., 58: 6. Possibly a substitute name rather than a new name. Synonymy (with *Sieboldia maxima*) by Gray, 1850, Cat. Spec. Amph. Coll. Brit. Mus., Batr. Grad., : 52; (with *Megalobatrachus maximus*) by Boulenger, 1882, Cat. Batr. Grad. Batr. Apoda Coll. Brit. Mus., Ed. 2, : 77.

- *Salamandra maxima* Schlegel In Tschudi, 1837, Neues Jahrb. Mineral. Geogn. Geol. Petrefactenkunde, Stuttgart, 5: 546. Syntypes: MNHNP and RMNH, and presumably animal figured by Temminck and Schlegel, 1838, Fauna Japonica, 3, : Pl. 8; RMNH 2392 designated lectotype by Hoogmoed, 1978, Zool. Meded., Leiden, 53: 102. See discussion by Bauer, Good, and Günther, 1993, Mitt. Zool. Mus. Berlin, 69: 291, of the types and type localities. Type localities: "Sakanosta", "monts Suzuga jama" (near Sakanosta), and "mont Okude" according to Temminck and Schlegel, 1838, Fauna Japonica, 3, : 134-135. Synonymy by Stejneger, 1907, Bull. U.S. Natl. Mus., 58: 6. Synonymy (with *Seiboldia maxima*) by Leuckart, 1840, Froriep's Neue Notizen, 13: 19-20; Gray, 1850, Cat. Spec. Amph. Coll. Brit. Mus., Batr. Grad., : 52. See discussion of types and publication dates by Thireau, 1986, Cat. Types Urodeles Mus. Natl. Hist. Nat., Rev. Crit., : 39.
- *Cryptobranchus japonicus* — Hoeven, 1838, Tijdschr. Natuurl. Geschied., 4: 384. Naylor, 1981, Copeia, 1981: 76-86
- *Hydrosalamandra siboldi* — Leuckart, 1840, Froriep's Neue Notizen, 13: 20. Incorrect subsequent spelling.
- *Hydrosalamandra japonica* — Leuckart, 1840, Froriep's Neue Notizen, 13: 19-20.
- *Sieboldia maxima* — Gray, 1850, Cat. Spec. Amph. Coll. Brit. Mus., Batr. Grad.: 52.
- *Salamandra gigas* Duméril, Bibron, and Duméril, 1854, Erp. Gén., 9: 164. *Lapsus calami* for *Salamandra maxima* Schlegel.
- *Tritomegas sieboldii* — Duméril, Bibron, and Duméril, 1854, Erp. Gén., 9: 164.
- *Tritomegas sieboldtii* — Duméril, Bibron, and Duméril, 1854, Erp. Gén., 9: 426. Incorrect subsequent spelling.
- *Salamandra (Megalobatrachus) maxima* — Schlegel, 1858, Handl. Dierkd., 2: 61.
- *Megalobatrachus maximus* — Boulenger, 1882, Cat. Batr. Grad. Batr. Apoda Coll. Brit. Mus., Ed. 2: 80.
- *Cryptobranchus maximus* — Chapman, 1893, Proc. Acad. Nat. Sci. Philadelphia, 45: 227.
- *Andrias japonicus* — Lapparent, 1900, Traite Geol., 3: 1532. Estes, 1981, Handb. Palaeoherpetol., 2, : 14.
- *Megalobatrachus japonicus* — Beddard, 1904 "1903", Proc. Zool. Soc. London, 1903: 298. Sato, 1943, Monogr. Tailed Batr. Japan, : 322-346; Thorn, 1968, Salamand. Eur. Asie Afr. Nord, : 106.
- *Sieboldiana maxima* Ishikawa, 1904, Proc. Dept. Nat. Hist. Tokyo Imp. Mus., 1: 21. Unjustified emendation of generic name.
- *Cryptobranchus sieboldia* — Calmette, 1907, Les Venins: 330. Incorrect subsequent spelling.
- *Megalobatrachus japonicus japonicus* — Chang, 1936, Contr. Etude Morphol. Biol. Syst. Amph. Urodeles Chine: 82.
- *Andrias scheuchzeri japonicus* — Westphal, 1958, Palaeontographica, Abt. A, 110: 26.

Distribution: Southwestern portion of the Island of Honshu northeast to the Prefecture of Gifu, Shikoku, and on the Island of Kyushu only in the Prefecture of Oita, Japan.

Comment: Reviewed (as *Megalobatrachus japonicus*) by Sato, 1943, Monogr. Tailed Batr. Japan, : 322-346. See Hoogmoed, 1978, Zool. Meded., Leiden, 53: 92, for discussion of the obscure description. Thorn and Raffaëlli, 2000, Salamand. Ancien Monde, : 142-147, provided an account.