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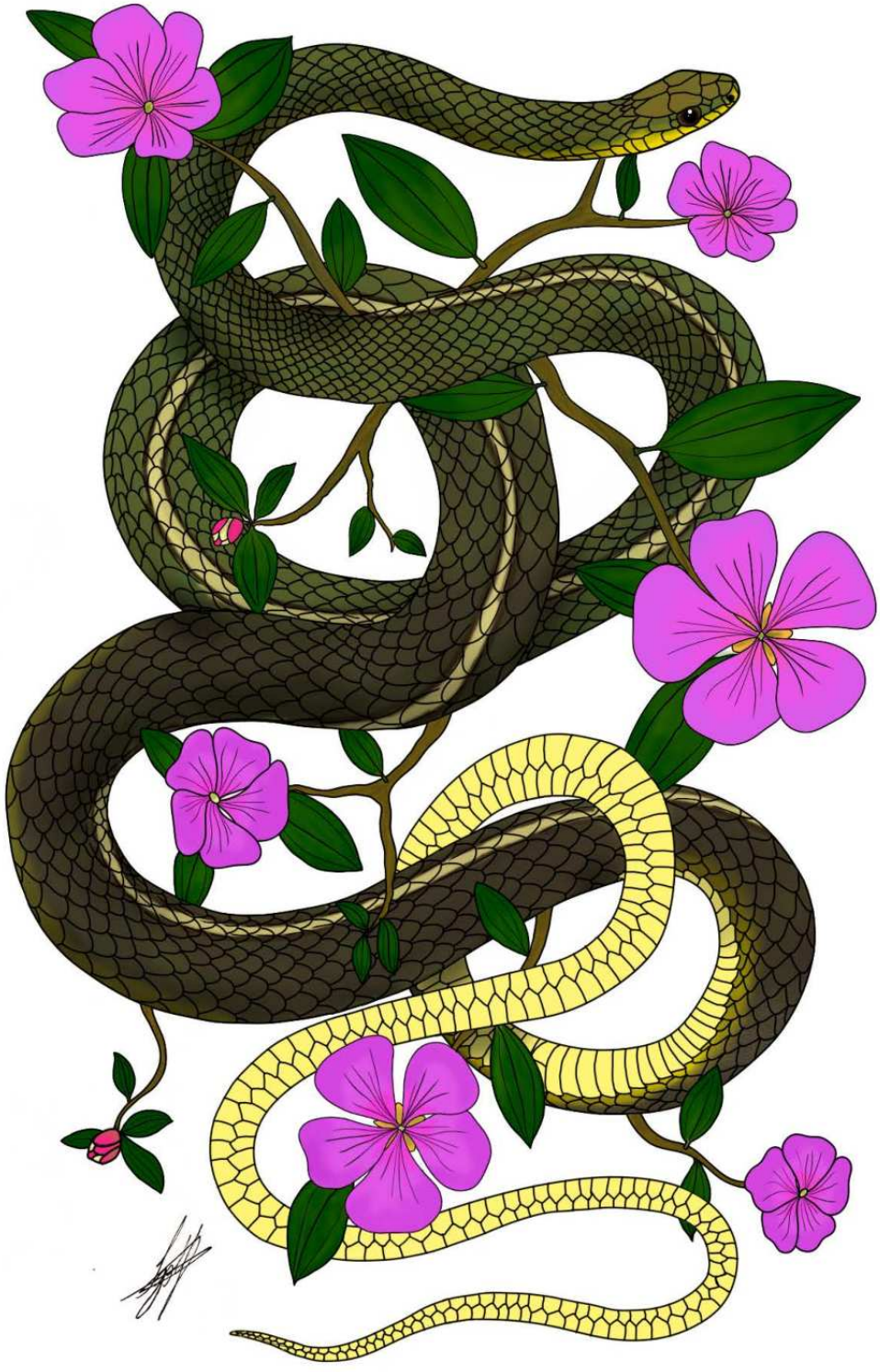

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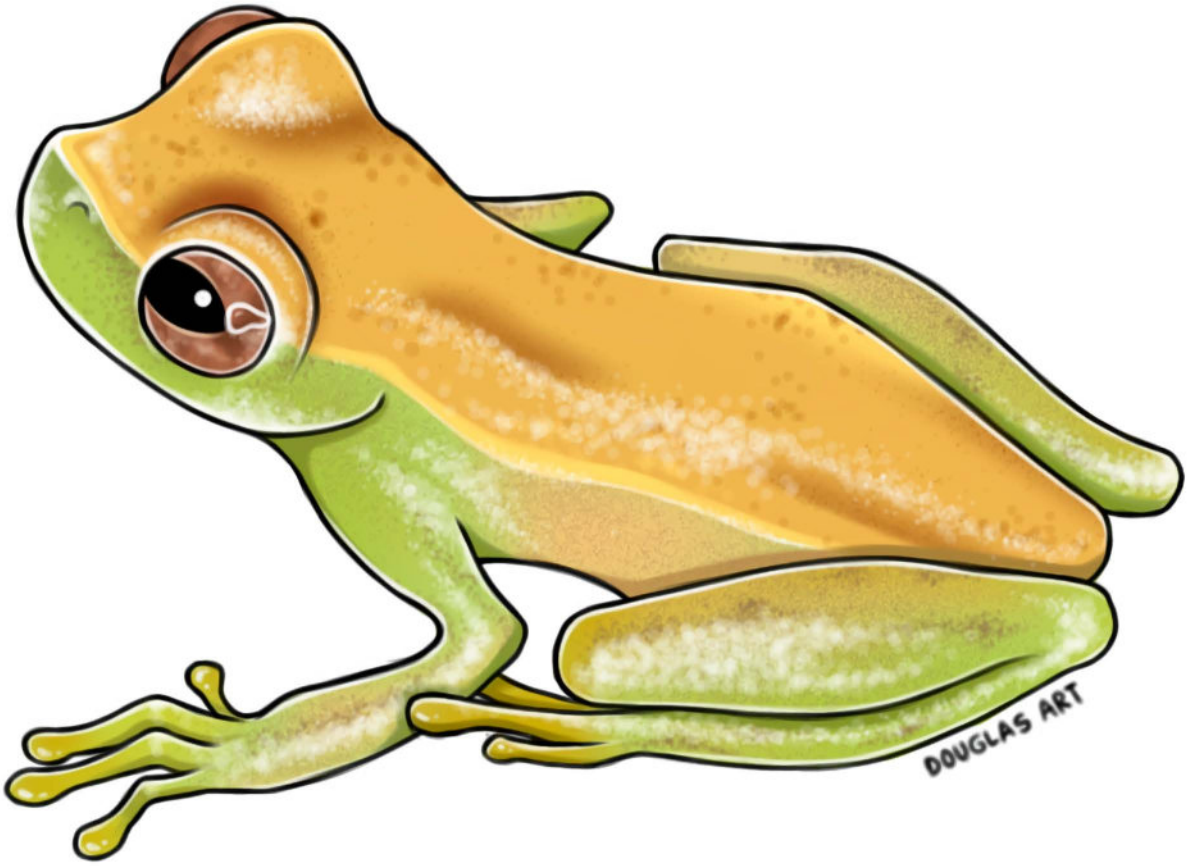

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é semestral e publica textos sobre assuntos de interesse para a comunidade herpetológica brasileira.

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The Etymology of the Gymnophiona of the World

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Abstract

The etymologies of the generic names and specific epithets of all the Gymnophiona described between 1758 and 2023 are presented, pinpointing their current taxonomic standing. Each reference includes illuminating excerpts from the original descriptions, or from the directly transcribed original etymology, to shed light on the nomenclatural origins.

Key words: Amphibia, Gymnophiona, Scientific names, Etymology

INTRODUCTION:

This contribution delves into the etymology of the Gymnophiona (caecilians) of the world, spanning from *Caecilia tentaculata*, the first of two caecilian species described by Linnaeus in 1758, to *Caecilia wilkinsoni*, the latest name published by Fernández-Roldán & Lynch, on April 20, 2023. As highlighted in the Etymologies of Brazilian Amphibians (Lavilla et al., 2022), the main focus of this text is on the lexical analysis and not a systematic or exhaustive synonym list (though necessarily informed by them). Likewise, it doesn't claim to be a nomenclatural-work adhering to the International Code of Zoological Nomenclature (ICZN, 1999). The primary source for taxa was the American Museum of Natural History's Amphibian Species of the World Website (Frost, 2024) for recent species and Santos *et al.* (2020) for the fossils, supplemented by in-depth examination of each original description (see aforementioned web-page and publication for the bibliographic references).

To the greatest extent possible, each analyzed term is accompanied by:

- Its constituent word(s) and language of origin:

A. Arawak. Arawak family of languages. Spoken in Venezuela, Guyana, Suriname, French Guiana, and Brazil. They are also spoken in several Caribbean islands, including Trinidad and Tobago, Barbados, Jamaica, and the Dominican Republic.

B. Bantu. Bantu family of languages, branch of the larger Niger-Congo family of languages. Large group of over 500 languages spoken in Tanzania, Kenya, Uganda, Rwanda, Burundi, the Democratic Republic of the Congo, Zambia, Malawi, Zimbabwe, Mozambique, Angola, and South Africa.

C. Chinese. Sino-Tibetan family of languages. Spoken primarily in China, Taiwan, and Singapore.

Ch. Chocó. Part of the larger Chibchan family of languages. Spoken in parts of Colombia and Panama, particularly in the Chocó-Darién region.

Ce. Cebuan. Austronesian family of languages. Spoken in the central Visayas region (Cebu, Bohol, and parts of Leyte, Samar, and Negros), Philippines.

D. Darlong or Dalong. Part of the Sino-Tibetan language family, and possibly the Kuki-Chin sub-group of the Tibeto-Burman language family. Spoken in the Kailashahar and Kamalpur subdivisions of North Tripura district, Tripura, as well as Cachar district, Assam, India

E. English. West Germanic branch of the Germanic family of languages. Spoken as an official language in many countries, widely used as a second language and *lingua franca* around the world.

F. French. Romance family of language. Spoken as a first language primarily in France, Belgium, Switzerland, Canada, and several African countries. Also widely spoken as a second language in many countries around the world, particularly in former French colonies.

Fu. Fula (a.k.a. Fulani or Pulaar). Niger-Congo family of languages. Spoken by the Fula people in West and Central Africa.

G. Greek. Indo-European family of languages. Spoken in the Balkans and Mediterranean regions for over three millennia. Official language of Greece and Cyprus.

Ga. Garo. Tibeto-Burman language (Bodo-Naga Section). Spoken in the Northeast Indian states of Meghalaya, Assam, and Tripura, and in some areas of neighboring Bangladesh.

Ge. German. West Germanic branch of the Germanic family of languages. Spoken primarily in Germany, Austria, Switzerland, and Liechtenstein.

In? Unspecified Indian dialect or language.

K. Konkani. Indo-Aryan language. Spoken primarily in the Indian states of Goa, Karnataka, and Maharashtra, as well as in some parts of Kerala and Gujarat.

Kh. Khmer. Austroasiatic language family. Spoken in Cambodia.

L. Latin and Neo-Latin. Italic branch of the Indo-European language family. Official language of Vatican City.

La. Lao. Tai-Kadai language family. Spoken primarily in Laos, but also in Thailand, Cambodia, and Vietnam.

M. Marathi. Indo-Aryan language family. Spoken in western and central India, from north of Mumbai down the western coast past Goa and eastward across the Deccan.

Ma. Malayan (a.k.a. Bahasa Melayu or Melayu). Austronesian family of languages. Spoken in Malaysia, Brunei, and Indonesia, and is also spoken in Singapore, southern Thailand, and the Philippines.

Mk. Makushi (a. k. a. Macushi, Makusi, Macuxi, Macusi, Macussi, Teweya, or Teueia). Carib language family. Spoken in Brazil, Guyana, and Venezuela.

P. Portuguese. Romance language. Spoken in Portugal, Brazil, Angola, Mozambique, Guinea-Bissau, Cape Verde, São Tomé and Príncipe, and East Timor.

Q. Quechua (a.k.a. Quichua, Kichwa, Runasimi). Quechuan language family. Spoken primarily in the Andean region of South America, including parts of Peru, Bolivia, Ecuador, Colombia, Argentina, and Chile.

S. Spanish. Romance language. Spoken in Spain and in many countries throughout the Americas, as well as in Equatorial Guinea, the Philippines, and parts of North Africa.

Sa. Sanskrit. Ancient Indo-European language. Primarily used as a sacred and literary language in India.

Sc. Seychellois creole (a.k.a. Seselwa or kreol). Mix of African languages like Malagasy and Swahili, with large French influences. Spoken in the Republic of the Seychelles.

Sw. Swahili. Bantu family of languages, branch of the larger Niger-Congo family of languages. Spoken in Kenya, Tanzania, Uganda, and the Democratic Republic of Congo.

T. Tupí. Tupí-Guaraní language family. After the European conquest, *lingua franca* between natives and Portuguese traders, missionaries, adventurers, and administrators. Spoken in Brazil and neighboring countries of South America.

Ta. Tanimuka (a.k.a. Tanimuca-Retuarã and Letuama). Tucanoan language spoken in Colombia. Probably of an Arawakan origin.

Tm. Tamil. Dravidian language. Spoken primarily in the Indian state of Tamil Nadu, as well as in parts of Sri Lanka, Singapore, and Malaysia.

Th. Thai. Tai-Kadai language. Spoken in Thailand, Laos, and Cambodia, as well as by Thai communities around the world.

V. Vietnamese. Austroasiatic language family. Spoken in Vietnam and in Vietnamese diaspora communities.

- A relevant excerpt from the original description supporting the chosen etymology (or its transcription, if explicitly stated).

- The original combination in which it was used.

- Current synonym, if applicable.

- Question marks [?] prior to the name indicate undefined original language; at the end of the etymologies reflect that there are no further data associated with the origin or meaning of the name in the original description.

The most used sources to elucidate the origin of names were Brown's lexicon (1954), as a first step towards understanding names in Latin and Greek. For Greek, Bailly (1895), Beekes & Van Beek (2010), Borror (1960), Diggle et al. (2021) and Lidell & Scott (1996); Latin sources include the dictionaries by Borror (1960), De Vaan (2008) and Glare (2012). Additionally, some names were identified based on Beolens *et al.* (2013), as well as various online dictionaries for less widely spoken languages

ETYMOLOGIES

abitaguae: S. [Cerros de] Abitagua, mountain in Pastaza, Ecuador; in turn from Q. *abitagua*, burning or hot mountain. *Caecilia abitaguae* Dunn, 1942. ["...Type locality: Abitagua, Oriente, Ecuador, 1100 m. elevation..."].

Abranchia: G. a- (α-), not, without, negative, privative + G. *branchia* (βράγχια), gills. Abranchia Hogg, 1838. ["...Branchial apparatus none..."]. In the synonymy of Gymnophiona.

***acuminatus*:** L. *acuminatus*, sharp, pointed, tapering. *Ichthyophis acuminatus* Taylor, 1960. ["... *acuminatus* (Latin) = pointed, referring to the snout..."].

Adélobatraciens: G. *adelos* (ἀ-δηλος), unseen, unknown, obscure + F. *batraciens,* from G. *batrachos* (βάτραχος), frog. Adélobatraciens Gouriet, 1868. ["...*dans le sens vertical on aura la division en Batraciens par excellence ou Eubatraciens et en Batraciens moins évidents ou Adélobatraciens, le tout formant deux séries parallèles dans les deux sens*..."]. In the synonymy of Gymnophiona.

***africanus*:** L. *africanus*, African; from, of Africa. *Uraeotyphlus africanus* Boulenger, 1882. ["... West Africa..."]. In the synonymy of *Geotrypetes seraphini* (Duméril, 1859).

***Afrocaecilia*:** L. *Afrum*, African; of, connected with Africa + L. *Caecilia*, genus of caecilians due to Linnaeus, 1758 (see this name). *Afrocaecilia* Taylor, 1968. ["... East Africa..."]. Same root in Afrocaeciliiti Lescure, Renous & Gasc, 1986. In the synonymy of *Boulengerula* Tornier, 1896.

***albiceps*:** L. *albus*, white (color) + L. *-ceps*, from L. *caput,* head. *Dermophis albiceps* Boulenger, 1882. ["...Blackish grey, the head white..."]. Today *Microcaecilia albiceps* (Boulenger, 1882).

***albiventris*:** L. *albus*, white, pale + L. *ventris*, stomach, womb; belly. *Caecilia albiventris* Daudin, 1803. ["...*cum abdomine ex albo flavescente variegato*..."].

***alcocki*:** Alcock + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Chikila alcocki* Kamei, Gower, Wilkinson & Biju, 2013. Honoring Alfred William Alcock (1859-1933), former Superintendent of the Indian Museum.

***alfredi*:** Alfred + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Ichthyophis alfredi* Mathew & Sen, 2009. Honoring J. R. B. Alfred (?), former Director of the Zoological Survey of India.

***alternans*:** L. *alterno*, do by turns, vary; alternate. *Hypogeophis alternans* Stejneger, 1893. ["...the complete primary rings alternate with secondary rings broadly interrupted on the dorsal and ventral lines..."]. Today *Grandisonia alternans* (Stejneger, 1893).

***amazops*:** S., P. Amazonas, a South American river, state and city [in turn, from G. Amazṓn (Ἀμαζών), a woman warrior of the classic world] + G. *ops* (ὄψ), eye. (1) *Amazops* Wilkinson, Reynolds & Jacobs, 2021. ["...The name is a portmanteau word combining reference to the Amazonian provenance of the type and only known species and the distinctive topological relationships of its eye and orbit, particularly the contribution of the squamosal to the bony margin of the orbit, which is unknown in any other rhinatrematid...). (2) *Amazops amazops* Wilkinson, Reynolds & Jacobs, 2021. ["...Etymology. As for the genus..."].

Amblyopes: G. *amblyopos* (ἀμβλυωπός), dim-sighted. Amblyopes Goldfuss, 1820. ["... Wurmschlangen..."]. In the synonymy of Gymnophiona.

***Amphiumophis*:** G. *amphi* (ἀμφί), on both or all sides + G. *uma* (ῦμα), apocope of πνεῦμα, breath + G. *ophis* (ὄφϊς), snake, serpent. *Amphiumophis* Werner, 1901. [? Probably meaning *Amphiuma*-like snake, being *Amphiuma* a genus of aquatic salamander due to Garden, 1821]. In the synonymy of *Caecilia* Linnaeus, 1758.

***andicola*:** S. Andes, South American mountain range [in turn, from ? Andes, a pre-Hispanic people in the Jauja region (Junín, Peru) that gave the mountain range its name] + L. *-cola*, dwelling in, inhabiting, living among. *Amphiumophis andicola* Werner, 1901. ["...Ein Exemplar ...vom Chanchamayo..." (a province in Junin Department, Peru)]. In the synonymy of *Caecilia tentaculata* Linnaeus, 1758.

***angeli*:** Angel L. *-i*, suffix indicating the genitive of masculine names and nouns. *Geotrypetes angeli* Parker, 1936. Honoring Fernand Angel (1881-1950), French herpetologist.

***anguillaformis*:** L. *anguillaformis*, eel-shaped. *Typhlonectes anguillaformis* Taylor, 1968. ["... Low dermal "fin" visible from the greater part of body length..."]. In the synonymy of *Typhlonectes compressicauda* (Duméril & Bibron, 1841).

Anguinea: L. *anguis*, a serpent, snake + L. *-ea*, suffix indicating quality of. Anguinea Leunis, 1860. ["... Schleichenlurche..."]. In the synonymy of Gymnophiona.

***angusticeps*:** L. *angustus*, narrow, steep + L. *-ceps*, from L. *caput*, head. *Hypogeophis angusticeps* Parker, 1941. ["...is recognizable by its much smaller head..."]. In the synonymy of *Grandisonia larvata* (Ahl, 1934).

***annulata*:** L. *annulatus*, provided with a ring, ringed; fitted with a fetter, fettered (in turn, *annulatus* derives from L. *annuus*, of the year, annual). *Caecilia annulata* Mikan, 1822. ["...*corpore crasso, nigra, annulis albo-marginatis...*". Today *Siphonops annulatus* (Mikan, 1822).

***antioquiaensis*:** S. Antioquía, one of the 32 departments of Colombia (in turn, a toponym of doubtful origin, probably derived from

Ἀντιόχεια, Greek name of a city in present-day Syria that is mentioned several times in the New Testament of the Bible) + L. *-ensis*, belonging to a place. *Caecilia antioquiaensis* Taylor, 1968. ["... Valdivia, Antioquía..."].

Aphanobranchiata: G. *aphanes* (ἀφανής), unseen, invisible, viewless + G. *branchia* (βράγχια), gills. Aphanobranchiata Leuckart, 1840. ["...Schwindkiemet..."]. In the synonymy of Gymnophiona.

Apoda: G. *apous* (ἄπους), without foot. Apoda Oppel, 1811 ["...*pedibus carens*..."]. In the synonymy of Gymnophiona.

***Apodops*:** G. *apodos* (ἄποδως) out of tune + G. *ops* (ὄψ), the eye or face. *Apodops* Estes & Wake, 1972. ["... Greek *apodos*, out of tune; *ops,* face: refers to the resemblance to an African genus of this South American fossil..."].

***aprix*:** G. *aprix* (ἀπρίξ), with a tight grasp, tightly. *Caecilia aprix* Fernández-Roldán & Rueda-Almonacid, 2022. ["...The specific epithet is Greek, meaning 'with closed teeth' or 'with fast, tight teeth'. The name seems to fit this species because its inner mandibular series consists of four short, thick, pointed teeth on each side of the mouth that are situated very close to one another..."].

***arii*:** Ari + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Chthonerpeton arii* Cascon & Lima-Verde, 1994. Honoring Ari Santiago Lima-Verde, Brazilian physician.

***armata*:** L. *armata,* defensively armed, armor clad. *Caecilia armata* Dunn, 1942. ["...This remarkable form has the hind half of the body with bony scales..."].

***asplenius*:** G. *a-* (α-), privative particle + G. *splenion* (σπληνῐ́ον), splenial (referring to the splenial bone). *Ichthyophis asplenius* Taylor, 1965. ["...no splenial teeth in transformed specimens..."].

***atelolepis*:** G. *ateles* (ατελης), imperfect + G. *lepis* (λεπίς), scales (on animals). *Caecilia atelolepis* Fernández-Roldán, Lynch & Medina-Rangel, 2023. ["...The specific epithet is a combination of the Greek words *atelos* and *lepis*, meaning imperfect or unaccomplished scales. The name is given in reference to the poorly developed dermal scales of this species, which can be absent or very small, irregularly shaped, folded, and

mostly restricted to the terminal portion of the body..."].

***Atretochoana*:** G. *a-tretos* (α-τρητος), imperforate + G. *choane* (χοάνη), funnel or tube, choana. *Atreto - choana* Nussbaum & Wilkinson, 1995. ["...typhlonectid caecilians with sealed choanae, no lungs, no no pulmonary blood vessels.."].

***atricollaris*:** L. *atri,* from L. *ater*, black, dark; dark-colored + L. *collaris*, of, pertaining to, belonging to the neck. *Ichthyophis atricollaris* Taylor, 1965. ["...neck nearly uniformly dark above and below, the collars only dimly indicated..."].

***attenuata, attenuatus*:** L. *attenuata*, *-us*, to make thin, make slender, wear away, dilute, rarefy, attenuate. (1) *Caecilia attenuata* Taylor, 1968. ["...A very slender form..."]. (2) *Scolecomorphus attenuatus* Barbour & Loveridge, 1928. ["...Habit much more slender..."]. In the synonymy of *Scolecomorphus uluguruensis* Barbour & Loveridge, 1928.

***balboai*:** Balboa + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Dermophis balboai* Taylor, 1968. Without mention in the original description, probably Honoring Vasco Núñez de Balboa (1475–1519), the first European to cross the isthmus of Panamá. In the synonymy of *Dermophis glandulosus* Taylor, 1955.

***bannanica*:** C. *Banna*, apocope of Xishuangbanna, autonomous prefecture for Dai people in the extreme south of Yunnan Province, China + L. *-ica*, suffix used to indicate possession or association with something. *Ichthyophis bannanica* Yang, 1984. ["...云南西双版纳勐腊县城郊，海拔600米..." (Outskirts of Mengla County, Xishuangbanna, Yunnan, 600 meters above sea level)..."]. In the synonymy of *Ichthyophis kohtaoensis* Taylor, 1960.

***bassleri*:** Bassler + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia bassleri* Dunn, 1942. Honoring Harvey Bassler (1883–1950), US American geologist and herpetologist. Today *Oscaecilia bassleri* (Dunn, 1942).

Batrachophides: G. *batrachos* (βάτραχος), frog + Gr. *ophis* (ὄφις), snake, serpent. Batrachophides Latreille, 1825. [?]. Same root in Batrachophides Bonaparte, 1831, Batrachophidii

Bonaparte, 1832, Batrachopidii — Bonaparte, 1839 (incorrect subsequent spelling), Batracophidii Bonaparte, 1838 (incorrect subsequent spelling), Batrachophidia Miranda-Ribeiro, 1937. In the synonymy of Gymnophiona.

***battersbyi*:** Battersby + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Indotyphlus battersbyi* Taylor, 1960. Honoring James Clarence Battersby (1901–1993), British herpetologist.

***Bdellophis*:** G. *bdella* (βδέλλα), blood-sucking creature, leech + G. *ophis* (ὄφϊς), snake, serpent. *Bdellophis* Boulenger, 1895. ["... Body much flattened..."]. In the synonymy of *Scolecomorphus* Boulenger, 1883.

***beddomei*:** Beddome + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Ichthyophis beddomei* Peters, 1880. Honoring Colonel Richard Henry Beddome (1830–1911), British officer in India and naturalist.

***benjii*:** Benji + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Ichthyophis benjii* Lalremsanga, Purkayastha, Biakzuala, Mathipi, Muansanga & Hmar, 2021. Honoring the memory of Benjamin Lalremsanga (1988–2020), nephew of the first author.

***bernisi*:** Bernis + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Ichthyophis bernisi* Salvador, 1975. Honoring Francisco Bernis Madrazo (1916–2003), Spanish ornithologist.

***biangularis*:** L. *bi*, two, twice; double; having two + L. *angularis*, having angles or corners. *Ichthyophis biangularis* Taylor, 1965. ["...transverse folds distinctly angular above as below, throughout most of body..."].

***bicolor*:** L. *bicolor,* of two colors. *Epicrionops bicolor* Boulenger, 1883. ["...Dark brown; a broad yellow band along each side of the belly, nearly as broad as the interspace, commencing from the mouth, uniting in front of the vent, and occupying the lower half of the tail..."].

***billitonensis*:** E. Billiton (Palau Belitung in Malay), island in Karimata Strait (probably from Ma. *belat*, island, or *betung*, sand) + L. *-ensis*, belonging to a place. *Ichthyophis billitonensis* Taylor, 1965. ["...The species is named

for its place of origin, the island of Billiton situated in the northern part of the Java Sea, between Sumatra, Borneo, and Java…"].

***bivittata*:** L. *bi*, two + L. *vittata*, wearing or carrying a ritual band or ribbon. *Caecilia bivittata* Guérin-Méneville, 1838. [?]. Today *Rhinatrema bivittatum* (Guérin-Méneville, 1838).

***bokermanni*:** Bokermann + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia bokermanni* Taylor, 1968. Honoring Werner Carl August Bokermann (1929–1995), Brazilian herpetologist.

***bombayensis*:** E. Bombay, probably derived from Sa. Mumbadevi, a Hindu deity; it is also suggested that it is a corruption of Portuguese Boa Bahia (good bay) + L. *-ensis*, belonging to a place. *Ichthyophis bombayensis* Taylor, 1960. ["…Bombay + *ensis* = place, locality, country…"]. Today *Uraeotyphlus bombayensis* (Taylor, 1960).

***bornmülleri*:** Bornmüller + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Herpele bornmülleri* Werner, 1899. Honoring Joseph Friedrich Nicolaus Bornmüller (1862–1948), German botanist. Today *Crotaphatrema bornmuelleri* (Werner, 1899).

***boulengeri*:** Boulenger + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Boulengerula boulengeri* Tornier, 1896. Honoring George Albert Boulenger (1858–1937), Belgian-British herpetologist.

***Boulengerula*:** Boulenger + L. *-ula*, diminutive suffix. *Boulengerula* Tornier, 1896. See *boulengeri*.

***braestrupi*:** Bræstrup + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Chthonerpeton braestrupi* Taylor, 1968. Honoring Frits Wimpffen Bræstrup (1906–1999), Danish zoologist.

***brasiliensis, braziliensis*:** P. Brasil, South American country (in turn, from P. pau de brasa or pau brasil) + L. *-ensis*, belonging to a place. (1) *Gymnopis braziliensis* Dunn, 1945. ["…Four caecilians from Brazil, recently sent me for identification by Mr. C. M. Bogert, represent an undescribed species of the genus *Gymnopis* and add that genus to the fauna of Brazil…"]. Today *Brasilotyphlus braziliensis* (Dunn, 1945). (2) *Sipho-*

nops brasiliensis Lütken, 1851. ["...Det beskrevne Exemplar hidrörer fra Brasilien og er sendt til Europa af Dr. Langgaard. Da denne nye Art synes i det sydlige Brasilien at repræsentere den samme Grundform indenfor Slægten Siphonops som S. mexicanus i Central-Amerika, er Artsnavnet valgt i Overeensstemmelse dermed..."]. Today *Luetkenotyphlus brasiliensis* (Lütken, 1852).

***Brasilotyphlus*:** P. Brasil, South American country (in turn, from P. pau de brasa or pau brasil) + G. *typhlos* (τυφλος), blind. *Brasilotyphlus* Taylor, 1968. ["...Type of genus: *Gymnophis braziliensis* Dunn..."]. Same root in Brasilotyphlili Lescure, Renous & Gasc, 1986.

brevirostris: L. *brevis*, short, little, small + L. *rostris*, beak, snout. *Siphonops brevirostris* Peters, 1874. ["...Der Kopf hat eine ähnliche Gestalt, wie bei S. indistinctus, aber die Schnauze ragt viel weniger über die Maulöffnung hervor, als bei dieser oder einer anderen der bekannten Siphonops-Arten..."]. In the synonymy of *Schistometopum thomense* (Bocage, 1873).

***brevis*:** L. *brevis*, short, little, small. *Hypogeophis brevis* Boulenger, 1911. ["...Body very short, its diameter 14 or 15 times in the total length..."].

buckleyi: Buckley + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia buckleyi* Boulenger, 1884. Honoring Clarence Buckley, English professional collector active in Ecuador, Bolivia, and possibly Colombia during the late 1860's and 1870's. In the synonymy of *Caecilia pachynema* Günther, 1859.

***butantan*:** P. Butantan, a district in São Paulo, Brazil, and a biomedical research center founded in 1901, from T. *butantã*, corr. *yby-tantã*, hard, firm ground. *Microcaecilia butantan* Wilkinson, Antoniazzi & Jared, 2015. ["...The specific epithet is in honour of the Instituto Butantan, which enabled the discovery of the species through the Butantan na Amazônia (Butantan in Amazon) project..."].

***Caecilia*:** L. *caecilia,* blind-worm, in turn from L. *caecus*, blind. *Caecilia* Linnaeus, 1758. [?]. Same root in Cecilinia Rafinesque, 1814, Caeciliidae Rafinesque, 1814, Caeciliadae Gray, 1825, Caeciliina Bonaparte, 1850, and variations of the name.

***Caecilita*:** L. *Caecilia*, caecilian genus due to Linnaeus, 1758 (see this name) + *-ita*, suffix diminutive. *Caecilita* Wake & Donnelly, 2010. ["...The generic epithet refers to the small size of the new caeciliid taxon..."].

***cardamomensis*:** E. Cardamom [Mountains], E. for Kh. Krâvanh ជួរភ្នំក្រវ៉ាញ; mountain range in the southwest of Cambodia and Eastern Thailand (refers to *Elettaria cardamomum*: Zingiberaceae; in turn, from G. κάρδαμον, cress) + L. *-ensis*, belonging to a place. *Ichthyophis cardamomensis* Geissler, Poyarkov, Grismer, Nguyen, An, Neang, Kupfer, Ziegler, Böhme & Müller, 2015. ["...We name this new species after the geographic region of its known distribution, the Cardamom Mountains in western Cambodia..."].

***caribea*:** L. *caribea*, belonging or related to the Caribbean. In turn, from A. *caribe*, name used to describe the predominant Amerindian ethnicity in the region at the time of the first contact with Europeans at the end of the 15th century, probably meaning strength and bravery. *Caecilia caribea* Dunn, 1942. ["...Range. Known only from type locality and from Barranquilla, Colombia..."]

***carnosum*:** L. *carnosus*, fleshy; characterized by flesh; consisting of meat; fleshy in color, appearance. *Epicrium carnosum* Beddome, 1870. ["...of a uniform bright fleshy color when alive, fading to a reddish brown in spirits..."]. Today *Gegeneophis carnosus* (Beddome, 1870).

***catlocensis*:** V. Cat Loc, sector of the present Cat Tien National Park; originally a rhinoceros reserve + L. *-ensis*, belonging to a place. *Ichthyophis catlocensis* Geissler, Poyarkov, Grismer, Nguyen, An, Neang, Kupfer, Ziegler, Böhme & Müller, 2015. ["...We name this new species after its type locality, the Cat Loc area of the Cat Tien National Park..."].

***Caudacaecilia*:** L. *cauda*, tail (animal); extreme part, tail of any thing + L. *Caecilia*, genus of caecilians due to Linnaeus, 1758 (see this name). *Caudacaecilia* Taylor, 1968. ["...a tail is present..."]. In the synonymy of *Ichthyophis Fitzinger, 1826*.

Celatibranchia: L. *celatus*, concealed, hidden + G. *branchia* (βράγχια), gills. Celatibranchia Hogg, 1841. ["...Gill-fringes concealed..."]. In the synonymy of Gymnophiona.

***chaloensis*:** V. Cha Lo [Village] + L. *-ensis*, belonging to a place. *Ichthyophis chaloensis* Geissler, Poyarkov, Grismer, Nguyen, An, Neang, Kupfer, Ziegler, Böhme & Müller, 2015. ["...The specific epithet is in reference to the type locality of the forest near Cha Lo Village, Hoa Son Commune, Minh Hoa District, Quang Binh Province, Central Vietnam..."].

***changamwensis*:** Sw. Changamwe, a suburb of Mombasa (Kenya) + L. *-ensis*, belonging to a place. *Boulengerula changamwensis* Loveridge, 1932. ["...from Changamwe, near Mombasa, Kenya Colony..."].

***Chikila*:** In? *chikila*, vernacular name for these animals. *Chikila* Kamei, San Mauro, Gower, Van Bocxlaer, Sherratt, Thomas, Babu, Bossuyt, Wilkinson & Biju, 2012. ["...Chikila is a northeast (Meghalaya state) Indian tribal name for the included caecilians..."]. Same root in Chikilidae Kamei, San Mauro, Gower, Van Bocxlaer, Sherratt, Thomas, Babu, Bossuyt, Wilkinson & Biju, 2012, Chikilini — Dubois, Ohler & Pyron, 2021.

***Chthonerpeton*:** G. *chthon* (χθών), earth, soil + G. *erpeton* (ερπετον), reptile. *Chthonerpeton* Peters, 1880. [?].

***clarkii*:** Clark + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Gymnophis clarkii* Barbour, 1926. Honoring Herbert Charles Clark (1877–1960), US American physician, first Director of Gorgas Memorial Laboratory, Panama. In the synonymy of *Dermophis mexicanus* (Duméril & Bibron, 1841).

***Coecilia*:** L. *caecilia*, blind-worm, in turn from L. *caecus*, blind. *Coecilia* — Latreille *in* Sonnini de Manoncourt & Latreille, 1801 "An. X". Previously, Linnaeus (1758) used two alternative original spellings for the limbless amphibians included in SN 10, *Coecilia* on page 196 (corrected to *Caecilia* in the Emendanda after p. 823), and *Caecilia* on page 229. The following year (Linnaeus, 1759: 70; 81), consistently employed the spelling *Caecilia*, but again in SN 12 (Linnaeus, 1766), used both. Same root in Coeciliae Müller, 1831, Coeciliae Müller, 1832, Coeciliae Tschudi, 1838. In the synonymy of *Caecilia* Linnaeus, 1758.

***columbianum*:** L. *Columbia,* Colombia, a South American country named after Christopher Columbus (1451–1506) + L. *-anum*, pertaining to. *Rhinatrema columbianum* Rendahl & Vestergren, 1939. ["...Die betreffenden Sammlu-

ngen stammen aus der Provinz Cauca in Colombia, meistens aus der Umgebung von El Tambo…"]. Today *Epicrionops columbianus* (Rendahl & Vestergren, 1939)

***compressicauda*:** L. *compressus,* constricted, narrow, pressed together + L. *cauda,* tail. *Coecilia compressicauda* Duméril & Bibron, 1841. ["…Extrémité postérieure du tronc assez fortement comprimée à sa partie supérieure ou tectiforme…"]. Today *Typhlonectes compressicauda* (Duméril & Bibron, 1841).

***concolor*:** L. *concolor,* of uniform color throughout. *Rhinatrema concolor* Duméril, 1863. [?]. In the synonymy of *Microcaecilia unicolor* (Duméril, 1863).

***confusionis*:** L. *confusionis,* mingling, mixture, union; confusion, confounding, disorder. *Siphonops confusionis* Taylor, 1968. (Refers to the confusion of this species with *Siphonops*, *Luetkenotyphlus* and *Chtonherpeton*). In the synonymy of *Luetkenotyphlus brasiliensis* (Lütken, 1852).

***congoensis*:** B. Congo (today Democratic Republic of the Congo, from a B. word meaning"mountains") + L. *-ensis, belonging to a place.* *Geotrypetes congoensis* Taylor, 1968. ["…Mayombe Region, Congo…"]. In the synonymy of *Geotrypetes seraphini* (Duméril, 1859).

***convexus*:** L. *convexus*, arching, arched, vaulted, convex. *Scolecomorphus convexus* Taylor, 1968. ["…convexus = (Latin) arched, in reference to the arch in the anal area…"]. In the synonymy of *Scolecomorphus kirkii* Boulenger, 1883.

***cooperi*:** Cooper + L. *-i*, suffix indicating the genitive of masculine names and nouns. (1) *Nectocaecilia cooperi* Taylor, 1970. Honoring Edwin Cooper (1936–), US American biologist and immuno-biology professor. In the synonymy of *Typhlonectes natans* (Fischer, 1880). (2) *Praslinia cooperi* Boulenger, 1909. Honoring Sir Clive Forster-Cooper (1880–1947), British zoologist.

***Copeotyphlinus*:** Cope + connective o + G. *typhlos* (τυφλος), blind (frequent particle in gymnophiona names) + L. *-inus*, having the nature or condition of). *Copeotyphlinus* Taylor, 1968. Honoring Edward Drinker Cope (1840-1897), US American paleontologist and zoologist. In the synonymy of *Gymnopis* Peters, 1874.

***corpulenta*:** L. *corpulenta*, corpulent, fat, stout, of a heavy build of body. *Caecilia corpulenta* Taylor, 1968. ["...A large thick-bodied species with a relatively small head..."].

***corrugatum*:** L. *corrugatum*, make wrinkled; corrugate. *Chthonerpeton corrugatum* Taylor, 1968. ["...Skin transversely wrinkled, somewhat more in adults than in young..."]. In the synonymy of *Chthonerpeton indistinctum* (Reinhardt & Lütken, 1862).

***costaricense*:** S., L. *costaricense*, from Costa Rica, a Central American country. *Dermophis costaricense* Taylor, 1955. ["...Of Costa Rica..."].

***crassisquama*:** L. *crassus*, thick, deep; thick coated + L. *squama*, scale. *Caecilia crassisquama* Taylor, 1968. ["...An elongated species lacking secondaries, but with a few thickened (inflexible scales) in the posterior folds..."].

***crassus*:** L. *crassus*, thick, deep; thick coated. *Dermophis crassus* Cope, 1885 "1884". ["...The most robust species of the genus..."]. In the synonymy of *Siphonops annulatus* (Mikan, 1820).

***Crotaphatrema*:** G. *krótaphos* (κρόταφος), side of the forehead, temple + G. *-a* (-α), privative + G. *trema* (τρήμα), that which is created by drilling or piercing, aperture, hole. *Crotaphatrema* Nussbaum, 1985. ["...The generic name is derived from *krotaphos* (Gr.) meaning the temple of the head and *atrema* (Gr.) meaning without holes, in reference to the lack of temporal fossae..."]. Note that G. *átréma* (ἀτρέμα), means without motion or trembling; still, motionless.

***Cryptopsophis*:** G. *krypto* (κρύπτω) hide, cover + G. *ops* (ὤψ) + G. *ophis* (όφις), snake, serpent. *Cryptopsophis* Boulenger, 1883. In the characterization of *C. multiplicatus*, the type species of the genus, Boulenger wrote, referring to eyes, ["...latter very indistinct..."]. In the synonymy of *Gymnopis* Peters, 1874.

***cunhai*:** Cunha + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Typhlonectes cunhai* Cascon, Lima-Verde & Marques 1991. Honoring Osvaldo Rodrigues da Cunha (1928–2011), Brazilian herpetologist. In the synonymy of *Typhlonectes compressicauda* (Duméril & Bibron, 1841).

***danieli*:** Daniel + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Gegeneophis danieli* Giri, Wilkinson & Gower, 2003. Honoring Jivanayakam Cyril Daniel (1927–2011), Indian naturalist.

***daribokensis*:** ? Daribokgre, locality in Meghalaya State, India + L. *-ensis*, belonging to a place. *Ichthyophis daribokensis* Mathew & Sen, 2009. ["...The species name reflects the name of the locality Daribokgre in East Garo hills district of Meghalaya from where the type materials were collected..."].

***darlong*:** D. Darlong (26. 93722 N, 92. 99611 E; 121 m asl), Seijosa, East Kameng district, Arunachal Pradesh, India. The name Darlong is associated also to a language and a small tribe living in Tripura, India. *Chikila darlong* Kamei, Gower, Wilkinson & Biju, 2013. ["...The species is named after Darlong where the type series was collected..."].

***davidi*:** David + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Ichthyophis davidi* Bhatta, Dinesh, Prashanth, Kulkarni & Radhakrishnan, 2011. Honoring David Gower (1969–), British herpetologist, "...in recognition of his contributions to Indian caecilian studies...".

***degenerata*:** L. *degeneratus,* degenerate, + L. *-ata*, having the nature of. *Caecilia degenerata* Dunn, 1942. [?].

***denhardti*:** Denhardt + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Boulengerula denhardti* Nieden, 1912. Unclear; Honoring either Clemens Andreas Denhardt (1852–1928) or his brother, Gustav Denhardt (1856–1917), both German explorers and colonial functionaries.

***dermatophaga*:** G. *dermatikos* (δερματικός), of skin, like skin + G. *phagos* (φάγος), glutton. *Microcaecilia dermatophaga* Wilkinson, Sherratt, Starace & Gower, 2013. ["...from the Greek *derma*=skin and *phagos*=eating..."].

***Dermophis*:** G. *dermos* (δερμος), skin (in the sense of leather) + G. *ophis* (όφις), snake, serpent. *Dermophis* Peters, 1880. ["...Die Zusammensetzung *Dermophis*, ebenso wie *Dermochelys* (und nicht *Dermatochelys*) ist gebildet, wie das Aristotelische dermopterus..."]. Same root in Dermophiidae Taylor, 1969, Dermophiinae Taylor, 1969, Dermophiinia — Dubois, Ohler & Pyron, 2021, Dermophiinoa — Dubois, Ohler & Pyron, 2021.

Diatriata: G. *dia-* (διά), through, across, by, over + L. *atrium*, a room which contains the hearth, fore-court, hall, principal room + L. *-ata*, pertaining to. Diatriata Wilkinson & Nussbaum, 2006. ["...We propose Diatriata, as a suitable rankless name for this suprafamilial clade comprising those caecilians with partial external division of their atrium..."]. In the synonymy of Gymnophiona.

***diminutiva*:** L. *diminutivum,* form of the diminutive; diminutive. *Grandisonia diminutiva* Taylor, 1968. ["...smallest transformed specimen known, 64 mm). In the synonymy of *Dermophis sechellensis* Boulenger, 1911.

***disossea*:** L. *dis-*, intensive prefix + L. *ossea*, bone-, made, consisting of bone; bone-like. *Caecilia disossea* Taylor, 1968. ["...I regard it essential that these forms with the eye covered solidly with bone be separated from those having an open socket..."].

***dorsalis*:** L. *dorsalis*, pertaining to the back. *Caecilia dorsalis* Peters, 1877. ["...Auf dem Hinterrücken beginnt eine niedrige Längswulst, welche sich in das zusammengedrückte Schwanzrudiment fortsetzt, welches die Afteröffnung um 2 Mm. überragt..."]. In the synonymy of *Potamotyphlus kaupii* (Berthold, 1859).

***dubium*:** L. *dubium*, unclear, dubious, uncertain; variable. *Brasilotyphlus dubium* Correia, Nunes, Gamble, Maciel, Marques-Souza, Fouquet, Rodrigues & Mott, 2018. ["...The epithet *dubium* means "dubious", reflecting our doubt whether or not *Brasilotyphlus* should be considered a synonym of *Microcaecilia*..."].

***dulitensis*:** ? [Mount] Dulit, Sarawak, Borneo + L. *-ensis*, belonging to a place. *Ichthyophis dulitensis* Taylor, 1960. ["...(Mt.) Dulit + *ensis* (Latin) = place, locality, country..."].

***dunni*:** Dunn + L. *-i*, suffix indicating the genitive of masculine names & nouns. *Caecilia dunni* Hershkovitz, 1938. Honoring Emmett Reid Dunn (1894–1956), US American herpetologist.

***eburatus*:** *L. eburatus,* adorned with ivory; inlaid with ivory. *Dermophis eburatus* Taylor, 1968. ["... Color: Above, grayish-olive or brownish ivory..."]. In the synonymy of *Dermophis mexicanus* (Duméril & Bibron, 1841).

***eiselti*:** Eiselt + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Typhlonectes eiselti* Taylor, 1968. Honoring Josef Eiselt (1912–2001), Austrian herpetologist. Today *Atretochoana eiselti* (Taylor, 1968).

***elongata, elongatus*:** L. *elongata, -us,* prolonged, protracted. (1) *Caecilia elongata* Dunn, 1942. ["...500 – 620 mm..."]. Today *Oscaecilia elongata* (Dunn, 1942). (2) *Ichthyophis elongatus* Taylor, 1965. ["...body width in length 37 to 40 times..."].

***Eocaecilia*:** G. *eos* (ἑως), from *ios* (ἠώς), dawn or sunrise + L. *Caecilia*, genus of caecilians due to Linnaeus, 1758 (see this name). *Eocaecilia* Jenkins & Walsh, 1993. ["...Greek *Eo*, dawn: the dawn caecilian..."].

***ephele*:** L. *ephelis,* freckled. *Schistometopum ephele* Taylor, 1965. ["...From Latin *ephelis* = freckled..."]. In the synonymy of *Schistometopum thomense* (Bocage, 1873).

***Epicrionops*:** G. *ep-icrion* (ἐπ-ἰκριον), yard-arm (supporting a sail) + G. *ops* (ὄψ), eye. *Epicrionops* Boulenger, 1883. ["...Tentacle minute, flap-shaped, close to the anterior border of the eye..."]. Same root in Epicriidei Lescure, Renous & Gasc, 1986.

***epicrionopsoides*:** L. *Epicrionops*, a rhinatrematid genus due to Boulenger, 1883 (see this name) + L. *-oīdes*, or G. -ειδός, suffix indicating likeness. *Caecilia epicrionopsoides* Fernández-Roldán, Lynch & Medina-Rangel, 2023. ["...The specific epithet is Greek (*epicrionops-oides*) and is given in reference to the peculiar condition of this *Caecilia* having two sets of secondary grooves, an anterior one found shortly behind the collars and a posterior one near the terminus. The name alludes the annulation pattern of rhinatrematid caecilians of the genus *Epicrionops*, which have very high groove counts along the body. Additionally, the new species seems very closely associated with streams, which is also similar to species of *Epicrionops*..."]

***Epicrium*:** G. *ep-icrion* (ἐπ-ἰκριον), yard-arm (supporting a sail). *Epicrium* Wagler, 1828. ["...truncus elongatus, aequalis, cylindraceo-depressiusculus..."]. In the synonymy of *Ichthyophis* Fitzinger, 1826. Same root in Epicria Fitzinger, 1843, Epicrina Bonaparte, 1845, Epicriidae — Dubois, 1984, Epicriilae — Lescure,

Renous & Gasc, 1986, Epicriinae — Lescure, Renous & Gasc, 1986, Epicrioidae — Lescure, Renous & Gasc, 1986, Epicrioidea — Lescure, Renous & Gasc, 1986, Epicrioides — Lescure, Renous & Gasc, 1986, Epicriumidae — Anonymous, 1993.

***equatorialis*:** L. *equatorialis*, related to Ecuador. *Oscaecilia equatorialis* Taylor, 1973. ["...from Dyott Farm, Km 121 from Quito, 6 km E Santo Domingo de los Colorados, Pichincha, Ecuador..."].

***erugatum*:** L. *erugatum*, with wrinkles or creases removed. *Chthonerpeton erugatum* Taylor, 1968. ["...Conspicuous skin glands of two sorts, the larger ones often somewhat elevated and causing the surface to appear slightly granular..."]. In the synonymy of *Chthonerpeton indistinctum* (Reinhardt & Lütken, 1862).

***exile*:** L. *exile*, small, thin; poor. *Chthonerpeton exile* Nussbaum & Wilkinson, 1987. ["...The name *exile* (Latin, *exilis*) refers to the relatively slender, delicate shape of the body and head..."].

***fasciata*:** L. *fasciata*, having band, strip; ribbon. *Nectocaecilia fasciata* Taylor, 1968. [?]. In the synonymy of *Chthonerpeton indistinctum* (Reinhardt & Lütken, 1862).

***fischeri*:** Fischer + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Boulengerula fischeri* Nussbaum & Hinkel, 1994. Honoring Eberhard Fischer (1961–), German botanist.

***flaviventer*:** L. *flavus*, yellow, golden, gold colored + ventris, stomach, womb; belly. *Dermophis flaviventer* Ahl, 1926. ["...Oberseite gelblichbraun, Unterseite hell gelblichbraun..."]. In the synonymy of *Dermophis sechellensis* Boulenger, 1911.

***flavopunctata*:** L. *flavus*, yellow, golden, gold colored + L. *punctata*, punctuated; pointed. *Caecilia flavopunctata* Roze & Solano, 1963. ["...Lateralmente, aparecen dos manchas amarillas por cada segmento, dando la impresión de ser dos líneas laterales que se extienden desde la porción posterior de la cabeza hasta el ano..."].

***forcarti*:** Forcart + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Ichthyophis forcarti* Taylor, 1965. Honoring Lothar Hendrich Emil Wilhelm Forcart-Müller (1902–1990),

Swiss herpetologist. In the synonymy of *Caecilia glutinosa* Linnaeus, 1758.

***fredi*:** Fred + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Luetkenotyphlus fredi* Maciel, Castro, Sturaro, Silva, Ferreira, Santos, Risse-Quaioto, Barboza, Oliveira, Sampaio & Schneider, 2019. Honoring Carlos Frederico (Fred) Duarte Rocha (1958–), Brazilian herpetologist.

***fulleri*:** Fuller + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Herpele fulleri* Alcock, 1904. Honoring Sir Joseph Bampfylde Fuller (1854–1935), English colonial administrator in India. Today *Chikila fulleri* (Alcock, 1904).

***gaiduwani*:** Gaiduwan + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Chikila gaiduwani* Kamei, Gower, Wilkinson & Biju, 2013. Honoring Gaiduwan Gaipuizei Kammei, from Kohima, Nagaland), first author's father.

***gansi*:** Gans + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Uraeotyphlus gansi* Gower, Rajendran, Nussbaum & Wilkinson, 2008. Honoring Carl Gans (1923–2009), US American herpetologist born in Germany.

***garoensis*:** Ga. Garo [Hills], part of the Garo-Khasi range, Meghalaya, India (named after the Garo, native people inhabiting the area) + L. *-ensis,* belonging to a place. *Ichthyophis garoensis* Pillai & Ravichandran, 1999. ["...Distribution: Garo Hills, Meghalaya..."].

garzonheydti: Garzon Heydt + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Schistometopum garzonheydti* Taylor & Salvador, 1978. Honoring Jesús Garzon Heydt (1946–2023), Spanish naturalist. In the synonymy of *Geotrypetes seraphini (Duméril, 1859).*

***Gegeneophis*:** G. *gegenes* (γηγενής), earthborn + G. *ophis* (ὄφῐς), snake, serpent. *Gegeneophis* Peters, 1880. ["...Der von Hrn. Günther vorgeschlagene Name war schon 1816 von Hübner an eine Lepidopterengattung vergeben..."].

Gegenes: G. *gegenes* (γηγενής), earthborn. *Gegenes* Günther, 1876 "1875". Preoccupied by *Gegenes* Hübner, 1816 (Lepidoptera). In the synonymy of *Gegeneophis* Peters, 1880.

Georynchii: G. *geo-* (γεω-), land, earth + G. *rhynchos* (ῥύγχος), snout. Georynchii Wagler, 1828. ["...Wühler, Irdler, Grabler ..."]. Wagler (1828) used 'Georychi'. In the synonymy of Gymnophiona.

***Geotrypetes*:** G. *geo-* (γεω-), land, earth + G. *trypetes* (τρυπητής), borer. *Geotrypetes* Peters, 1880. ["...γέα, τρυπητής..."]. Same root in Geotrypetoidae Lescure, Renous & Gasc, 1986, Geotrypetinoa — Dubois, Ohler & Pyron, 2021.

***gilbertogili*:** Gilberto Gil + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Rhinatrema gilbertogili* Maciel, Sampaio, Hoogmoed & Schneider, 2018. Honoring Gilberto Passos Gil Moreira (1942–), Brazilian music, composer, and singer.

***glandulosus*:** L. *glandula*, gland (literally: a little acorn) + L. *-osus*, suffix denoting abundance. (1) *Dermophis glandulosus* Taylor, 1955. ["...Latin, *glandulosus* = glandulose..."]. (2) *Ichthyophis glandulosus* Taylor, 1923. ["...on each side of body is a broad dorsolateral glandular fold which extends from head along body to a point a short distance in front of tail; this fold is strongly defined, of equal prominence its entire length..."].

***glutinosa*:** L. *glutinosus*, viscous, sticky, glutinous. *Caecilia glutinosa* Linnaeus, 1758. [?]. Today *Ichthyophis glutinosus* (Linnaeus, 1758).

***goaensis*:** P. Goa (in turn, from K. गोंय, patch of tall grass, referring to the lush greenery or abundant vegetation that characterized the area), state on the southwestern coast of India + L. *-ensis*, belonging to a place. *Gegeneophis goaensis* Bhatta, Dinesh, Prashanth & Kulkarni, 2007. ["...The species is named after Goa where the type locality is situated..."].

***goweri*:** Gower + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia goweri* Fernández-Roldán & Lynch, 2021. Honoring David J. Gower (1969–), British herpetologist.

***gracilior*:** L. *gracilis*, slender, thin, slim, slight; fine, narrow + L. *-ior*, comparative suffix. *Dermophis gracilior* Günther, 1902. ["...Habit moderate, the circumference of the body being nearly one-sixth of its length..."].

***gracilis*:** L. *gracilis*, slender, thin, slim, slight; fine. *Caecilia gracilis* Shaw, 1802. ["...Slender Caecilia..."].

***grandis*:** L. *grandis*, full-grown, grown up; large, great, grand, tall, lofty; powerful. *Microcaecilia grandis* Wilkinson, Nussbaum & Hoogmoed, 2010. ["...The species is named for its large size..."].

***grandisonae*:** Grandison + L. *-ae*, suffix indicating the genitive of feminine names and nouns. *Geotrypetes grandisonae* Taylor, 1970. Honoring Alice Georgie Cruickshank Grandison (1927–2014), British herpetologist. Today *Sylvacaecilia grandisonae* (Taylor, 1970).

***Grandisonia*:** Grandison + L. *-ia*, dedicative suffix. *Grandisonia* Taylor, 1968. Honoring Alice Georgie Cruickshank Grandison (1927–2014), British herpetologist. Same root in Grandisoniidae Lescure, Renous & Gasc, 1986, Grandisoniilae Lescure, Renous & Gasc, 1986, Grandisoniina — Dubois, Ohler & Pyron, 2021, Grandisoniinia — Dubois, Ohler & Pyron, 2021.

***gregorii*:** Gregory + L. *-ii*, suffix indicating the genitive of masculine names and nouns. *Dermophis gregorii* Boulenger, 1895 "1894". Honoring John Walter Gregory (1864–1932), British geologist and explorer. Today *Schistometopum gregorii* (Boulenger, 1895).

***guarantanus*:** P. Guarantã do Norte, Mato Grosso, Brazil; from T. *guara-antã*, hard wood (vernacular name of diverse species of hardwood trees, including *Cupania uraguensis* and *Esenbeckia leiocarpa*) + L. *-anus*, belonging to. *Brasilotyphlus guarantanus* Maciel, Mott & Hoogmoed, 2009. ["...The name of the species refers to the type-locality..."].

***guentheri, guntheri*:** Günther + L. *-i*, suffix indicating the genitive of masculine names and nouns. (1) *Caecilia guntheri* Dunn, 1942. (2) *Hypogeophis guentheri* Boulenger, 1882. Honoring Albert Carl Ludwig Gotthilf Günther (1830–1914), German-born British zoologist. In the synonymy of Hypogeophis rostratus (Cuvier, 1829).

Gymnophiona: G. *gymnos* (γυμνός), naked + G. *ophis* (όφις), snake, serpent. Gymnophiona Rafinesque, 1815. ["...*I ginoffi. Corpo senza squame*..."]. Same root in Gymnophia Rafinesque, 1814, Gymnodermia Rafinesque, 1815, Gymnophides Latreille, 1825, Gymnophidia Müller, 1831.

***Gymnophis*:** G. *gymnos* (γυμνός), *naked* + *G. ophis* (όφις), snake, serpent. *Gymnophis* — Barbour, 1924. [?]. Incorrect subsequent spelling of *Gymnopis* Peters, 1874.

***Gymnopis*:** G. *gymnos* (γυμνός), naked + G. *ops* (ὤψ), eye. (1) *Gymnopis* Peters, 1874. ["...γυμνός, ὤψ..."]. (2) Same root in Gymnopiilae Lescure, Renous & Gasc, 1986.

***hardyi*:** Hardy + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Siphonops hardyi* Boulenger, 1888. Honoring F. Hardy du Dréneuf, Belgian collector and traveler, active in Brazil at the end of the XIX century.

***hasselti*:** Hasselt + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Epicrium hasselti* Wagler, 1828; in the synonymy of *Ichthyophis hypocyaneus* (Van Hasselt *in* Boie, 1827). (2) *Ichthophis hasselti* Fitzinger, 1826, *nomen nudum*; in the synonymy of *Ichthyophis hypocyaneus* (Van Hasselt *in* Boie, 1827). Honoring Johan Coenraad van Hasselt (1797–1823), Dutch biologist.

***haydee*:** S. *Haydée*, feminine name, Spanish and French form of Haidee. Perhaps intended to derive from Greek αιδοιος meaning modest, reverent. This name was created by Lord Byron for a character (written as Haidée) in his 1819 poem *Don Juan*. *Chthonerpeton haydee* Roze, 1963. Honoring Haydée Solano de Chacin (1922–1993), Venezuelan herpetologist. In the synonymy of *Typhlonectes natans* (Fischer, 1880).

Hedraeoglossi: G. *hedraios* (ἑδραῖος), sitting, sedentary + G. *glossa* (γλῶσσα), tongue. Hedraeoglossi Wagler, 1828. ["... Haftzüngler ..."]. In the synonymy of Caeciliidae Rafinesque, 1814.

***hellmichi*:** Hellmich + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Chthonerpeton hellmichi* Taylor, 1968. Probably Honoring Karl George Walter Hellmich (1906–1974), German herpetologist. In the synonymy of *Chthonerpeton indistinctum* (Reinhardt & Lütken, 1862).

***Herpele*:** G. *herpele* (ἑρπήλη), a kind of worm. *Herpele* Peters, 1880. ["...ἑρπήλη..."]. Same root in Herpelidae Laurent, 1984, Herpelinae Laurent, 1984, Herpeloidi — Lescure, Renous & Gasc, 1986, Herpelini — Lescure, Renous & Gasc, 1986, Herpeliti — Lescure, Renous & Gasc, 1986.

***humphreyi*:** Humphrey + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Ichthyophis humphreyi* Taylor, 1973.

Honoring Philip Humphrey (1926–2009), US American ornithologist.

***husaini*:** Husain + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Ichthyophis husaini* Pillai & Ravichandran, 1999. Honoring Akhlaq Husain, Zoological Survey of India, Dehra Dun, who collected the specimen and provided valuable data. In the synonymy of *Ichthyophis garoensis* Pillai & Ravichandran, 1999.

***hypereumeces*:** G. *hyper* (ὑπέρ), beyond, over, above, very + G. *eumêkes* (εὐ-μήκης), very long, extensive, impressive. *Oscaecilia hypereumeces* Taylor, 1968. ["...A slender, much-elongated species, reaching a known length of 640 mm..."].

***hypocyanea*:** G. *hypo* (ὑπό), beneath, below, under + G. *kyaneos* (κυάνεος), glossy black or dark blue. *Caecilia hypocyanea* Van Hasselt *in* Boie, 1827. ["...*Supra ex olivaceo obscura, subtus chalybea linea laterali flavo punctata*..."]. Today *Ichthyophis hypocyaneus* (Van Hasselt *in* Boie, 1827).

***Hypogeophis*:** G. *hypogeios* (υπόγειος), underground + G. *ophis* (ὄφῐς), snake, serpent. *Hypogeophis* Peters, 1880. [?].

***ibiara*:** T. *ibiara*, corr. *yby-ra,* what is born from the ground. *Caecilia ibiara* Daudin, 1803 "An. XI". ["... Le nom qui sert à désigner cette espèce a été employé par Marcgrave, d'après les habitans du Brésil, pour l'amphisbène enfumé..."]. Substitute name for *Caecilia tentaculata*. In the synonymy of *Caecilia tentaculata* Linnaeus, 1758.

***Ichthyophis*:** G. *ichthys* (ἰχθῦς), fish + G. *ophis* (ὄφῐς), snake, serpent. *Ichthyophis* Fitzinger, 1826. ["... Linne's *Caecilia glutinosa* und eine neue Art aus Java, haben einen deutlich plattgedrückten Körper mit zugespitztem Ende, welcher den übrigen Coecilen durchaus fehlt, und hieraufist der generische Unterschied gegründet..."]. Same root in Ichthyophiidae Taylor, 1968, Ichthyophidinae — Wollenberg & Measey, 2009, Ichthyophioidea — Dubois, Ohler & Pyron, 2021.

***Idiocranium*:** G. *idios* (ἴδιος), peculiar, separate, distinct + G. *cranion* (κρᾱνίον), skull. *Idiocranium* Parker, 1936. ["...This new genus is distinguished from any caecilian hitherto described by the great reduction of the frontal bones, which do not meet the maxillaries but permit the naso-premaxillaries to

form a suture with the squamosals…"].

***inca*:** Q. *[Sapa] Inka*, the only Inca, was the Emperor of the Andean, pre-Columbian Inca Empire (Tawantinsuyu). *Caecilia inca* Taylor, 1973. ["…The name "*inca*" refers to the rulers of the primitive inhabitants of Perú…"].

***indistinctus*:** L. *indistinctum*, not separated; indistinct, obscure. *Siphonops indistinctus* Reinhardt & Lütken, 1862 "1861". ["…*annuli corporis indisticti & incompleti*…"]. Today *Chthonerpeton indistinctum* (Reinhardt & Lütken, 1862).

***Indotyphlus*:** L. *indo,* Indian, inhabitant of India + G. *typhlos* (τυφλος), blind (frequent ending in caecilian names). *Indotyphlus* Taylor, 1960. ["…From *Indo*, referring to India, + *typhlos* Gr. = blind…"]. Same root in Indotyphlini Lescure, Renous & Gasc, 1986, Indotyphlidae — Wilkinson, San Mauro, Sherratt & Gower, 2011, Indotyphlina — Dubois, Ohler & Pyron, 2021.

***insulanus*:** L. *insula*, island + L. *-anus*, belonging to. *Siphonops insulanus* Ihering, 1911. ["…Est. S. Paulo, Ilha Victoria e Ilha de São Sebastião…"]. Today *Luetkenotyphlus insulanus* (Ihering, 1911).

***intermedia*:** L. *intermedia*, intermediate. *Caecilia intermedia* Boulenger, 1913. ["…Intermediate between *C. tentaculata* L. and *C. pachynema* Gthr.…"]. Either synonym of *Caecilia dunni* Hershkovitz, 1938 or *Caecilia nigricans* Boulenger, 1902, *fide* Frost 2023.

***Interrupta, interruptus*:** L. *interrupta, -us*, drive a gap in, break up; cut short, interrupt. (1) *Caecilia interrupta* Cuvier, 1829. ["… *Caec. interrupta*, Nob. , où les lignes blanches des anneaux ne se correspondent pas en dessous…"]. In the synonymy of *Siphonops annulatus* (Mikan, 1820). (2) *Uraeotyphlus interruptus* Pillai & Ravichandran, 1999. ["…The more important characters for the erection of a new taxon are the interrupted nature of the body folds…"].

***isthmica*:** L. *isthmica,* pertaining, belonging to the isthmus. *Caecilia isthmica* Cope, 1877. ["…This species was included in the collection made by Commander Selfridge on the East side of the Isthmus of Darien…"].

***iwokramae*:** Mk. Iwokrama [Forest], natural reserve in central Guyana (in turn, from Mk. *Iwokrama*, place of refuge). *Caecilita iwokramae* Wake & Donnelly, 2010. ["… The species is named for the forest

in which the type specimen was discovered…"]. Today *Microcaecilia iwokramae* (Wake & Donnelly, 2010).

***iyob*:** E. *iyob*, acronym for International Year of Biodiversity. *Microcaecilia iyob* Wilkinson & Kok, 2010. ["…The species is named to commemorate the International Year of Biodiversity (2010) to serve as a reminder that much biodiversity is undescribed and much sampled biodiversity is poorly understood taxonomically…"]

***javanicus*:** L. *javanicus,* belonging to Java, one of the Indonesian Sunda Islands [in turn, from Sa. Sawa (यव), barley]. *Ichthyophis javanicus* Taylor, 1960. ["…Java + *icus* = belonging to, pertaining to…"].

***kaupii*:** Kaupp + L. *-ii*, suffix indicating the genitive of masculine names and nouns. *Caecilia kaupii* Berthold, 1859. Honoring Johann Jakob von Kaup (1803–1873), German zoologist. Today *Potamotyphlus kaupii* (Berthold, 1859).

***khumhzi*:** ? Khumhzi village, Tamenglong district, Manipur, India. *Ichthyophis khumhzi* Kamei, Wilkinson, Gower & Biju, 2009. ["…Named after Khumhzi village, where the type series was collected…"].

***kirkii*:** Kirk + L. *-ii*, suffix indicating the genitive of masculine names and nouns. *Scolecomorphus kirkii* Boulenger, 1883. Honoring Sir John Kirk (1832–1922), British diplomat, explorer and naturalist.

***kodaguensis*:** ? Kodagu, district on the eastern slopes of the Western Ghats, Karnataka state, India. *Ichthyophis kodaguensis* Wilkinson, Gower, Govindappa & Venkatachalaiah, 2007. ["…The specific epithet reflects the provenance of the type specimens from the District of Kodagu (also known as Coorg) in Southern Karnataka, India…"].

***koepckeorum*:** Koepcke + L. *-orum*, genitive plural of the second declension. *Oscaecilia koepckeorum* Wake, 1984. Honoring Hans-Wilhelm Koepcke (1914–2000) and his wife Maria (née Maria Emilia Ana von Mikulicz-Radecki, 1924–1971), German ornithologists.

***kohtaoensis*:** Th. Koh Tao Island, part of the Chumphon Archipelago in the Gulf of Thailand; in turn, from Thai เกาะเต่า, turtle island. *Ichthyophis kohtaoensis* Taylor, 1960. ["…The species is named from the island + *ensis* (Latin) place, country…"].

***krishni*:** Krishna + L. *-i*, suffix indicating the genitive of masculine names and nouns. Honoring Krisna Farms, a dairy farm in Karnataka, India. *Gegeneophis krishni* Pillai & Ravichandran, 1999. ["... Krishna Farms, Gurpur, Karnataka..."].

***ladigesi*:** Ladiges + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Nectocaecilia ladigesi* Taylor, 1968. Honoring Werner Ladiges (1910–1984), German ichthyologist. In the synonymy of *Typhlonectes compressicauda* (Duméril & Bibron, 1841).

***lakimi*:** Lakim + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Ichthyophis lakimi* Nishikawa, Matsui & Yambun, 2012. Honoring Maklarin B. Lakim (?), then in charge of the research division of Sabah Parks, Kota Kinabalu, Malaysia.

***lamottei*:** Lamotte + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Scolecomorphus lamottei* Nussbaum, 1981. Honoring Maxime Lamotte (1920-2007), French biologist and geneticist. Today *Crotaphatrema lamottei* (Nussbaum, 1981).

***laosensis*:** La. Laos, landlocked country in SE Asia; from Lao people, a Tai ethnic group native to Southeast Asia + L. *-ensis*, belonging to a place. *Ichthyophis laosensis* Taylor, 1969. ["...Specimen from "Haut Laos."..."].

***larutensis*:** Ma. Larut [Hills], Perak, Malaysia (from Ma. *larut*, soluble or dissolve) + L. *-ensis*, belonging to a place. *Ichthyophis larutensis* Taylor, 1960. ["...Larut (Mts.) + ensis (Latin) = place, locality, country..."].

***larvatus*:** L. *larva,* ghost-like, masked, (used for the distinct juvenile form of many animals before metamorphosing into their next stage) + L. *-atus*, suffix indicating condition of. *Dermophis larvatus* Ahl, 1934. Today *Grandisonia larvata* (Ahl, 1934).

***lativittatus*:** L. *latus*, wide, broad + L. *vittatus*, wearing or carrying a ritual band or ribbon. *Epicrionops lativittatus* Taylor, 1968. ["...A short thick-bodied species with a very broad (5½-, 7mm) lateral yellow stripe on each side..."].

***lenticulata*:** L. *lenticulata,* provided with lenses. *Caecilia lenticulata* Tschudi, 1838. Error for *Caecilia tentaculata* Linnaeus, 1758.

***leucocephala*:** G. *leuco* (λευκος), white + G. *képhala* (κεφάλη), head. *Caecilia leucocephala* Taylor, 1968. ["...Head light grayish cream to old ivory..."].

***leucoderus*:** G. *leuco* (λευκος), white + G. *deros* (δερος), skin, hide. *Siphonops leucoderus* Taylor, 1968. ["...Dark brown dorsally, lighter beneath; a white area on chin and throat..."].

***lionneti*:** Lionnet + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Hypogeophis rostratus lionneti* Taylor, 1969. Honoring Mr. J. F. Guy Lionnet (1922–2007), Mauritian-Seychellois agronomist, naturalist, linguist, playwright and historian. In the synonymy of *Hypogeophis rostratus* (Cuvier, 1829).

***longicephalus*:** L. *longus*, long + G. *képhala* (κεφάλη), head. *Ichthyophis longicephalus* Pillai, 1986. ["...Head comparatively longer..."].

***Luetkenotyphlus*:** Lütken + G. *typhlos* (τυφλος), blind. *Luetkenotyphlus* Taylor, 1968. Honoring Christian (not Charles, as stated by Taylor) Frederik Lütken (1827–1901), Danish zoologist.

***lumbricoidaea*:** L. *lumbricus,* earthworm + L. *-oīdes*, or G. -ειδός, suffix indicating likeness. *Caecilia lumbricoïdaea* Daudin, 1803 "An. XI". ["...On ne peut mieux comparer cette cécilie qu'à un lombric ou ver de terre, à cause de sa forme qui est mince, très-longue, d'égale grosseur depuis la tête jusqu'au bout de la queue..."]. In the synonymy of *Caecilia gracilis* Shaw, 1802.

***macrodonta*:** G. *makros* (μακρός), long; large in size or degree, great + G. *odontia* (οδόντια), teeth. *Caecilia macrodonta* Fernández-Roldán, Lynch & Medina-Rangel, 2023. ["...The specific epithet is derived from the Greek words *macro* (large) and *odonto* (teeth), and roughly translates as 'bigtooth'. We consider the name to be fitting one because of all the Colombian species of the genus *Caecilia*, this one possesses the largest and thickest dentary teeth, suggesting a specialized diet..."].

***maculatus*:** L. *maculatus*, spotted. *Siphonops paulensis* var. *maculatus* Sawaya, 1937. ["...Do mesmo modo que em *S. annulatus*, aqui nesta especie deparei com dois exemplares ... providos de manchas esbranquiçadas absolutamente idênticas às já descriptas para a variedade daquella especie..."]. In

the synonymy of *Siphonops paulensis* Boettger, 1892.

***madhavai*:** Madhava + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Gegeneophis madhavai* Bhatta & Srinivasa, 2004. Honoring Madhava Bhat, Madhavarao Bhide, Madhava Anantha Pai, and Madhava Gadgil "for supporting the first author's research into caecilians".

***maharashtraensis*:** M. Maharashtra, an Indian state + L. *-ensis*, belonging to a place. It has been suggested that the name derives from a tribe or dynasty of chiefs ruling in the Deccan region, or from the Sanskrit, meaning great nation. *Indotyphlus maharashtraensis* Giri, Wilkinson & Gower, 2004. ["...The species is named for Maharashtra, the Indian State within which the type locality lies..."].

***malabarensis*:** ? Malabar, probably from Tm. *Malai*, mountain and Tm. *Barum*, slope + L. *-ensis*, belonging to a place. *Ichthyophis malabarensis* Taylor, 1960. ["... Malabar + *ensis*, place locality of..."]. In the synonymy of *Uraeotyphlus bombayensis* (Taylor, 1960).

***malabarica*:** ? Malabar, probably from Tm. *Malai*, mountain and Tm. *Barum*, slope+ L. *-ica*, suffix used to indicate possession or association with something. *Cecilia malabarica* Beddome, 1870. ["... Malabar - rare..."]. Today *Uraeotyphlus malabaricus* (Beddome, 1870).

***marcusi*:** Marcus + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Caecilia marcusi* Wake, 1985. Honoring Harry Marcus, German physician working in Bolivia. In the synonymy of *Caecilia mertensi* Taylor, 1973

***marmoratus*:** L. *marmoratus*, marbled; overlaid with marble. (1) *Epicrionops marmoratus* Taylor, 1968. ["...The ground color cream-white with spots, flecks, and dots of lavender pigment..."]. (2) *Siphonops annulatus* var. *marmoratus* Sawaya, 1937. ["...Dentre os exemplares de *S. annulatus* examinados, 32 apresentam grande numero de manchas formadas de um conjuncto de semicírculos ou segmentos de arcos de parabolas, ou ainda de espiraes, concêntricos, localizados nos flancos, no dorso e no abdômen, sem uma distribuição uniforme ...Estes traços pódem ainda mostrar-se emaranhados, cruzando-se entre si na superfície das pregas annulares em

diversas direcções, dando á pelle um aspecto rajado..."]. In the synonymy of *Siphonops annulatus* (Mikan, 1820).

***marvaleewakeae*:** Marvalee Wake + L. *-ae*, suffix indicating the genitive of feminine names and nouns. *Microcaecilia marvaleewakeae* Maciel & Hoogmoed, 2013. Honoring Marvalee Hendricks Wake (1939–), US American herpetologist.

***melanochrus*:** G. *melanos* (μέλανος), black + G. *chros* (χρώς), skin, flesh. *Potomotyphlus melanochrus* Taylor, 1968. ["...The color is deep black throughout..."]. In the synonymy of *Potamotyphlus kaupii* (Berthold, 1859).

***menoni*:** Menon + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Uraeotyphlus menoni* Annandale, 1913. Honoring Konkoth Ramunni Menon (1872–1949), Indian zoologist.

***mertensi*:** Mertens + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia mertensi* Taylor, 1973. Honoring Robert Friedrich Wilhelm Mertens (1894–1975), German herpetologist.

***mexicanus*:** L. *mexicanus*, from México. *Siphonops mexicanus* Duméril & Bibron, 1841. ["...Ce *Siphonops* est originaire du Mexique..."]. Today *Dermophis mexicanus* (Duméril & Bibron, 1841).

***mhadeiensis*:** Sa. Mahadayi or Mhadei, river in the state of Goa, India (probably Honoring Mahadevi, महादेवी, the supreme goddess in the Shaktism sect of Hinduism) + L. *-ensis*, belonging to a place. *Gegeneophis mhadeiensis* Bhatta, Dinesh, Prashanth & Kulkarni, 2007. ["...The species is named after the river Mhadei on the bank of one of the tributaries of which the type locality is situated..."].

***Microcaecilia*:** G. *mikros* (μικρός), small + L. *Caecilia*, caecilian genus due to Linnaeus, 1758 (see this name). *Microcaecilia* Taylor, 1968. ["...Small species with eye visible or invisible externally..."]. Same root in Microcaeciliinoa Dubois, Ohler & Pyron, 2021.

***microcephalum*:** G. *mikros* (μικρός), small + *képhala* (κεφάλη), head. *Chthonerpeton microcephalum* Miranda-Ribeiro, 1937. ["...Cabeça pequena, egualando a ½ do maior diametro do corpo..."]. In the syn-

onymy of *Potamotyphlus kaupii* (Berthold, 1859).

***micropodia*:** G. *mikros* (μικρός), small + G. *podos* (ποδος), foot. *Eocaecilia micropodia* Jenkins & Walsh, 1993. ["...*mikros*, small; *pous,* foot: in reference to the diminutive limbs..."].

***Mimosiphonops*:** L. *mimus*, mime; farce; actor in mimes + L. *Siphonops*, genus of gymnophiones due to Wagler, 1828 (see this name). *Mimosiphonops* Taylor, 1968. ["...A genus generally resembling *Siphonops annulatus*..."].

***Minascaecilia*:** S. [Sierra de las] Minas, mountain range in the departments of Baja Verapaz, Alta Verapaz, El Progreso, Zacapa, and Izabal, Guatemala + L. *Caecilia,* genus of gymnophiona due to Linnaeus, 1758 (see this name). *Minascaecilia* Wake & Campbell, 1983. ["...The generic name reflects the general region inhabited by the taxon (Minas-, for the Sierra de las Minas of east-central Guatemala) and-caecilia, for the group of genera to which the taxon is most similar (the small and attenuate species included in *Caecilia*, and its relatives)..."]. In the synonymy of *Gymnopis* Peters, 1874.

***mindanaoensis*:** S. Mindanao (Spanish corruption of Ce. *maguindanao*, people of the lake or flood plains), the second-largest island in the Philippines archipelago + L. *-ensis*, belonging to a place. *Ichthyophis mindanaoensis* Taylor, 1960. ["...Mindanao + *ensis* (Latin) = place, country of..."].

***monbaroni*:** Monbaron + L. *-i*, suffix indicating the genitive of masculine names and nouns. Honoring Michel Monbaron (1942-), Swiss geologist.

***monochrous*:** G. *monos* (μόνος), alone (without the presence of others) + G. *chrous* (χρως) color; the color of the skin; complexion. *Epicrium monochrous* Bleeker, 1858. ["...Het is van eene violetbruine kleur over het geheele ligchaam en slechts iets lichter gekleurd aan de ondervlakte van den kop..."]. Today *Ichthyophis monochrous* (Bleeker, 1858).

***montanus*:** L. *montanus,* from the mountains; mountain dweller. *Hypogeophis montanus* Maddock, Wilkinson & Gower, 2018. ["...The specific epithet is in reference to the restricted, high elevation distribution of the species, known only from above 700 m, on the highest mountains in the Seychelles..."].

***moustakius*:** G. *mýstakos* (μύστακος), moustache. *Ichthyophis moustakius* Kamei, Wilkinson, Gower & Biju, 2009. ["...The species name is derived from the Greek word *moustakius*, meaning moustache, referring to the distinctive yellow, arched stripes extending between the TAs and nares..."].

***multicolor*:** L. *multicolor*, many-colored. *Ichthyophis multicolor* Wilkinson, Presswell, Sherratt, Papadopoulou & Gower, 2014. ["... Named for its having more distinct colours than most other *Ichthyophis*..."].

***multiplicata, multiplicatus*:** L. *multiplicata, -us*, multiply; repeat; increase (number, quantity, extent). (1) *Cryptopsophis multiplicatus* Boulenger, 1883. [?]. In the synonymy of *Gymnopis multiplicata* Peters, 1874. (2) *Gymnopis multiplicata* Peters, 1874. ["... Zähne kegelförmig, ziemlich kurz und zahlreich (im Oberkieferrande etwa 18 an jeder Seite)..."]. (3) *Herpele multiplicata* Nieden, 1912. ["...Die Zahl der Hautfalten ist merklich größer als bei *Herpele squalostoma*..."].

***museugoeldi*:** P. Museu Goeldi. *Caecilia museugoeldi* Maciel & Hoogmoed, 2018. Honoring the Museu Paraense Emílio Goeldi, Belém, Pará, Brazil, the oldest research institution in the Amazon region.

***nadkarnii*:** Nadkarni L. *-ii*, suffix indicating the genitive of masculine names and nouns. *Gegeneophis nadkarnii* Bhatta & Prashanth, 2004. Honoring Vinayaka Baburao Nadkarni (1933-2020), Indian zoologist.

***narayani*:** Narayan + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Uraeotyphlus narayani* Seshachar, 1939. Honoring C. R. Narayan Rao (1882–1960), Indian herpetologist.

***natans*:** L. *natans,* swimming. *Caecilia natans* Fischer In Peters, 1880 "1879". ["...Aus dem Cauca, Nebenfluss mit festem Kiesgrund des Magdalenenflusses, Neu Granada..."]. Today *Typhlonectes natans* (Fischer, 1880)

***Nectocaecilia*:** G. *nektes* (νηκτης), swimmer + L. *Caecilia*, genus of caecilians due to Linnaeus, 1758 (see this name). *Nectocaecilia* Taylor, 1968. ["...two large narial plugs on tongue..."].

Neocaecilia: G. *neos* (νεός) + new, young, recent + L. *Caecilia*, genus of caecilians due to Linnaeus, 1758 (see this name). *Neocaecilia*

Wilkinson & Nussbaum, 2006. ["...For this reason, we prefer the anatomically neutral Neocaecilia as a rankless epithet for the suprafamilial clade including all caecilians with jaw-closing muscles that do not extend onto the top of the skull from the adductor chamber..."]. In the synonymy of Gymnophiona.

***nguyenorum*:** Nguyen + L. *-orum*, genitive plural of the second declension. *Ichthyophis nguyenorum* Nishikawa, Matsui & Orlov, 2012. Honoring the brothers Nguyen Quang Truong (1975–) and Nguyen Thien Tao (1982–), Vietnamese herpetologists.

***nicefori*:** Nicéforo + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Gymnophis nicefori* Barbour, 1924. Honoring Brother Nicéforo María, né Antoine Rouhaire Siauzade (1888–1980), French priest and naturalist active in Colombia. Today *Microcaecilia nicefori* (Barbour, 1924).

***niedeni*:** Nieden + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Boulengerula niedeni* Müller, Measey, Loader& Malonza, 2005. Honoring Fritz Nieden (1883–1942), German zoologist.

***nigricans*:** L. *nigricans*, to be blackish. *Caecilia nigricans* Boulenger, 1902. ["...Blackish; lips yellowish..."].

***nigroflavus*:** L. *nigrum*, black, dark + L. *flavus*, yellow, golden, gold colored. *Ichthyophis nigroflavus* Taylor, 1960. ["...*nigro* (Latin) = black + *flavus* (Latin) = yellow..."].

***nigrum*:** L. *nigrum*, black, dark. *Rhinatrema nigrum* Dunn, 1942. ["... Uniformly dark..."].

***noblei*:** Noble + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Epicrionops petersi noblei* Taylor, 1968. Honoring Gladwyn Kingsley Noble (1894–1940), US American herpetologist. In the synonymy of *Epicrionops petersi* Taylor, 1968.

***noctinectes*:** L. *noctis*, night + G. *nektes* (νηκτης), swimmer. *Chthonerpeton noctinectes* da Silva, Britto-Pereira & Caramaschi, 2003. {"...The specific name is an adjective derived from *nocti* (Latin [*nox*, *noctis*] nocturnal) and *nectes* (Greek [*nekton*, *nektos*] swimmer), as an allusion to the nocturnal swimming activity of the species....}.

***nokrekensis*:** ? Nokrek, a Biosphere Reserve in Sasatgre, Meghalaya, West Garo Hills, India. ["...The species name reflects the name of the Biosphere Reserve from where *Ichthyophis nokrekensis* Mathew & Sen, 2009. the type materials were collected..."].

Nuda: L. *nudus*, naked, bare, unclothed, stripped, uncovered, exposed. Nuda Fitzinger, 1826. ["... *Nuden*..."]. In the synonymy of Gymnophiona.

***oaxacae*:** S. Oaxaca, Mexican city and state, from Náhuatl (Na). *Huaxyacac,* on the top of the huaje (a tree of the genus *Leucaena*) + L. *-ae*, suffix indicating pertenance. *Gymnopis multiplicata oaxacae* Mertens, 1930 "1929". ["...Terra typica: Cafetal Concordia, 600 m. Höhe (zwischen Puerto Angel und Salina Cruz), Staat Oaxaca, Mexiko..."]. Today *Dermophis oaxacae* (Mertens, 1930).

***obesus*:** L. *obesus*, fat, stout, plump. *Typhlonectes obesus* Taylor, 1968. ["...A cylindrical, thick-bodied species..."]. In the synonymy of *Typhlonectes compressicauda* (Duméril & Bibron, 1841).

***occidentalis*:** L. *occidentalis*, of, pertaining to, connected with, coming from the west. (1) *Caecilia occidentalis* Taylor, 1968. ["... From near Popayan, Cauca, Colombia..."]. (2) *Dermophis occidentalis* Taylor, 1955. ["...Latin, *occidentalis* = western..."]. (3) *Geotrypetes seraphini occidentalis* Parker, 1936. ["...The western subspecies of *seraphini* may be known by the above name..."]. In the synonymy of *Geotrypetes seraphini* (Duméril, 1859).

***ochrocephala*:** G. *ochra* (ὠχρα), ochre, pale yellow + G. *céphala* (κεφάλη), head. *Coecilia ochrocephala* Cope, 1866. ["...Head lighter, clouded yellowish-olive ...lower lip and jaw yellowish..."]. Today *Oscaecilia ochrocephala* (Cope, 1866).

***oligozonus*:** G. *oligos* (ολίγος), little in size or weight; insignificant + L. *zona,* belt, girdle, zone. *Siphonops oligozonus* Cope, 1877. ["... The annuli continue to the vent, and those of the secondary series commence much posterior to the point of beginning in the other species..."]. In the synonymy of *Gymnopis syntrema (Cope, 1866).*

***onorei*:** Onore + L. *-i*, suffix indicating the genitive of masculine names

and nouns. *Chthonerpeton onorei* Nussbaum, 1986. Honoring Father Giovanni Onore (1941–), Italian Marianist missionary priest and zoologist, active in Ecuador.

***oommeni*:** Oommen + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Uraeotyphlus oommeni* Gower & Wilkinson, 2007. Honoring Oommen V. Oommen (1949–), Indian herpetologist.

Ophiomorpha: G. *ophis* (όφις), snake, serpent + G. *morpha* (μορφή), form, shape, appearance. Ophiomorpha Van der Hoeven, 1855. ["...*Corpus anguiforme, teres*..."]. In the synonymy of Gymnophiona.

Ophiosomes: G. *ophis* (όφις), snake, serpent + G. *soma* (σῶμα), body of man or beast. Ophiosomes Duméril & Bibron, 1841. ["...Parmi les Batraciens, un groupe entier a été long-temps rangé dans l'ordre des Ophidiens, c'est celui des Ophiosomes ou Péromèles..."]. Same root in Ophiosoma Lichtenstein & Martens, 1856 In the synonymy of Gymnophiona.

***orientalis*:** L. *orientalis*, coming from the east. (1) *Caecilia orientalis* Taylor, 1968. ["...La Bonita, Napo-Pastaza Prov., Ecuador..."]. (2) *Gegeneophis orientalis* Agarwal, Wilkinson, Mohapatra, Dutta, Giri & Gower, 2013. ["...The specific epithet is an adjective derived from the Latin *oriens* for "East" in reference to this being the first *Gegeneophis* from the Eastern Ghats..."].

***orthoplicatus*:** G. *orthos* (ὄρθος), straight, steep; upright, standing + L. *plicatus*, folded. *Ichthyophis orthoplicatus* Taylor, 1965. ["... Grooves and folds not angulate on venter..."].

***osae*:** S. [Península de] Osa, Costa Rica (in turn, named after a local cacique or tribal chief named Osa, first contacted by the Spanish explorer Gil González Dávila around 1522) + L. *-ae*, suffix indicating pertenance. *Oscaecilia osae* Lahanas & Savage, 1992. ["...adult female collected from the airstrip at La Sirena, Peninsula de Osa, Canton de Osa, Puntarenas Province, Costa Rica..."].

***Oscaecilia*:** L. *os,* bone, + L. *Caecilia*, genus of caecilians due to Linnaeus (1758); in turn, from L. *caecus*, blind. *Oscaecilia* Taylor, 1968. ["...Eye buried under bone & may or may not be visible through the bone..."]. Same root in Oscaecilioidae Lescure, Renous & Gasc, 1986.

***oxyura*:** G. *oxys* (οξύς), sharp, acute + G. *oura* (οὐρά), tail. *Caecilia oxyura* Duméril & Bibron, 1841. ["... extrémité du tronc cylindrique; queue pointue..."]. Today *Uraeotyphlus oxyurus* (Duméril & Bibron, 1841).

***pachynema*:** G. *pachy* (παχυς), thick + G. *nema* (νήμα), thread. *Caecilia pachynema* Günther, 1859. ["...The length of the body is to its greatest diameter as 92:1..."].

***palmeri*:** Palmer + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia palmeri* Boulenger, 1913. Honoring Mervyn George Palmer (1882–1954), English naturalist, traveler and collector in Central and South America. In the synonymy of *Caecilia nigricans* Boulenger, 1902.

***pareshi*:** Paresh + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Gegeneophis pareshi* Giri, Gower, Gaikwad & Wilkinson, 2011. Honoring Paresh Porob, Indian range forest officer in Goa, "...in recognition of his dedicated efforts to conserve and promote a love and understanding of wildlife and the natural environment, especially in Goa...".

***parkeri*:** Parker + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Rhinatrema parkeri* Dunn, 1942. Honoring Hampton Wildman Parker (1897–1968), British herpetologist. Today *Epicrionops parkeri* (Dunn, 1942).

***Parvicaecilia*:** L. *parvus*, small, little; unimportant + L. *Caecilia*, caecilian genus due to Linnaeus, 1758 (see this name). *Parvicaecilia* Taylor, 1968. ["...Slender, diminutive species..."].

***parviceps*:** L. *parvus*, small + L. *-ceps*, from L. *caput,* head. *Siphonops parviceps* Dunn, 1924 ["...A *Siphonops* with head much smaller than body in diameter..."]. Today *Dermophis parviceps* (Dunn, 1924).

***paucidentulus*:** L. *paucus*, little, small in quantity or extent + L. *dentulus,* from L. *dentatus,* toothed, having teeth. *Ichthyophis paucidentulus* Taylor, 1960. ["... The name *paucidentulus* is derived from Latin *paucus*, few; *dentatis*, toothed, in reference to the fact that there are only three instead of four sets of teeth..."].

***paucisulcus*:** L. *paucus*, little, small in quantity or extent + L. *sulcus*,

furrow. *Ichthyophis paucisulcus* Taylor, 1960. ["...*pauci* (Latin) = few + *sulcus* (Latin) = groove..."].

***paulensis*:** P. [São] Paulo, Brazilian city and state + L. *-ensis*, belonging to a place. *Siphonops paulensis* Boettger, 1892. ["...Erw. São Paulo, Brasilien ..."].

***pauli*:** Paul + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Ichthyophis pauli* Nishikawa, Matsui, Sudin & Wong, 2013. Honoring Paul Yambun, Malay zoologist, one of the collectors of this species.

***peninsularis*:** L. *peninsularis*, from the peninsula. *Ichthyophis peninsularis* Taylor, 1960. ["...*Peninsula* (Latin) referring to peninsular India..."]. In the synonymy of *Uraeotyphlus bombayensis* (Taylor, 1960).

***perdita*:** L. *perditus*, ruined; broken, debilitated. *Caecilia perdita* Taylor, 1968. [?].

***perissodus*:** G. *perissos* (περισσός), beyond what is normal in number or size + G. *odoús* (οδούς), tooth (human or animal) *Chthonerpeton perissodus* Nussbaum & Wilkinson 1987. ["...This species has more premaxillary-maxillary teeth than any other *Chthonerpeton*, hence the name *perissodus*, from perissos (Greek, more than the usual number of) and *odous* (Greek, tooth)..."].

Péromèles: G. *peros* (πηρός), disabled in a limb, maimed + G. *melos* (μέλος), limb. *Péromèles* Duméril & Bibron, 1841. [?]. Same root in *Peromela* Bonaparte, 1850, Conspect. Syst. Herpetol. Amph.: 1. Subclass to contain caecilians (Batrachophidii) & Batrachosaurus (Batrachosaurii). In the synonymy of Gymnophiona.

***peruvianum*:** L. *peruvianum*, from Perú, a South American country. *Rhinatrema peruvianum* Boulenger, 1902. ["...Marcapata Valley, E. Peru..."]. Today *Epicrionops peruvianus* (Boulenger, 1902)

***petersi*:** Peters + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Epicrionops petersi petersi* Taylor, 1968. Honoring James Arthur Peters (1922–1972), US American herpetologist. Today *Epicrionops petersi* Taylor, 1968

***petersii*:** Peters + L. *-ii,* suffix indicating the genitive of masculine names and nouns. (1) *Chthonerpeton petersii* Boulenger, 1882 "1861". Today *Nectocaecilia petersii* (Boulenger, 1882). (2) *Geo-*

trypetes petersii Boulenger, 1895. In the synonymy of *Geotrypetes seraphini* (Duméril, 1859).

Phractamphibia: G. *phractos* (φρακτός), fenced, protected + L. Amphibia, a class of vertebrates; in turn from G. *amphibios* (ἀμφίβιος), living a double life. Phractamphibia Haeckel, 1866. ["...Panzerlurche..."]. In the synonymy of Gymnophiona.

Plesiophiona: G. *plesios* (πλησίος), nearby + G. *ophis* (ὄφις), snake, serpent + L. *-ona*, feminie suffix. Plesiophiona Dubois, Ohler & Pyron, 2021. ["...G: πλησιός (plesios), 'near, close'; ὄφις (ophis), 'snake'. This nomen is based on the same stem as the ordinal nomen Gymnophiona and the subordinal nomen Pseudophiona, and suggests the phylogenetic proximity of the species of this group with those of the latter. In the synonymy of Gymnophiona..."]. In the synonymy of Gymnophiona.

***polyzona*:** G. *polys* (πολύς), several + G. *zona* (ζώνή), waistband, belt or girdle. *Caecilia polyzona* Fischer *in* Peters, 1880 „1879". ["...Oben braungrau Kopf wenig heller, Ringfurchen schwarz; unten hellgrau..."]. Today *Oscaecilia polyzona* (Fischer, 1880).

***Potamotyphlus*:** G. *potamos* (ποταμος), river + G. *typhlos* (τυφλος), blind. *Potamotyphlus* Taylor, 1968. [?]. The same root in *Potomotyphlus* Taylor, 1968 (incorrect original spelling, corrected in errata distributed with original publication by publisher); also in Potamotyphloidea Lescure, Renous & Gasc, 1986, Potamotyphlidae — Lescure, Renous & Gasc, 1986, Potamotyphlinae — Lescure, Renous & Gasc, 1986, Potamotyphlilae — Lescure, Renous & Gasc, 1986, Potamotyphlini — Lescure, Renous & Gasc, 1986,

***praslini, Praslinia*:** F. Praslin, one of the islands of the Seychelles archipelago, in turn named in honor of César Gabriel de Choiseul, duc de Praslin (1712–1785), French military officer, diplomat, and statesman + L. *-i,* suffix indicating the genitive of masculine names and nouns. (1) *Hypogeophis rostratus praslini* Parker, 1958. ["... collected on Praslin by the Percy Sladen Trust Expedition to the Indian Ocean in November 1905..."]. In the synonymy of *Hypogeophis rostratus* (Cuvier, 1829). (2) *Praslinia* Boulenger, 1909 [in the description of *P. cooperi*, the type-species of the genus, "...Two specimens from Praslin..."].

***pressula*:** L. *pressula*, rather compressed. *Caecilia pressula* Taylor, 1968. ["...A species somewhat resembling *Caecilia tentaculata*, but with the body strongly compressed for most of its length..."]. In the synonymy of *Caecilia tentaculata* Linnaeus, 1758.

***pricei*:** Price + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Apodops pricei* Estes & Wake, 1972. Honoring Llewellyn Ivor Price (1905–1980), Brazilian paleontologist.

***pricei*:** Price + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Gymnopis pricei* Dunn, 1944. Honoring Wilfred Devereux Price, author's host at El Centro, Colombia. Today *Microcaecilia pricei* (Dunn, 1944).

***primus*:** L. *primus*, first; 1st - (ORD, 'in series'). *Gegeneophis primus* Kotharambath, Gower, Oommen & Wilkinson, 2012. ["...The specific epithet is in reference to the presence of only primary annuli...).

***proximus*:** *L. proximus,* nearest, closest, next. *Siphonops proximus* Cope, 1877. ["...This Caecilian resembles so much the *S. mexicanus* that I referred specimens of it to that species in my Batrachia and Reptilia of Costa Rica..."]. In the synonymy of *Gymnopis multiplicata* Peters, 1874.

***pseudangularis*:** G. *pseudo* (ψευδής), false, untrue, mistaken + L. *angularis,* having angles or corners. *Ichthyophis pseudangularis* Taylor, 1965. ["...The name *pseudangularis* is from Greek, *pseudo*, false and Latin, *angulus*, angle..."].

***pseudoangeli*:** G. *pseudo* (ψευδής), false, untrue, mistaken + [*Geotrypetes*] *angeli*, species due to Parker, 1936 (see this name). *Geotrypetes pseudoangeli* Taylor, 1968. ["...having about the same number of primary folds as *angeli*..."].

Pseudophydiens: G. *pseudo* (ψευδής), false, untrue, mistaken + G. *ophis* (ὄφις), snake, serpent. Pseudophydiens Blainville, 1816. [?]. Same root in Pseudophidii — Gray, 1825, Pseudo-ophidia — Blainville, 1835, Pseudophidia Gray, 1850, Pseudophiona — Dubois, Ohler & Pyron, 2021. In the synonymy of Gymnophiona.

***Pseudosiphonops*:** G. *pseudo* (ψευδής), false, untrue, mistaken + L. *Siphonops*, genus of gymnophiones due to Wagler, 1828 (see

this name). *Pseudosiphonops* Taylor, 1968. ["...The type of the genus bears a superficial resemblance to *Siphonops annulatus* and *S. paulensis* and to certain forms of African *Geotrypetes*..."]. Same root in Pseudosiphonopiti Lescure, Renous & Gasc, 1986, Pseudosiphonopili — Lescure, Renous & Gasc, 1986. In the synonymy of *Mimosiphonops* Taylor, 1968.

***Pseudotyphlonectes*:** G. *pseudo* (ψευδής), false, untrue, mistaken + L. *Typhlonectes*, genus of gymnophiona due to Peters (1880) (see this name). *Pseudotyphlonectes* Lescure, Renous & Gasc, 1986. [?]. Same root in Pseudotyphlonectini Lescure, Renous & Gasc, 1986, In the synonymy of *Typhlonectes* Peters, 1880.

***pti*:** Sc. *pti,* small. *Hypogeophis pti* Maddock, Wilkinson, Nussbaum & Gower, 2017. ["...The specific epithet is in reference to the very small size of the species, one of the smallest of known caecilians. 'Pti' is a typical spelling in Seychellois Creole of the French petit, petite (small, in English)..."].

***ptychodermis*:** G. *ptychos* (πτύχως), fold + G. *derma* (δέρμα), skin, hide. *Pseudosiphonops ptychodermis* Taylor, 1968. ["...The two nuchal collars are distinct..."]. In the synonymy of *Mimosiphonops vermiculatus* Taylor, 1968.

***pulchraserrana*:** L. *pulchra,* pretty; beautiful + S. *serrana,* from the sierra. *Caecilia pulchraserrana* Acosta-Galvis, Torres & Pulido-Santacruz, 2019. ["...The specific epithet is formed from the Latin *pulchra* (nominative feminine singular of *pulcher*), meaning beauty & the Spanish adjective serrana (feminine singular of serrano), from the sierra or serranía. This specific name refers to the type locality of the species: vereda La Belleza (beauty in English) in the western foothills of the Serranía de Los Yariguíes..."].

rabei Rabe + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Gymnopis rabei* Roze & Solano, 1963. Unclear; probably Honoring some Marvin? Rabe, member of the botanical expedition to southern Venezuela (1961). Today *Microcaecilia rabei* (Roze & Solano, 1963).

***ramaswamii*:** Ramaswami + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Geogeneophis ramaswamii* Taylor, 1964. Honoring Ladapur Srinivas Ramaswami (1907–1987), Indian zoologist.

***reinhardti*:** Reinhardt + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Mimosiphonops reinhardti* Wilkinson & Nussbaum, 1992. Honoring Johann Theodor Reinhardt (1816–1882), Danish zoologist.

***Rhinatrema*:** G. *ris* (ῥίς), nose or snout of men and beasts + G. *-a* (-α), privative + G. *trema* (τρήμα), that which is created by drilling or piercing, aperture, hole. *Rhinatrema* Duméril & Bibron, 1841. ["... De ριν, nasus, nez; a privatif, et de τρήμα, foramen, trou, narines sans trous, ou nez non percé..."]. Same root in Rhinatrematidae Nussbaum, 1977, Rhinatrematoides — Lescure, Renous & Gasc, 1986, Rhinatrematoidea — Lescure, Renous & Gasc, 1986, Rhinatremoidae — Lescure, Renous & Gasc, 1986.

***rochai*:** Rocha + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Microcaecilia rochai* Maciel & Hoogmoed, 2011. Honoring Reginaldo Augusto Trindade Rocha, a technician in the herpetological laboratory of the Museu Paraense Emílio Goeldi.

***ron*:** E. *Ron*, nickname of Ronald. *Rhinatrema ron* Wilkinson & Gower, 2010. Honoring Ronald Archie Nussbaum (1942–), US American herpetologist.

***rostrata*:** L. *rostratus,* having a beak, hooked, with a crooked point, beaked, with a curved front. *Coecilia rostrata* Cuvier, 1829. ["...à museau un peu plus pointu , sans bords blancs aux anneaux..."]. Today *Hypogeophis rostratus* (Cuvier, 1829).

***Rubricaecilia*:** L. *rubrica*, red earth; red ocher + L. *Caecilia*, genus of caecilians due to Linnaeus, 1758 (see this name). *Rubricaecilia* Evans & Sigogneau-Rusel, 2001. ["... From *rubrica* (L), meaning red earth, with reference to the Couches Rouges from which the assemblage comes, and caecilia..."].

***russeli*:** Russel + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Idiocranium russeli* Parker, 1936. According to Beolens *et al.* (2013), the name honors W. M. Russell (1911–1979), US American-born British cryptozoologist.

***sabogae*:** S. Saboga, island of the archipiélagos de las Perlas, Balboa district, Panamá; in turn, from Ch. *saboga*, rocky island + L. *-ae*, suffix indicating pertenance. *Caecilia sabogae* Barbour, 1906. ["...

From Saboga Island..."]. In the synonymy of *Oscaecilia ochrocephala* (Cope, 1866).

***sartoria*:** L. *sartor,* patcher; mender; by extension, taylor. *Minascaecilia sartoria* Wake & Campbell, 1983. Honoring Edward Harrison Taylor (1889–1978), US American herpetologist. In the synonymy of *Gymnopis syntrema (Cope, 1866).*

***savagei*:** Savage + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Microcaecilia savagei* Donnelly & Wake, 2013. Honoring Jay Mathers Savage (1928–), US American herpetologist.

***Schistometopum*:** G. *schistos* (σχιστός), branching, forked (although Parker probably meant to refer to schizo, σχίζω, split, divided) + G. *metopon* (μέτωπον), space between the eyes, brow, forehead. *Schistometopum* Parker, 1941. ["...Frontals small, widely separated medially..."].

***Scolecomorphus*:** G. *scólecos* (σκώληκος), worm + G. *morphi* (μορφή), form, shape, appearance. [?]. Same root in Scolecomorphidae Taylor, 1969, Scolecomorphoides — Lescure *Scolecomorphus* Boulenger, 1883. Renous & Gasc, 1986, Scolecomorphoidea — Lescure, Renous & Gasc, 1986, Scolecomorphoidae — Lescure, Renous & Gasc, 1986, Scolecomorphinae — Lescure, Renous & Gasc, 1986.

***sechellensis*:** F. Se[y]chelles, island nation in the Indian Ocean, named after Jean Moreau de Séchelles (1690-1761), Louis XV's Minister of Finance + L. *-ensis*, belonging to a place. *Dermophis sechellensis* Boulenger, 1911. ["...W. side of Mt. Seychellois, 1200 ft.... "]. Today *Grandisonia sechellensis* (Boulenger, 1911).

***sendenyu*:** ? Sendenyu, a village, Tseminyu sub-division, Kohima District, Nagaland, India. *Ichthyophis sendenyu* Kamei, Wilkinson, Gower & Biju, 2009. ["...Named after Sendenyu village, Nagaland state, where the type series was collected..."].

***septentrionalis*:** L. *septentrionalis,* northern, north-; in northern hemisphere. *Dermophis septentrionalis* Taylor, 1968. [?]. In the synonymy of *Dermophis mexicanus* (Duméril & Bibron, 1841).

***seraphini*:** Seraphin + L. *-i*, suffix indicating the genitive of mascu-

line names and nouns. *Caecilia Seraphini* Duméril, 1859. Honoring Séraphin Braconnier (1812–1884), French "*garçon de laboratoire*" de la chaire des Reptiles et Poissons du Muséum de Paris. Today *Geotrypetes seraphini* (Duméril, 1859).

***seshachari*:** Seshachar + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Gegeneophis seshachari* Ravichandran, Gower & Wilkinson, 2003. Honoring Bagepalli Ramachandrachar Seshachar (1908–1994), Indian zoologist.

***shiv*:** E. *Shiv*, nickname of Shivnarine. *Rhinatrema shiv* Gower, Wilkinson, Sherratt & Kok, 2010. Honoring Shivnarine Chanderpaul (1974–), Guyanese cricketer

***sikkimensis*:** Sa. Sikkim, an Indian state; in turn, from Sa. *Shijim*, crested + L. *-ensis*, belonging to a place. *Ichthyophis sikkimensis* Taylor, 1960. ["...Sikkium + ensis (Latin) = place or country..."].

***simus*:** *L. simus,* flat-nosed, snub-nosed. *Siphonops simus* Cope, 1877. ["...muzzle wide, truncate, nostrils terminal..."]. In the synonymy of *Gymnopis multiplicata* Peters, 1874.

***singaporensis*:** E. Singapore, a sovereign island city-state; from Sanscrit *Siṃhapura*, lion city + L. *-ensis*, belonging to a place. *Ichthyophis singaporensis* Taylor, 1960. ["...Singapore + ensis = place, locality, country..."].

***Siphonops*:** G. *siphon* (σίφων), a tube, pipe, siphon + G. *ops* (ὤψ), eye. *Siphonops* Wagler, 1828. ["... *truncus modice longus, omnino cylindraceus*..."]. Same root in Siphonopidae Bonaparte, 1850, Siphonopina Bonaparte, 1850, Siphonopinae — Dubois, 1984, Siphonopidae — Dubois, 1984, Siphonopoides — Lescure, Renous & Gasc, 1986, Siphonopoidea — Lescure, Renous & Gasc, 1986, Siphonopoidae — Lescure, Renous & Gasc, 1986, Siphonopinae — Lescure, Renous & Gasc, 1986, Siphonopini — Lescure, Renous & Gasc, 1986, Siphonopoidi — Lescure, Renous & Gasc, 1986, Siphonopiti — Lescure, Renous & Gasc, 1986, Siphonopina — Dubois, Ohler & Pyron, 2021, Siphonopinia — Dubois, Ohler & Pyron, 2021, Siphonopinoa — Dubois, Ohler & Pyron, 2021,.

***spawlsi*:** Spawls + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Boulengerula spawlsi* Wilkinson, Malonza,

Campbell & Loader, 2017. Honoring Stephen Spawls (1953–), British herpetologist active in East Africa.

***squalostoma*:** L. *squalus*, squali, kind of fish; shark + G. *stoma* (στόμα), mouth. *Caecilia squalostoma* Stutchbury, 1836 "1834". ["...Muzzle prominent, with a slight protuberance situated about a line inferiorly and posteriorly to the nostrils..."]. Today *Herpele squalostoma* (Stutchbury, 1836).

***Stegokrotaphia*:** G. *stego* (στέγος), roof + G. *krotaphos* (κρόταφος), side of the forehead. *Stegokrotaphia* Cannatella & Hillis, 1993. ["...based on the widespread occurrence of stegokrotaphy, or complete skull roofing, in this group..."]. In the synonymy of Gymnophiona.

***subcaudalis* :** L. *sub*-, under + L. *caudalis*, referring to the tail (animal). *Epicrionops bicolor subcaudalis* Taylor, 1968. ["...subcaudal region brownish black..."].

***subdermalis*:** L. *sub*-, under + G. *dermos* (δερμος), skin. *Caecilia subdermalis* Taylor, 1968. ["... subdermal scales in connective tissue..."].

***subnigricans*:** L. *sub*-, less than + L. *nigricans*, to be blackish; *Caecilia nigricans* Boulenger, 1902. *Caecilia subnigricans* Dunn, 1942. ["...This form has fewer secondaries than *nigricans*..."].

***subterminalis*:** L. *sub*-, less than + L. *terminalis*, terminal; marking a boundary; final. *Caecilia subterminalis* Taylor, 1968. ["... The "terminal" shield shorter and partly segmented..."].

***subterrestris*:** L. *sub*, under + L. *terrestris*, terrestrial, earthly; living, operating on land (not sea). *Ichthyophis subterrestris* Taylor, 1960. ["...*Sub* (Latin) under + *terrestris* (Latin) = of the earth..."]. In the synonymy of *Uraeotyphlus bombayensis* (Taylor, 1960).

***sumatranus*:** L. *sumatranus*, from Sumatra, one of the Sunda Islands of western Indonesia; in turn from Sa. सुवर्णद्वीपः, island of gold. *Ichthyophis sumatranus* Taylor, 1960. ["...Sumatra + *anus* (Latin) = place, location, country..."].

***supachaii*:** Supachai + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Ichthyophis supachaii* Taylor, 1960. Honoring Supachai Vanijvadhana, Sec-

retary General of Chulalongkorn University.

***supernumeraria*:** L. *supernumerarius,* exceeding the usual, stated, or prescribed number. *Microcaecilia supernumeraria* Taylor, 1969. ["...This form differs from the three other species recognized in this genus in having 40 more secondaries and 20 more primaries..."].

***Sylvacaecilia*:** L. *sylva* (better *silva*), wood, forest, woodland + L. *Caecilia,* genus of caecilians due to Linnaeus, 1758 (see this name). *Sylvacaecilia* Wake, 1987. ["...From *sylva*, Gr. (sic), referring to the tropical deciduous forest habitat of these animals, and *caecilia*, L., in reference to the taxon..."].

***syntremus*:** G. *syn* (συν), in company with, together with + G. *trema* (τρήμα), aperture, hole. *Siphonops syntremus* Cope, 1866. ["...This species differs from the four hitherto known, in the close approximation of the narial and tentacular openings..."]. Today *Gymnopis syntrema (Cope, 1866).*

***taitana*:** E. Taita [Hills], mountain range in the Taita-Taveta County, S. E. Kenya (from Sw. *teta*, defensive, quarrelsome, or aggressive) + L. *-ana*, of or pertaining to. *Boulengerula taitana* Loveridge, 1935. ["...Mount Mbololo, Taita Mountains, Coast Province, Kenya Colony..."].

***taprobanicensis*:** G. *Taprobana* (Ταπροβανᾶ), ancient Greek name for Sri Lanka + L. *-ensis*, belonging to a place. *Ichthyophis taprobanicensis* Taylor, 1969. ["...Ohiya Area, Ceylon..."]. In the synonymy of *Ichthyophis orthoplicatus* Taylor, 1965.

***taylori*:** Taylor + L. *-i,* suffix indicating the genitive of masculine names and nouns. *Microcaecilia taylori* Nussbaum & Hoogmoed, 1979. Honoring Edward Harrison Taylor (1889–1978), US American herpetologist.

***tchabalmbaboensis*:** Fu. Tchabal Mbabo (or Tchabbal Mbabo), mountain range in Adamaoua Province, Cameroon (from Fu. *Tchabal,* high-altitude area with a flat relief, cold and windy climate, and grassy vegetation, which is typically used for grazing cattle, and Fu. *Mbabo*, a proper noun) + L. *-ensis*, belonging to a place. *Crotaphatrema tchabalmbaboensis* Lawson, 2000. ["...*Crotaphatrema tchabalmbaboensis* is named for the type locality, Mount Tchabal Mbabo, a remote, isolated highland consisting of a mosaic of

montane savanna, gallery forest and cloud forest. Tchabal Mbabo is located on the Adamaoua Plateau of Cameroon…"].

***tejaswini*:** E. Tejaswini, river in Kasaragod District, Kerala, India (from Sa. तेजस्वनी, radiant, lustrous). *Gegeneophis tejaswini* Kotharambath, Wilkinson, Oommen & Gower, 2015. ["…The specific epithet is in reference to the type locality, which lies close to (less than 1 km north of) the Tejaswini (= Thejaswini) river. The origin of the river's name is the Sanskrit word *tejas*, meaning spiritually splendorous radiance…."].

***tentaculata*:** L. *tentaculum* (feeler) + L. *-ata*, suffix added to nouns to form adjectives. *Caecilia tentaculata* Linnaeus, 1758. [? In the generic characterization, "…*Labium superius tentaculis 2*…"].

***tenuissima*:** L. *tenuissima*, superlative of L. *tenuis,* thin, fine; delicate. *Caecilia tenuissima* Taylor, 1973. ["…A slender elongate species reaching a known length of 390 mm…"].

Teresomata: L. *teres*, rounded off, rounded, well-turned, round, smooth + G. *soma* (σῶμα), body. *Teresomata* Wilkinson & Nussbaum, 2006. ["…These caecilians lack true tails and have, for the most part, more rounded (teres) ends to their bodies (soma) than rhinatrematids, ichthyophiids and uraeotyphlids…"]. In the synonymy of Gymnophiona.

***thomense, thomensis*:** F. Thomé (in the original Portuguese, República Democrática de São Tomé e Príncipe), island nation off the Gulf of Guinea + L. *-ensis*, belonging to a place. *Siphonops thomensis* Bocage, 1873. ["…ils ont été rapportés de l'Ile Saint Thomé (côte occidentale d'Afrique)…"]. Today *Schistometopum thomense* (Bocage, 1873).

***thompsoni*:** Thompson + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia thompsoni* Boulenger, 1902. Honoring Kay Thompson, collector of the holotype in Colombia; no further data available.

***tremembe*:** P. *Tremembé*, an indigenous group that live in the state of Ceará, mainly in the municipality of Itarema; they have lost their native language and speak Portuguese. *Chthonerpeton tremembe* Maciel, Leite, Silva-Leite, Leite & Cascon, 2015. ["…a reference to the Tremembé ethnic group…"].

***tricolor*:** L. *tricolor*, with three colors. *Ichthyophis glutinosus tricolor* Annandale, 1909. ["...I propose to call the form with the white ventral surface— var. *tricolor*..."]. Today *Ichthyophis tricolor* Annandale, 1909.

***trombetas*:** P. Trombetas [Floresta Nacional (FLONA) Trombetas (0°57'45.97" S, 55°31'20. 28" W], municipality of Óbidos, state of Pará, Brazil]. According to João de São José de Queirós da Silveira (1711–1764), bishop of Pará, referring to Trombetas, noted that "... êste foi o nome de um índio que dirigia a grande nação dos índios que vivem no seu sertão, chamado o principal Trombeta ..." (Visita ao sertão, p. 212, cited by Cardoso, 1961[1]). *Microcaecilia trombetas* Maciel & Hoogmoed, 2011. ["... The name of the species refers to the type-locality..."].

***Typhlonectes*:** G. *typhlos* (τυφλος), blind + G. *nektes* (νήκτής), swimmer. *Typhlonectes* Peters, 1880. ["...im Wasser lebend..."]. Same root in Typhlonectidae Taylor, 1968, Typhlonectoides — Lescure, Renous & Gasc, 1986, Typhlonectoidae — Lescure, Renous & Gasc, 1986, Typhlonectinae — Lescure, Renous & Gasc, 1986, Typhlonectilae — Lescure, Renous & Gasc, 1986, Typhlonectoidi — Lescure, Renous & Gasc, 1986, Typhlonectini — Lescure, Renous & Gasc, 1986, Typhlonectina — Dubois, Ohler & Pyron, 2021.

***uaiuai*:** C. Uaiuai or Wai-Wai, Carib-speaking native Americans. *Rhinatrema uaiuai* Maciel, Sampaio, Hoogmoed & Schneider, 2018. ["...honoring the Uaiuai Indians ...which include indigenous communities in southern Guyana and the southeastern part of the state of Roraima, the northeastern part of the state of Amazonas, and the northwestern part of the state of Pará in Brazil...."].

***uluguruensis*:** B. Uluguru [Mountains], isolated mountain range in Eastern Tanzania (named after the Luguru people, inhabitants of the area) + L. *-ensis*, belonging to a place. (1) *Boulengerula uluguruensis* Barbour & Loveridge, 1928. ["...From Vituri, Uluguru Mountains, Tanganyika Territory..."]. (2) *Scolecomorphus uluguruensis* Barbour & Loveridge, 1928. ["...From Nyingwa, Uluguru Mountains, Tanganyika Territory..."].

***unicolor*:** L. *unicolor,* of one color; monochromatic. (1) *Bdel-*

1 Cardoso, L. A. 1961. Toponímia brasílica. Rio de Janeiro. Biblioteca do Exército. 476 p.

lophis unicolor Boettger, 1913. ["...vollkommen einfarbige, glänzend schwarze, wie lackiert erscheinende Färbung..."]. In the synonymy of *Schistometopum gregorii* (Boulenger, 1895). (2) *Rhinatrema unicolor* Duméril, 1863. ["...Teinte générale uniformément olivâtre, mais la tête et l'extrémité tout-à-fait terminale du tronc sont d'un jaune-verdâtre clair..."]. Today *Microcaecilia unicolor* (Duméril, 1863).

***Uraeotyphlus*:** G. *ouraios* (οὐραῖος), of the tail + G. *typhlos* (τυφλος), blind (frequent ending in caecilian names). *Uraeotyphlus* Peters, 1880. ["...οὐραῖος, τυφλος..."]. Same root in Uraeotyphlinae Nussbaum, 1979, Uraeotyphlidae — Duellman & Trueb, 1986, Uraeotyphlilae — Lescure, Renous & Gasc, 1986, Uraeotyphlidinae — Wollenberg & Measey, 2009.

venezuelense: Venezuela + L. *-ense*, belonging to a place. *Thyphlonectes compressicauda venezuelense* Fuhrmann, 1914. ["...Quant à la provenance des exemplaires, ceux de Paris proviennent de Cayenne, ceux de Berlin du Venezuela (Caracas) et l'exemplaire de Hambourg de Maracaibo..."]. In the synonymy of *Typhlonectes natans* (Fischer, 1880).

***vermiculatus*:** L. *vermiculatus,* arranged to give an effect of wavy lines. *Mimosiphonops vermiculatus* Taylor, 1968. [?].

***vermiformis*:** L. *vermiformis*, worm-shaped. *Caecilia vermiformis* Shaw *in* Gray, 1850. [?]. In the synonymy of *Caecilia gracilis* Shaw, 1802.

versatilis: L. *versatilis,* revolving; versatile. *Amphisbaena versatilis* Gray, 1850. *Nomen nudum*. In the synonymy of *Dermophis mexicanus (Duméril* & Bibron, 1841).

***viscosa*:** L. *viscosus,* full of birdlime, sticky, viscous. *Coecilia viscosa* Latreille *in* Sonnini de Manoncourt & Latreille, 1801 "An. X". ["...La *Cœcile visqueuse*..."]. In the synonymy of *Caecilia glutinosa* Linnaeus, 1758.

***vittatus*:** L. *vittatus*, wearing or carrying a ritual ribbon or band. *Bdellophis vittatus* Boulenger, 1895. ["...Bright yellow, with a broad black dorsal band..."]. Today *Scolecomorphus vittatus* (Boulenger, 1895).

***viviparum*:** L. *viviparus,* of an animal that gives birth to developed live young, viviparous. *Chthonerpeton viviparum* Parker & Wett-

stein, 1929. ["...In *Chthonerpeton viviparum*, however, the eggs are retained within the oviducts..."].

***volcani*:** L. *Volcan* + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia volcani* Taylor, 1969. Honoring Volcanus, Latin god of fire (etymology by the author).

***weberi*:** Weber + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Ichthyophis weberi* Taylor, 1920. Honoring Max Wilhelm Carl Weber van Bosse (1852–1937), German-Dutch physician and zoologist.

***wilkinsoni*:** Wilkinson + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Caecilia wilkinsoni* Fernández-Roldán & Lynch, 2023. Honoring Mark Wilkinson (1963–), Merit Researcher at the Natural History Museum in London, U. K.

***yaigoje*:** S. [Parque Nacional Natural] Yaigoj´e [Apaporis]; in turn, from Ta. *Yaigojé*, place of the gods or sacred place. *Caecilia yaigoje* Fernández-Roldán, Medina-Rangel & Lynch, 2023. ["...This species is named after Parque Nacional Natural Yaigoj´e Apaporis, the first P. N. N. to be entirely designated as a protected area in response to the wishes and petitions of its native human inhabitants who believe in the conservation of the Amazon jungle and oppose any mining activities carried out in this region of Colombia..."].

***youngorum*:** Young + L. *-orum*, genitive plural of the second declension. *Ichthyophis youngorum* Taylor, 1960. Honoring the family of Oliver Gordon Young (1927–2016), US American Baptist Missionary in Chiang Mai, Thailand.

***zweifeli*:** Zweifel + L. *-i*, suffix indicating the genitive of masculine names and nouns. *Oscaecilia zweifeli* Taylor, 1968. Honoring Richard George Zweifel (1926–2019), US American herpetologist.

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au texte, et par de nombreux exemples traduits; l'étymologie; les noms propres placés à leur ordre alphabétique; suivi d'une liste des racines mentionées dans l'ouvrage, de tableaux sur le calendrier, les monnaies, les poids, et mesures, la numération des Grecs, et précédé d'une liste des auteurs et des ouvrages cités. Par M. A. Bailly (...). Librairie Hachette, Paris.

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Hachura
Roberto Silva Nascimento - @roberto_o.o
Chelonoidis denticulatus



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Dermochelys coriacea

Etymology of American reptile genera

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Abstract

Here we provide the etymologies of all 416 extant reptile genera that occur on the American supercontinent, ranging from Canada to Argentina and Chile, but excluding the Caribbean. The 416 genera make up one third of all 1,250 reptile genera worldwide. Most of these names are still based on Greek and Latin terms (316 and 79, respectively), and about 20 names each are based on local terms, eponyms, and actual localities. The origin of some names remains mysterious (e.g. *Farancia, Ficimia, Ninia*), although we do offer speculations about them. More than half of all American reptile genera were coined by just 10 individuals, two of whom are still alive. The vast majority of names were coined in an intense period of discovery from around 1820 to 1880 (when many authors did not explain the origin of their names). However, a significant increase of new genus descriptions has begun in the 21st century with the advent of molecular taxonomy.

Key words: Sauria, Serpentes, Squamata, Crocodylia, Testudines, North America, Central America, South America, New World

INTRODUCTION

The American supercontinent ranges from the Arctic in Canada to the Antarctic parts of Tierra del Fuego in Argentina and Chile. This huge landmass boasts a huge diversity of life, including 3,793 reptile species (Uetz et al., 2024; Uetz & Stylianou, 2018). Note that we exclude the Caribbean from this definition which hosts another 800 species of reptiles or so (as defined by Uetz, 2000, i.e. we exclude Puerto Rico from the Americas although it is politically associated to the United States).

The 3,793 species are currently organized in 416 genera, a number that represents a full third of the world's 1,250 reptile genera. Although there have been several books and monographs that explained the etymology of many genera (e.g. Beolens et al., 2011; Gotch, 1986, 1995), there is no comprehensive survey of all of them, and certainly no further analysis in space and time.

Thus, we have compiled the etymologies of all these genera, and tried to classify them into their source types, that is, whether they originate from Greek or Latin stems, eponyms, or other sources. The latter would include localities, such as *Amapasaurus*, named after the Brazilian state of Amapa, or mythology, such as *Lachesis*, named after one of the three Fates in Greek mythology. A surprisingly large group of genera was actually named after other genera, such as *Ameivula*, supposedly a diminutive form of *Ameiva*. Finally, we identify several genera whose etymology remains unknown, such as those of *Ficimia* or *Riama*, even though we take the liberty to speculate about the origin of some of them. All etymologies and their classification are summarized in an appendix, and tabulated for easier access in a supplementary table. The etymologies are also available through the Reptile Database (Uetz et al., 2024).

MATERIAL AND METHODS

We compiled etymologies from several previously published lists such as that of Ellin Beltz (2006), books such as those on the herpetofauna of Mexico by Lemos-Espinal et al. (2007, 2015), websites such as Wikipedia, etymological dictionaries (e.g. Werner, 1972) and Greek and Latin dictionaries, as well as original descriptions of these species. Unfortunately, many older species descriptions do not explain their origin, even though many can be inferred from their Greek and Latin stems. However, some names remain completely obscure, which is made more complicated by the fact that some authors, e.g. John Edward Gray, are thought to have formed names out of random characters, without any explanation.

Brown's lexicon (1954) has been a classic tool in zoological nomenclature, although it is occasionally insufficient, so we rely on some other sources. For **Greek**, Bailly (1895), Beekes & Van Beek (2010), Borror (1960), Diggle et al. (2021) and Liddell & Scott (1996); **Latin** is covered by the dictionaries of Borror (1960), De Vaan (2008) and Glare (2012). Portuguese followed the famous Aurelio, of Ferreira et al., 2010, and VV. AA., 2021, and the native Tupí terms were defined with the help of Barbosa (1951), Dias (1858), Navarro (2008), Carvalho (1987) and Sampaio (1987). Additionally, some names

were identified based on Beolens et al. (2011).

In the interest of space, we do not provide all original references for all genera, but we do list the authors of genera, and the type species in the supplement. More details on these names, including their detailed distribution, can be obtained from the Reptile Database using the general URL

https://reptile-database.reptarium.cz//species?genus=genus&species=epithet, e.g. *https://reptile-database.reptarium.cz//species?genus=Abronia&species=deppii* for Deppe's Arboreal Alligator Lizard, *Abronia deppii,* the type species of the genus *Abronia*. The etymology and source reference for each genus is listed in the database entry of the type species that is listed in **Supplementary Table 1**. Note that we do not provide the etymologies of all species, a project that we will address in a forthcoming paper.

RESULTS

Not surprisingly, most genus names are derived from **Greek** and **Latin** stems, namely 316 and 79 names, respectively. In fact, we found 31 genera that combine Greek and Latin terms, e.g. *Calamodontophis*, a combination of the Latin *calamus*, meaning reed or cane, and the Greek terms *odontos* (ὀδόντος), meaning tooth, plus the Greek *ophis*, (ὄφις), a snake. Other genus names are combinations of classic words and other terms, e.g. names of people, so called eponyms.

In fact, **eponyms** are commonly used for genus names and we found 19 eponymous names, ranging from *Alexandresaurus* to *Xantusia*. The former was named after Brazilian naturalist Alexandre Rodrigues Ferreira, while the latter was named after John Xantus, (also known as Louis de Vesey, 1825–1894), a Hungarian-born naturalist who arrived in the US in 1850. Typically, eponyms are coined in combination with a Greek or Latin term, as in *Alexandresaurus*, which contains the Greek word sauros (σαῦρος) for lizard. In fact, 39 genera contain the Greek term sauros, which is thus almost as common as the Greek ophis (ὄφις), a snake, which is used in 46 genus names, ranging from *Amnesteophis* to *Ungaliophis*.

A surprising 22 genus names are based on **local words** or **languages**, such as the snake genus *Mixcoatlus*, which has been named after the Náhuatl word Mixcoatl, meaning 'cloud serpent,' a god of the Aztecs and other Mesoamerican civilizations. We also included Spanish and Portuguese words in the "local" category, given that these are based on local words, even if the source languages were introduced by colonial powers. An example is the lizard genus name *Varzea*, a feminine noun from the

Portugese várzea, actually a pre-Roman word of Iberian origin, meaning "flooded river bank," in allusion to the apparent preferred habitat of these species.

Many genus names are based on **locality** information which often provides useful information about the origin of a genus. We have already mentioned *Amapasaurus* above, but other examples are *Brasiliscincus* or less obvious cases such as *Paikwaophis*, named after the river name "Paikwa", referring to its type locality in Guyana.

Finally, a smaller number of names comes from **mythology**. We already mentioned *Lachesis* above. Another example is *Iphisa*, a lizard genus named after an individual in the Metamorphoses, the most famous book of Roman poet Ovid (ca. 43 BC – AD 17).

We were unable to elucidate seven names, and thus categorized them as **unknown**, including *Anniella*, *Emoia*, *Farancia*, *Ficimia*, *Holcosus*, *Ninia* and *Riama*, although we speculate about the origin of some. Five of these names were coined by John Edward Gray, who is known to have used random but euphonious words as genus names, hence we can only speculate about the origin of some of them. One, *Emoia*, may be named after "*Emo*", a name that Gray 1845 used for this species without further explanation.

Table 1. **A classification of American genus etymologies.** Some genera are based on combinations, such as a place name and a Greek terms (e.g. ophis, for snake), hence the numbers do not add up to the 416 American genera. See text for further details.

Class	number of genera
Greek	316
Latin	79
Local names	22
Eponym	19
Locality	18
Genus	17
Unknown	9
Mythology	7
Random	2

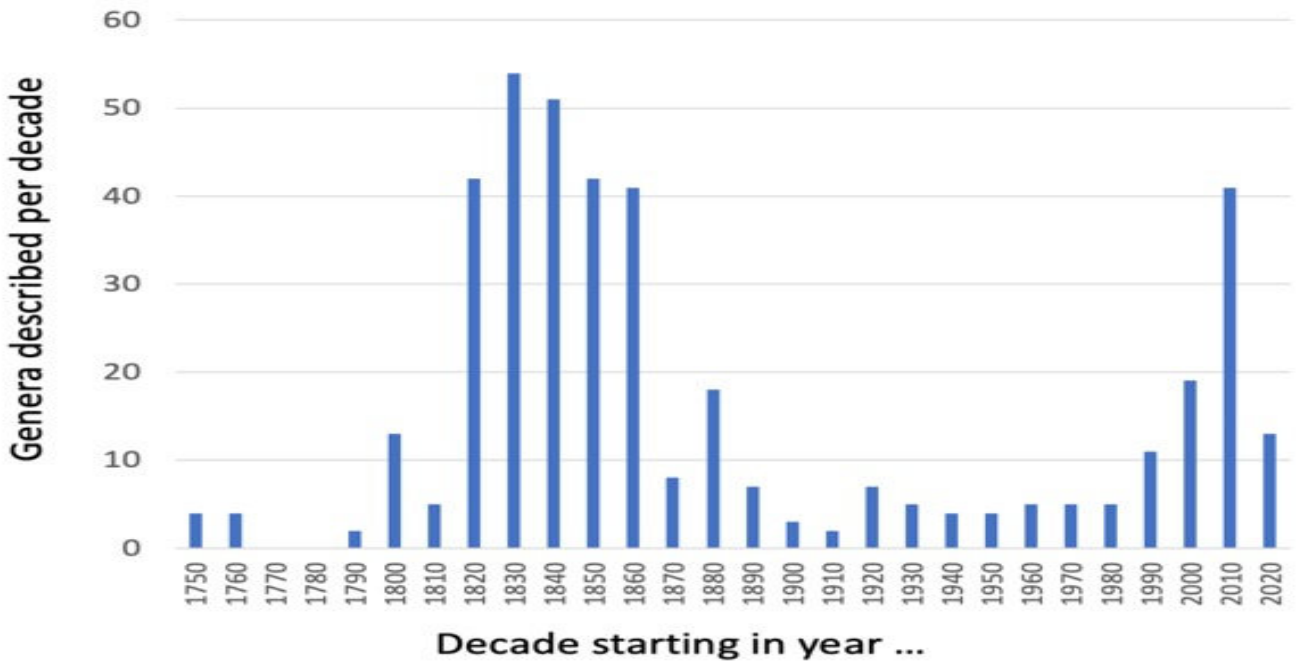
Overall, a few individuals coined a large number of genus names. Earlier authors, obviously, had an advantage, but novel technologies such as DNA sequencing have allowed more recent authors to create many new genus names as well. For example, the most prolific author in terms of new genera was Edward Drinker Cope (1840-1897), an American zoologist who described 37 new (American) genera that are still in use today. The only contemporary herpetologists in the list are Blair Hedges, who described 15 new American genera, most of them with his co-authors Caitlin E. Conn and Molly Schools, and Miguel T. Rodrigues, who described 10 new genera. Together, the top 11 authors described 225 out of 416 genera or a whopping 54%.

Table 2. **Top 11 most prolific authors describing new genera.** Living authors are highlighted in bold. For biographic details we refer the reader to Adler (1989; 2007; 2012).

Name	Genera
Edward Drinker Cope (1840-1897)	37
Leopold Josef Fitzinger (1802-1884)	35
John Edward Gray (1800-1875)	33
Johann Georg Wagler (1800-1832)	30
André Marie Constant Dumeril (1774-1860) & Gabriel Bibron (1806-1848)	17
Spencer Fullerton Baird (1823-1887) & Albert Girard (1860-1914)	17 (11)*
S. Blair Hedges (1957-)	15
Wilhelm Peters (1815-1883)	13
Arend Friedrich August Wiegmann (1802-1841)	12
Miguel T. Rodrigues (1953-)	10
George Albert Boulenger (1858-1937)	9
Total	**225**

*Baird authored 17 genera, 11 as co-author with Girard.

Figure 1. **American reptile genera described per decade.** By far the most genera were described in the discovery period from ca. 1820 through 1890, with a recent rebound starting in the 1990s, probably driven by molecular techniques. The 2020s would currently extrapolate to about 24 new genera, based on numbers in mid 2024.



DISCUSSION

An intense discussion has started recently about the use of eponyms which are widely considered as colonial, patriarchal, sexist, and thus racist, given that they are often dedicated to older white men who were frequently active during colonial rule (e.g. Guedes et al., 2023, Slabin, 2023). While there is certainly some truth to that, the problem has been recognized and there is a strong trend to counter it. Interestingly, among the 22 "local" genus names in our list, 13 (59%) have been coined in the 18th and 19th century, with a long gap of more than 100 years after that. The first "modern" local name, *Boiruna* Zaher 1996 was coined after the Tupi-Guarani word "Mboi+r+ú" [= which eats snakes] +una [= black], in allusion to the ophiophagous habits of these black snakes. However, since 2009, another eight local names have been coined for new genera, and we expect this trend to continue. Whether this will affect the use of eponyms is another question, but we clearly see a trend to apply eponyms more to local heroes, such as the latest name in our list, *Galvarinus*, which is derived from "Galvarino," a famous Mapuche warrior who fought the invasion and attempted servitude of the Mapuche people by the colonial Spaniards in Chile during the sixteenth century.

After finishing the list of American genera, we will continue to work on the genus etymologies of the remaining 835 genera and finally all reptile species. It will be interesting to see if the patterns we elucidated in this study will apply to species names as well, but we are confident that the use of Greek and Latin will continue to decrease, given a more international community of herpetologists who will be less trained in classical European languages but put more emphasis on local cultural and conservation issues.

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SUPPLEMENTARY TABLE

Table S1. List of all genera, together with their higher taxa, genus authors and year, etymology, classification and the actual etymology.

APPENDIX: etymologies of all American reptile genera

As noted in a previous contribution (Lavilla et al., 2022), we tried to compile the source or stem of each genus name, and its language of origin (**A**. Arawak. **C**. Caribe. **D**. Dutch. **E**. English **G**. Greek. **Gu**. Guaraní. **I**. Italian **L**. Latin. **M**. Mapudungun. **N**. Náhuatl. **OE**. Old English. **P**. Portuguese. **Pa**. Patamona. **Q**. Quechua. **S**. Spanish. **SL**. Several languages. **T.** Tupi. **Ta**. Taíno. **Y**. Yanomamö). We have added a quote from the original description to provide context and the original explanation, in case the etymology was not explicit. **Question marks [?]** before a name indicate that the original language remains unclear; a question mark at the end of an etymology reflects that we have no further information about the origin or meaning of the name in the original description. Readers who have corrections or additions are requested to send them to the authors who will post them as updates in the Reptile Database. Note that etymologies of genera can be found there in the entry of the type species.

***Abronia*:** G. *abros* (ἁβρός), delicate, graceful, beauteous, pretty + L. *-ia*, or G. *-ια*, sux denoting pertain - ing to. [? perhaps in reference to the delicate nature of the tail (Lemos-Espinal & Dixon 2013)]. Note that there is also a plant genus *Abronia*. *Abronia* Gray, 1838. Sauria: Anguidae.

***Acanthochelys*:** G. *akanthos* (ἀκανθης), thorn + G. *chelys* (χέλυς), tortoise. ["...back of neck covered with conical spines..."]. *Acanthochelys* Gray, 1873. Testudines: Chelidae.

***Acratosaura*:** G. *akratos* (ἄκρατος), unmixed, sheer + G. *saura* (σαύρα), lizard. ["...From the Greek *akratos*, meaning "unmixed, pure"; here intended to reflect its unmixed condition after being dismembered from the polyphyletic *Colobosaura*..."]. *Acratosaura* Rodrigues, Pellegrino, Dixo, Verdade, Pavan, Argolo & Sites, 2007. Sauria: Gymnophthalmidae.

***Actinemys*:** G. *actinos* (ἀκτινώς), *rays* + *G. emys* (ἐμύς), fresh-water tortoise ["...Young, with radiating striae upon the scales, the center of which remains for a long time granular, as in *Testudo tabulata*..."]. *Actinemys* Agassiz, 1857. Testudines: Emydidae.

***Adelphicos*:** G. *adelphicos* (ἀδελφικός), brotherly. [Se per l'abito generale questo serpente non può essere allontanalo dal gen. *Rabdosoma*..."]. *Adelphicos* Jan, 1862. Serpentes: Colubridae.

***Adelphostigma*:** G. *adelphos* (ἀδελφός), brother + G. *stigma* (στίγμα), mark, spot. ["...From the composition of the Ancient Greek words ἀδελφός (*adelphos* [twin, brother]) and στίγμα (*stigma* [mark, brand, spot]) (Liddell and Scott, 1883; Brown, 1954), in reference to the paired dorsal spots typical of the species here included in this new genus. The genus name is feminine..."]. *Adelphostigma* Abegg, Santos-Jr, Costa, Battilana, Graboski, Vianna, Azevedo, Fagundes, Castille, Prado, Bonatto, Zaher & Grazziotin, 2022. Serpentes: Colubridae.

***Adercosaurus*:** G. *aderces* (ἀδερκής), unseen, invisible + G. *sauros* (σαῦρος), lizard. ["...From the Greek *aderkes* (something unexpected or unseen) + *sauros*—an unexpected lizard. Gender masculine..."]. *Adercosaurus* Myers & Donnelly, 2001. Sauria: Gymnophthalmidae.

***Advenus*:** L. *advenus*, foreign, alien; migrant; recently arrived. ["...The generic name *Advenus* is a masculine noun derived from the Latin *ad-*

vena ("stranger"), referring to the distribution of this species in Middle America when all of its close relatives are on Caribbean islands..."]. *Advenus* Schools & Hedges, 2021. Sauria: Diploglossidae.

***Agkistrodon*:** G. *agkistron* (ἄγκιστρον), a fish-hook + G. *odon* (ὀδών), tooth; anything pointed. ["...The extremity of the upper jaw furnished with two hollow fangs or canine teeth..."]. *Agkistrodon* Palisot de Beauvois 1799. Serpentes: Viperidae.

***Alexandresaurus*:** P. Alexandre, a given name + G. *sauros* (σαῦρος), lizard. Honoring Alexandre Rodrigues Ferreira (1756-1815), Brazilian naturalist. *Alexandresaurus* Rodrigues, Pellegrino, Dixo, Verdade, Pavan, Argolo & Sites, 2007. Sauria: Gymnophthalmidae.

***Alligator*:** S. *El lagarto*, the lizard. ["...Les colons et voyageurs anglois emploient le mot *alligator* dans les mêmes circonstances où ceux des autres nations font usage de celui de caïman, comme pour désigner un crocodile plus commun ou plus petit, etc., sans aucun caractère fixe. Quoiqu'il ait une tournure latine, il n'a point de rapport avec son étimologie apparente. Si l'on en croyoit quelques-uns de leurs auteurs, il viendroit de legateer ou allegater, qui seroit le nom du crocodile dans quelques endroits de l'Inde; mais je n'en trouve nulle indication authentique: je pense bien plutôt que c'est une corruption du portugais lagarto, qui vient lui-mème de *lacerta*; car Hawkins écrivoit alagartos, et Sloane, allagator. Dans la prononciation angloise, il n'y a presque pas de différence entre allagator et alligator, ou même allegater..."]. *Alligator* Cuvier, 1807. Crocodylia: Alligatoridae.

***Alopoglossus*:** G. *alopos* (ἄλοπος), not scutched + G. *glossa* (γλώσσα), tongue. ["...Tongue moderately elongate, arrow-headed, without imbricate scale-like papilla, these being replaced by oblique plicae converging towards the median line..."]. *Alopoglossus* Boulenger, 1885. Sauria: Alopoglossidae.

***Amapasaurus*:** P. Amapá, a Braziian state + G. *sauros* (σαῦρος), lizard. ["...O nome *Amapasaurus* deriva de Amapá, Território Federal, a região de onde procedem os exemplares estudados..."]. *Amapasaurus* Cunha, 1970. Sauria: Gymnophthalmidae.

***Amastridium*:** Uncertain. (1) G. *mastr-* (μάστρ-), seeker, searcher, one who looks for + G. *–idium* (–ιδιον), diminutive suffix. According to Wilson (1988), "The first letter of the

name was most likely intended by Cope o represent a euphonic alpha, affecting the pronunciation but not the meaning. Given such was the case, the meaning would be "a little searcher," in apparent reference to the snake's size and foraging habits. It is possible, however, that Cope used the a- as an intensive alpha, meaning "very much," thus signifying "very much the little searcher." (2) G. *Amastris* (Ἄμαστρις), daughter of Otanes, wife of Xerxes, and mother of Artaxerxes I. (3) G. *Amastris* (Ἄμαστρις), city in Paphlagonia on the southern coast of the Euxine Pontus, called Cromna by Homer. *Amastridium* Cope, 1860. Serpentes: Colubridae.

***Amblyrhynchus*:** G. *amblys* (ἀμβλύς), blunt, dulled, with the edge taken off + G. *rhygchos* (ῥύγχος), snout, beak. ["...Caput breve, truncatum, supra tuberculatum..."]. *Amblyrhynchus* Bell, 1825. Sauria: Iguanidae.

***Ameiva*:** T. *ameiva*, vernacular name for some lizards, probably from the Tupí words *ambere*, lizard + *aíba*, not fit for eating. [?]. *Ameiva* Meyer 1795. Sauria: Teiidae.

***Ameivula*:** L. *Ameiva,* lizard genus due to Meyer, 1795 + L. *-ula*, diminutive suffix. ["...The new name *Ameivula* is a feminine noun in the nominative singular and a diminutive form of *Ameiva*..."]. *Ameivula* Harvey, Ugueto & Gutberlet, 2012. Sauria: Teiidae.

***Amerotyphlops*:** L. *americanus*, from America + G. *typhlos* (τυφλός), blind. ["...The generic name is a masculine noun formed from the adjective *americanus* (*a*, *um*; 'from America') and Greek noun *typhlops* (the blind)..."]. *Amerotyphlops* Hedges, Marion, Lipp, Marin & Vidal, 2014. Serpentes: Typhlopidae.

***Amnesteophis*:** G. *amnestos* (ἄμνηστος), unremembered, forgotten + G. *ophis* (ὄφις), a serpent, snake. ["...*Amnesteophis* (forgotten snake), from Greek *amnēstos* (ἄμνηστος, "forgotten, no longer remembered") + connective -e- + *ophis* (ὄφις, "snake")..."]. *Amnesteophis* Myers, 2011. Serpentes: Colubridae.

***Amnisiophis*:** L. *amnis,* river (real/personified), stream; current; (running) water + G. *ophis* (ὄφις), a serpent, snake. ["...From the combination of the Latin word *amnis* (stream of water, river) and the Greek word οφις (*ophis* [snake])..."] (Liddell and Scott, 1883; Brown, 1954). This name was chosen in reference to the habit of the monotypic species *A. amoenus*, whose

individuals inhabit the margins of forest streams. The genus name is masculine..."]. *Amnisiophis* Abegg, Santos-Jr, Costa, Battilana, Graboski, Vianna, Azevedo, Fagundes, Castille, Prado, Bonatto, Zaher & Grazziotin, 2022. Serpentes: Colubridae.

***Amphisbaena*:** G. *amphisbaina* (ἀμφίσβαινα), from G. *amphis* (ἀμφίς), both ways, double + G. *bainein* (βαίνειν), to go, to walk; vernacular name of a reptile able to move forwards and backwards. [?]. *Amphisbaena* Linnaeus 1758. Sauria: Amphisbaenidae.

***Anadia*:** G. *anadema* (ἀνάδημα), hairnet, headband. ["...Head with regular many sided shields..."]. *Anadia* Gray, 1845. Sauria: Gymnophthalmidae.

***Andinosaura*:** S. *Andino*, demonym of the inhabitant of the Andes + G. *saura* (σαύρα), lizard. ["...*Andinosaura* (gender feminine), formed from the Spanish *Andino* (from the Andes) and the Latin Sauria (lizard), in reference to its distribution. The suffix is used commonly for gymnophthalmid genera..."]. *Andinosaura* Sánchez-Pacheco, Torres-Carvajal, Aguirre-Peñafiel, Nunes, Verrastro, Rivas, Rodrigues, Grant & Murphy, 2018. Sauria: Gymnophthalmidae.

***Anelytropsis*:** G. *anelytos* (ανήλυτος), unresolved + G. *ops* (ὄψ, ὤψ), face, eye. ["...The present form is essentially interesting as introducing for the first time to the Western continent, the family of the Anelytropidae, or the Typhlophthalm lizards with the eye entirely concealed..."]. *Anelytropsis* Cope, 1885. Sauria: Dibamidae.

***Anilius*:** G. *anilees* (ἀνηλεής), without pity, unmerciful. ["...Sei giftig..."]. *Anilius* Oken, 1816. Serpentes: Aniliidae.

***Anniella*:** Unclear. Probably from L. *annellus*, little ring, or from G. *aneleos* (ἀνέλεος), unmerciful [?]. *Anniella* Gray, 1852. Sauria: Anguidae.

***Anolis*:** C. *anolis*, a vernacular name of probable Caribbean origin, first cited in literature by Du Tertre (1754: 352) for Guadeloupe Island. *Anolis* Daudin, 1802. Sauria: Anolidae.

***Anomalepis*:** G. *anomalos* (ἀνώμαλος), uneven, irregular; which deviate from a general rule, anomalous + G. *lepis* (λεπίς), a scale. ["...Chez les autres Typhlopiens, au contraire, les plaques de la tête ont une disposition tout à fait spéciale, qui ne se rencontre que dans cette famille.."] *Anomalepis*

Jan, 1860. Serpentes: Anomalepididae.

***Anotosaura*:** G. *an-* (αν-), prefix meaning without or lacking + G. *otos* (ὠτος), ear + G. *saura* (σαύρα), lizard. ["...Genero de Teiideo desprovido de ouvido apparente..."]. *Anotosaura* Amaral, 1933. Sauria: Gymnophthalmidae.

***Apalone*:** G. *apalon* (ἁπαλόν), soft to the touch, tender + G. *chelones* (χελώνης), tortoise. ["...The name is contracted from *apalochelone* meaning Soft turtle..."]. *Apalone* Rafinesque, 1832. Testudines: Trionychidae.

***Apographon*:** G. *apographo* (ἀπογράφω), to write off, copy. ["...From the Greek "*Apographos*" (masculine noun, translated as "copy" or "transcript"), in reference to its resemblance with the genus *Tomodon*, where it was previously allocated..."]. *Apographon* Trevine, Grazziotin, Giraudo, Sallesbery-Pinchera, Vianna & Zaher, 2022. Serpentes: Colubridae.

***Apostolepis*:** G. *apostos* (ἀπωστός), thrust or driven away from + G. *lepis* (λεπίς), a scale. ["...*Apostolepis*, in which the prefontals are obliterated..."]. *Apostolepis* Cope, 1862. Serpentes: Colubridae.

***Arcanumophis*:** L. *arcanum*, secret, private, hidden + G. *ophis* (ὄφις), a serpent, snake. ["...From Latin *arcanum*, meaning mystery and Greek *ophis*, meaning serpent..."]. *Arcanumophis* Smaga, Ttito & Catenazzi, 2019. Serpentes: Colubridae.

***Aristelliger*:** G. *ari-* (ἀρι-), good, excellent + L. *stella* (star), in apparent reference to the prominent pale centers of the scapular ocelli which are typical components of the color pattern of members of this genus, including the type species, *A. lar* (*fide* Bauer & Russell 1993). *Aristelliger* Cope, 1861. Sauria: Sphaerodactylidae.

***Arizona*:** E. Arizona, US American territory (state since 1912). Probably from the Native American Tohono O'odham (Pima) *ali ṣonak*, small spring or place of the small spring. [?]. *Arizona* Kenicott *in* Baird, 1859. Serpentes: Colubridae.

***Arthrosaura*:** G. *arthron* (ἄρθρον), limb; joint + G. *saura* (σαύρα), lizard. ["...Limbs well developed, pentadactyle..."]. *Arthrosaura* Boulenger, 1885. Sauria: Gymnophthalmidae.

***Aspidoscelis*:** G. *aspidion* (ασπίδιον), small shield + G. *skelos* (σκέλος), leg

[?]. This likely refers to the enlarged scales that are apparent on the hind limbs. *Aspidoscelis* Fitzinger, 1843. Sauria: Teiidae.

***Aspronema*:** G. *aspro* (ἀσπρο), white + G. *nema* (νῆμα), that which is spun, thread, yarn. ["...The generic name (*Aspronema*) is a neuter noun derived from the Greek adjective *aspro* (white) and noun *nema* (thread), referring to the distinctive narrow and white dorsolateral and ventrolateral stripes present in species of this genus..."]. *Aspronema* Hedges & Conn, 2012. Sauria: Scincidae.

Atractus: G. *atraktos* (ἄτρακτος), spindle, arrow.["...Caput pro trunci volumine nimis parvum, minutum, indistinctum, longulum, aeque fere altum ac latum, rostro longulo subtruncatum..."]. *Atractus* Wagler, 1828. Serpentes: Colubridae.

***Atropoides*:** G. *Atropos* (Ἄτροπος), the eldest of the three Fates + G. *-eides* (-ειδής), suffix indicating resemblance. ["...The genus name is derived from the Greek words "*atropos*," one of the three fates in Greek mythology who cut the thread of life, and *oides*, meaning "similar to, or having the nature of. (The first Fate is Clotho who spins the thread of life, after which it is measured by Lachesis, the second Fate)..."]. Names ending in *-eides* are substantivated adjectives and are masculine according to Article 30.1.4.4 of the Code. *Atropoides* Werman, 1992. Serpentes: Viperidae.

***Aurivela*:** L. *auris*, the ear + L. *velare*, to cover (body or part of body), clothe. ["...The genus *Aurivela* is a feminine Latin noun in the nominative singular derived from the Latin words *auris* meaning ear and *velatus* meaning covered or concealed. The new name alludes to the auricular flap diagnostic of this genus..."]. *Aurivela* Harvey, Ugueto & Gutberlet, 2012. Sauria: Teiidae.

Bachia: G. *baktra* (βάκτρα), wand, stick, cudge (*fide* Tim Williams, *in litt.*). [?]. *Bachia* Gray, 1845. Sauria: Gymnophthalmidae.

***Baliodryas*:** G. *balios* (βαλιός), spotted, dappled + G. *dryas* (δρυάς), (ref. to a nymph) inhabitant of trees. ["...*Baliodryas* is a masculine noun from the Greek βαλιός, spotted, dappled, and δρυάς, a kind of snake..."]. *Baliodryas* Zaher & Prudente, 2019. Serpentes: Colubridae.

***Barisia*:** Unclear. Probably from G. *barys* (βαρύς), heavy + G. *-ia* (-ία), suffix commonly used to indicate

belonging, origin, or quality. [?]. Apparently in reference to the robust body of *B. imbricata*, according to Lemos-Espinal & Dixon 2013. *Barisia* Gray, 1838. Sauria: Anguidae.

***Basiliscus*:** G. *basilíscos* (βασιλίσκος), princelet, chieftain (here, in the sense of a crowned creature). [In Laurenti (1768), "...*Occiput intra cava membranacea squamulis tecta, prælta, conica, compressa...*". In Wagler (1830) description: "....*occiput lobatum...*"]. *Basiliscus* Wagler, 1830. Sauria: Corytophanidae.

Bipes: L. *bi-*, two, twice; double; having two + L. *pes*, foot. ["...Point de pattes postérieures; les antérieures très-petites..."]. *Bipes* Latreille, 1801. Sauria: Bipedidae.

***Boa*:** L. *boa*, a large snake that, according to Pliny, was found in the Vatican hills, near Rome; owes its name to the fact that, early in their lives, they feed on milk from cows (*bos*). [?]. *Boa* Linnaeus 1758. Serpentes: Boidae.

Bogertophis: Bogert + G. *ophis* (ὄφις), a serpent, snake. Honouring Charles Mitchill Bogert (1908-1992), US American herpetologist. *Bogertophis* Dowling & Price, 1988. Serpentes: Colubridae.

***Boiruna*:** T. *mboîa*, snake + T. û, to eat + T. *una*, dark, black; also, T. *mboi-una*, vernacular name for the black snake also known as *muçurana*. ["...from the Tupi-Guarani '*Mboi* + r + á (= which eats snakes) + *una* (black), in allusion to the ophiophagous habits of these black snakes..."]. *Boiruna* Zaher, 1996. Serpentes: Colubridae.

Bothriechis: G. *bothros* (βόθρος), any pit or hole + *echi*[*dna*]. (ἐχιδνα), an adder, viper. ["...Eine Gattung, die zwischen *Bothrops* und *Atropos* steht, mit jener durch das grosse Supraorbitalschild, mit dieser durch h die Grösse, Lage und Begrenzung der Thränengruben, durch den Mangel der Kiele an den Schuppen des Vorderkopfes übereinstimmt..."]. *Bothriechis* Peters, 1859. Serpentes: Viperidae.

***Bothrocophias*:** G. *bothros* (βόθρος), any pit or hole + G. *cophias* (κωφιας), the deaf adder. ["...The generic name is derived from the Greek words *bothros*, meaning pit, and *kophias*, meaning snake or adder; the gender of this name is masculine..."]. *Bothrocophias* Gutberlet & Campbell, 2001. Serpentes: Viperidae.

***Bothrops*:** G. *bothros* (βόθρος), any pit or hole. ["...fovea utrinque inter nares et oculos intermedia..."]. *Bothrops* Wagler, 1824. Serpentes: Viperidae.

***Brasiliscincus*:** SL Brasil, a South-American country + L. *scincus*, a kind of lizard. ["...The generic name (*Brasiliscincus*) is a masculine noun derived from the Latin *scincus* (skink) and refers to the distribution of this genus of skinks, centered in Brazil (Portuguese: Brasil)..."]. *Brasiliscincus* Hedges & Conn, 2012. Sauria: Scincidae.

***Caaeteboia*:** T. *kaã-etê*, forest; virgin forest + T. *mboia*, snake. ["...The genus was named after the Brazilian indigenous Tupi word *Caaetê-* (= "true forest") + *Boia* (derived from the Tupi *Mboi*, "snake"), gender feminine..."]. *Caaeteboia* Zaher, Grazziotin, Cadle, Murphy, Moura-Leite & Bonatto, 2009. Serpentes: Colubridae.

***Cachryx*:** G. *cachryx* (κάχρυς), parched barley. ["...Tail short, at, covered with verticils of strong, erect, conic spinous scales..."]. *Cachryx* Cope, 1866. Sauria: Iguanidae.

***Caiman*:** Ta. *caiman*, vernacular name. [?]. *Caiman* Spix, 1825. Crocodylia: Alligatoridae.

***Calamodontophis*:** L. *calamus*, reed, cane + G. *odonto-* (ὀδόντο-), tooth + G. *ophis* (ὄφις), a serpent, snake. [?]. *Calamodontophis* Amaral, 1963. Serpentes: Colubridae.

***Callisaurus*:** G. *calli* (καλλι), beautiful + G. *sauros* (σαῦρος), lizard. ["...nous avons été forcés d'en former un petit genre distinct auquel nous avons donné le nom de callisaurus pour indiquer la gentillesse de ce petit animal..."].*Callisaurus* Blainville, 1835. Sauria: Phrynosomatidae.

***Callopistes*:** G. *callopistes* (καλλωπιστής), one who adorns himself, dandy. ["...Der Gattungsname ist nach dem griechischen καλλωπίζειν, ausschmücken, gebildet, wegen der schönen Zeichnung der einzigen mir bekannten Art; im deutschen Schmuck eidechse..."] *Callopistes* Gravenhorst, 1838. Sauria: Teiidae.

***Calyptommatus*:** G. *calypto* (καλύπτω), to cover with; hidden, concealed + G. *ommatos* (ὄμματος), eye. ["...Como estes pequenos lagartos além de mostrarem redução acentuada nos apêndices têm o olho totalmente coberto por uma escama ocular, o mais elevado nível de adaptação à fossorialidade encontrado em Teiidae, reservo-lhes o nome de *Calyptommatus*, do grego

calypto = oculto, escondido; *ommatus* = olho...”]. *Calyptommatus* Rodrigues, 1991. Sauria: Gymnophthalmidae.

***Caparaonia*:** P. Caparao, mountain range in SE Brazil + L. *-ia*, suffix denoting belonging to. [“...Named for the Caparaó mountains, the type locality, and meaning ‘from Caparaó.’...”]. *Caparaonia* Rodrigues, Cassimiro, Pavan, Curcio, Verdade & Machado Pellegrino, 2009. Sauria: Gymnophthalmidae.

***Caretta*:** C. *caret*, vernacular name for these turtles, according to Rochefort (1658; 1665). [?]. *Caretta* Rafinesque, 1814. Testudines: Cheloniidae.

***Carphophis*:** G. *carpho* (κάρφος), a dry stalk or any small dry body + G. *ophis* (ὄφις), a serpent, snake. [“...Κάρφη, fétu; ὄφις, serpent...”]. *Carphophis* Gervais *in* d’Orbigny, 1843. Serpentes: Colubridae.

***Cemophora*:** G. *cemo* (κημός), a muzzle; nose bag for horses + G. *phoros* (φορός), bearing. [“...Rostril (sic) very prominent, obtusely trihedral, produced slightly between the prefontals...”]. *Cemophora* Cope, 1860. Serpentes: Colubridae.

***Cenaspis*:** L. *cena,* dinner/supper; principal Roman meal (evening) + G. *aspis (ἀσπίς), asp, venomous snake*. [“...The generic name is derived from the Latin cena, meaning dinner, and aspis, meaning a kind of snake, in reference to predation on the single known individual of this snake. The name taken literally means ‘dinner snake.’...”]. *Cenaspis* Campbell, Smith & Hall, 2018. Serpentes: Colubridae.

***Centrosaura*:** L. *centrum*, center + G. *saura* (σαύρα), lizard. [“... *Centrosaura* (gender feminine) is derived from the Latin *centrum* (center or middle) and the Greek *σαύρα*, saura (lizard), in reference to its geographic distribution in Central America...”]. *Centrosaura* Vásquez-Restrepo, Ibáñez, Sánchez-Pacheco & Daza, 2019. Sauria: Gymnophthalmidae.

***Cercophis*:** G. *cercos* (κέρκος) tail + G. *ophis* (ὄφις), a serpent, snake. [?]. *Cercophis* Fitzinger, 1843. Serpentes: Colubridae.

***Cercosaura*:** G. *cercos* (κέρκος) tail + G. *saura* (σαύρα), lizard. [“... *Κέρκος*, cauda, et *σαύρα* lacerta...”] *Cercosaura* Wagler, 1830. Sauria: Gymnophthalmidae.

***Cerrophidion*:** S. *cerro*, an isolated elevation of land, of lesser height

than a mountain + G. *ophidion* (ὀφίδιον), a kind of snake. ["...The genus name comes from the Spanish *cerro*, meaning mountain, an allusion to the habitat, and the Greek *ophidion*, meaning small snake..."]. *Cerrophidion* Campbell & Lamar, 1992. Serpentes: Viperidae.

***Chapinophis*:** S. *Chapín,* demonym of the natives of Guatemala + G. *ophis* (ὄφις), a serpent, snake. ["... The genus name is derived from the Guatemalan colloquialism *Chapín*, referring to a Guatemalan or something from Guatemala, and the Greek *ophis*, meaning a serpent. The generic name is masculine..."]. *Chapinophis* Campbell & Smith, 1998. Serpentes: Colubridae.

Charina: G. *charis* (χάρις), loveliness, grace + L. *-ina*, feminine suffix sometimes with diminutive implications. [?]. *Charina* Gray, 1849. Serpentes: Boidae.

Chatogekko: S. / P. *chato*, flat + Malay gekoq, vernacular name of a lizard. ["...A composite word from the Spanish and Portuguese 'Chato', derived from the G. '*Platus*', meaning 'flat' and referring to its pug-nosed snout; and gekko from the Malay 'gekoq', onomatopoeic of the call of the species *Gekko gecko* and the common name to all limbed gekkotans..."]. *Chatogekko* Gamble, Daza, Colli, Vitt & Bauer, 2011. Sauria: Sphaerodactylidae.

***Chelonia*:** G. *chelones* (χελώνης), tortoise. Chelônê (Χελώνη) was a nymph who was turned into a turtle as punishment for not attending the wedding of Zeus and Hera. [?]. *Chelonia* Brongniart, 1800**.** Testudines: Cheloniidae.

***Chelonoidis*:** G. *chelones* (χελώνης), tortoise + G. *-oides* (-οειδής), suffix indicating likeness. [?]. *Chelonoidis* Fitzinger, 1835. Testudines: Testudinidae.

***Chelus*:** G. *chelys* or *chelus* (χέλυς), tortoise. [?]. *Chelus* Duméril, 1806. Testudines: Chelidae.

***Chelydra*:** G. *chelydros* (χέλυδρος), an amphibious serpent, a kind of tortoise. [?]. *Chelydra* Schweigger, 1812. Testudines: Chelydridae.

***Chersodromus*:** G. *chersos* (χέρσος), dry land, land + G. *dromos* (*δρ*όμος), a course, running, race. ["...Af *χέρρος* eller χέρσος, öde udyrket Land, og δρομέω, löber..."]. *Chersodromus* Reinhardt, 1861. Serpentes: Colubridae.

***Chironius*:** G. *chiros* (ξηρός), dry land + L. *-ius,* quality or nature of. [?]. *Chironius* Fitzinger, 1826. Serpentes: Colubridae.

***Chlorosoma*:** G. *chloros* (χλωρός), greenish-yellow, pale green + G. *soma* (σῶμα), body. ["...Χλωρός viridis et σῶμα..."]. *Chlorosoma* Wagler, 1830. Serpentes: Colubridae.

***Chrysemys*:** G. *chrysos* (χρυσός), gold + G. *emys* (ἐμῦς), freshwater tortoise. [?]. *Chrysemys* Gray, 1844. Testudines: Emydidae.

***Claudius*:** L. *claudo,* to shut something that is open, to close, shut up. ["...Carapace completely ossified, extending much beyond plastron anteriorly and posteriorly..."]. *Claudius* Cope, 1865. Testudines: Kinosternidae.

***Clelia*:** L. *Cloelia*, one of the hosta - ges given to the Etruscan king Lars Porsena during a war with Rome. She escaped captivity and swam across the Tiber River to freedom, an act of bravery that made her a symbol of courage and virtue. [?]. *Clelia* Fitzinger, 1826. Serpentes: Colubridae.

Clemmys: G. *clemmys* (κλεμμύς), tortoise. ["...Als Benennung dieser Gattung habe ich Clemmys, Diebkrotte, gewählt..."]. *Clemmys* Ritgen, 1828. Testudines: Emydidae.

***Clonophis*:** G. *clonos* (κλώνός), branch or sprig (of a tree) + G. *ophis* (ὄφις), a serpent, snake. [?]. *Clonophis* Cope, 1889. Serpentes: Colubridae.

***Cnemidophorus*:** G. *cnemidophoros* (κνημιδοφόρος), wearing greaves. ["...κνημιδοφόρος, ocreis armatus..."]. *Cnemidophorus* Wagler, 1830. Sauria: Teiidae.

***Coleodactylus*:** G. *coleos* (κολεός), sheath + G. *dactylos* (δάκτυλος), finger, toe. ["...claw obliquely retractile into an oval asymmetrical sheath composed of five scales..."]. *Coleodactylus* Parker, 1926. Sauria: Sphaerodactylidae.

***Coleonyx*:** G. *coleos* (κολεός), sheath + G. *onyx* (όνυξ), nail, claw. ["... the end of each toe furnished with large, oblong, convex scales on each side, forming a complete sheath to the small claws, an elongate tapering scale covering the suture between these two scales above..."]. *Coleonyx* Gray, 1845. Sauria: Eublepharidae.

***Colobodactylus*:** Combination of L. *Colobosaura*, lizard genus due to Boulenger, 1877 + L. *Heterodactylus*, lizard genus due to Spix, 1825. ["...Genero de Teideo, perfectamente intermediario a *Heterodactylus* Spix, 1825 e *Colobosaura*

Boulenger, 1887...”]. *Colobodactylus* Amaral, 1933. Sauria: Gymnophthalmidae.

***Colobosaura*:** G. *colobos* (κολοβός), docked, curtailed + G. *saura* (σαύρα), lizard. [“...In the characterization of *Perodactylus*, “... Limbs short, with well developed digits; the inner finger rudimentary, tubercular, clawless...”]. *Colobosaura* Boulenger, 1887. Sauria: Gymnophthalmidae.

***Colobosauroides*:** L. *Colobosaura*, lizard genus due to Boulenger, 1887 + L. *oides*, resembling, having the form of. [“...O novo gênero apresenta certa afinidade com *Anotosaura* Amaral, 1932, *Colobodactylus* Amaral, 1932 e *Colobosaura* Boulenger, 1887...”]. *Colobosauroides* Cunha, Lima-Verde & Lima, 1991. Sauria: Gymnophthalmidae.

***Coluber*:** L. *coluber*, serpent, snake. [?]. *Coluber* Linnaeus 1758. Serpentes: Colubridae.

***Coniophanes*:** G. *conios* (κόνιος), dusty + G. *phaino* (φαίνω), appearance. [“...A peculiarity in the coloration of the species consists in the numerous punctulations of the upper and under surface, whence probably the name (κόνιος *pulverulentus*)...”]. *Coniophanes* Hallowell in Cope, 1860. Serpentes: Colubridae.

***Conolophus*:** G. *conos* (κώνος), cone; pine-cone + G. *lophos* (λόφος), neck, crest of hill, ridge, crest of a helmet. [?]. *Conolophus* Fitzinger, 1843. Sauria: Iguanidae.

***Conophis*:** G. *conos* (κώνος), cone; pine-cone + G. *ophis* (ὄφις), a serpent, snake. [“...κώνος, ὄφις...”]. *Conophis* Peters, 1860. Serpentes: Colubridae.

***Conopsis*:** G. *conos* (κώνος), cone; pine-cone + G. *opsis* (ὄψις), aspect, appearance. [“...rostral shield protruding, pyramidal, slightly bent upwards...”]. *Conopsis* Günther, 1858. Serpentes: Colubridae.

***Contia*:** [Le] Conte + L. *-ia*, dedicative suffix. Honouring John Lawrence LeConte (1825-1883), US American entomologist and naturalist. *Contia* Baird & Girard, 1852. Serpentes: Colubridae.

***Contomastix*:** G. *contos* (κοντός), short + G. *mastix* (μάστιξ), a whip, scourge. [“...*Contomastix* is a feminine noun in the nominative singular derived from the Greek adjective *kontos*, meaning short, and noun *mastix*, meaning whip. The name alludes to the relatively short tails

of *Contomastix* compared to other whiptail lizards..."]. *Contomastix* Harvey, Ugueto & Gutberlet, 2012. Sauria: Teiidae.

***Copeoglossum*:** G. *copeus* (κοπεύς), a chisel + G. *glossa* (γλώσσα), tongue. ["...The generic name (*Copeoglossum*) is a neuter noun, derived from the Greek nouns *kopeus* (chisel) and *glossa* (tongue), in allusion to the shape of the tongue..."]. *Copeoglossum* Tschudi, 1845. Sauria: Scincidae.

***Cophosaurus*:** G. *cophos* (κωφός), unable to hear, deaf + G. *sauros* (σαῦρος), lizard. ["...aures externae nullae..."]. *Cophosaurus* Troschel, 1852. Sauria: Phrynosomatidae.

***Corallus*:** G. *corallos* (κόραλλος), coral. ["...c'est donc pour faire allusion traître et méchant de ces reptiles dangereux que j'ai donné à ce genre nouveau le nom de coralle, qui appartenoit anciennement à des peuples sauvages et barbares, dont Ovide décrit les cruautés dans ses Œuvres..."]. *Corallus* Daudin, 1803. Serpentes: Boidae.

***Coronelaps*:** L. *corona*, crown; garland, wreath; halo/ring + G. *elaps* (ἔλαψ), a snake. ["...Yellow collar on the parietals..."]. *Coronelaps* Lema & Hofstadler-Deiques, 2010. Serpentes: Colubridae.

***Corytophanes*:** G. *corythos* (κόρυθος), crested + G. *phaneros* (φανερός), visible, manifest. [?]. *Corytophanes* Boie, 1827. Sauria: Corytophanidae.

***Crisantophis*:** S. Crisanta, a given name (fem.) + G. *ophis* (ὄφις), a serpent, snake. Honouring Crisanta Chaves (1900-1981), Nicaragan naturalist. *Crisantophis* Villa, 1971. Serpentes: Colubridae.

***Crocodilurus*:** G. *crocódilos* (κροκόδιλος), lizard, crocodile + G. *oura* (οὐρᾷ), tail. ["...cauda vero tota rectangula, compressa, supra ad basin planiuscula, carinata, utrinque denticulata..."]. *Crocodilurus* Spix, 1825. Sauria: Teiidae.

***Crocodylus*:** G. *crocódilos* (κροκόδιλος), Greek noun for lizards, later applied to the Nile crocodile. [?]. *Crocodylus* Laurenti 1768. Crocodylia: Crocodylidae.

***Crotalus*:** L. *crotalus*, clapper (used instead of bell), rattle, bell, castanet. ["...*Crepitaculum terminale caudae*..."]. *Crotalus* Linnaeus 1758. Serpentes: Viperidae.

***Crotaphytus*:** G. *crotaphytis* (κροταφίτης), temporal muscle. ["...Head large, sub-triangular, rounded at the snout and greatly de-

veloped at the temporal region...”]. *Crotaphytus* Holbrook, 1842. Sauria: Crotaphytidae.

Cryophis: G. *cryos* (κρύος), freezing weather, icy cold, frost cold + G. *ophis* (ὄφις), a serpent, snake. [“... In allusion to the cool cloud-forest habitat of these snakes in Oaxaca, the genus is herewith given a name derived from the G. *kryos*, cold...”]. *Cryophis* Bogert & Duellman, 1963. Serpentes: Colubridae.

***Cryptoblepharus*:** G. *cryptos* (κρυπτός), hidden, secret + G. *blepharon* (βλέφαρον), eyelid. [“... wegen der nicht völlig fehlenden, nur verborgenen Augenlieder (l.c.) ...”]. *Cryptoblepharus* Wiegmann, 1834. Sauria: Scincidae.

Ctenoblepharys: G. *chtenos* (κτενος), comb + G. *blepharon* (βλέφαρον), eyelid [“...Pholidosis palpebrarum granulata...”]. *Ctenoblepharys* Tschudi, 1845. Sauria: Liolaemidae.

***Ctenosaura*:** G. *ctenos* (κτενός), comb + G. *saura* (σαύρα), lizard. [“...crista cornea versus caudam evanescenti denticulatum...”]. *Ctenosaura* Wiegmann, 1828. Sauria: Iguanidae.

***Cyclura*:** G. *cyclos* (κύκλος), ring, circle + G. *oura* (οὐρᾷ), tail [?]. In the characterization of *Cyclura teres* [“...tail cylindrical, tapering gradually towards the point...”]. *Cyclura* Harlan, 1824. Sauria: Iguanidae.

***Cyrtopodion*:** G. *cyrtos* (κυρτός), bulging, swelling + G. *podion* (πόδιον), foot. [?]. *Cyrtopodion* Fitzinger, 1843. Sauria: Gekkonidae.

***Deirochelys*:** G. *deire* (δειρή) neck, throat + G. *chelys* (χέλυς), tortoise. [“...In many respects it recalls the Australian Chelodinae, by the unusual length of its neck...”]. *Deirochelys* Agassiz, 1857. Testudines: Emydidae.

***Dendrophidion*:** G. *dendron* (δένδρον), tree + G. *ophidion* (ὀφίδιον), a kind of snake. [?]. *Dendrophidion* Fitzinger, 1843. Serpentes: Colubridae.

***Dendrosauridion*:** G. *dendron* (δένδρον), tree + G. *sauros* (σαῦρος), lizard + G. *-idion* (-ίδιον), diminutive suffix. [“...The genus name *Dendrosauridion* is derived from the Greek nouns ‘*dendron*’ (tree; neutrum) and ‘*sauridion*’ (small lizard; diminutive, neutrum) and is in allusion to the arboreal habits of the type species...”]. *Dendrosauridion* Lehr, Moravec, Lundberg, Köhler, Catenazzi & Šmíd, 2019. Sauria: Gymnophthalmidae.

***Dermatemys*:** G. *dermatos* (δέρματος), skin, hide + G. *emys* (ἐμῦς), freshwater tortoise. ["...scutellis membranaceis tenuissimis defenso..."]. *Dermatemys* Gray, 1847. Testudines: Dermatemydidae.

***Dermochelys*:** G. *derma* (δέρμα) skin, hide + G. *chelys* (χέλυς), turtle. ["...Dans cet ordre je fais un genre distinct de la Tortue à cuir, sous le nom de *Dermochelys*..."]. *Dermochelys* Blainville, 1816. Testudines: Dermochelyidae.

***Diadophis*:** G. *diadema* (διάδημα), a band + G. *ophis* (ὄφις), a serpent, snake. ["...generally with a light ring on the occipital region..."]. *Diadophis* Baird & Girard, 1853. Serpentes: Colubridae.

***Diaphorolepis*:** G. *diaphoros* (διάφορος), different, unlike + G. *lepis* (λεπίς), a scale. ["...nachdem mir nun ein zweites Exemplar dieser seltenen Art vorliegt, welches kleiner ist und im Wesentlichen nur durch die weit zahlreicheren Subcaudalen sich unterscheidet..."]. *Diaphorolepis* Werner, 1901. Serpentes: Colubridae.

***Dibernardia*:** I. Di Bernardo, a family name + L. -ia, suffix denoting pertaining to. Honouring Marcos Di Bernardo (1963-2006), Brazilian herpetologist. *Dibernardia* Abegg, Santos Jr., Costa, Battilana, Graboski, Vianna, Azevedo, Fagundes, Castille, Prado, Bonatto, Zaher & Grazziotin, 2022. Serpentes: Colubridae.

***Dicrodon*:** G. *dicros* (δίκρος), forked, split, double + G. *odon* (ὀδών), tooth; anything pointed. ["...De *δίκρος*, *bifidus*, *furcatus*, doublée, fourchue; et de οδονς, οντος, *dens*, dent..."]. *Dicrodon* Duméril & Bibron, 1839. Sauria: Teiidae.

***Diploglossus*:** G. *diplos* (διπλος), double + G. *glossa* (γλώσσα), tongue. ["...Διπλος, diplus, de deux sortes, et de γλοσσα, langue de deux apparences..."]. *Diploglossus* Wiegmann, 1834. Sauria: Diploglossidae.

***Diplolaemus*:** G. *diplos* (διπλος), double + G. *laimos* (λαιμός), throat, gullet. ["...The neck ... has a longitudinal fold on each side ... There is also a distinct transverse fold on the throat..."]. *Diplolaemus* Bell, 1843. Sauria: Leiosauridae.

***Dipsas*:** G. *dipsas* (διψάς), thirsty; causing thirst. [?]. The name is traceable up to Nicander's Theriaca (line 334), describing a venomous serpent, whose bite caused intense

thirst.]. *Dipsas* Laurenti 1768. Serpentes: Colubridae.

***Dipsosaurus*:** G. *dipsos* (δίψος), thirst + G. *sauros* (σαῦρος), lizard. [?]. *Dipsosaurus* Hallowell, 1854. Sauria: Iguanidae.

***Ditaxodon*:** G. *di-* (δι-), two, double + G. *taxis* (τάξις), arrangement, order + G. *odon* (ὀδών), tooth. ["...12 Maxillarzähne, die vorderen klein und allmählich nach hinten zu größer werdend, gefolgt nach einer Lücke von 2 mäßig vergrößerten Furchenzähnen..."]. *Ditaxodon* Hoge, 1958. Serpentes: Colubridae.

***Dracaena*:** L. *drăcæna*, or G. (*dracaena*) δράκαινα, a shedragon. ["... *Dragone* ..."]. *Dracaena* Daudin, 1801. Sauria: Teiidae.

***Drepanoides*:** G. *drepanon* (δρέπανον), a scythe; curved sword, scimitar + G. *-oides* (-οειδής), suffix indicating likeness. ["...*nomen novum* for *Drepanodon* Peracca, preoccupied..."]. The genus *Drepanodon* Peracca, 1896 is a junior homonym of *Drepanodon* Nesti, 1826, a Mammal. *Drepanoides* Dunn, 1928. Serpentes: Colubridae.

***Dryadosaura*:** G. *Dryados* (Δρυάδης), tree nymphs, inhabitants of trees + G. *saura* (σαύρα), lizard. ["...The genus was named after Greek *Dryades*, meaning 'woodland nymph'. This was the first name proposed (by Carl Philipp von Martius) for the biogeographical province of the Atlantic Forest..."]. *Dryadosaura* Rodrigues, Freire, Pellegrino & Sites, 2005. Sauria: Gymnophthalmidae.

***Drymarchon*:** G. *drymos (δρυμός)*, an oak-coppice, forest, wood + G. *archon* (ἄρχων), ruler or leader. [?]. *Drymarchon* Fitzinger, 1843. Serpentes: Colubridae.

***Drymobius*:** G. *drymos* (δρυμός), an oak-coppice, forest, wood+ G. *bios* (βίος), existence or condition of being alive; life. [?]. *Drymobius* Fitzinger, 1843. Serpentes: Colubridae.

***Drymoluber*:** L. *Drymobius*, snake genus due to Fitzinger, 1843 + L. *Coluber*, snake genus due to Linnaeus, 1758 . ["...Por seus caracteres dentarios e peníanos, *dichrous* parece próxima e intermediaria aos representantes do genero *Drymobius* e *Coluber*..."]. *Drymoluber* Amaral, 1930. Serpentes: Colubridae.

***Dryophylax*:** G. *drys* (δρῦς), tree + G. *phylax* (φύλαξ), watcher, guard, sentinel. ["...Δρῦς arbor, et φύλαξ

custos...”]. *Dryophylax* Wagler, 1830. Serpentes: Colubridae.

***Echinanthera*:** G. *echis* (ἔχις), an adder, viper + G. *antherix* (ἀνθέριξ), the beard of an ear of grain. [?]. In the characterization of the type-species, *Aporophis cyanopleurus* Cope, 1885 [“...this part of the band isolates itself into dark round spots; on the upper edge of the lateral band every other scale has a pale spot in the centre...”]. *Echinanthera* Cope, 1894. Serpentes: Colubridae.

***Echinosaura*:** G. *echinos* (ἐχῖνος), the urchin, hedgehog + G. *saura* (σαύρα), lizard. [“...Upper parts granular with enlarged tubercles, the largest of which are spines...”]. *Echinosaura* Boulenger, 1890. Sauria: Gymnophthalmidae.

***Ecpleopus*:** G. *ecpleos* (ἐκπλεος), complete + G. *pous* (πούς), foot. [“...Εχπλέως, au complet; πούς, πόδες, pied...”]. *Ecpleopus* Duméril & Bibron, 1839. Sauria: Gymnophthalmidae.

***Elapomorphus*:** G. *elaps* (ἔλαψ), a snake, from ἐλαφρός, lightly, buoyantly + G. *morpha* (μορφά), bodily form, build. [?]. *Elapomorphus* Wiegmann in Fitzinger, 1843. Serpentes: Colubridae.

***Elgaria*:** OE. *elger*, eel-spear (*fide* Lemos-Espinal et al. 2019) + L. *-ia*, suffix denoting pertaining to. [“... tail much longer than the body, slender...”]. *Elgaria* Gray, 1838. Sauria: Anguidae.

***Emmochliophis*:** G. *emmochlion* (ἐμμόχλιον), ring or socket into which the bolt of a latch is inserted + G. *ophis* (ὄφις), a serpent, snake. [“...Trunk vertebrae with a large lateral projection in the form of a straight-edged shelf anteriorly emarginate next to the centrum and bearing a lateral rodlike anterior extension fitting into a groove in the posterior portion of the lateral surface of the shelf of the vertebra anterior to it...”]. *Emmochliophis* Fritts & Smith, 1969. Serpentes: Colubridae.

***Emoia*:** Unclear; *Emo* as a vernacular name? Probably from Middle-English *emoi*, in turn from L. *emotio*, move away, remove, dislodge. [English names for the included species are The Black Sided Emo, Carteret’s Emo, Baudin’s Emo, and The Emo]. *Emoia* Gray, 1845. Sauria: Scincidae.

***Emydoidea*:** L. *Emys*, chelonian genus due to Duméril 1805 + L. *oides*, suffix indicating resembling, having the form of. [?]. *Emydoidea* Gray, 1870. Testudines: Emydidae.

***Enuliophis*:** G. *en* (ἔν, from εἷς), one + G. *oule* (οὐλή), a scar + G. *ophis* (ὄφις), a serpent, snake. ["...The name *Enuliophis* is from the Greek words *hen* (meaning one), *oule* (scar or mark), and *ophis* (snake). *Enulius* (with the h in *hen* silent and dropped) as originally used by Cope, apparently referred to the single mark (the neck band) characteristic of the type species..."]. *Enuliophis* McCranie & Villa, 1993. Serpentes: Colubridae.

***Enulius*:** G. *en* (ἔν, from εἷς), one + G. *oule* (οὐλή), a scar (see *Enuliophis*), or G. *en* (ἔν, from εἷς), one + G. *uli* (ὕλη), the smaller branches of felled timber. [?]. *Enulius* Cope, 1871. Serpentes: Colubridae.

***Enyalioides*:** L. *Enyalius*, lizard genus due to Wagler, 1830 + L. *-oides*, suffix indicating likenes. [?]. *Enyalioides* Boulenger, 1885. Sauria: Hoplocercidae.

***Enyalius*:** G. *enyalios* (ἐνυάλιος), warrior, warlike, terrible. ["...Ἐνυάλιος belicosus..."]. *Enyalius* Wagler, 1830. Sauria: Leiosauridae.

***Epicrates*:** G. *epicrates* (επικρατές), master of. ["...*Epicrates, is*, m. Cic. ..."] (i.e. name given by Cicero to Pompey in his letters to Atticus, 2, 3). *Epicrates* Wagler, 1830. Serpentes: Boidae.

***Epictia*:** L. *e-*, without + L. *pictus*, painted (apparently in allusion to the absence of colors) [?]. *Epictia* Gray, 1845. Serpentes: Leptotyphlopidae.

***Eretmochelys*:** G. *eretmon* (ἐρετμόν), oar + Gr. *chelys* (χέλυς), tortoise. [?]. *Eretmochelys* Fitzinger, 1843. Testudines: Cheloniidae.

***Erythrolamprus*:** G. *erythros* (ερυθρός), red + G. *lampros* (λαμπρός), bright, brilliant, radiant. "...Ερυθρός, ruber et λαμπρός, splendidus..."]. *Erythrolamprus* Boie, 1826. Serpentes: Colubridae.

***Eunectes*:** G. *eu-* (εὖ-), well + G. *nectes* (νήκτης) swimmer. ["...Wasserschlinger..."]. *Eunectes* Wagler, 1830. Serpentes: Boidae.

***Eurolophosaurus*:** G. *Euros* (Εὖρος), the East wind + G. *lophos* (λόφος), crest of hill, ridge + G. *sauros* (σαῦρος), lizard. ["...G. Euro- (eastern), lopho- (ridge), sauros (lizard), referring to the association of this group of species with the Serra da Espinhaço ridge of mountains in eastern Brazil..."]. *Eurolophosaurus* Frost, Rodrigues, Grant & Titus, 2001. Sauria: Tropiduridae.

***Euspondylus*:** G. *eu-* (ἐῦ-), good, well, genuine + G. *spondylion* (σφονδύλιον), neck vertebra. ["... Jugulum collari distincto..."]. *Euspondylus* Tschudi, 1845. Sauria: Gymnophthalmidae.

***Eutrachelophis*:** G. *eu-* (εῦ-), well; good, noble + G. *trachelos* (τράχηλος), the neck, throat + G. *ophis* (ὄφις), a serpent, snake. ["... The intended meaning of the generic name is "beautiful-necked snake." It is compounded from the prefix *eu-* (beautiful) + *trachelos* (neck) + *ophis* (a serpent), all from the Greek. Gender masculine..."]. *Eutrachelophis* Myers & Mcdowell, 2014. Serpentes: Colubridae.

***Exila*:** L. *exilis*, strict, narrow, thin, slender, lank, small, meagre, poor ["...The generic name (*Exila*) is a feminine noun derived from the Latin adjective exilis (lean), alluding to the thin body shape and unusually low number of midbody scale rows in this species (24–28)..."]. *Exila* Hedges & Conn, 2012. Sauria: Scincidae.

***Exiliboa*:** L. *exilis*, small, thin; poor + L. *Boa*, snake genus due to Linnaeus, 1758. ["...A small, nearly unicolored, prehensile-tailed boa..."]. *Exiliboa* Bogert, 1968. Serpentes: Boidae.

***Farancia*:** Unknown. Possibly a name that was made up by Gray. None of our sources has a plausible explanation for this name. *Farancia* Gray, 1842. Serpentes: Colubridae.

***Ficimia*:** Unknown. Possibly a name that was made up by Gray. None of our sources has a plausible explanation for this name. *Ficimia* Gray, 1849. Serpentes: Colubridae.

***Furcifer*:** L. *furcifer*, a yoke-bearer, gallows rogue, hang-dog, rascal. [?]. *Furcifer* Fitzinger, 1843. Sauria: Chamaeleonidae.

***Galvarinus*:** S. Galvarino (? - 1557), Mapuche warrior during the Spanish conquest of Chile (in turn from M. *Kallfürüngi*, blue colihue, a cane of the genus *Chusquea*) + L. *-inus*, suffix indicating possession, belonging to, pertaining to; connected with. ["...The genus epithet *Galvarinus* (noun, gender masculine) is derived from "Galvarino," a famous Mapuche warrior who fought the invasion and attempt of servitude of the Mapuche people by the colonial Spaniards in Chile during the sixteenth century. The Mapuche are indigenous people from Chile and some parts of Argentina, who had most of their territory diminished by Spanish colonization. The name is in reference to the distribution of the genus type species

Galvarinus chilensis, restricted to Chile and Argentina..."]. *Galvarinus* Trevine, Grazziotin, Giraudo, Sallesbery-Pinchera, Vianna & Zaher, 2022. Serpentes: Colubridae.

***Gambelia*:** Gambel + L. *-ia*, suffix denoting belonging to. Honouring William Gambel, Jr. (1823–1849) US explorer, naturalist and collector. *Gambelia* Baird, 1859. Sauria: Crotaphytidae.

***Garthia*:** Garth + L. *-ia*, dedicative suffix. Honouring Garth Leon Underwood (1919-2002), British herpetologist. *Garthia* Donoso-Barros & Vanzolini, 1965. Sauria: Phyllodactylidae.

***Geagras*:** G. *gea* (from γῆ, γῆς), earth, land + G. *agreus* (ἀγρεύς), a hunter. [?]. *Geagras* Cope, 1876. Serpentes: Colubridae.

***Gehyra*:** Unknown. Maybe from G. *gee* (γέη-), from the earth + G. *gýra* (γυρὰ), rounded, curved, crooked. [?]. Possibly a meaningless but euphonious combination of letters, as Gray often produced. *Gehyra* Gray, 1834. Sauria: Gekkonidae.

***Gekko*:** L. *gekko*, from Indonesian-Malaysian *gēkoq*, onomatopoeia of the sound made by these animals. [?]. The first reference on the onomatopoeic origin of the name was given by Bontius (1658): "...*Nostrates ipsum animal apposito vocabulo Gecco vocant; Quippe non secus, ac Coccyx apud nos suum cantum iterat; etiam Gecco assiduo sonat, pius edito stridore, qualem Picus emittit...*". *Gekko* Laurenti 1768. Sauria: Gekkonidae.

***Gelanesaurus*:** G. *gelanes* (γελανής), cheerful + G. *sauros* (σαῦρος), lizard. ["...The name *Gelanesaurus* derives from the Greek words *gelanes* (=laughing, cheerful) and *sauros* (=lizard), and refers to the joker-looking head color pattern of the included species, more marked in *G. flavogularis*..."]. *Gelanesaurus* Torres-Carvajal, Lobos, Venegas, Chávez, Aguirre-Peñafiel, Zurita & Echevarría, 2016. Sauria: Gymnophthalmidae.

***Geophis*:** G. *gea* (from γῆ, γῆς), earth, land + G. *ophis* (ὄφῐς), a serpent, snake. [?]. *Geophis* Wagler, 1830. Serpentes: Colubridae.

***Gerrhonotus*:** G. *gerron* (γέρρον), oblong shield; anything made of wicker-work + G. *notos* (νῶτος) the back; dorsum. ["...*Caput pyramidatum, obtusum, clypeolis irregulari-multangulis tectum...*"]. *Gerrhonotus* Wiegmann, 1828. Sauria: Anguidae.

***Glaucomastix*:** G. *glaucos* (γλαυκός), grey-blue or grey-green + G. *mastix* (μάστιξ), a whip, scourge. ["... *Glaucomastix* is a composite name derived from the Greek adjectives "*glaukos*", meaning blue-green, and "*mastix*", meaning whip. The name alludes to the bluish-green tail that characterizes this group of lizards..."]. *Glaucomastix* Goicoechea, Frost, De la Riva, Pellegrino, Sites, Rodrigues & Padial, 2016. Sauria: Teiidae.

***Glyptemys*:** G. *glyptos* (γλυπτός), fit for carving + G. *emys* (ἐμῦς), freshwater tortoise. [?]. *Glyptemys* Agassiz, 1857. Testudines: Emydidae.

***Gomesophis*:** P. Gomes, family name + G. *ophis* (ὄφις), a serpent, snake. Honouring João Florêncio Gomes (1886-1919), Brazilian naturalist and descriptor of the type species *Gomesophis* Hoge & Mertens, 1959. Serpentes: Colubridae.

***Gonatodes*:** G. *gonatodes* (γονατώδης), with joints. [?]. *Gonatodes* Fitzinger, 1843. Sauria: Sphaerodactylidae.

***Gopherus*:** E. *gopher,* perhaps an Anglicizing of Louisiana French *gaufre*, honeycomb, waffle, said to have been used by French settlers in reference to small mammals in analogy to the structure of their burrows. [?]. *Gopherus* Rafinesque, 1832. Testudines: Testudinidae.

***Graptemys*:** G. *graptos* (γραπτός), written down, written; marked with patterns resembling letters + *G. emys* (ἐμῦς), a freshwater tortoise. [?]. *Graptemys* Agassiz, 1857. Testudines: Emydidae.

***Gyalopion*:** G. *gyalon* (γύαλον), concavity; a hollow + G. *pion* (πῖον), fat. ["...Rostral plate acute; its anterior border elevated; its upper surface concave..."]. *Gyalopion* Cope, 1860. Serpentes: Colubridae.

***Gymnodactylus*:** G. *gymnos* (γυμνός), naked + G. *dactylos* (δάκτυλος), finger, toe. ["...digitis omnibus liberis, non fimbriatis..."]. *Gymnodactylus* Spix, 1825. Sauria: Phyllodactylidae.

***Gymnophthalmus*:** G. *gymnos* (γυμνός), naked + G. *ophtalmos* (οφθαλμός), eye. ["...*Palpebrae nullae*?..."]. *Gymnophthalmus* Merrem, 1820. Sauria: Gymnophthalmidae.

***Habrophallos*:** G. *abros* (ἁβρός), delicate, graceful, beauteous, pretty + G. *phallos* (φαλλός), membrum virile, phallus. ["...The generic name is derived from the Greek "*habros*"

(pretty, graceful, delicate) + the Greek "*phallos*," used herein in reference to the small, delicate, and diagnostic hemipenial morphology of the new genus..."]. *Habrophallos* Martins, Koch, Pinto, Folly, Fouquet & Passos, 2020. Serpentes: Leptotyphlopidae.

***Helicops*:** G. *elikopis* (ἑλῐκῶπις), with lively eyes. *Helicops* Wagler, 1828. Serpentes: Colubridae.

***Helminthophis*:** G. *helminthos* (ἕλμινθος), worm + G. *ophis* (ὄφῐς), serpent, snake. ["...Diese Wurmschlange hat die abgerundete Schnauze und die seitlichen Augen..."]. *Helminthophis* Peters, 1860. Serpentes: Anomalepididae.

***Heloderma*:** G. *elos* (ἦλος), wart, callus + G. *derma* (δέρμα), skin, hide. ["...*Truncus cute squamulosa, rugis transversis parallelis distincta vestitus, squamis majoribus distantibus tuberiformibus, osseis*..."]. *Heloderma* Wiegmann, 1829. Sauria: Helodermatidae.

***Hemidactylus*:** G. *hemi-* (ἡμι-), half + G. *dactylos* (δάκτυλος), finger, toe. ["... Zehen dünn; die Sohlenscheibe oval, von einer doppelten Reihe von Blättchen gebildet..."]. *Hemidactylus* Goldfuss, 1820 (fide Frétey & Dubois 2019). Sauria: Gekkonidae.

***Hemiphyllodactylus*:** L. *Hemidactylus*, lizard genus due to Oken, 1817 (see) + L. *Phyllodactylus*, lizard genus due to Gray, 1828 (see). ["...Staat in verwantschap tusschen *Platydactylus* en *Hemidactylus*..."]. *Hemiphyllodactylus* Bleeker, 1860. Sauria: Gekkonidae.

***Heterodactylus*:** G. *heteros* (ἕτερος), of another kind, different + G. *dactylos* (δάκτυλος), finger, toe. ["... *pedibus anterioribus 4-dactylis, posterioribus 5-dactylis*..."]. *Heterodactylus* Spix, 1825. Sauria: Gymnophthalmidae.

***Heterodon*:** G. *heteros* (ἕτερος), of another kind, different + G. *odon* (ὀδών), tooth; anything pointed. ["...Branche extérieure de la mâchoire supérieure ayant près de son origine deux dents plus longues. Point d'autres dents propres à être des crochets à venin..."]. *Heterodon* Latreille, 1801. Serpentes: Colubridae.

***Holbrookia*:** Holbrook, a family name + L. *-ia*, or G. -ια, suffix denoting pertaining to. Honouring John Edwards Holbrook (1796-1871), US American herpetologist. *Holbrookia* Girard, 1851. Sauria: Phrynosomatidae.

***Holcosus*:** Unclear; perhaps from L. *holcus*, a kind of grain (Poaceae)

+ L. *–osus*, rich in; abounding in [?]. ["...Frontal, fronto-parietal and parietal plates very numerous..."]. *Holcosus* Cope, 1862. Sauria: Teiidae.

***Homonota*:** G. *homos* (ὁμός), same, uniform, similar + G. *notos* (νωτος), back, dorsum. ["...scales of the back hexangular, smooth, scarcely imbricate..."]. *Homonota* Gray, 1845. Sauria: Phyllodactylidae.

***Hoplocercus*:** G. *hoplos* (ὅπλον), implements of war, arms and armour + G. *cercos* (κέρκος) tail. ["...Cauda breviuscula, verticillata..."]. *Hoplocercus* Fitzinger, 1843. Sauria: Hoplocercidae.

Hydrodynastes: G. *hydros* (ὕδρος), a water-snake + G. *dynastes* (δυνάστης), a lord, master, ruler. [?]. *Hydrodynastes* Fitzinger, 1843. Serpentes: Colubridae.

***Hydromedusa*:** G. *hydor* (ὑδωρ), water + G. *medeon* (μεδέων) → *medeousa* (μεδέουσα), ruling, holding. ["...Ὑδρομεδουσα, a ὑδωρ aqua, et μεδω imperio..."]. *Hydromedusa* Wagler, 1830. Testudines: Chelidae.

Hydromorphus: L. *Hydrus*, snake genus due to Schneider, 1799 (see) + G. *morpho* (μορφή), form, shape. ["...Diese neue Gattung schließt sich durch die Körperform zunächst an die Homalopsidae mit ungefurchten hinteren Zähnen, *Calopisma*, *Hypsirhina* und *Hydrops* an, ist aber durch eigentümlichen Kieferbau, Bezahnung und Kopfschilder leicht zu underscheiden..."]. *Hydromorphus* Peters, 1859. Serpentes: Colubridae.

***Hydrophis*:** G. *hydor* (ὑδωρ), water + G. *ophis* (ὄφις), a serpent, snake. ["...Hydrophis..."]. *Hydrophis* Latreille, 1801. Serpentes: Elapidae.

***Hydrops*:** G. *hydros* (ὕδρος), a water-snake + G. *ops* (ὄψ, ὤψ), face, eye. ["...Ὑδρος, serpens aquaticus, et οψ facies..."]. *Hydrops* Wagler, 1830. Serpentes: Colubridae.

***Hypsiglena*:** G. *hypsi-* (ὕψι-), on high, aloft; to a high or relatively high position + G. *glenes* (γλήνη), the pupil of the eye, eyeball. ["... Pupil elliptic, erect..."]. *Hypsiglena* Cope, 1860. Serpentes: Colubridae.

***Iguana*:** S. *iguana*, a lizard; from A. *iwana*, vernacular name for the species. [?]. [Probably the oldest printed mention of the name is that of Pedro Mártir de Anglería (1511), ["...las sierpes, a las que consideran en primer lugar entre sus alimentos,

y que describimos más arriba y son similares a los cocodrilos. A estas sierpes llaman *Iuanas*..."]. *Iguana* Laurenti 1768. Sauria: Iguanidae.

***Imantodes*:** G. *imantodes* (ἱμαντώδης), fibrous, leather-like. ["...Tronc à dos en carène..."]. *Imantodes* Duméril, 1853. Serpentes: Colubridae.

***Incaspis*:** Q. *inka*, ruler, emperor + G. *aspis* (ἀσπίς), asp, venomous snake. ["...The genus name is a combination of the Quechua word *Inca* (adjective, meaning royalty) and the Greek word -*aspis* (noun, ἀσπίς, meaning venomous snake), in reference to the Andean region where the Inca Empire was established..."]. *Incaspis* Donoso-Barros, 1974. Serpentes: Colubridae.

***Indotyphlops*:** L. *Indus*, *Indi*, Indian, inhabitant of India + G. *typhlops* (τυφλωψ), blind-eyed, blind. ["... The generic name is a masculine noun formed from the adjective *indianus* (a, um; i.e., 'from India') and the Greek noun *typhlops* (the blind)..."]. *Indotyphlops* Hedges, Marion, Lipp, Marin & Vidal, 2014. Serpentes: Typhlopidae.

***Iphisa*:** Unclear. Possibly from G. *Iphis* (Ἴφις), daughter of Ligdus and Telethusa, or Ἴφις, a slave of Patroclus, or L. *Iphis*, one of the Argonauts, or from G. *iphios* (ἴφιος), stout, fat, goodly, or just an arbitrary combination of letters? [?]. *Iphisa* Gray, 1851. Sauria: Gymnophthalmidae.

***Kaieteurosaurus*:** E. Kaieteur, a National Park in Guyana (in turn, from Pa. "the place where the old man fell" + G. *sauros* (σαῦρος), lizard. ["...The generic name is a noun in apposition and is derived from "Kaieteur" referring to the Kaieteur National Park where the type species occurs, the connecting -o, and the Greek "*saurus*" meaning "lizard"..."]. *Kaieteurosaurus* Kok, 2005. Sauria: Gymnophthalmidae.

***Kataphraktosaurus*:** G. *cataphractos* (κατάφρακτος), shut up, confined + G. *sauros* (σαῦρος), lizard. ["...The generic name Kataphraktosaurus (gender masculine) is derived from the combination of the G. word κατάφρακτος ("*katáphraktos*"), which means completely enclosed, covered or armored, and the Neo- L. -saurus—derived from the ancient G. σαῦρος ("*saûros*")—, which means lizard..."]. *Kataphraktosaurus* Rojas-Runjaic, Barrio-Amorós, Señaris, De la Riva & Castroviejo-Fisher, 2021. Sauria: Gymnophthalmidae.

***Kentropyx*:** G. *kentroo* (κεντρόω), to furnish with a sting + G. *pyka* (πύκα), thickly, solidly. ["...aculeo utrinque ad anum oblongo..."]. *Kentropyx* Spix, 1825. Sauria: Teiidae.

***Kinosternon*:** G. *cineo* (κινέω), to set in motion, to move + G. *sternon* (στέρνον) breast, chest. [?]. *Kinosternon* Spix, 1824. Testudines: Kinosternidae.

***Lacerta*:** L. *lacerta*, Latin name for a lizard. ["...Corpus tetrapodum, caudatum, nudum..."]. The alusion to a naked body is striking, because the salamanders included were very few. *Lacerta* Linnaeus 1758. Sauria: Lacertidae.

***Lachesis*:** G. *Lachesis* (Λάχεσις), in G. mythology, one of the three Fates. ["...Le nom d'une des Parques qui tenaient entre leurs mains le fil de nos destinées, selon l'expression des poètes anciens, peut convenir au nouveau genre d'ophidiens dont je vais donner la description, puisqu'il ne renferme que des animaux très redoutables par leur morsure envenimée et souvent mortelle.."]. *Lachesis* Daudin, 1803. Serpentes: Viperidae.

***Laemanctus*:** G. *laimos* (λαιμός), throat, gullet + L. *arcto*, to squeeze, compress. ["... *iugulum constrictum*, transverse plicatum..."]. *Laemanctus* Wiegmann, 1834. Sauria: Corytophanidae.

***Lampropeltis*:** G. *lampros* (λαμπρός), bright, brilliant, radiant + G. *pelta* (πέλτη), small light shield of leather without a rim. [?]. *Lampropeltis* Fitzinger, 1843. Serpentes: Colubridae.

***Leiocephalus*:** G. *leios* (λεῖος), smooth, plain, not embroidered + G. *cephale* (κεφάλη), head. In the diagnosis of the type species, ["...capite glabro..."]. *Leiocephalus* Gray, 1827. Sauria: Leiocephalidae.

***Leiosaurus*:** G. *leios* (λεῖος), smooth, plain, not embroidered + G. *sauros* (σαῦρος), lizard. ["...De Λεῖος, lisse, uni, laevis, non scaber ; et de Σαῦρος, Lézard, Lacerta..."]. *Leiosaurus* Duméril & Bibron, 1837. Sauria: Leiosauridae.

***Lepidoblepharis*:** G. *lepidos* (λεπίδος) a scale + G. *blepharon* (βλέφαρον), eyelid. ["...Palpebra inferiore rudimentale, la superiore laminare, sporgente all'esterno a mezzaluna, non chiudente l'occhio..."].. *Lepidoblepharis* Peracca, 1897. Sauria: Sphaerodactylidae.

***Lepidochelys*:** G. *lepidos* (λεπίδος) collectively, the scales of fish or reptiles + G. *chelys* (χέλυς), turtle. [?]. *Lepidochelys* Fitzinger, 1843. Testudines: Cheloniidae.

***Lepidodactylus*:** G. *lepidos* (λεπίδος) a scale + G. *dactylos* (δάκτυλος), finger, toe. [?]. *Lepidodactylus* Fitzinger, 1843. Sauria: Gekkonidae.

***Lepidophyma*:** G. *lepidos* (λεπίδος) a scale + G. *phyma* (φῦμα), a growth, tubercle, wart, tumor. ["... Tronc revêtu en dessus et sur les flancs d'écaillés granuleuses, petites et très-serrées, entremêlées de tubercules coniques et pointus, beaucoup plus gros, disposés en séries transversales plus ou moins régulières..."]. *Lepidophyma* Duméril, 1851. Sauria: Xantusiidae.

***Leposoma*:** G. *lepos* (λέπος), rind, husk, scale + G. *soma* (σῶμα), body. ["...*squamis dorsi, nec non capitis subasperis, acutis, medio carinatis*..."]. *Leposoma* Spix, 1825. Sauria: Gymnophthalmidae.

***Leposternon*:** G. *lepos* (λέπος), rind, husk, scale + G. *sternon* (στέρνον), breast, chest. ["...*Caput et sternum scutata*..."]. *Leposternon* Wagler, 1824. Sauria: Amphisbaenidae.

***Leptodeira*:** G. *leptos* (λεπτός), fine, thin, delicate, subtle + G. *deire* (δειρή), neck, throat. [?]. *Leptodeira* Fitzinger, 1843. Serpentes: Colubridae.

***Leptodrymus*:** L. *Leptophis* snake genus due to Bell, 1825 (see) + L. *Drymobius*, snake genus due to Fitzinger, 1843 (see). ["...*Leptodrymus* is close to both *Drymobius* Fitzinger and *Leptophis* Wagler through its dentition, physiognomy, shape and pholidosis..."]. *Leptodrymus* Amaral, 1927. Serpentes: Colubridae.

***Leptophis*:** G. *leptos* (λεπτός), fine, thin, delicate, subtle + G. *ophis* (ὄφις), a serpent, snake. ["...I propose to give the name Leptophis (from λεπτός gracilis and ὄφις serpens)..."]. *Leptophis* Bell, 1825. Serpentes: Colubridae.

***Lichanura*:** G. *lichanos* (λιχανός), the fore-finger + G. *oura* (οὐρᾷ), tail. ["...tail short, thick, obtuse at the extremity..."]. *Lichanura* Cope, 1861. Serpentes: Boidae.

***Liodytes*:** G. *leios* (λεῖος), smooth, plain, not embroidered + G. *dytes* (δύτης), a diver. ["...I note here that the *Helicops alleni* Garman, from Florida, has the scales entirely smooth. It is necessary therefore that it be placed in another genus,

which I call *Liodytes*..."]. *Liodytes* Cope, 1885. Serpentes: Colubridae.

***Lioheterophis*:** G. *leios* (λεῖος), smooth, plain, not embroidered + G. *heteros* (ἕτερος), of another kind, different + G. *ophis* (ὄφις), a serpent, snake. [?]. *Lioheterophis* Amaral, 1935. Serpentes: Colubridae.

***Liolaemus*:** G. *leios* (λεῖος), smooth, plain, not embroidered + G. *laimos* (λαιμός), throat, gullet. ["...cuti gulari adstricta, plicae iugularis rudimento supra axillas..."]. *Liolaemus* Wiegmann, 1834. Sauria: Liolaemidae.

***Liotyphlops*:** G. *leios* (λεῖος), smooth, plain, not embroidered + G. *typhlos* (τυφλός), blind. [?]. *Liotyphlops* Peters, 1881. Serpentes: Anomalepididae.

***Loxocemus*:** G. *loxos* (λοξός), slanting + G. *cemos* (κημός), muzzle. ["... Muzzle prominent, obliquely truncate..."]. *Loxocemus* Cope, 1861. Serpentes: Loxocemidae.

***Loxopholis*:** G. *loxos* (λοξός), slanting + G. *pholis* (φολίς), horny scale. ["...The scales imbricate, arranged in oblique rows or quincuncially..."]. *Loxopholis* Cope, 1869. Sauria: Gymnophthalmidae.

***Lygodactylus*:** G. *lygoi* (λύγοι), pliant twigs of willow (used for binding or plaiting) + G. *dactylos* (δάκτυλος), finger, toe. ["...Toes free, all clawed, slender and subcylindrical..."]. *Lygodactylus* Gray, 1864. Sauria: Gekkonidae.

***Lygophis*:** G. *lygoi* (λύγοι), pliant twigs of willow (used for binding or plaiting) + G. *ophis* (ὄφις), a serpent, snake. [?]. *Lygophis* Fitzinger, 1843. Serpentes: Colubridae.

***Macrochelys*:** G. *makros* (μακρός), long in extent + G. *chelys* (χέλυς), tortoise. ["...Head large, angular..."]. *Macrochelys* Gray, 1856. Testudines: Chelydridae.

***Macropholidus*:** G. *makros* (μακρός), long in extent + G. *pholidos* (φολίδος), a horny scale. ["... Two medial rows of large hexagonal scales extending from occipital region to base of tail..."]. *Macropholidus* Noble, 1921. Sauria: Gymnophthalmidae.

***Magdalenasaura*:** S. Magdalena, a Colombian river + G. *saura* (σαύρα), lizard. ["...*Magdalenasaura* (gender feminine) derives from the Spanish word Magdalena and the Greek word *saura* (lizard), in allusion to the Magdalena River basin where the two species have

been found...”]. *Magdalenasaura* Fang, Vázquez-Restrepo & Daza, 2020. Sauria: Gymnophthalmidae.

***Malaclemys*:** G. *malacos* (μαλακός), soft + G. *clemmys* (κλεμμύς), tortoise. [“...Head very large, depressed, covered with a soft spongy skin...”]. *Malaclemys* Gray, 1844. Testudines: Emydidae.

***Manciola*:** L. *manciola*, dim. of *manus*, a little hand. [“...The generic name (*Manciola*) is a feminine, Latin, noun meaning small hand, in reference to the relatively small hands and feet in these skinks...”]. *Manciola* Hedges & Conn, 2012. Sauria: Scincidae.

***Manolepis*:** G. *manos* (μανός), loose, porous; few, scanty + G. *lepis* (λεπίς), a scale. [?]. *Manolepis* Cope, 1885. Serpentes: Colubridae.

***Maracaiba*:** S. Maracaibo, lake and capital city of Zulia State, Venezuela. [“...The generic name (*Maracaiba*) is a feminine noun and refers to the distribution of the genus, centered around Lago de Maracaibo in northern Venezuela...”]. *Maracaiba* Hedges & Conn, 2012. Sauria: Scincidae.

***Marinussaurus*:** D. Marinus, a given name + G. *sauros* (σαῦρος), lizard. Honouring Marinus Steven Hoogmoed (1942), Dutch-born Brazilian herpetologist active in Surinam and Brazil. *Marinussaurus* Peloso, Pellegrino, Rodrigues & Ávila-Pires, 2011. Sauria: Gymnophthalmidae.

***Marisora*:** L. *maris*, sea + L. *ora*, coast, border. [“...The generic name (*Marisora*) is a feminine noun derived from the Latin words maris (sea) and ora (coast, or border), referring to the distribution of this genus occurring predominately in low elevations near the coast (Caribbean, Atlantic, and Pacific), with relatively few inland and upland localities. Three of the seven species occur exclusively on islands...”]. *Marisora* Hedges & Conn, 2012. Sauria: Scincidae.

***Masticophis*:** G. *mastizo* (μαστίζω), a whip, scourge + G. *ophis* (ὄφις), a serpent, snake. [“...Similar in general features to Bascanion, but still more slender and elongated. Tail very long...”]. *Masticophis* Baird & Girard, 1853. Serpentes: Colubridae.

***Mastigodryas*:** L. *Masticophis*, snake genus due to Baird & Girard, 1853 (see) + L. *Eudryas*, snake genus due to Fitzinger, 1843. [“...este genero é affim de *Eudryas* Fitzinger e *Masticophis* Baird & Girard...”]. *Mastigodryas* Amaral, 1935. Serpentes: Colubridae.

***Medopheos*:** G. *medea* (μήδεα), genitals + G. *pheos* (φέως), a thorny plant. ["... from the G. noun *medea* meaning genitalia and *pheos*, a term used to refer to certain spiny plants. The name alludes to the distinctive cluster of 5–6 preanal spurs on either side of the vent of males..."]. *Medopheos* Harvey, Ugueto & Gutberlet, 2012. Sauria: Teiidae.

***Melanosuchus*:** G. *melanos* (μέλανος), black + G. *souchos* (σοῦχος), crocodile. ["...Back black varied with yellow..."]. *Melanosuchus* Gray, 1862. Crocodylia: Alligatoridae.

***Mesoamericus*:** S. Mesoamérica, cultural and geographical region of the Americas that encompasses Central America and southern Mexico + L. -us, having the nature of. ["... The generic name is a masculine noun derived from the name for the region (Mesoamerica) where it occurs..."]. *Mesoamericus* Schools & Hedges, 2021. Sauria: Diploglossidae.

***Mesobaena*:** G. *mesos* (μέσος), of the middle point or part + G. *baino* (βαίνω), walk, step, but also of all motion on ground. ["...Diese südamerikanische Leposternidengattung steht zwischen Amphisbaena und Anopsibaena..."]. *Mesobaena* Mertens, 1925. Sauria: Amphisbaenidae.

***Mesoclemmys*:** G. *mesos* (μέσος), middle, in the middle + G. *clemmys* (κλεμμύς), tortoise. ["...This genus is between *Hydraspis* and *Platemys* in the form of the skull, but is known from both by the regular shields on the head..."]. *Mesoclemmys* Gray, 1873. Testudines: Chelidae.

***Mesoscincus*:** G. *mesos* (μέσος), middle (of) + L. *Scincus*, reptile genus due to Laurenti (1768). ["...The name refers to the Middle American distribution of this group, and its current position as a middle group within the scincid cladogram. It is masculine in gender..."]. *Mesoscincus* Griffith, Ngo & Murphy, 2000. Sauria: Scincidae.

***Mesotes*:** G. *mesotes* (μεσότης), a middle; state between two extremes. [?]. *Mesotes* Jan, 1863. Serpentes: Colubridae.

***Metlapilcoatlus*:** N. *metlapilli,* from N. *metlatl* (metate) and N. *pilli* (son); a type of roller used for grinding on the metate + N. *coatl,* snake. ["...The generic name is derived from the náhuatl *metlapil*, referring to the thick mortar used with a grinding stone called metate,

and *coatl*, meaning "serpent." ..."]. *Metlapilcoatlus* Campbell, Frost & Castoe, 2019. Serpentes: Viperidae.

Micrablepharus: G. *micros* (μῑκρός), small, little, short + G. *blepharon* (βλέφαρον), eyelid. [?. "...*supraocularibus 2, altero maximo, altero* minore..."]. *Micrablepharus* Boettger, 1885. Sauria: Gymnophthalmidae.

***Microlophus*:** G. *micros* (μικρός), small, little, short + G. *lophos* (λόφος), neck, crest of hill, ridge, crest of a helmet. ["...De Μικρός, petite, *parva,* et λόφος, crête, *crista*..."]. *Microlophus* Duméril & Bibron, 1837. Sauria: Tropiduridae.

***Micruroides*:** L. *Micrurus*, snake genus due to Wagler in Spix, 1824 (see) + G. *-oides* (-οειδής), suffix indicating likeness. [?]. *Micruroides* Schmidt, 1928. Serpentes: Elapidae.

***Micrurus*:** G. *micros* (μικρός), small, little, short + G. *oura* (οὐρᾰ́), tail. ["...*Cauda brevissima*..."].*Micrurus* Wagler in Spix, 1824. Serpentes: Elapidae.

***Mixcoatlus*:** N. Mixcoatl, god of the hunt or the cloud serpent; from N. *mixtli*, cloud and N. coatk, snake. ["...The generic name is derived from the Náhuatl word Mixcoatl, meaning 'cloud serpent', a god of the Aztecs and several Mesoamerican civilizations. The name alludes to the restriction of this clade to high elevations. The gender of this name is masculine..."]. *Mixcoatlus* Jadin, Smith & Campbell, 2011. Serpentes: Viperidae.

***Mussurana*:** T. *muçurana*, a rope used in ritual sacrifice; also, T. *muçu*, freshwater eel (Synbranchiformes) + T. *rana*, what seems like but is not the same. ["...From *Mosu-* (indigenous Tupi, "eel") + *Rana* (indigenous Tupi, "like or false"), gender feminine (Amaral, 1974). *Mussurana* or *Muçurana* is a very common name in Latin America, applied mostly to the dark adults of pseudoboine snakes..."]. *Mussurana* Zaher, Grazziotin, Cadle, Murphy, Moura-Leite & Bonatto, 2009. Serpentes: Colubridae.

Nerodia: *G. neros (*νηρός), flowing, liquid + G. *-ia (*-ια), suffix denoting belonging to. ["...Habits aquatic..."]. *Nerodia* Baird in Baird & Girard, 1853. Serpentes: Colubridae.

***Neusticurus*:** G. *neusticos* (νευστικός), able to swim + G. *oura* (οὐρᾰ́), tail. ["...De *Νευστικός, natans, natrix,* prope à nager et de *οὐρᾰ́, cauda,* queue..."]. *Neusti-*

curus Duméril & Bibron, 1839. Sauria: Gymnophthalmidae.

***Ninia*:** Unknown. McCranie (2011) speculates that *Ninia* might be derived from the English word nine and the Greek suffix *-ia* (pertaining to), in reference to the normal colubrid condition of having nine large scales on the dorsal surface of the head. *Ninia* Baird & Girard, 1853. Serpentes: Colubridae.

***Nothobachia*:** G. *nothos* (νόθος), cross-bred; bastard + L. *Bachia*, lizard genus due to Gray, 1845. [?]. *Nothobachia* Rodrigues, 1984. Sauria: Gymnophthalmidae.

***Nothopsis*:** G. *nothos* (νόθος), cross-bred; bastard + G. *opsis* (ὄψις), aspect, appearance. ["...Its superficial characters remind one at once of the Peropoda, and the double urosteges suggest the Pythons..."]. *Nothopsis* Cope, 1871. Serpentes: Colubridae.

***Notomabuya*:** G. *notos* (νότος), the south + L. *Mabuya*, lizard genus due to Fitzinger, 1826. ["...The generic name (*Notomabuya*) is a feminine noun derived from the Greek *notos* (south, southern) and *mabuya* (a Neotropical skink), hence "Southern Neotropical Skink," in allusion to the distribution of the included species (*frenata*) in southern South America..."]. *Notomabuya* Hedges & Conn, 2012. Sauria: Scincidae.

***Omoadiphas*:** S. [Sierra de] Omoa, a mountain range in the Cortés department, Honduras + G. *diphas* (δίφας), a kind of serpent. ["...The genus name is derived from the name of the mountain range (Sierra de Omoa) containing the type locality, and the Greek *diphas*, meaning "a kind of serpent" (Brown 1991). The generic name is feminine..."]. *Omoadiphas* Köhler, McCranie & Wilson, 2001. Serpentes: Colubridae.

***Opheodrys*:** G. *opheodes* (ὀφεώδης), snake-like. [?]. *Opheodrys* Fitzinger, 1843. Serpentes: Colubridae.

***Ophiodes*:** G. *ophis* (ὄφις), a serpent, snake + G. *-oides* (-ειδής), suffix denoting likeness. [?]. *Ophiodes* Wagler, 1828. Sauria: Diploglossidae.

***Ophisaurus*:** G. *ophis* (ὄφις), a serpent, snake + G. *sauros* (σαῦρος), lizard. [?]. *Ophisaurus* Daudin, 1803. Sauria: Anguidae.

***Ophryacus*:** G. *ophrys* (ὀφρύς), eyebrow + G. *acis* (ἀκίς), a point, the barb of an arrow. ["...This genus differs from *Bothrops* in the pro-

longation of one of the superciliary scales into a horn like process...”]. *Ophryacus* Cope, 1887. Serpentes: Viperidae.

***Oreosaurus*:** G. *oreos* (όρεος), mountain, hill + G. *sauros* (σαῦρος), lizard. [In the characterization of its type species: “...Das Vaterland dieser Art ist Neu Granada; acht Exemplare zum Theil in verstümmeltem Zustande, hat das zoologische Museum aus den Hochgebirgen in der Umgebung von Sta Fé de Bogotá erhalten...”]. *Oreosaurus* Peters, 1863. Sauria: Gymnophthalmidae.

***Oxybelis*:** G. *oxybelis* (ὀξυβελής), sharp-pointed- [“...Ὀξυβελής acutum cuspidem gerens...”]. *Oxybelis* Wagler, 1830. Serpentes: Colubridae.

***Oxyrhopus*:** G. *oxyrropos* (ὀξύρροπος), turning quickly. [“... ὀξύρροπος *qui celeriter repit*...”]. *Oxyrhopus* Wagler, 1830. Serpentes: Colubridae.

***Paikwaophis*:** [?]. Paikwa, a river in Cuyuni-Mazaruni Region, Guyana + G. *ophis* (ὄφις), a serpent, snake. [“...The generic name is derived from the river name ‘Paikwa’ (referring to the type locality) and the Greek ‘*ophis*’ (meaning snake)...”]. *Paikwaophis* Kok & Means, 2023. Serpentes: Colubridae.

***Palea*:** L. *palea*, chaff, husk; the wattles or gills of a cock. [“...From the L. *palea*, meaning wattles, in reference to the autapomorphic structures on the neck...”]. *Palea* Meylan, 1987. Testudines: Trionychidae.

***Paleosuchus*:** G. *palaios* (παλαιός), old, aged, ancient + G. *souchos* (σοῦχος), crocodile. [?]. *Paleosuchus* Gray, 1862. Crocodylia: Alligatoridae.

***Palusophis*:** L. *palus,* a swamp, marsh, morass, bog, fen, pool + G. *ophis* (ὄφις), a serpent, snake. [“... From the Latin word *Palus* (swamp, marsh), and the Greek *ophis* (serpent) in reference to the habitat of its species, *Palusophis bifossatus*, in humid areas of both forested and open environments in South America...”]. *Palusophis* Montingelli, Grazziotin, Battilana, Murphy, Zhang & Zaher, 2019. Serpentes: Colubridae.

***Panopa*:** G. *pan* (πᾶν, from πᾶς), all, the whole + G. *lopas* (λοπάς), a flat dish. [“...The generic name (*Panopa*) is a feminine noun and is derived from the Greek adjective *pan* (whole, undivided) and noun *lopas* (flat plate), in allusion to the single (fused) frontoparietal scale...”]. *Panopa* Hedges & Conn, 2012. Sauria: Scincidae.

***Pantepuisaurus*:** SL. *Pantepui*, biogeographic province in the mountains ('tepuis') of the Guiana Region above 1,200 to 1,500 m a.s.l. + G. *sauros* (σαῦρος), lizard. ["...A noun in apposition, derived from "Pantepui" referring to the phytogeographic province where the type species was discovered, and the Greek *sauros* meaning "lizard". Gender masculine..."]. *Pantepuisaurus* Kok, 2009. Sauria: Gymnophthalmidae.

***Pantherophis*:** G. *panther* (πάνθηρ), the panther + G. *ophis* (ὄφις), a serpent, snake. [?]. *Pantherophis* Fitzinger, 1843. Serpentes: Colubridae.

***Paraphimophis*:** G. *para* (παρά), besides, near + L. *Phimophis*, snake genus due to Cope, 1860. ["... From the Greek "*para*" and *Phimophis*, meaning near the genus *Phimophis*..."]. *Paraphimophis* Zaher, Grazziotin, Murphy, Scrocchi, Altamirano, Benavides, Zhang & Bonatto in Grazziotin et al. 2012. Serpentes: Colubridae.

***Pelodiscus*:** G. *pelos* (πηλός), mud, mire + L. *discus*, disk/disc; disk-shaped object. [?]. *Pelodiscus* Fitzinger, 1835. Testudines: Trionychidae.

***Peltocephalus*:** G. *pelto* (πέλτη), small wooden or wicker shield with covering of skin; light shield + G. *cephale* (κεφαλή), head. ["... Nous répétons ici que nous avons cherché à indiquer, par ce nom de Peltocéphale, la disposition particulière des écailles qui recouvrent le crâne comme une sorte de casque, de πέλτη, un èсusson, et de *κεφαλή*, tête..."]. *Peltocephalus* Duméril & Bibron, 1835. Testudines: Podocnemididae.

***Petracola*:** L. *petra,* petra, a rock, crag, stone + L. *-cola*, dwelling in, inhabiting, living among. ["...*Petracola* is a masculine word derived from Latin, meaning rock dweller. It refers to the fact that these lizards are usually found beneath rocks on the ground...."]. *Petracola* Boulenger, 1900. Sauria: Gymnophthalmidae.

***Petrosaurus*:** L. *petra,* petra, a rock, crag, stone + G. *sauros* (σαῦρος), lizard. [?]. *Petrosaurus* Boulenger, 1885. Sauria: Phrynosomatidae.

***Phalotris*:** G. *phalos* (φάλος), horn of a helmet + *G. -tris* (τρίς), thrice, thrice as much or many. [?]. *Phalotris* Cope, 1862. Serpentes: Colubridae.

***Phelsuma*:** D. Phelsum, a family name + L. *-a*, Latinizing suffix. Honour-

ing Murk van Phelsum (1732-1779), Dutch physician. *Phelsuma* Gray, 1825. Sauria: Gekkonidae.

***Philodryas*:** G. *philos* (φίλος), loved, beloved, dear + G. *dryas* (δρυάς), (ref. to a nymph) inhabitant of trees. ["...*Φίλος amicus, et δρυάς Sylvae Nympha (Ovid)*..."]. *Philodryas* Wagler, 1830. Serpentes: Colubridae.

***Phimophis*:** G. *phimos* (φιμός), nose, muzzle; any instrument for keeping the mouth closed + G. *ophis* (ὄφις), a serpent, snake. [?]. *Phimophis* Cope, 1860. Serpentes: Colubridae.

***Pholidobolus*:** G: *pholidoo* (φολιδόω), covered with horny scales + G. *bolis* (βολίς), a javelin, or G. *ballo* (βαλλο), to throw. *Pholidobolus* Peters, 1863. Sauria: Gymnophthalmidae.

***Phrynonax*:** G. *phrynonos* (φρυνωνος), like a toad. [?]. *Phrynonax* Cope, 1862. Serpentes: Colubridae.

***Phrynops*:** G. *phrynos* (φρύνος), toad + G. *ops* (ὄψ, ὤψ), eye, face, countenance. ["...Φρύνος bufo, et ὤψ vultus..."]. *Phrynops* Wagler, 1830. Testudines: Chelidae.

***Phrynosoma*:** G. *phrynos* (φρύνος), toad + G. *soma* (σῶμα), body. ["... *Corpus compactile, bufonium*..."]. *Phrynosoma* Wiegmann, 1828. Sauria: Phrynosomatidae.

***Phyllodactylus*:** G. *phyllon* (φύλλον), leaf + G. *dactylos* (δάκτυλος), finger, toe. ["...*Digiti 5-5 graciles compressi, ultimo articulo squamâ latâ foliacea longitudinaliter fissa*..."]. *Phyllodactylus* Gray, 1828. Sauria: Phyllodactylidae.

***Phyllopezus*:** G. *phyllon* (φύλλον), leaf + G. *pezos* (πεζός), on foot, on land. ["...φύλλον, πεζός..."]. *Phyllopezus* Peters, 1878. Sauria: Phyllodactylidae.

***Phyllorhynchus*:** G. *phyllon* (φύλλον), leaf + G. *rhygchos* (ῥύγχος), snout, beak. ["...rostral plate greatly enlarged, with free lateral borders, and produced backwards so as to separate the supranasals entirely..."]. *Phyllorhynchus* Stejneger, 1890. Serpentes: Colubridae.

***Phymaturus*:** G. *phyma* (φῦμα), a growth: esp. a tumour + G. *oura* (οὐρᾷ), tail. ["...Nach dieser Beschaffenheit des Schwanzes habe ich der Gattung den Namen Phymaturus, Beulenschwanz, gegeben, welcher aus den griechischen

Wörtern φῦμα Beule, und οὐρᾷ Schwanz, gebildet ist...”]. *Phymaturus* Gravenhorst, 1838. Sauria: Liolaemidae.

***Pituophis*:** G. *pituoeis* (πιτυόεις), abounding in pine-trees + G. *ophis* (ὄφις), a serpent, snake. [“...To Dr. S. Barker of South Carolina, I am indebted for many living specimens of the Serpents of the lower section of the state, and especially for a magnificent specimen of the *Pituophis melanoleucus*, or Pine Snake...”]. *Pituophis* Holbrook, 1842. Serpentes: Colubridae.

***Placosoma*:** G. *placos* (πλάκος, from πλάξ), anything flat and broad + G. *soma* (σῶμα), body. [“...*Cervix integra. Dorsum integrum* ...”]. *Placosoma* Tschudi, 1847. Sauria: Gymnophthalmidae.

***Platemys*:** G. *platus* (πλατύς), flat, wide, broad + G. *emys* (ἐμῦς), freshwater tortoise. [“...Πλατυς, planus, et εμυς testudo...”]. *Platemys* Wagler, 1830. Testudines: Chelidae.

***Plesiodipsas*:** G. *plesios* (πλήσιος), near, close to + L. *Dipsas,* snake genus due to Laurenti, 1768 (see). [“...The new name is a feminine noun formed by adding the prefix *plesio-* (derived from the Greek word *plesios* meaning near) to the generic name *Dipsas* (derived from the Greek word for thirst)...”]. *Plesiodipsas*, Harvey Rivas-Fuenmayor Portilla & Rueda-Almonacid, 2008. Serpentes: Colubridae.

***Plestiodon*:** G. *pleistos* (πλεῖστος), most, greatest, largest; the greatest number, the most + G. *odon* (ὀδών), tooth; anything pointed. [“...Πλεῖστος, plurimi, beaucoup; ὀδών- ὀδόντος, dentes, dents...”]. *Plestiodon* Duméril & Bibron, 1839. Sauria: Scincidae.

***Plica*:** L. *plica*, fold. [“...*collo lateribus verrucoso subtus plicato...*”]. *Plica* Gray *in* Cuvier, 1831. Sauria: Tropiduridae.

***Pliocercus*:** G. *pleon* (πλήων, from πλείων), more; most + G. *cercos* (κέρκος) tail. [“...The great length of the tail separates this genus from *Lampropeltis* and *Erythrolamprus*...”]. *Pliocercus* Cope, 1860. Serpentes: Colubridae.

***Podarcis*:** G. *podarcis* (ποδαρκής), swift-footed. [“...Ποδαρκής *pedibis celer*...”]. *Podarcis* Wagler, 1830. Sauria: Lacertidae.

***Podocnemis*:** G. *podos* (ποδός), from G. *pous* (πούς), foot + G. *cnemis* (κνημίς), greave or piece of armour

from knee to ankle. ["...Πες pes, et κνημις ocrea..."]. *Podocnemis* Wagler, 1830. Testudines: Podocnemididae.

***Polychrus*:** G. *polys* (πολύς), much, many + G. *chroma* (χρωμα), the colour of the skin. ["...ils jouissent, comme les caméléons, de la faculté de changer de couleur..."]. *Polychrus* Cuvier, 1816. Sauria: Polychrotidae.

Porthidium: G. *portheo* (πορθέω), to destroy, ravage, waste, plunder + G. *-idion* (–ιδιον), diminutive suffix. [?]. *Porthidium* Cope, 1871. Serpentes: Viperidae.

***Potamites*:** G. *potamites* (ποταμίτης), water-finder. ["...*Potamites* is a masculine Greek noun, meaning water-finder. It refers to the fact that most members of this genus are semiaquatic, walking on the bottom of streams and often diving into streams to escape predation..."]. *Potamites* Doan & Castoe, 2005. Sauria: Gymnophthalmidae.

Pristidactylus: G. *pristes* (πρίστης), saw or file + G. *dactylos* (δάκτυλος), finger, toe. [?]. *Pristidactylus* Fitzinger, 1843. Sauria: Leiosauridae.

***Procellosaurinus*:** L. *procella*, a violent wind, storm, hurricane, tempest + G. *sauros* (σαῦρος), lizard + G. *-inos* (-ινος), suffix indicating of, made of. ["...O nome, que indica lagarto das regiões de ventos intensos ou uivantes, é dado em alusão às imensas dunas continentais onde suas espécies são encontradas..."]. *Procellosaurinus* Rodrigues, 1991. Sauria: Gymnophthalmidae.

***Proctoporus*:** G. *proctos* (πρωκτός), anus + G. *poros* (πόρος), pore; crossing-place. ["...Pori anales per seriem semilunarem in ani margine posteriore dispositi..."]. *Proctoporus* Tschudi, 1845. Sauria: Gymnophthalmidae.

***Pseudalsophis*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Alsophis*, snake genus due to Fitzinger, 1843. ["...Pseudo- (Greek, "false, erroneous") + *Alsophis*, in allusion to the morphological similarity with *Alsophis* Fitzinger sensu stricto, gender masculine..."]. *Pseudalsophis* Zaher, Grazziotin, Cadle, Murphy, Moura-Leite & Bonatto, 2009. Serpentes: Colubridae.

***Pseudelaphe*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Elaphe*, snake genus due to Wagler, 1833. Beltz 2006 stated that *Elaphe* derives from G. *elaphos* (ἔλαφος), deer, as a misnomer, presumably

indicating swiftness. *Pseudelaphe* Mertens & Rosenberg, 1943. Serpentes: Colubridae.

***Pseudemys*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Emys*, chelonian genus due to Duméril 1805 (see). [?]. *Pseudemys* Gray, 1856. Testudines: Emydidae.

***Pseudoboa*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Boa*, snake genus due to Linnaeus, 1758 (see). ["...Systematici plerasque cum *Bois* confusas propter scuta subcaudalia enarrarunt..."]. *Pseudoboa* Schneider, 1801. Serpentes: Colubridae.

***Pseudoeryx*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Eryx*, snake genus due to Daudin, 1803. [?]. *Pseudoeryx* Fitzinger, 1826. Serpentes: Colubridae.

***Pseudoficimia*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Ficimia*, snake genus due to Gray 1849. [?]. *Pseudoficimia* Bocourt, 1883. Serpentes: Colubridae.

***Pseudogonatodes*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Gonatodes*, lizard genus due to Fitzinger, 1843 (see). [?]. *Pseudogonatodes* Ruthven, 1915. Sauria: Sphaerodactylidae.

***Pseudoleptodeira*:** G. *pseudos* (ψευδης), false, untrue, mistaken + L. *Leptodeira*, snake genus due to Fitzinger, 1843 (see). [?]. *Pseudoleptodeira* Taylor, 1938. Serpentes: Colubridae.

***Psilops*:** G. *psilos* (ψιλῶς), naked, bare, stripped + G. *ops* (ὄψ, ὤψ), face, eye. ["...Pálpebra ausente..."]. *Psilops* Rodrigues, Recoder, Teixeira Jr, Roscito, Camacho Guerrero, Sales Nunes, Freitas, Silva Fernandes, Bocchiglieri, Dal Vechio, Fortes Leite, Campos Nogueira, Damasceno, Machado Pellegrino, Suzart Argôlo & Amaro, 2017. Sauria: Gymnophthalmidae.

***Psomophis*:** G. *psomos* (ψωμός), a morsel, bit + G. *ophis* (ὄφις), snake, serpent. ["...From the Greek *psomos* (a morsel or bit) + *ophis* (snake), alluding to the minuteness of these snakes, which doubtless are preyed on by many larger animals. Gender masculine..."]. *Psomophis* Myers & Cadle, 1994. Serpentes: Colubridae.

***Psychosaura*:** G. *psyche* (ψυχή), soul + G. *sauros* (σαῦρος), lizard. ["... The generic name (*Psychosaura*) is a feminine noun from the Greek psyche (mind) and *saura* (lizard), meaning "thinking lizard," in allusion to the prominent heads, gracile bodies, and agile, active habits of the species..."]. *Psychosaura* Hed-

ges & Conn, 2012. Sauria: Scincidae.

***Ptychophis*:** G. *ptych* (πτύξ), a fold, leaf, plate + G. *ophis* (ὄφις), a serpent, snake. [?]. *Ptychophis* Gomes, 1915. Serpentes: Colubridae.

***Ranacephala*:** L. *rana,* frog + G. *cephale* (κεφαλή), head. ["...Latin, *rana* for "frog," and Greek , *cephale* for "head." The "Froghead Turtle."..."]. *Ranacephala* McCord, Joseph-Ouni & Lamar, 2001. Testudines: Chelidae.

***Regina*:** L. *regina*, a queen. [?]. *Regina* Baird in Baird & Girard, 1853. Serpentes: Colubridae.

***Rena*:** Presumably after L. *ren* (kidney), apparently in allusion to the kidney color (reddish brown) of the type species. [?]. *Rena* Baird & Girard, 1853. Serpentes: Leptotyphlopidae.

***Rhachidelus*:** G. *rachis* (ῥάχις), backbone, spine + G. *delos* (δῆλος), clear, visible. ["...the scales being in 25 rows, those of the vertebral row distinctly enlarged..."]. *Rhachidelus* Boulenger, 1908. Serpentes: Colubridae.

***Rhachisaurus*:** G. *rachis* (ῥάχις), backbone, spine + G. *sauros* (σαῦρος), lizard. ["...from Greek '*rhachis*', an allusion to 'Espinhaço' (backbone), a single-word reference for the Portuguese noun 'Serra do Espinhaço', an extensive mountain range of eastern Brazil from where most specimens of *Rhachisaurus brachylepis* are known..."]. *Rhachisaurus* Pellegrino, Rodrigues, Yonenaga-Yassuda & Sites, 2001. Sauria: Gymnophthalmidae.

***Rhadinaea*:** G. *rhadinos* (ῥαδινός), slender, taper + L. *-ea*, feminine suffix. ["...The general form is rather more slender..."]. *Rhadinaea* Cope, 1863. Serpentes: Colubridae.

***Rhadinella*:** L. *Rhadinaea,* snake genus due to Cope, 1863 (see) + L. *-ella*, suffix diminutive. ["... From *Rhadinaea* it differs in its smaller size, short tail..."]. *Rhadinella* Smith, 1941. Serpentes: Colubridae.

***Rhadinophanes*:** G. *rhadinos* (ῥαδινός), slender, taper + G. *phaino* (φαίνω), show, cause to appear. ["...From the Greek ῥαδινός (=*rhadinos*, slender, graceful) + the suffix φανες (=*phanes*, appearing), alluding both to the slenderness of the type species and to its superficial similarity to *Rhadinaea* and *Coniophanes*. Gender masculine..."]. *Rhadinophanes* Myers &

Campbell, 1981. Serpentes: Colubridae.

***Rheosaurus*:** G. *rheo (ῥέω)*, flow, stream + G. *sauros* (σαῦρος), lizard. ["...The genus name *Rheosaurus* (gender masculine) is derived from the Greek ρέω, *rheo* (flow or stream) and σαύρα, *saura* (lizard), in reference to the riparian habit of this lizard..."]. *Rheosaurus* Vásquez-Restrepo, Ibáñez, Sánchez-Pacheco & Daza, 2019. Sauria: Gymnophthalmidae.

***Rhinemys*:** G. *rhinos* (ῥινός, genitive of ῥίς), nose, snout + G. *emys* (ἐμῦς), freshwater tortoise. ["...Ῥίς nasus, et ἐμῦς testudo..."]. *Rhinemys* Wagler, 1830. Testudines: Chelidae.

***Rhineura*:** G. *rhin* (ῥίνη), file, rasp + G. *oura* (οὐρά), tail. ["...It differed from both (and *Lepidosternum*) in the depressed, superiorly tuberculous tail..."]. *Rhineura* Cope, 1861. Sauria: Rhineuridae.

***Rhinobothryum*:** G. *rhinos* (ῥινός, genitive of ῥίς), nose, snout + G. *bothryon* (βοθρίον), small trench. ["...ῥίς nasus, *βοθρίον*, fovea..."]. *Rhinobothryum* Wagler, 1830. Serpentes: Colubridae.

***Rhinocheilus*:** G. *rhinos* (ῥινός, genitive of ῥίς), nose, snout + G. *cheilos* (χείλος), lip. ["...Head subelliptical, pointed on the snout..."]. *Rhinocheilus* Baird & Girard, 1853. Serpentes: Colubridae.

***Rhinoclemmys*:** G. *rhinos* (ῥινός, genitive of ῥίς), nose, snout + G. *clemmys* (κλεμμύς), tortoise. ["... Nasus protractus..."]. *Rhinoclemmys* Fitzinger, 1836. Testudines: Geoemydidae.

***Riama*:** Unknown. *Riama* Gray, 1858. Sauria: Gymnophthalmidae.

***Riolama*:** Pemon-like name, *Riolama* is a fictional locality in the novel Green Mansions, by William Henry Hudson. ["...Riolama was the name and home of Rima, who inhabited another isolated mountain of northern South America in W. H. Hudson's Green Mansions..."]. *Riolama* Uzzell, 1973. Sauria: Gymnophthalmidae.

***Rodriguesophis*:** P. Rodrigues, a family name + G. *ophis* (ὄφις), a serpent, snake. Honouring Miguel Trefaut Urbano Rodrigues (1953-) Brazilian herpetologist. *Rodriguesophis* Zaher, Grazziotin, Murphy, Scrocchi, Benavides, Zhang & Bonatto, 2012. Serpentes: Colubridae.

***Rondonops*:** P. Rondon, a family name + L. *ops*, power, might; influence: Honouring Cândido Mariano da Silva Rondon (1865-1958), Brazilian military officer and explorer. *Rondonops* Colli, Hoogmoed, Cannatella, Cassimiro, Gomes, Ghellere, Sales Nunes, Pellegrino, Salerno, Marques de Souza & Rodrigues, 2015. Sauria: Gymnophthalmidae.

***Salvadora*:** Unknown. There are several theories about the origin of this name. Perhaps from S. Salvadora, or L. *salvator*, savior + L. *adora*, honor, an explicit homage to the collector of the type species *S. grahamiae*, Col. J.D. Graham (fide Hernández-Jiménez et al. 2021). Alternatively, from L. *salvos*, sound or well preserved + L. *dura*, tough or outer covering, in reference to the smooth, tough skin. *Salvadora* Baird in Baird & Girard, 1853. Serpentes: Colubridae.

***Salvator*:** L. *salvator*, savior; latinization of the French *Sauvegarde*. ["...Ve Genre SAUVEGARDE..."]. *Salvator* Duméril & Bibron, 1839. Sauria: Teiidae.

***Saphenophis*:** G. *saphenes* (σαφηνής), the plain truth + G. *ophis* (ὄφις), a serpent, snake. ["... From the G. saphenes (evident truth, clear) + *ophis* (a serpent), meaning 'clearly a snake'..."]. *Saphenophis* Myers, 1973. Serpentes: Colubridae.

***Sauromalus*:** G. *saura* (σαύρα), lizard + G. *omalos* (ὁμαλός), even, level. ["...L'un des caractères remarquables de ce genre se tire de l'aplatissement du tronc, d'où le nom par lequel je propose de le désigner et qui est formé des mots grecs σαῦρος, lézard, et ὁμαλός, plat..."]. *Sauromalus* Duméril, 1856. Sauria: Iguanidae.

***Scaphiodontophis*:** G. *scapheion* (σκαφεῖον), spade, hoe, mattock + G. *odontotos* (οδοντωτος), furnished with teeth + G. *ophis* (ὄφις), a serpent, snake. ["...Maxillary teeth numerous (more than 50), the teeth scaphoid or spatulate..."]. *Scaphiodontophis* Taylor & Smith, 1943. Serpentes: Colubridae.

***Sceloporus*:** G. *scelos* (σκέλος), leg + G. *poros* (πόρος), pore; crossing-place. ["...pori femorales magni..."]. *Sceloporus* Wiegmann, 1828. Sauria: Phrynosomatidae.

***Scincella*:** L. *Scincus*, lizard genus due to Laurenti (1768) + L. *–ella*, diminutive suffix. ["...Small scincid lizards..."]. *Scincella* Mittleman, 1950. Sauria: Scincidae.

***Scolecophis*:** G. *scolex* (σκώληξ), a worm + G. *ophis* (ὄφις), a serpent, snake. [?]. *Scolecophis* Fitzinger, 1843. Serpentes: Colubridae.

***Scriptosaura*:** L. *scriptor*, writer, author; scribe + L. *saura* (from G. σαύρα), lizard. ["...From the Latin "*scriptor*" = writer, and "*saura*" = lizard in reference to the sand tracks left by this sand swimming species. The tracks are in the origin of its popular name (escrivão = public writer) which is also attributed to other similar sand swimming lizards like those of the related genera *Calyptommatus* and *Nothobachia*...."]. *Scriptosaura* Rodrigues & Maranhão dos Santos, 2008. Sauria: Gymnophthalmidae.

***Selvasaura*:** S. *selva*, forest + G. *saura* (σαύρα), lizard. ["...The generic name *Selvasaura* is derived from the Spanish noun '*selva*' (forest) and the Greek noun σαύρα (lizard; *saura* is the feminine form) and refers to the habitat (montane rainforest) of the type species..."]. *Selvasaura* Moravec, Šmid, Štundl & Lehr, 2018. Sauria: Gymnophthalmidae.

***Seminatrix*:** L. *semi-*, half, partly + L. *Natrix*, snake genus due to Laurenti, 1768. ["...An examination of the penial structure shows that the reference to the Natricinæ is correct. The other characters differ, however, from those of the genus *Natrix*, so that it appears to be necessary to refer it to a new genus..."]. *Seminatrix* Cope, 1895. Serpentes: Colubridae.

***Senticolis*:** L. *sentis*, a thorn, thornbush, brier, bramble + L. *colis*, penis. ["...The name *Senticolis* is from the Latin *sentis*, a thorn or bramble, and *colis*, a penis, in reference to the large spines on the hemipenis-perhaps the most distinctive morphological feature of this genus..."]. *Senticolis* Dowling & Fries, 1986. Serpentes: Colubridae.

***Siagonodon*:** G. *siagon* (σιαγών), jawbone, jaw + G. *odon* (ὀδών), tooth; anything pointed. [?]. *Siagonodon* Peters, 1881. Serpentes: Leptotyphlopidae.

***Sibon*:** L. *sibina,* or G. *σιβύνη*, a hunting spear, a spear, pike. [?]. *Sibon* Fitzinger, 1826. Serpentes: Colubridae.

***Siderolamprus*:** G. *sideros* (σίδηρος), iron + G. *lampros* (λαμπρός), bright, brilliant, radiant. [?]. *Siderolamprus* Cope, 1861. Sauria: Diploglossidae.

***Simophis*:** G. *simos* (σιμός), snub-nosed, flat-nosed G. *ophis* (ὄφις), a serpent, snake. ["...σιμός, ὄφις..."]. *Simophis* Peters, 1860. Serpentes: Colubridae.

***Siphlophis*:** G. *siphlos* (σιφλός). , crippled, maimed G. *ophis* (ὄφις), a serpent, snake. [?]. *Siphlophis* Fitzinger, 1843. Serpentes: Colubridae.

***Sistrurus*:** G. *seistron* (σεῖστρον), rattle + G. *oura* (οὐρᾷ), tail. ["... The name proposed for the species grouped under *Crotalophorus* of Gray, Holbrook, and others, but not of Linné or Gronow, is *Sistrurus* (σεῖστρον, a rattle)..."]. *Sistrurus* Garman, 1884. Serpentes: Viperidae.

Sonora: S. Sonora, a state in NW Mexico. ["...Sonora, Mex. ..."]. *Sonora* Baird & Girard, 1853. Serpentes: Colubridae.

***Sordellina*:** Sordelli, a family name + L. *-ina*, feminine suffix sometimes with diminutive implications. Honouring Ferdinando Sordelli (1837-1916), Italian botanist and herpetologist. *Sordellina* Procter, 1923. Serpentes: Colubridae.

***Sphaerodactylus*:** G. *sphaira* (σφαίρα), any globe, sphere + G. *dactylos* (δάκτυλος), finger, toe. ["...Digiti simplices in discum, subtus laevem, integrum..."]. *Sphaerodactylus* Wagler, 1830. Sauria: Sphaerodactylidae.

***Sphenomorphus*:** G. *sphenos* (σφηνός), wedge + G. *morpha* (μορφά), bodily form, build. [?]. *Sphenomorphus* Fitzinger, 1843. Sauria: Scincidae.

***Spilotes*:** G. *spilos* (σπίλος), a spot, stain + G. *-otes* (-οτης), suffix often used in Greek to form adjectives or nouns that denote a characteristic or association. ["...Fleckennatter..."]. *Spilotes* Wagler, 1830. Serpentes: Colubridae.

***Staurotypus*:** G. *stauros* (σταυρός), cross, as the instrument of crucifixion + G. *typos* (τύπος), form, shape. ["...Kreuzemyde ... Σταυροτυπυς crucis formam gerens..."]. *Staurotypus* Wagler, 1830. Testudines: Kinosternidae.

***Stenocercus*:** G. *steno* (στενο), narrow, tight + G. *cercos* (κέρκος) tail. ["...de grandes écailles épineuses verticillées le long de la queue qui est comprimée..."]. *Stenocercus* Duméril & Bibron, 1837. Sauria: Tropiduridae.

***Stenolepis*:** G. *steno* (στενο), narrow, tight + G. *lepis* (λεπίς), a scale. ["... Dorsal and lateral scales equal, hexagonal-lanceolate, keeled, imbricate, arranged in regular transverse series..."]. *Stenolepis* Boulenger, 1887. Sauria: Gymnophthalmidae.

***Stenorrhina*:** G. *steno* (στενο), narrow, tight + G. *rhinos* (ρινός), from (ρῑς), nose. ["... Orifices des narines percés dans une seule plaque..."]. *Stenorrhina* Duméril, 1853. Serpentes: Colubridae.

***Sternotherus*:** G. *sternon* (στέρνον), breast, chest + *thairos* (θαιρός), hinge or pivot of a door. ["...the anterior lobe moveable, separated by a transverse ligamentous hinge..."]. *Sternotherus* Gray, 1825. Testudines: Kinosternidae.

***Storeria*:** Storer, a family name + L. *-ia*, or G. -ια, suffix denoting pertaining to. Honouring David Humphreys Storer (1804-1891), US American physician and naturalist. *Storeria* Baird & Girard, 1853. Serpentes: Colubridae.

***Strobilurus*:** G. *strobilos* (στροβιλός), spinning, whirling + G. *oura* (οὐρᾷ), tail. ["...*Cauda mediocris, compressiuscula, squamis maximis, carinatis, imbricatis, spiniferis*..."]. *Strobilurus* Wiegmann, 1834. Sauria: Tropiduridae.

***Symphimus*:** G. *symphyas* (συμφυάς), a growing together, connexion by natural growth + G. *-imos* (-ιμος), pertaining to, having the quality of. ["...cephalic plates normal except that the internasals are confluent with the nasal, and the latter with each other and with the loreal..."]. *Symphimus* Cope, 1869. Serpentes: Colubridae.

***Sympholis*:** G. *syn* (σὺν), in company with, together with + G. *pholis* (φολίς), horny scale. ["...its nasal confluent with with the first superior labial..."]. *Sympholis* Cope, 1861. Serpentes: Colubridae.

***Synophis*:** G. *syn* (σὺν), together; denoting joining, union, contact, proximity + G. *ophis* (ὄφις), a serpent, snake. ["...prefrontali uniti in un largo scudetto..."]. *Synophis* Peracca, 1896. Serpentes: Colubridae.

***Tachymenis*:** G. *tachys* (ταχύς), quick, swift + G. *menis* (μῆνις), wrath, anger. [?]. *Tachymenis* Wiegmann, 1835. Serpentes: Colubridae.

***Tachymenoides*:** L. *Tachymenis*, snake genus due to Wiegmann, 1835 (see) + L. *oides*, resembling, having the form of. ["...the suffix –*oides* (Greek: "similar," "likeliness") indicates the historical proximity of this

taxon to *Tachymenis*, in reference to the type species description...”]. *Tachymenoides* Trevine, Grazziotin, Giraudo, Sallesbery-Pinchera, Vianna & Zaher, 2022. Serpentes: Colubridae.

***Taeniophallus*:** L. *taenia*, a band, hair-band, ribbon, fillet + L. *phallus,* from G. φαλλός, membrum virile, phallus. [?]. *Taeniophallus* Cope, 1895. Serpentes: Colubridae.

***Tantalophis*:** G. *Tantalos* (Τάνταλος), king of Phrygia, ancestor of the Pelopidae + G. *ophis* (ὄφις), a serpent, snake. [“...The generic name comes from the Greek Τάνταλος, a mythological character symbolic of eternal torment, and from the Greek ὄφις for snake...”]. *Tantalophis* Duellman, 1958. Serpentes: Colubridae.

***Tantilla*:** L. *tantillus*, so little a thing, such a little thing. [?]. *Tantilla* Baird & Girard, 1853. Serpentes: Colubridae.

***Tantillita*:** L. *tantillita*, diminutive of *tantillus*, so small. [“...size small; tail relatively short...”]. *Tantillita* Smith, 1940. Serpentes: Colubridae.

***Tarentola*:** Ancient I. *tarantola*, salamander, from *Tarentum* (today Taranto), a city port of Greek origin on the coast of southern Italy. [?]. *Tarentola* Gray, 1825. Sauria: Phyllodactylidae.

***Teius*:** T., Gu. *teyu*, lizard. [“...Teju...”]. *Teius* Merrem, 1820. Sauria: Teiidae.

***Terrapene*:** E. *terrapene,* from Powhatan (Pw.) *torope*, variety of turtle. [“...Terrapine...”]. *Terrapene* Merrem, 1820. Testudines: Emydidae.

***Thamnodynastes*:** G. *thamnos* (θάμνος), bush, thicket, shrub + G. *dynastes* (δυναστής), a lord, master, ruler. [“...θάμνος frutex, et δυνασ[τ]. ής dominus...”]. *Thamnodynastes* Wagler, 1830. Serpentes: Colubridae.

***Thamnophis*:** G. *thamnos* (θάμνος), bush, thicket, shrub + G. *ophis* (ὄφις), a serpent, snake. [?]. *Thamnophis* Fitzinger, 1843. Serpentes: Colubridae.

***Thecadactylus*:** G. *theca* (θήκη) case, chest + G. *dactylos* (δάκτυλος), finger, toe. [“...Zehen ihrer ganzen Länge nach vor gleicher Breite. Die Sohlenscheiben durch eine tiefe Längsfurche getheilt, in welche sich die Nägel zurücklegen...”]. *Thecadactylus* Goldfuss, 1820. Sauria: Phyllodactylidae.

***Tomodon*:** G. *tomos* (τόμος), a cut, slice + G. *odon* (ὀδών), tooth; anything pointed. ["...dents cannelées encore plus longues..."]. *Tomodon* Duméril, 1853. Serpentes: Colubridae.

***Trachemys*:** G. *trachys* (τραχύς), jagged, rough, harsh, savage + G. *emys* (ἐμύς), freshwater tortoise. ["...and, finally, longitudinal ridges and rugosities prevail upon the scales..."]. *Trachemys* Agassiz, 1857. Testudines: Emydidae.

***Trachylepis*:** G. *trachys* (τραχύς), jagged, rough, harsh, savage + G. *lepis* (λεπίς), a scale. [?]. *Trachylepis* Fitzinger, 1843. Sauria: Scincidae.

***Tretanorhinus*:** G. *tretos* (τρητός), perforated, with a hole in it + G. *ano* (ἄνω), upwards, high above+ G. *rhinos* (ῥινός, genitive of ῥίς), nose, snout. ["...De *Τρητός*, percé, perforatus, ἄνω en dessus, *superne,* et ῥίν nez, *nasus*. Narines percées au dessus du museau..."]. *Tretanorhinus* Duméril, Bibron & Duméril, 1854. Serpentes: Colubridae.

***Tretioscincus*:** G. *tretos* (τρητός), perforated, with a hole in it + L. *Scincus*, lizard genus due to Laurenti, 1768 (see). ["...The discovery of this little lizard is particularly interesting, as exhibiting femoral pores for the first time among the Scincidae..."]. *Tretioscincus* Cope, 1862. Sauria: Gymnophthalmidae.

***Trilepida*:** G. *tri-* (τρι᾽), three + G. *lepidos* (λεπίδος) a scale. ["...I propose the new generic name *Trilepida* (from classical Greek; feminine; "three scales") to continue allusion to the character (presence of three supralabials) which is useful—in combination with other traits (brown or pale brown venter, usually 10 midtail scales, moderate anterior supralabials)—in diagnosing the group..."]. *Trilepida* Hedges, 2011. Serpentes: Leptotyphlopidae.

***Trimetopon*:** G. *tri-* (τρι᾽), three + G. *metopon* (μέτωπον), the space between the eyes, the brow, forehead. ["...Two internasals; one prefrontal plate..."]. *Trimetopon* Cope, 1885. Serpentes: Colubridae.

***Trimorphodon*:** G. *tri-* (τρι᾽), three + G. *morpha* (μορφά), bodily form, build + G. *odon* (ὀδών), tooth; anything pointed. ["...Posterior superior maxillary tooth separate, grooved ; median teeth small ; anterior elongate, spaced..."]. *Trimorphodon* Cope, 1861. Serpentes: Colubridae.

***Trioceros*:** G. *tri-* (τριˈ), three + G. *ceras* (κέρας), the horn of an animal. ["...General structure of Chamelion; but there are three long conical slightly curved horns, pointing forwards, before the eyes..."]. *Trioceros* Swainson, 1839. Sauria: Chamaeleonidae.

***Tropidoclonion*:** G. *tropizo* (τροπίζω), furnish with a keel + G. *clonion* (κλωνίον, diminutive of κλών), a twig, spray. [?]. *Tropidoclonion* Cope, 1860. Serpentes: Colubridae.

***Tropidodipsas*:** G. *tropizo* (τροπίζω), furnish with a keel + L. *Dipsas*, a snake genus due to Laurenti, 1768 (see). ["...scales moderate, keeled, in seventeen rows..."]. *Tropidodipsas* Günther, 1858. Serpentes: Colubridae.

***Tropidodryas*:** G. *tropizo* (τροπίζω), furnish with a keel + G. *dryas* (δρυάς), (ref. to a nymph) inhabitant of trees. [?]. *Tropidodryas* Fitzinger, 1843. Serpentes: Colubridae.

***Tropidophis*:** G. *tropizo* (τροπίζω), furnish with a keel + G. *ophis* (ὄφις), a serpent, snake. ["...Le nom de *Tropidophis*, formé des mots grecs Τρόπις ἰδός carène, ὄφις serpent, rappellera que le nouveau genre d'Ophidiens auquel nous l'appliquons a chacune des pièces de son écaillure relevée d'une petite saillie longitudinale..."]. *Tropidophis* Bibron, 1840. Serpentes: Tropidophiidae.

***Tropidurus*:** G. *tropizo* (τροπίζω), furnish with a keel + G. *oura* (οὐρᾷ), tail. ["...Kielschwanz..."]. *Tropidurus* Wied, 1824. Sauria: Tropiduridae.

***Tupinambis*:** P. *Tupinambis*, misinterpretation of the reference to the language spoken by the Tupinambá, an indigenous group from South America established on the coasts of present-day Brazil, as mentioned in Marcgravius (1648), when referring to the *teiu guaçu*, "...*Teivgvacv & Temapara Tupinambis: Lacertus egregius*... "[?]. *Tupinambis* Daudin, 1802. Sauria: Teiidae.

***Typhlophis*:** G. *typhlos* (τυφλός), blind + G. *ophis* (ὄφις), a serpent, snake. [?]. *Typhlophis* Fitzinger, 1843. Serpentes: Anomalepididae.

***Uma*:** Apparently named after the Yuma Native American group, fide Beltz 2006. *Uma* Baird, 1858. Sauria: Phrynosomatidae.

***Ungaliophis*:** L. *Ungalia*, Boidae genus now considered a synonym

of *Tropidophis* (in turn, from L. *unguis*, claw, in reference to the spur-like pericloacal structures, representing vestigial hind limbs) + G. *ophis* (ὄφις), a serpent, snake. ["...Wenn nun auch die bis jetzt angenommene Diagnose des genus Ungalia in diesem Sinne erweitert werden kann und muss, so sind doch bei unserm Stück aus Guatemala die Veränderungen der Pholidose (und auch die Vermehrung der ventralia) zu ausgiebige, als dass dasselbe im genus Ungalia Platz fände..."]. *Ungaliophis* Müller, 1880. Serpentes: Boidae.

***Uracentron*:** G. *oura* (οὐρᾷ), tail + G. *centron* (κέντρον), sharp point, goad, sting. ["...Les fouettes-queue..."]. *Uracentron* Kaup, 1826. Sauria: Tropiduridae.

***Uranoscodon*:** G. *ouranos* (οὐρανός), celestial vault; by ext., mouth palate + G. *odon* (ὀδών), tooth; anything pointed. ["... eine eigene Gattung, die zu den Iguanartigen Thieren gehört, welche Gruppe sich durch dicke, weiche Zungen, feine angefügte Zähnchen und Gaumenzähne bezeichnet..."]. *Uranoscodon* Kaup, 1825. Sauria: Tropiduridae.

***Urosaurus*:** G. *oura* (οὐρᾷ), tail + G. *sauros* (σαῦρος), lizard. ["...tail very long and tapering, verticillate..."]. *Urosaurus* Hallowell, 1854. Sauria: Phrynosomatidae.

***Urostrophus*:** G. *oura (οὐρᾷ), tail* + *G. strophos* (στρόφος), a twisted band or cord. ["...Ce nom est emprunté à deux mots grecs, qui signifient queue contournée, de *Οὐρᾷ*, queue, cauda, et de *στρόφος* contourné, *contortus, involutus*..."]. *Urostrophus* Duméril & Bibron, 1837. Sauria: Leiosauridae.

***Urotheca*:** G. *oura* (οὐρᾷ), tail + G. *theca* (θήκη), case, chest. ["...cola tan ancha como el tronco en su nacimiento y mui poco estrechada en su extremo..."]. *Urotheca* Bibron, 1843. Serpentes: Colubridae.

***Uta*:** Named after the state of Utah, fide Beltz 2006. *Uta* Baird & Girard, 1852. Sauria: Phrynosomatidae.

***Vanzosaura*:** P. Vanzo, apocope of the family name Vanzolini, used as a nickname + G. *saura* (σαύρα), lizard. Honouring Paulo Emilio Vanzolini (1924-2013), Brazilian herpetologist. *Vanzosaura* Rodrigues, 1991. Sauria: Gymnophthalmidae.

***Varzea*:** P. várzea, a seasonally flooded forest or wetland in the Amazon region, which is periodically inundated by river waters. ["...The generic name (Varzea) is a feminine

noun, from the Portugese várzea (a pre-Roman word, Iberian in origin) meaning "flooded river bank," in allusion to the apparent preferred habitat of these species..."]. *Varzea* Hedges & Conn, 2012. Sauria: Scincidae.

***Virginia*:** SL, Virginia, a given name (fem.); also, an US American state. [?].*Virginia* Baird & Girard, 1853. Serpentes: Colubridae.

***Wilsonosaura*:** Wilson, a family name + G. *saura* (σαύρα), lizard. Honouring Edward Osborne Wilson (1929-2021), US American biologist. *Wilsonosaura* Lehr, Moravec, Lundberg, Köhler, Catenazzi & Šmíd, 2019. Sauria: Gymnophthalmidae.

***Xantusia*:** Xántus, a family name + L. *-ia*, or G. -ια, suffix denoting pertaining to. Honouring Xántus János (a.k.a. John Xantus de Vesey, 1825-1894), Hungarian-born naturalist active in the United States of America. *Xantusia* Baird, 1859. Sauria: Xantusiidae.

***Xenodon*:** G. *xenos* (ξένος), stranger, foreigner + G. *odon* (ὀδών), tooth; anything pointed. ["...*Χενος* inusitatus, et ὀδώς. H. Boie Isis 1827. p. 230..."]. *Xenodon* Boie, 1826. Serpentes: Colubridae.

***Xenopholis*:** G. *xenos* (ξένος), stranger, foreigner + G. *pholis* (φολίς), horny scale. ["...sehr grosses Anteorbitale..."]. *Xenopholis* Peters, 1869. Serpentes: Colubridae.

***Xenosaurus*:** G. *xenos* (ξένος), stranger, foreigner + G. *sauros* (σαῦρος), lizard. ["...Diese merkwürdige Gattung stimmt durch die Bildung der Zunge, wenn sie auch merklich flacher ist, am meisten mit den Iguanen, namentlich mit *Cyclura* überein, während die Form der Zähne und die obere Körperbekleidung mehr an die Geckonen, die Bekleidung des Bauches und des Schwanzes an die Varanen erinnert..."]. *Xenosaurus* Peters, 1861. Sauria: Xenosauridae.

***Xenoxybelis*:** G. *xenos* (ξένος), stranger, foreigner + L. *Oxybelis*, snake genus due to Wagler, 1830. [?]. *Xenoxybelis* Machado, 1993. Serpentes: Colubridae.

***Yanomamia*:** Y. *yanõmami thëpë*, human beings, native American culture established beween nowadays Venezuela and Brazil + L. *-ia*, or G. -ια, suffix denoting pertaining to. ["...The generic name, feminine, is a homage to the Yanomami Indians and their lands which largely coincide with the Tepui area, the highland region of the Guiana Shield

inhabited by these lizards...”]. *Yanomamia* Machado- Pellegrino, Brunes, Souza, Laguna, Ávila-Pires, Hoogmoed & Rodrigues, 2018. Sauria: Gymnophthalmidae.

***Zonateres*:** L. *zona*, encircling band/marking + L. *teres*, smooth, polished, elegant. [“...The generic epithet derives from the junction of the Latin noun “*zona*” (belt or waistband) and the adjective “*teres*” (smooth, elegant, or polished), in reference to the characteristic naked belt that separates the body and base of the hemipenis of the type species...”]. *Zonateres* Trevine, Grazziotin, Giraudo, Sallesbery-Pinchera, Vianna & Zaher, 2022. Serpentes: Colubridae.

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Notícias de Conservação

Planos Estratégicos de Conservação de Anfíbios (PECAn): um novo passo do ASG Brasil para a conservação de anfíbios ameaçados do país

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Em 2023, o Grupo de Especialistas em Anfíbios do Brasil (ASG Brasil/IUCN SSC) avançou significativamente em sua missão de promover a conservação de anfíbios em todo o país. Esse avanço foi impulsionado pela elaboração de Planos Estratégicos de Conservação de Anfíbios (PECAns), direcionados a espécies ameaçadas que necessitam ações imediatas para evitar sua extinção em curto prazo. Essas espécies foram identificadas durante o *workshop* "*Conservation Needs Assessments*" (CNA), realizado virtualmente em 2020, o qual avaliou 67 espécies de anfíbios brasileiros ameaçados (Lisboa et al., 2021). Dentre elas, 13 espécies foram classificadas como "altamente prioritárias" por necessitarem tanto de ações *in situ* quanto de resgate para manejo *ex situ* (Johnson & Carrillo, 2022). O objetivo do ASG Brasil é assegurar que para cada uma destas espécies seja elaborado um PECAn. Esse plano será desenvolvido em colaboração com todos os envolvidos que desempenham um papel importante na conservação da espécie em questão. Essa abordagem busca garantir que todas as ações sejam criteriosamente planejadas, direcionadas de forma objetiva e integradas em um plano de conservação unificado, evitando a desconexão de esforços e promovendo uma abordagem coordenada e eficaz.

Para dar início a esses planos, foram selecionadas duas das 13 espécies "altamente prioritárias": *Nyctimantis pomba,* encontrada em Minas Gerais, e Pithecopus rusticus, em Santa Catarina, ambas já alvo de ações de conservação em andamento. Essas espécies compartilham contextos semelhantes, tanto em relação ao microendemismo quanto às ameaças que enfrentam. Por isso, a elaboração de seus planos foi conduzida simultaneamente, aproveitando a experiência adquirida com uma espécie para orientar o desenvolvimento do plano da outra. Além disso, a presença de atores em comum para ambas as espécies facilitou a elaboração de ambos os planos.

A elaboração dos PECAns para essas duas espécies foi realizada por meio de uma oficina remota. Ao longo de sete encontros, realizados entre 4 de agosto e 13 de outubro de 2022, e com duração média de quatro horas cada, os participantes discutiram diversos aspectos cruciais à conservação dessas espécies. A organização da oficina foi conduzida pelos membros do ASG Brasil, com o apoio dos pesquisadores Clodoaldo Lopes de Assis (UFV) e Elaine Maria Lucas (UFSM), além do coordenador de treinamento da Amphibian Ark, Luis Carrillo. Quarenta e quatro atores de diferentes instituições, entre universidades, zoológicos, associações, órgãos municipais, estaduais, governamentais e não-governamentais, participaram da oficina, contribuindo para a elaboração do plano de uma ou de ambas as espé-

cies. Cada encontro abordou temas específicos, como redução das lacunas de conhecimento sobre as espécies e seus hábitats; identificação, caracterização e mitigação de ameaças, e estratégias de comunicação e sensibilização para a conservação das espécies.

Após a conclusão da oficina, a equipe do ASG Brasil consolidou todas as colaborações e informações discutidas nos encontros. A redação dos dois PECAns pelo ASG Brasil contou com o apoio e revisão do pesquisador Clodoaldo Lopes de Assis para o PECAN da *N. pomba* e das pesquisadoras Elaine Maria Lucas e Veluma De Bastiani (Unochapecó) para o PECAn da *P. rusticus*. Além disso, os participantes envolvidos nos encontros puderam contribuir com a revisão final do documento.

Os PECAns da *N. pomba e da P. rusticus* foram oficialmente publicados em maio e novembro de 2023, respectivamente. Ambos os planos têm período de vigência de cinco anos, abrangendo o período entre 2023 a 2028. Após este período, novas oficinas para monitoria e revisão das ações propostas nos planos serão realizadas. Estamos confiantes de que os PECAns serão ferramentas essenciais para o direcionamento preciso de atividades de conservação, desempenhando um papel relevante na redução do risco de ameaça enfrentado pelas espécies de anfíbios brasileiros.

Os planos podem ser acessados clicando nos links ou pelos QR codes abaixo:

https://www.iucn-amphibians.org/wp-content/uploads/2023/05/Plano-Estrategico-de-Conservacao-de-Anfibios-%E2%80%94-Nyctimantis-pomba.pdf

https://www.iucn-amphibians.org/wp-content/uploads/2023/11/Plano-estrategico-de-conservacao-Pithecopus-rusticus.pdf

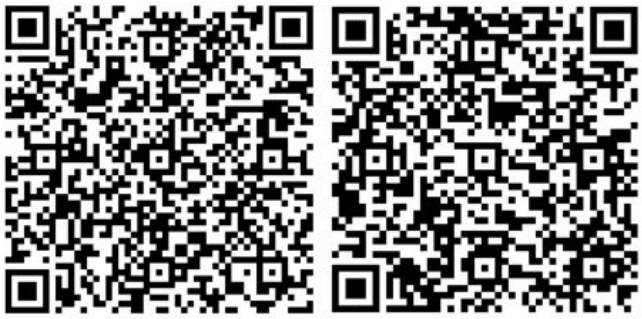

Figura 1. QR Codes para acesso aos PECAns. **A)** *Nyctimantis pomba* **B)** *Pithecopus rusticus*.

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Johnson K., Carrillo L. 2022. Amphibian Conservation Needs Assessments. *WAZA News* 1:13–16.

Lisboa C.S., Oswald C.B., Serrano J., Ramalho Q., Vaz R.I., Machado I.F. 2021. Using Conservation Needs Assessments to Develop Conservation Action Plans for Brazilian Amphibians. *AArk Newsletter 56:19–20.*



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Trabalhos recentes

Silva-Santos, M.L., Cascon, P., Passos, D.C. 2024. **Wet creatures in a warming world: How climate change will impact the future distribution of anuran amphibians from Brazilian semiarid region?** *Journal for Nature Conservation*. 82: 126710.

A mudança climática refere-se a alterações de longo prazo na temperatura e nos padrões climáticos do planeta que, embora possam ocorrer devido a causas naturais, têm sido aceleradas por ações humanas e estão provocando mudanças no clima global. Atualmente, presume-se que a mudança climática afeta mais de 10.000 espécies na Lista Vermelha de Espécies Ameaçadas da IUCN, aumentando ainda mais suas vulnerabilidades. Entre todos os vertebrados, os anfíbios são os mais vulneráveis e suscetíveis aos impactos da crise climática. Apesar de serem adaptados ao ambiente terrestre, a maioria das espécies de anuros ainda depende de fontes de água do ambiente para completar seu ciclo de vida, além da troca gasosa através da pele. Além disso, são ectotérmicos, o que torna suas atividades diárias altamente dependentes das temperaturas ambientais e, geralmente, apresentam baixa capacidade de dispersão para evitar habitats inadequados.

Considerando a escassez de estudos e a divergência de resultados sobre o impacto da crise climática nos anuros do domínio da Caatinga, este estudo tem como objetivo comparar a influência da mudança climática na distribuição geográfica entre espécies de anuros com ocorrência restrita à região semiárida brasileira (Caatinga) e espécies estreitamente relacionadas com ampla distribuição. Para isso, os autores selecionaram pares de espécies congêneres das famílias de anuros com maior riqueza na Caatinga (Hylidae, Leptodactylidae e Odontophrynidae), sendo uma endêmica e a outra com ocorrência na Caatinga e em biomas vizinhos (Cerrado, Mata Atlântica e Amazônia). Em seguida, realizaram a modelagem de nicho ecológico de cada espécie, gerando distribuições potenciais para o presente e quatro cenários futuros, com base em variáveis bioclimáticas do WordClim. Diante de precedentes na literatura, testaram a hipótese de que a mudança climática seria mais prejudicial para espécies de distribuição restrita do que para aquelas de ampla distribuição.

Os resultados revelaram que a adequação climática não diferiu entre as

condições climáticas atuais e aquelas esperadas para 2050 e 2090, nem entre espécies com distribuição restrita à Caatinga e espécies amplamente distribuídas. Por outro lado, ao contrário das previsões dos autores, enquanto as espécies de ampla distribuição tenderiam a retrair sua área de ocorrência no futuro, as espécies de distribuição restrita tenderiam a expandir seus alcances. Esses resultados sugerem que espécies com distribuição restrita ao bioma Caatinga podem ser relativamente favorecidas pelas mudanças climáticas previstas para os próximos 80 anos. No entanto, esse resultado deve ser interpretado com muita cautela, pois muitos requisitos ecológicos e de conservação precisam ser garantidos para que essas previsões realmente se concretizem.

Esses resultados reforçam a necessidade de ações de conservação mais eficazes, além da intensificação de estudos sobre as ameaças à biodiversidade da Caatinga. Em conclusão, este estudo contribuiu para a compreensão dos efeitos das mudanças climáticas em táxons estreitamente relacionados, com diferentes padrões de distribuição, revelando particularidades dos anfíbios anuros que ocorrem em ambientes semiáridos em resposta às mudanças climáticas previstas para este século.

Editora: Daniela Pareja-Mejia



Aquarela
Eduardo Lira dos Santos - @lirarts18
Phyllomedusa burmeisteri

Kono, I. S., Pandolfi, V. C. F., de Marchi, M. N. A., Freitas, N., Freire, R. L. 2024. **Unveiling the secrets of snakes: Analysis of environmental, socioeconomic, and spatial factors associated with snakebite risk in Paraná, Southern Brazil.** Toxicon. 237: 107552.

O Paraná é reconhecido como um dos estados brasileiros que possui uma diversidade significativa de espécies e subespécies de serpentes, com 114 descrições documentadas das 412 identificadas no Brasil. No entanto, o número real pode ser ainda maior, dado que o estado faz parte do bioma Mata Atlântica, considerado um dos mais biodiversos do mundo, e devido a lacunas substanciais no conhecimento sobre a composição da fauna de serpentes no Paraná. Embora o número de espécies e subespécies de serpentes tenha grande importância no Paraná, apenas algumas são consideradas relevantes para a saúde pública e pertencem às famílias de serpentes venenosas Elapidae e Viperidae, especificamente dos gêneros *Bothrops*, *Crotalus* e *Micrurus*.

As mordidas de serpente podem causar sérias complicações de saúde, conhecidas como ofidismo ou envenenamento por mordida de serpente, e representam o maior percentual de mortes por animais venenosos no Paraná e no Brasil. Apesar do Paraná abrigar um dos quatro centros nacionais de produção de soro antiveneno do Brasil, o CPPI – Centro de Produção e Pesquisa de Imunobiológicos, a alocação dessa intervenção terapêutica é influenciada pela distribuição espacial dos incidentes de mordida de serpente. Consequentemente, há uma necessidade urgente de identificar áreas e fatores associados ao risco de ofidismo. Compreender a epidemiologia dos acidentes fornece dados para o delineamento de um perfil epidemiológico, auxiliando as autoridades de saúde na tomada de decisões e direcionando medidas e políticas de prevenção mais focadas nos grupos de alto risco. Portanto, este estudo teve como objetivo investigar os fatores de risco associados às mordidas de serpente no Paraná, sul do Brasil.

Os autores coletaram dados sobre acidentes de mordidas de serpente com base no ano de ocorrência, município, mordidas de serpente por gênero (incluindo as não venenosas) e o número total de incidentes durante o período do estudo, tanto a nível estadual quanto municipal. Também foram coletadas variáveis ambientais, como cobertura do solo, temperatura média anual, altitude e precipitação média anual no estado do Paraná. As variáveis demográficas e socioeconômicas coletadas incluíram a população total do municí-

pio, população rural e urbana, número de pessoas por tipo de trabalho realizado, forma de coleta de lixo e destino dos resíduos domiciliares. Todos os dados foram coletados a partir de fontes públicas disponíveis por meio de consultas abertas.

Durante o período estudado, foram recebidas 12.877 notificações, das quais 8.166 (63,41%) foram causadas por *Bothrops*, 1.534 (11,91%) por *Crotalus*, 56 (0,43%) por *Micrurus*, 1.703 (13,22%) por espécies de serpentes não venenosas, e os casos restantes não tinham a espécie causadora identificada. Os incidentes causados por *Bothrops* e *Crotalus* apresentaram padrões de distribuição diferentes. A análise espacial revelou que os principais fatores que contribuíram para o risco de mordida de serpente incluíam a presença de florestas nativas, manguezais, apicuns e florestas plantadas monospecíficas. O grupo populacional com maior risco foi composto por residentes e trabalhadores rurais. Este estudo permitiu a identificação dos principais fatores associados ao risco de mordidas de serpente, facilitando esforços mais direcionados para prevenir acidentes de mordida de serpente entre populações vulneráveis.

O monitoramento contínuo das serpentes em resposta às atividades antrópicas e suas flutuações populacionais é crucial. Os resultados obtidos neste trabalho mostram que a análise espacial é uma ferramenta importante para entender a dinâmica das mordidas de serpente no espaço e para propor medidas de prevenção e mitigação das sequelas que essa lesão pode causar, direcionadas às populações de maior risco.

Editora: Daniela Pareja-Mejia



Aquarela, lápis grafite e tinta naquim, feito com pincel, papel tingido naturalmente
Renan Narvais Leite de Oliveira @ninguem_1996
Bothrops bilineatus

Métodos em Herpetologia

Procedures for obtaining tissue samples from amphibian and reptile specimens for museomics

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According to current estimates, 41% of amphibians and 21% of reptiles are at risk of extinction (IUCN, 2022), with amphibians being the most threatened vertebrate class due to habitat loss, fragmentation, climate change, and emerging diseases (Kiesecker et al., 2001; Becker et al., 2007; Fisher & Garner, 2020; Luedtke et al., 2023). Unfortunately, a significant portion of species of amphibians and reptiles currently disappeared in nature have not been included in molecular phylogenetic studies, because they were last collected before tissue sampling for PCR amplification and Sanger sequencing (i.e. first generation sequencing) were a common practice (Wandeler et al., 2007; Yeates et al., 2016; Straube et al., 2021).

Amphibians and reptiles in natural history collections are commonly fixed with formalin and stored in 70% ethanol, which can cause damage to DNA through hydrolysis (Lindahl, 1993), accelerate post-mortem DNA damage (e.g. disruption of base-pairing, denaturation, cross-linking between DNA and proteins; Karlsen et al., 1994; Hoffman et al., 2015), and reduce the amount of viable endogenous DNA (Gilbert et al., 2007). As such, procedures to obtain DNA sequences through PCR and Sanger sequencing from wet collections require large amounts of tissue and have a low success rate (Gilbert et al., 2007; Licht et al., 2012). Nevertheless, the adaptation of techniques designed to obtain ancient DNA for paleogenomics and the necessity to obtain historical DNA (hDNA) from museum speci-

mens to answer fundamental questions about biodiversity has given rise to the new field of museomics (Raxworthy & Smith, 2021; Lalueza-Fox, 2022).

The number of herpetological studies employing museomics has increased in recent years (e.g. Hekkala et al. 2011; Kehlmaier et al., 2019, 2021; Lyra et al., 2020; Rancilhac et al. 2020; Scherz et al. 2020, 2022; Ernst et al., 2021; Reyes-Velasco et al. 2021; Vences et al. 2021, 2022; Goutte et al., 2022; Mahony et al., 2022). To date, the two main applications of hDNA in studies of amphibians and reptiles have addressed problems in the identification and phylogenetic position of lost species. For example, Kehlmaier et al. (2019) noted that the identity of multiple subspecies of the chelid turtle *Chelodina mccordi* was unclear based solely on morphology; by analyzing the mitogenomes of specimens from wet collections, they were able to synonymize *C. m. roteensis* and *C. m. mccordi*. Similarly, Lyra et al. (2020) sequenced museum tadpoles of the former *Bokermannohyla claresignata*—which has not been observed in nature for half a century—and found it to be nested within *Boana* as sister of the *Boana pulchella* group. This finding was important to re-evaluate synapomorphies for the group and optimize characters related to suctorial tadpoles and oocyte pigmentation.

The general workflow to obtain hDNA for museomics consists of (1) specimen selection, (2) documentation, (3) material sterilization, (4) tissue sampling, (5) hDNA extraction, (6) library preparation (e.g. single-stranded DNA), and (7) high-throughput sequencing. Protocols for steps 5–7 have been proposed and evaluated in the literature (e.g., Hykin et al., 2015; Straube et al., 2021), but best practices for steps 1–4 have not been established. As such, here we propose brief and simple procedures to obtain tissue samples from specimens of amphibians and reptiles in natural history collections. The workflow is summarized in Fig. 1. We have successfully employed these methods to obtain hDNA from dozens of specimens (Lyra et al., 2020; Straube et al., 2021; unpublished data).

1. SPECIMEN SELECTION. –– The selection of specimens for museomics depends foremost on the scientific question. If the question is related to taxonomic identity, type (holotype, lectotype, or a paratype) or topotypic material is usually required. Alternatively, if the problem is related to the phylogenetic position or population genetics, then any well-preserved specimen can be used. Straube et al. (2021) found no correlation between specimen age and DNA yield, so voucher age should not constrain specimen selection for successful sequencing. Instead, specimen preservation history appears to be

most relevant. As such, we recommend avoiding specimens that are obviously decomposed or otherwise degraded, as they are more likely to yield little or no endogenous DNA. In all cases, specimen selection must be discussed with and approved by the museum curator.

2. DOCUMENTATION.–– Given the risk of cross-contamination Given the risk of cross-contamination (see below), information on each specimen should be carefully recorded in the order in which they are sampled, as this can help identify cross-contamination. Minimally, this entails taking notes on specimen identity (e.g., museum and field voucher numbers and any identifying characteristics, such as collector identity, date, and locality) and tissue source (e.g., muscle obtained via an existing dorsolateral incision). We also recommend photographing each specimen, as well as the jar (showing the label) in which it is stored, as this is useful to confirm specimen identity.

3. MATERIAL STERILIZATION.–– The materials required for tissue sampling are (1) DNA-free gloves, (2) scissors or scalpel, (3) forceps, (4) 1.5 ml Eppendorf tubes, (5) 15 or 50 mL Falcon tubes (or equivalent) (6) ≥ 2% sodium hypochlorite (NaClO; liquid bleach), (7) purified or ultra-purified water, (8) 70% ethanol, and (9) petri dish, kimwipe or paper towel. Depending on specimen size, tissue sampling often must be conducted with the aid of a dissecting microscope. All procedures must be carried out using either latex or nitrile gloves, which must be changed before handling each specimen. Procedures need not be performed in a fume hood or cleanroom lab, but they should not be carried out in a lab where PCR from modern DNA is carried out.

First, fill the three Falcon tubes with sodium hypochlorite, distilled water, and 70% ethanol, respectively (Fig. 2A). Next, before sampling each specimen, thoroughly clean all instruments, ensuring that no residue remains from previous dissections, and sterilize them by immersing in the sodium hypochlorite for 30–60 s, drying with kimwipes or paper towel, immersing three times in the distilled water, drying, and immersing three times in the 70% ethanol and drying thoroughly. Sodium hypochlorite is relevant to disinfect the instrument surface by killing bacteria, fungi, protists, and viruses, reducing the amount of exogenous DNA from contaminants; water is used for removing debris and residuals of sodium hypochlorite from instrument surface; ethanol is also relevant to disinfect the instrument surface by killing remaining contaminants and also denaturing enzymes that could degrade DNA. Alternatively, heat sterilization may also be performed, but this can be difficult when visiting museums because (1) mini high temperature dry sterilizers,

although safe, often are not available in natural history collections, and (2) heat sterilization methods that employ an open flame (e.g. lighting a match, a lighter, or a Bunsen burner) may be prohibited by some curators due to the risk of fire in a building containing jars filled with alcohol.

We recommend using nuclease-free Eppendorf tubes (or equivalent) to prevent DNA degradation (Fulton & Shapiro 2019). Each tube must be filled with 96–100% ethanol, identified, and placed in a rack (Fig. 2B).

Finally, each specimen should be processed separately, in sequence. Preferably the specimen should be washed with clean 70% ethanol before incision. If multiple specimens are stored in the same jar, the selected specimen should be rinsed with distilled water before processing. Position the specimen on a layer of kimwipes or paper towel or a sterilized petri dish, avoiding placing it on contaminated surfaces (e.g., petri dishes of common use in the laboratory). Before using them, petri dishes should be cleaned using sodium hypochlorite, distilled water, and 70% ethanol, following the same sterilization procedure used for the instruments.

4. TISSUE SAMPLING.–– We suggest obtaining a 1–2 mm3 (approximately the size of a small drop of water, ≈10 mg) piece of tissue. We recommend sampling unexposed tissue, either via a new incision or reaching through an existing incision to unexposed tissue, as skin and other exposed tissues are more likely to be contaminated by post-mortem bacterial colonization or human DNA from prior handling. For example, it is common for older frog specimens to have been dissected ventrally to expose the pectoral girdle and viscera, in which case we advise reaching below the skin to obtain unexposed muscle tissue. We recommend sampling muscle because it tends to yield more endogenous DNA than the liver (Lyra et al., 2020; Straube et al., 2021).

DNA from other vouchers stored in the same jar could also serve as a source of contamination (Raxworthy & Smith, 2021), which poses challenges for studies focusing on individual-level biological questions (e.g. identifying specimen identity in cryptic species lacking morphological diagnostic characters, in which all undetermined vouchers are in the same jar). Although FastQ Screen (Wingett & Andrews, 2018) can effectively map unique reads against human and bacterial contaminants for their removal, it might not eliminate reads from contaminant samples of closely related taxa stored in the same jar without also deleting a substantial amount of endogenous DNA from the target specimen. To reduce this risk, it is preferable to collect previously unexposed tissue.

Only researchers who have extensive experience dissecting preserved specimens should perform tissue sampling, especially from type material. Any new incision must be authorized by the curator and should be as small and discrete as possible to facilitate data collection by future researchers. For instance, in anurans, we prefer to perform a short dorsolateral incision on the right side (the stomach is usually on the left) through the skin and underlying muscle to sample trunk muscle (which is both of limited taxonomic value and bilaterally symmetric), as this minimizes damage to the specimen while also enabling visualization of the viscera to confirm sex and maturity and potentially score additional characters. In contrast, taxonomically informative muscles should be avoided (e.g., jaw, thigh, hand, and foot muscles in anurans). Care must be taken to prevent accidentally sampling the digestive tract and inadvertently generating sequences from consumed prey.

In other taxa, tissue selection may vary widely due to morphological diversity and different preservation conditions, but sampling should focus on muscle of limited taxonomic value, as recommended for anurans. For instance, in salamanders and reptiles possessing limbs (e.g. crocodiles, turtles, and many lepidosaurs), a short incision on one of the thighs to access muscles should suffice (e.g. Stuckas et al., 2013). In limbless taxa, like caecilians and snakes, a short paravertebral or ventrolateral incision allows muscle to be sampled. In large specimens, incisions are typically already present along the ventral surface, made during fixation for formalin penetration, thus reducing the need for additional incisions (Ruane & Austin, 2017).

Samples should be stored in 96–100% ethanol at 4°C or, if tissue processing will be delayed, –20°C. Ambient temperature is not recommended, but freezing in an ultrafreezer or liquid nitrogen in a cryogenic tank is not required (though it is also not contraindicated). Repeated freezing/thawing of samples should be avoided to prevent additional DNA damage.

DNA decay seems greater in historical samples from wet collections of anurans than those from bones or dry skin samples of mammals (Sawyer et al., 2012; Straube et al., 2021). However, when good practices are followed in all steps, museomics becomes a powerful tool to obtain reliable molecular data from rare and extinct species. We hope our protocol will enable more researchers to reliably obtain hDNA to address fundamental biological questions.

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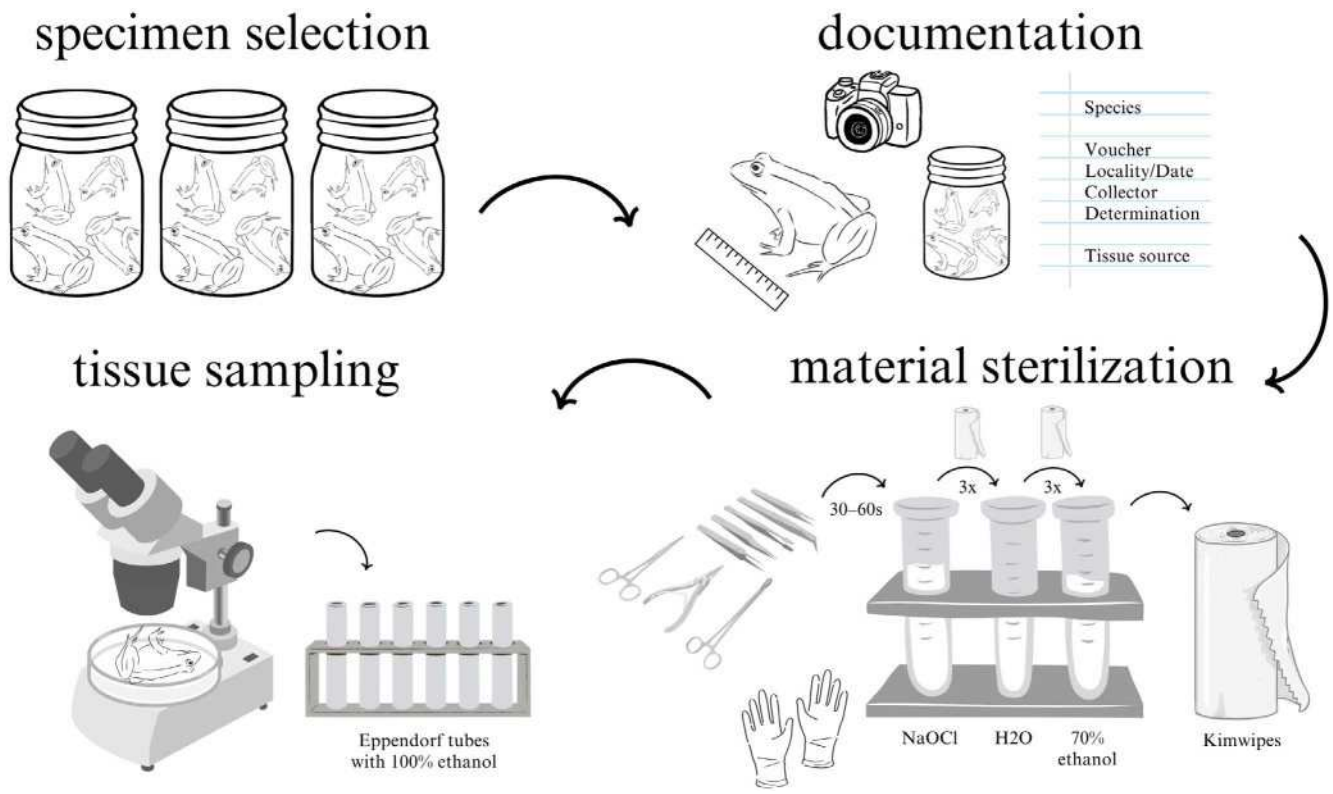

Figure 1. Workflow for collecting tissue samples from amphibians and reptiles for museomics.

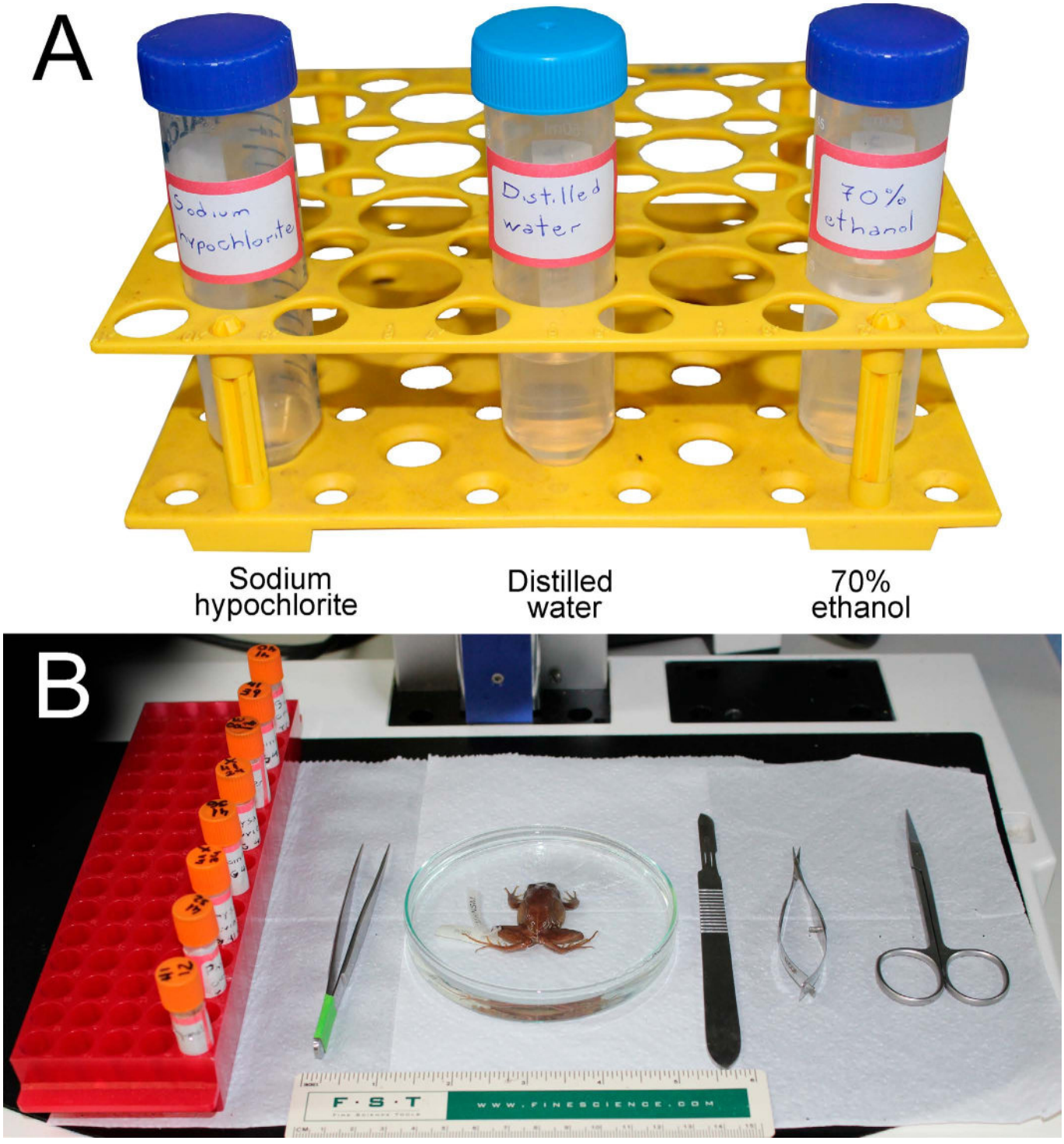

Figure 2. **(A)** Sterilization station with a rack containing three Falcon tubes with ≥ 2% sodium hypochlorite, distilled water, and 70% ethanol. **(B)** Tissue sampling station with a rack containing Eppendorf tubes filled with 96–100% ethanol, a sterilized petri dish, and sterilized materials for microdissection. All procedures must be carried out with gloves. All Eppendorf and Falcon tubes must be identified with sample information (e.g. voucher number) and solution content (sodium hypochlorite, distilled water, and 70% ethanol).



Ilustração Digital
Alizée Thomas - @at_illustrations_
Caiman yacare



Foi utilizado lápis HB para o rascunho e lápis de cor para a coloração e detalhes com caneta em gel branca.
Mayk Douglas de Oliveira Moura - @ue.mayk (perfil pessoal) / @exploracoes_artisticas (perfil profissional)
Pithecopus gonzagai

Resenhas

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Como o Brasil, o país com a maior riqueza de espécies de anfíbios do mundo, não possuía uma obra dedicada exclusivamente aos girinos, fase fundamental da vida da maioria dos anuros? O livro "Girinos do Brasil" surge justamente para preencher essa importante lacuna.

Duas características da obra chamam a atenção à primeira vista. A primeira é o tamanho, com 828 páginas e pesando quase 3 kg, o livro impressiona pelo porte. A segunda é a beleza, a obra, ricamente ilustrada, é belíssima. A apresentação passa a impressão de ter sido cuidadosamente planejada, com capa dura ilustrada protegida por uma sobrecapa e um marcador muito útil, considerando o volume de informações contidas no livro. Cada detalhe reflete o cuidado e o carinho que os autores dedicaram à execução desta obra.

Coordenado pela Professora Denise Rossa-Feres, o livro é resultado do esforço conjunto de 24 pesquisadores de 17 universidades brasileiras, fruto da rede de pesquisa SISBIOTA: Girinos do Brasil. A Professora Rossa-Feres é bióloga, mestre em ecologia, doutora em zoologia e docente na Universidade Estadual Paulista (UNESP), *campus* de Rio Preto. Autora de mais de 100 publicações, principalmente relacionadas à estudos sobre girinos, é reconhecida como uma das principais pesquisadoras dessa área no Brasil. A equipe conta também com especialistas com ampla experiência em ecologia, morfologia, taxonomia e evolução de girinos, conferindo ao trabalho um corpo científico muito competente.

No prefácio, os Professores Sérgio Potsch de Carvalho e Silva e Ana Telles P. de Carvalho e Silva apresentam a obra de forma cuidadosa, destacando seu valor científico e relevância para a herpetologia.

A obra compila dados de girinos de 367 espécies, divididos em 62 gêneros, abrangendo todas as famílias brasileiras com girinos, exceto Allophrynidae. Mais de 70% dos gêneros brasileiros com girinos (que não apresentam desenvolvimento direto) estão representados, tornando a obra ampla e digna do nome "Girinos do Brasil".

A estrutura do livro inclui uma breve introdução, uma seção de metodologia e uma seção contendo as descrições dos girinos. A introdução traz informações gerais sobre a ecologia e hábitos dos girinos, enquanto a metodologia apresenta uma descrição dos biomas brasileiros e uma breve descrição das técnicas utilizadas no estudo, incluindo uma descrição de como foram tomadas as fotografias.

Antes das descrições dos girinos, há uma seção muito bem ilustrada que

apresenta uma caracterização morfológica detalhada das diferentes formas de corpo, cabeça, cauda e boca de girinos, elementos fundamentais para a leitura e compreensão do guia. Essa caracterização morfológica torna o guia acessível mesmo para aqueles que não têm familiaridade com a morfologia dos girinos.

A seção seguinte, composta por 733 páginas, contém as descrições e fotos das 367 espécies estudadas, distribuídas em 62 gêneros e 15 famílias. Sendo os biomas mais representados a Mata Atlântica e a Amazônia, os com as maiores riquezas de espécies.

Cada descrição ocupa duas páginas: uma branca, com a descrição dos girinos e pictogramas relacionados à sua história natural, e uma preta, com uma prancha de fotos mostrando o girino em vista lateral e dorsal, sua boca, uma escala e um pictograma indicando a posição do girino na coluna d'água. A escolha da página preta para as fotos foi uma decisão acertada, pois realça a beleza e os detalhes das figuras.

As descrições são bem detalhadas e apresentam também informações morfométricas. No entanto, na minha opinião, a inclusão das citações das descrições originais dos girinos apresentados no livro ampliaria ainda mais o valor científico da obra.

As fotos são muito boas e bem definidas, e os pictogramas sobre a história natural incluem o tipo de cobertura vegetal, tipo de habitat, uso da coluna d'água e se o girino é solitário ou gregário. Esses elementos são intuitivos e fáceis de reconhecer, dispensando a consulta frequente à explicação dos pictogramas.

A obra apresenta ainda uma seção final com as medidas de todos os girinos descritos e conta também com belíssimas ilustrações desenhadas à mão de algumas espécies.

Desta forma, o livro representa uma contribuição importantíssima para a herpetologia e é essencial para todos que se interessam por essa área e pela diversidade brasileira. São poucos os países que possuem uma obra desta magnitude dedicada exclusivamente aos girinos.

Girinos do Brasil é muito mais do que um guia sobre girinos, o livro destaca e valoriza a biodiversidade brasileira e a relevância da colaboração em trabalhos de pesquisa. Além disso, a realização desta obra seria inexequível sem as coleções científicas, ressaltando o papel fundamental desses acervos para o avanço da pesquisa no país.

Por fim, o livro é dedicado ao Professor Marcelo Menin, da Universidade Federal do Amazonas, reconhecido por sua

atuação em pesquisas sobre girinos, sobretudo no bioma amazônico, que lamentavelmente faleceu de maneira precoce em decorrência da Covid-19.

Editor: José P. Pombal Jr.



Trachemys adiutrix, Vanzolini, 1995

Lápis de cor
Carlos Eduardo Vargas Grou - @campogrou
Trachemys adiutrix

Crump, Martha L. 2024. Lost Frogs & Hot Snakes: Herpetologists' Tales from the Field. Comstock Publishing Associates, an imprint of Cornell University Press.

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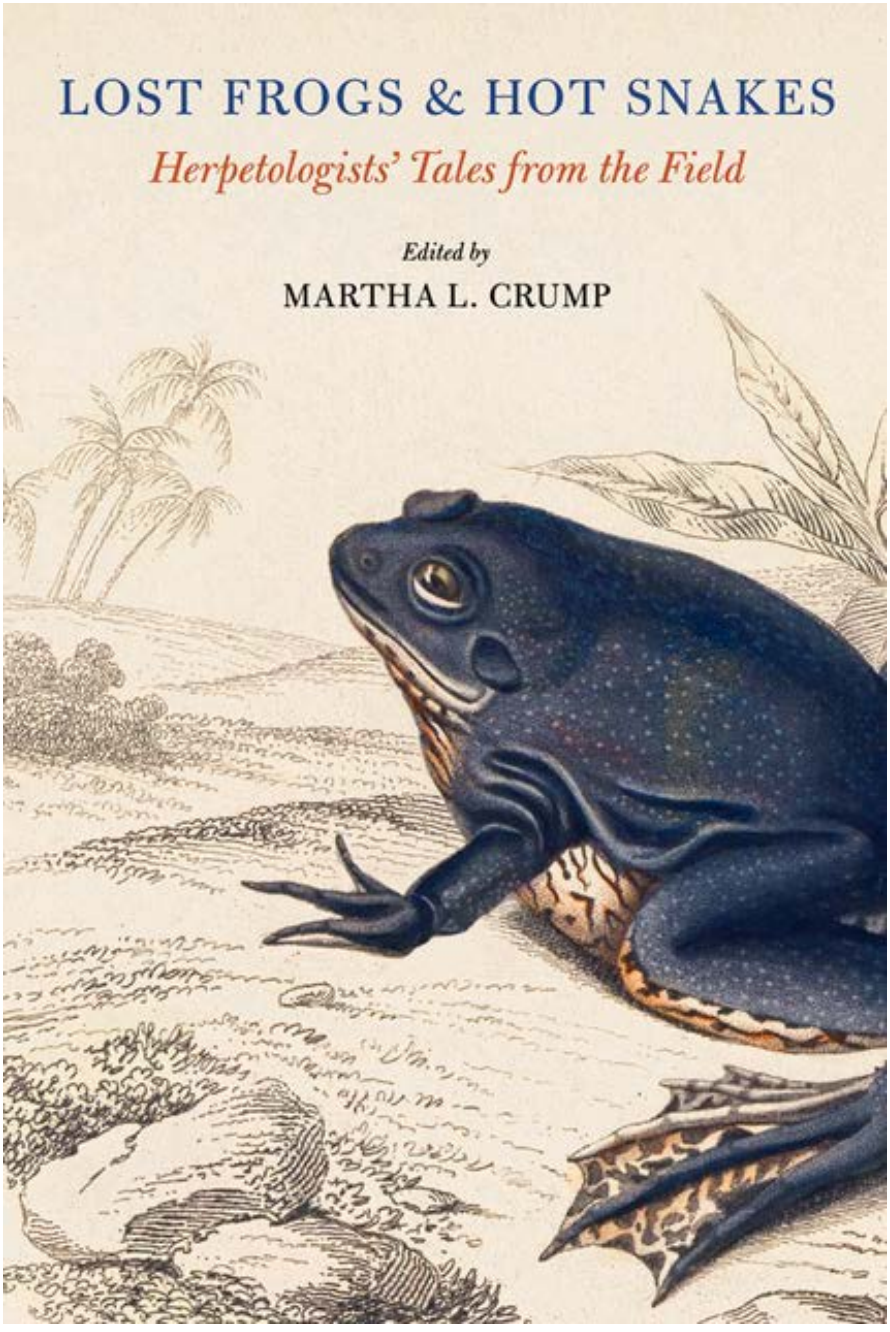

Este livro de cara prendeu minha atenção pela sua belíssima ilustração e textura da capa, mas mais ainda quando vi o título e o nome da autora: Martha Crump. Fiquei eufórica para ler logo, uma vez que já conhecia o livro "*Eye of Newt and Toe of Frog, Adder's Fork and Lizard Leg*", dessa mesma autora, e não esperava menos do que uma obra deslumbrante, dada sua escrita tão contemplativa. Parabenizo Martha Crump pelo seu talento para popularizar a ciência cativando os leitores. Marty Crump, como também é conhecida, é Professora Adjunta do Departamento de Biologia e do Centro de Ecologia da Northern Arizona University e Utah State University, tendo ocupado o primeiro cargo a partir de 1992. Fato interessante e importante acerca de sua carreira é sua forte influência dos relatos de campo de William E. Duellman e Linda Trueb somados a outros estudantes para se direcionar e aperfeiçoar como bióloga de campo (por mais de 50 anos!) e inclusive estender esse amor para outras pessoas (e como ela é bem-sucedida nisso!). Esse compromisso com o encantamento pelo mundo natural e pela herpetologia, ela revela logo no prefácio do livro, estabelecendo o alinhamento com a editora Comstock Publishing, conforme estabelecido em obras anteriores, com a proposta de imersão do indivíduo na natureza para sua compreensão.

O livro é dividido em VI partes: a excitação da descoberta; aventura e exploração; fascínio e amor pelos animais; contratempos e desventuras; lidando com o inesperado; as pessoas que conhecemos, as amizades que forjamos, os alunos que influenciamos. Todos esses títulos são autoexplicativos. Para compor essa obra, Martha Crump convidou 50 herpetólogas e herpetólogos ao redor do mundo, nas mais diversas atuações, sejam acadêmicas, em museus, agências federais, para relatarem em 2 mil palavras alguma experiência que tivessem em alta estima, somando em 320 páginas na íntegra do livro. É provocador, e com propósito, no blog da Cornell, Crump ressaltar que lhe perturbava pensar sobre como enfrentaria determinadas redações que pudessem ser inapropriadas ou tediosas. Felizmente todas lhe impressionaram. Então cada história é curta, em torno de seis páginas, dando para transitar entre histórias de partes distintas sem comprometimento da compreensão. Algumas destas contam com fotos, todas em preto e branco, todavia seria mais interessante mais fotos.

Logo na introdução, ela veste o leitor com as roupas, mochilas e equipamentos típicos necessários que acompanham um biólogo ou bióloga de campo. É um caminho sem volta, o leitor já está se encaminhando para campo. O estado de espírito, como ela bem pontua, é muito realçado. No entanto, para ten-

tar engajar não só biólogos em início de carreira, mas também aspirantes, e popularizar o que fazemos, é preciso retomar o arrebatamento que tínhamos quando crianças. Mas, se por um lado ela pontua como muitas pessoas atualmente se sentem desconectadas da natureza e, sabemos que isso é algo que temos de enfrentar com muitas gerações encerradas nas cidades, ou seja, que não cultivaram esses laços estreitos de pertencimento com o meio ambiente, como poderiam retomar algo que não lhes é conhecido? Ao longo do livro cria-se essa abertura para o estabelecimento de novas e maravilhosas percepções, mas talvez essa expressão do passado infantil não tenha sido a mais adequada para chegar especialmente a públicos mais jovens. Na verdade, se trata de estabelecer, pela primeira vez, esta conexão com a natureza.

Ainda no início do livro há uma citação que diz que sempre encontraremos nossa melhor versão em campo. Talvez seja um pouco utópico e por vezes encontramos uma versão irritante, quando, por exemplo, com fome e sono. Mas a maravilha do campo consiste justamente nisso, nessa capacidade de transformar uma experiência às vezes incômoda, a citar a impaciência devido às picadas de insetos, com um estímulo de fascínio e alvoroço por uma criatura, por vezes extremamente diminuta, que é capaz de tornar pequenos alguns "desconfortos". A menos, por exemplo no conto 29, que esteja correndo algum tipo de risco, como ter que passar por fasciotomia após um acidente com *Crotalus molossus*, mas ainda assim, ser capaz de sustentar o fascínio.

Todos os contos são povoados de sensações, são sinestésicos, associa-se à noite, ao cheiro de chuva e te transportam para o cenário descrito. O livro é pontuado com suor, risadas dos próprios erros e biscoitos. É possível ler (ou ouvir) onomatopeias de herpetólogas e herpetólogos que julgaram ouvir um pássaro estranho, mas que na verdade se depararam com um anuro raro (conto 6). Acaso o leitor ouça o choro de um espírito que se perdeu na floresta em forma de uma *Gastrotheca* (conto 22). Mas terá de aguçar os ouvidos, diferir os ortópteros e contar com algum tipo de esperança (literal e zoologicamente) distinguível que deixou intocada para lhe guiar até o caminho de volta após se perder (conto 33). Talvez nunca chegue ao destino e encontre espécies maravilhosas por causa disso (conto 22), mas talvez chegue e tenha febre tifóide (conto 35). A oscilação entre "gostaria de passar por isso" e "ainda bem que isso nunca me aconteceu" ocorre várias vezes durante a leitura. Inesperadamente, poderá ser pego de surpresa no Pantanal com a primeira visualização de poliandria envolvendo sete machos e uma fêmea de rã da América do Sul (conto 4). Quem sabe tente armar uma emboscada para capturar um cro-

codiliano pedindo para que seu filho de 12 anos segure um filhote e termine sendo arrastado para dentro da água (conto 28). E vá mergulhar em cavernas atrás de salamandras (conto 10). Talvez pense em se defender carregando sapos pela cintura e se indigne com a visualização de castanheira enorme sendo abatida e tartarugas detidas por buracos em suas carapaças (conto 13). Porventura, relembrará da sua infância e ponderará sobre a forma que encontrou de salvaguardar uma serpente era admirá-la em segredo (conto 20). E sentirá também o quão sensível e dolorosamente amargo é ver o declínio e a ausência silenciosamente gritante de espécies que foram extintas, e como atuar no enfrentamento a isso (conto 22, 23 e 40).

Durante a leitura do livro, ainda é possível indagar sobre quanto se pode dirigir em terrenos ruins sem prejudicar o cérebro do seu bebê (conto 36) e refletir sobre como ser humilde com um varanídeo (conto 16). E que nunca se conhece verdadeiramente uma espécie se nunca botou os olhos nela em campo nem interagiu com ela, que se deve ter muita serenidade para ter a chance de alimentar uma serpente na sua própria mão (conto 39). A obra é maravilhosa em tecer críticas aos cientistas de bancada que não têm conhecimento de campo, taxonomia e ecologia que são essenciais para corroborar ou refutar os próprios cálculos que fazem a partir dos dados coletados em campo por terceiros. Soma-se igualmente a expansão para a indispensabilidade da dialogicidade com o público geral e como é possível a diversão com sua participação. Além de propiciar reflexões sobre como as experiências de campo ou a falta delas são atravessadas por contextos políticos.

O livro encerra com maestria abordando as relações humanas mediadas pelos campos. Penso que as mais significativas para mim foram as “The captain and the Frog” (conto 42) e “In the Rabeta of the Pajé: An Ethnoherpetological Experience” (conto 48). O primeiro é um relato de como a autora passou a visitar um senhor na prisão e lhe contar em sua língua materna sobre sua pesquisa com sapos naquele local. Gostei especialmente deste por mostrar como algo tratado de modo insignificante por alguns pode ser tão importante para a gente criar vínculos profundos. E como a autora pontua “A conexão através das criaturas e o alívio mental para ele” (p. 259) de tal forma que mesmo após ele sair da prisão, e perderem contato por mais de 11 anos, restabeleceram esse contato novamente por causa dos anuros. O conto 48 encerra o livro com etnoherpetologia e ressalta a necessidade de valorização dos conhecimentos indígenas. E como é fundamental repensarmos sobre como não é só um estar na natureza, mas com a natureza, que não dá para separar a compreensão acerca

do seu funcionamento da expressão da nossa experiência e como conferimos significados a ela.

Guardo com muito apreço cada palavra deste livro; nunca será obsoleto ter acesso às experiências de outros. Acredito que, com este livro, Crump começou a estabelecer um espaço compartilhado para registro e celebração das experiências de campo que tanto carecem nos artigos científicos, que são erguidos e sustentados por todas essas vivências. Ter acesso aos julgamentos e autoanálises zelosas da construção do conhecimento de campo é muito enriquecedor, estimula nossa vontade e capacidade de se conectar com a natureza através da contação de histórias. Martha Crump afirma no blog da Cornell que editaria num piscar de olhos outra coletânea de histórias de campo com outros contribuidores, encerrando com o questionamento "Volume II?", ao qual respondemos com: "Absolutely, we beg you!!"

Editor: José P. Pombal Jr

Notas de História Natural & Distribuição Geográfica

Predation of *Micrablepharus maximiliani* (Reinhardt & Lütken, 1862) by *Cercosaura parkeri* (Ruibal, 1952) (Squamata: Gymnophthalmidae)

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Lizards serve important roles within their ecosystems because they are mid-level consumers in trophic networks, feeding on a range of invertebrate and vertebrate fauna, and plant material (e.g., fruits, leaves, flowers, floral buds; Valido & Nogales, 1994; Nogales et al., 1998; Lord & Marshall, 2001; Cooper & Vitt, 2002; Ribeiro & Freire, 2011; Rocha et al., 2021). Functionally, lizards can regulate populations, while also contributing towards ecosystem services by acting as seed dispersers and pollinators in the trophic networks (Martins & Molina, 2008). The foraging method of lizards underlies many of their ecological and behavioral characteristics, such as defensive behavior and diet (Huey & Pianka, 1981).

Lizards can be classified as omnivores, herbivores, and mainly carnivores, especially insectivores (Teixeira, 2001; Rocha et al., 2021). However, saurophagy accounts for approximately 30% of the records of lizards as prey species (Schalk & Cove, 2018).

The Blue-tailed Lizard *Micrablepharus maximiliani* (Gymnophthalmidae) is a small semi-fossorial species that uses termite mounds as shelter and is often associated with rocky outcrops, leaf litter, and sandy soils, frequently in open habitats (Rodrigues, 1996, 2003; Mesquita et al., 2006; Werneck et al., 2009). Parker´s Many-fingered Teiid *Cercosaura parkeri* (Gymnophthalmidae) is a diurnal species found in riverbanks and streams at open areas – including vacant lots and gardens – and forests, (Ávila-Pires, 1995; Cabrera et al., 2019). Insects and spiders comprise most of the diets of both species (Dal-Vechio et al., 2014; Cabrera et al., 2019).

On 12 November 2022, at the Pouso Alegre Lodge (16°28′25.6″ S, 56°45′37.5″ W; 125 m a.s.l.; DATUM WGS84), municipality of Poconé, northern region of Pantanal, state of Mato Grosso, Brazil, we found a dead, slightly desiccated *C. parkeri* (118.56 mm snout-vent length) in a 200-liter pitfall trap (Fig. 1A). Part of the lizard's body was torn open, and inside the body cavity we observed a *M. maximiliani* (22.48 mm snout-vent length) (Fig. 1B-C). The two lizards were fixed in 10% formalin, transferred to permanent storage in 70% ethanol (Heyer et al., 1994) and deposited in the Zoological Collection of Federal University of Mato Grosso, catalogue numbers UFMT–12947 (*C. parkeri*) and UFMT–12948 (*M. maximiliani*). The field studies were authorized by the System of Authorization and Information in Biodiversity, Ministry of the Environment (SISBio 83945-2).

We searched journals and platforms (Google Scholar, ResearchGate, and Scielo) for scientific papers using keywords ("predation", "lizard*", "*Pantodactylus schreibersii*", "*Pantodactylus parkeri*", "*Cercosaura parkeri*", "*Micrablepharus maximiliani*", "diet"). The studies found reported that *C. parkeri* has a diet based on arthropods, without further detail of the food items (Cacciali & Bauer, 2003; Cabrera et al., 2019). These results are also reported for other Gymnophthalmidae species (Rocha, 1994; Oliveira & Pessanha, 2013; Silva, 2012; Da Silva et al., 2015).

This is the first record of a vertebrate (*M. maximiliani*) as diet of *C. parkeri*, and the second record of a vertebrate as prey of a gymnophthalmid lizard, as Echevarria & Venegas (2013) had previously recorded a cannibalism event in which an adult of *Petracola ventrimaculatus* preyed on a hatchling.

In the present record, two observations suggest accidental predation: the finding of the specimens in a pitfall trap and the fact that *C. parkeri* was dead with its stomach open and its prey partially exposed. Pitfall traps are efficient for sampling herpetofauna (Corn, 1994), but they can select the availability of food items in the environment and result in predator-prey interactions that do not occur under normal environmental conditions. However, the diet does not differ between lizards collected in and out of pitfalls traps (Costa et al., 2008).

This record shows that *C. parkeri* feeds on other lizards and expands information about the species diet. More detailed investigations of the stomach contents of individuals captured in natural conditions can provide insight into the frequency of this predator-prey interaction. Short notes like this are important to understand the natural history of the species and the family Gymnophthalmidae, as well as providing important data for futher studies on the ecology of lizards.

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Figure 1. Predation record of *Micrablepharus maximiliani* (22.48 mm snout-vent length) by *Cercosaura parkeri* (118.56 mm snout-vent length) in Pouso Alegre Lodge, Poconé , Mato Grosso, Brazil. **(A)** Pitfall trap where the event occurred; and **(B-C)** specimens involved.

Aprimorando o conhecimento sobre espécies exóticas por meio de mídias sociais: 34 novas localidades de ocorrência de *Pantherophis guttatus* (Serpentes: Colubridae) no Brasil

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Resumo

Utilizando uma abordagem de ciência cidadã que envolveu a combinação de dados obtidos por nós e informações de redes sociais, identificamos 34 novas localidades de *Pantherophis guttatus* no Brasil. Entre as três plataformas de ciência cidadã analisadas, o Facebook foi a única que retornou registros de *P. guttatus* no país, com a maioria (69,7%) proveniente do "Grupo do Biólogo Henrique", atualmente o mais popular do Brasil relacionado à herpetologia. A região Sudeste concentrou a maioria dos registros (82,4%), o que pode ser explicado por fatores socioeconômicos e maior densidade populacional. O aumento expressivo de registros nos últimos dois anos (73,5% da amostra) pode sugerir um crescimento na quantidade de espécimes em vida livre, mas também pode ser resultado do aumento do número de usuários em grupos online relacionados à herpetologia. Dos registros levantados, 29,4% dos espécimes continuaram em vida livre, enquanto 38,3% foram encaminhados para órgãos competentes. No entanto, em ao menos um caso o espécime foi novamente posto em vida livre, atitude que decorre da falta de conhecimento para diferenciar espécies nativas de exóticas pelo público em geral. Finalmente, o

ritmo cada vez mais acelerado de novos registros de *P. guttatus* evidencia a importância de iniciativas adicionais aos artigos científicos, como plataformas de ciência cidadã especializadas, para monitorar os avanços na distribuição de espécies exóticas no Brasil.

Palavras-chave: cobra-do-milho; *Corn snake*; espécies alienígenas; Facebook.

INTRODUÇÃO

Espécies exóticas (alienígenas) são capazes de causar mudanças no ecossistema em que foram inseridas e podem gerar impactos à vida selvagem, economia e saúde (Pimentel et al., 2001; 2005; Pedrosa et al., 2015). Um dos principais fatores para o sucesso do estabelecimento de espécies exóticas é o aumento de propágulos (número de indivíduos e eventos de introdução). Em outras palavras, o número de indivíduos e sucessivos eventos de introdução são fundamentais para a manutenção e crescimento de populações dessas espécies (Blackburn et al., 2011; 2015). Assim, a análise das escalas temporais e espaciais dos propágulos está diretamente relacionada à compreensão da manutenção de uma espécie invasora em determinado local (Fonseca et al., 2019).

Quando o assunto são as serpentes, porém, essa análise pode ser particularmente desafiadora. As serpentes estão entre os vertebrados mais difíceis de amostrar em campo e, dependendo da localização, encontrar apenas um exemplar pode exigir várias horas de busca e alto custo financeiro (Martins & Oliveira, 1998; Fraga et al., 2014; Nogueira et al., 2019). Tal dificuldade é um reflexo do comportamento discreto e da história de vida das serpentes (Steen, 2010), o que torna o Déficit Wallaceano especialmente marcado para esse grupo (Terribile et al., 2018; Nogueira et al., 2019; Serrano et al., 2023).

A cobra-do-milho ou *corn snake*, *Pantherophis guttatus* (Linnaeus, 1766), é a serpente exótica mais comumente comercializada no Brasil (Alves et al., 2019; Fonseca et al., 2019; Nehemy et al., 2022). Essa espécie é nativa da América do Norte e pode alcançar cerca de 1,8 m de comprimento total. Apresenta hábitos arborícolas e terrestres e ocupa áreas abertas e florestais, onde se alimenta de pequenos mamíferos, aves, anfíbios e répteis (Burbrink, 2002; Fisher & Csurhes, 2009). A cobra-do-milho é popular como animal de estimação em muitos países, e acredita-se que eventuais fugas e abandonos de indivíduos são a principal causa da introdução dessa espécie em ambientes naturais (Magalhães & São-Pedro 2012). No Brasil, espécimes de *P. guttatus* já foram registrados em vida livre nas regiões Centro-oeste, Nordeste, Sudeste e Sul, tanto em ambientes urbanos

quanto em unidades de conservação (Fonseca et al., 2014; 2019; Santos et al., 2023).

Atualmente, as plataformas digitais atuam como bancos de dados para registros de espécimes de vida livre. Através do contínuo avanço tecnológico, as fotografias têm se mostrado uma das formas mais versáteis e fáceis para obter dados biológicos (Borges et al., 2020; Durso et al., 2021; Leipzig et al., 2021). Quando depositadas em plataformas de acesso público e associadas a informações adicionais (e.g., coordenadas geográficas), as imagens de serpentes têm potencial para serem usadas em diversas abordagens diferentes. Alguns exemplos são a quantificação de gradientes de variação fenotípica, material de referência para descrição de novos táxons e mapeamento da distribuição geográfica de espécies (Durso et al., 2021; Botan et al., 2022; Caley & Barry, 2022). Assim, as plataformas de ciência cidadã, que envolvem tanto entusiastas amadores quanto profissionais em projetos sobre a vida selvagem, têm a capacidade de ajudar os pesquisadores a suprirem lacunas de dados sobre a distribuição das espécies (Chandler et al., 2017).

Neste estudo, fornecemos uma atualização sobre a distribuição geográfica de *P. guttatus* no Brasil. Ao combinar informações recebidas pessoalmente e dados disponíveis em redes sociais dos últimos anos, constatamos que o número de localidades de ocorrência conhecidas para a espécie no Brasil mais que dobrou.

MATERIAL E MÉTODOS

No dia 16 de setembro de 2023, um residente do distrito de São Francisco Xavier, município de São José dos Campos, estado de São Paulo, nos comunicou sobre a presença de uma serpente na área do Projeto Dacnis (22°53′44,5″ S, 45°56′29,5″ W). O espécime foi filmado e identificado pelos autores como *Pantherophis guttatus* (Figura 1), o que se revelou uma nova localidade de ocorrência para a espécie no Brasil. O arquivo de mídia foi depositado na Coleção de Vídeos do Museu de Diversidade Biológica da Universidade Estadual de Campinas, sob o acrônimo ZUEC-VID_0001318 (https://www2.ib.unicamp.br/fnjv/).

Esse encontro nos motivou a realizar uma busca mais abrangente para mapear a distribuição de *P. guttatus* no país. Para isso, utilizamos uma abordagem envolvendo ciência cidadã. Para cada registro, coletamos as seguintes informações das plataformas na internet, quando disponíveis: URLs das publicações; data; estado; município; localidade; coordenadas geográficas; local (e.g., espécime encontrado dentro de residência); e destino (e.g., espécime permaneceu em vida livre). Quando

não havia localidade do registro, obtivemos coordenadas a partir do centroide do município. Focamos nossa busca em publicações *on-line* disponíveis a partir do ano de 2017, uma vez que os anos precursores foram englobados nas buscas de Fonseca et al. (2019), em abordagem similar. Conduzimos a busca no período de 25 de setembro de 2023 a 26 de outubro de 2023, utilizando o termo "*Pantherophis*" como palavra-chave, nas três seguintes páginas online: (1) iNaturalist, plataforma de ciência cidadã em que os usuários enviam arquivos de fotos ou sons de diversos organismos de qualquer local do mundo (Durso et al., 2021); (2) HerpMapper, a maior plataforma global de ciência cidadã sobre répteis e anfíbios (O'Donnell & Durso, 2014), na qual usuários enviam fotos ou outros tipos de mídias de réptil ou anfíbio de qualquer local do mundo; e (3) Facebook, provavelmente a maior fonte de imagens de serpentes disponível na internet, com diversos grupos contendo centenas de milhares de usuários preocupados em registrar, obter e fornecer identificações a partir de fotos e vídeos de serpentes (Smith et al., 2019; Angarita-Sierra et al., 2022), alguns dos quais capazes de identificar centenas de fotos de serpentes por dia (Durso et al., 2021).

Dentro do Facebook, restringimos nossa busca a três grupos: (1) "Herpetologia Brasileira"; (2) "Identificação de Serpentes"; e (3) "Cobras e Serpentes Identificação e discussão, Biólogo Henrique" (daqui em diante, apenas "Grupo do Biólogo Henrique"). Selecionamos esses três grupos com base em dois critérios: (1) elevado número de usuários (~11.000, ~38.000 e ~222.000, respectivamente); e (2) observação empírica da preocupação dos moderadores em curar os dados publicados e da constante exigência de informações complementares nas imagens de serpentes, como a localização de cada registro. Ainda assim, para evitar mapear localidades potencialmente errôneas, desconsideramos registros que se enquadraram nas seguintes situações: (1); fotografias fornecidas que não permitiam identificação inequívoca da espécie; (2) registro realizado por terceiro, de origem desconhecida (e.g., inicialmente recebido por grupo de WhatsApp); (3) o usuário não forneceu informações sobre localidade; (4) o usuário não retornou em nenhum momento aos comentários da publicação original para prestar esclarecimentos quando questionada a veracidade do registro; (5) o usuário não retornou nenhum esclarecimento quando procurado diretamente pelos autores.

RESULTADOS

As buscas realizadas nas plataformas iNaturalist e HerpMapper não retornaram nenhum registro para *P. guttatus* no Brasil, enquanto o Facebook retornou 33 novas localidades de ocorrência

(Apêndice I; Figura 2). Dessas, duas foram encontradas no grupo "Herpetologia Brasileira" (6%), oito no grupo "Identificação de Serpentes" (24,3%) e 23 no grupo "Grupo do Biólogo Henrique" (69,7%; Figura 3A). Assim, ao combinarmos o registro realizado no município de São José dos Campos, distrito de São Francisco Xavier, aos demais disponíveis nos grupos do Facebook averiguados, somamos um total de 34 novas localidades de ocorrência de *P. guttatus* no Brasil. As informações específicas das novas localidades encontradas, bem como os respectivos *links* de acesso de cada publicação, estão disponíveis no Apêndice I.

A maior concentração de novas localidades ocorreu nos anos de 2022 (n = 10, 29,4%) e 2023 (N = 15, 44,1%; Figura 3B). Somados, os dois últimos anos correspondem a 73,5% do total de novas localidades registradas, demonstrando tendência temporal de aumento progressivo no número de registros geográficos inéditos para *P. guttatus* no Brasil. Em contexto geográfico, os estados de São Paulo e Rio de Janeiro foram os líderes, com 17 e seis novas localidades de ocorrência respectivamente, correspondendo a 50% e 17,6% dos registros. Tomados em conjunto, 28 registros ocorreram na região Sudeste, resultando em 82,4% do total, com o restante vindo da região Sul (n = 5, 14,7%) e Centro-Oeste (n = 1, 2,9%; Figura 3C; Apêndice I).

Quanto ao local de encontro dos espécimes, a maioria estava associada a áreas de ocupação humana (n = 27, 79,4%), em geral com registros próximos ou no interior de residências (n = 17, 50%). No entanto, duas novas localidades resultaram de indivíduos registrados dentro de unidades de conservação (no Parque Natural Municipal Fazenda do Carmo, em São Paulo (SP) e no Parque Municipal da Serra do Curral, em Belo Horizonte (MG)). Quanto ao destino dos espécimes de *P. guttatus*, não havia informação para oito deles (23,5%). Para os que havia informação disponível, a maior parte foi encaminhada a diferentes órgãos competentes (n = 13, 38,3%), alguns permaneceram em vida livre (n = 10, 29,4%), e os demais foram registrados mortos (n = 3, 8,8%; Figura 3D).

DISCUSSÃO

A representatividade das mídias sociais nos registros de *P. guttatus* no Brasil

Ao combinarmos o nosso registro com os demais disponíveis nas mídias sociais analisadas, fornecemos um novo panorama sobre a distribuição geográfica da espécie exótica *Pantherophis guttatus* no Brasil. Nossa adição de 34 novos registros eleva para 50 o número de localidades de ocorrência para essa espécie no país e representa um acréscimo de mais do que o dobro do núme-

ro de locais previamente conhecidos para *P. guttatus* no Brasil (Fonseca et al., 2014; 2019; Santos et al., 2023).

As plataformas de ciência cidadã iNaturalist (~3,2 milhões de usuários) e HerpMapper (~10,7 mil usuários), em que os participantes enviam fotos e informações de anfíbios e répteis de qualquer local do mundo, não retornaram nenhum registro para *P. guttatus* no Brasil. Esse resultado pode ser considerado surpreendente, especialmente em relação ao iNaturalist, que é uma das maiores fontes de fotos e informações de serpentes globalmente, incluindo a América Latina (Durso et al., 2021). No entanto, a representatividade de usuários brasileiros em ambas as plataformas ainda é muito baixa quando comparada à de outros países, especialmente os da América do Norte. Na plataforma iNaturalist, por exemplo, apenas 0,6% das observações disponíveis foram feitas por usuários brasileiros (iNaturalist, 2019); na HerpMapper, a participação é ainda menor, e apenas 0,1% das contribuições correspondem a usuários do Brasil (HerpMapper, 2023). Em contrapartida, os Estados Unidos da América, país em que as duas páginas são mais populares, representam ~54% e ~93% do total de registros em ambas as plataformas, respectivamente. Assim, é possível que a ausência de registros de *P. guttatus* para o Brasil, tanto na iNaturalist quanto na HerpMapper, esteja associada à baixa adesão da população brasileira a essas duas plataformas.

Por outro lado, o Facebook se mostrou uma ferramenta muito útil para detectar novos registros de *P. guttatus* no Brasil. Atualmente, a plataforma mantém uma grande base de usuários no país, onde ela é a terceira rede social mais acessada em termos de popularidade (Facebook, 2022). Por exemplo, das ~2,9 bilhões de contas ativas na plataforma, ~116 milhões são brasileiras, o que resulta em ~4% do total de usuários (Facebook, 2021). Considerando esse panorama e os resultados encontrados neste estudo, parece seguro assumir que o Facebook pode funcionar como uma boa ferramenta para refinarmos o conhecimento não somente acerca da presença de *P. guttatus* no Brasil ou de qualquer outra espécie de serpente, mas também sobre outros organismos, em distintas abordagens (Whittaker et al., 2014; Köseoglu et al., 2016).

Dentro da amostragem do Facebook, os grupos com maior número de usuários forneceram o maior número de registros de *P. guttatus* no Brasil. O grupo "Grupo do Biólogo Henrique", atualmente o mais popular do país sobre identificação de serpentes, foi responsável por aproximadamente 70% dos registros. Desse percentual, cerca de 78% foram realizados entre 2022 e 2023. Apesar da alta taxa de observações de *P. guttatus* recentemente, indicando um possível aumento no número de indivíduos de vida livre registrados, o crescimento no número de participantes nos grupos

estudados pode ter influenciado esses resultados. Por exemplo, o "Grupo do Biólogo Henrique", que atualmente possui ~227 mil participantes, em meados de agosto de 2021 contava com cerca de 27 mil membros (M. Modolo, comunicação pessoal). No final de fevereiro de 2023, o referido grupo possuía ~117 mil participantes (M. Modolo, comunicação pessoal). Assim, com um crescimento do número de membros de cerca de 740% em dois anos, e aproximadamente 94% somente ao longo do ano de 2023, seria naturalmente esperado um maior número de registros de *P. guttatus* durante esse período. Dessa forma, entendemos que o aumento no número de registros pode ser resultado do crescimento tanto da população de *P. guttatus* quanto do número de pessoas engajadas em registrar serpentes nas redes sociais.

Distribuição geográfica dos registros de *P. guttatus* no Brasil

Dos 50 registros de *P. guttatus* no Brasil até o momento, 35 (~70%) provêm da região Sudeste, em áreas de Mata Atlântica. O mesmo padrão se mantém se considerados apenas os 34 registros apresentados neste estudo, dos quais 28 (~87%) são oriundos da região Sudeste. Um resultado similar foi obtido por Fonseca et al. (2019) ao mapear a ocorrência de diferentes espécies exóticas de anfíbios e répteis no Brasil. Naquele estudo, das 136 espécies encontradas, aproximadamente 56% dos registros se concentraram na região Sudeste, com a maioria associada à Mata Atlântica (Fonseca et al., 2019). As autoras argumentaram que esse resultado é explicável por fatores socioeconômicos, como a alta densidade populacional e o PIB per capita nas regiões de Mata Atlântica no Brasil, que representam aproximadamente 72% da densidade populacional e 80% do PIB per capita do país (Fundação SOS Mata Atlântica, 2016; Fonseca et al., 2019). É lógico pensar que regiões com elevada atividade econômica facilitam o fluxo de espécies exóticas de diversas formas, influenciando a soltura de propágulos e o número de eventos de introdução (Blackburn et al., 2008; Hulme et al., 2008). Assim, o padrão de distribuição dos registros de *P. guttatus* encontrado neste estudo parece explicável pela mesma linha de raciocínio, se encaixando dentro do esperado para outras espécies alienígenas no Brasil e em outras partes do mundo (Cassey et al., 2005; Meyerson & Mooney, 2007; Fonseca et al., 2019). Ademais, há evidências de que *P. guttatus* está entre as espécies mais comercializadas em redes online no Brasil, sobretudo na região Sudeste (e.g. Magalhães & São Pedro, 2012; Nehemy et al., 2022). Esse comércio online, aliado ao baixo custo de aquisição e à falta de conhecimento dos compradores, podem ser fatores que influenciam o elevado número de indivíduos de *P. guttatus* em vida livre nessa região.

Embora a presença de diferentes espécies alienígenas de répteis em áreas de Mata Atlântica seja conhecida e esperada, inclusive dentro de unidades de conservação, o caso envolvendo *P. guttatus* pode ser particularmente preocupante. Isso porque Fonseca et al. (2017) investigaram a viabilidade climática e risco de estabelecimento de cinco espécies de serpentes sabidamente comercializadas ilegalmente no Brasil, entre elas *P. guttatus*. Os resultados obtidos por esses autores indicaram viabilidade climática para esta espécie majoritariamente concentrada em áreas florestais, especialmente na Mata Atlântica (Fonseca et al., 2017). Ademais, *P. guttatus* demonstrou alta probabilidade de estabelecimento nessas regiões, uma vez que compartilha uma série de atributos de história natural com espécies de serpentes nativas desse bioma, sobretudo algumas da porção sudeste do Brasil (Eterovic & Duarte, 2002; Fonseca et al., 2017). Além de impor competição direta por recursos com outras espécies de nicho similar, *P. guttatus* pode representar uma ameaça a aves nativas, por meio de predação, e a outras serpentes, através da disseminação de parasitas (Ma et al., 2016; Xiao et al., 2004). Assim, se somados o elevado número de registros de *P. guttatus* em porções de Mata Atlântica da região Sudeste, a viabilidade climática da espécie no bioma, o elevado risco de estabelecimento e as potenciais ameaças dessa serpente para espécies nativas, o futuro se apresenta com perspectivas acentuadamente desafiadoras.

O destino dos espécimes de *P. guttatus* e desafios futuros para monitorar a espécie

Dentre os 34 novos registros de *P. guttatus* apresentados neste estudo, cerca de 29,4% corresponderam a espécimes que permaneceram em vida livre. Contudo, é possível que esse número esteja subestimado, uma vez que não foi possível determinar o destino dos indivíduos para 23,5% dos registros. Tais números, embora preocupantes, são esperados e aceitáveis, uma vez que a maioria dos registros são feitos por não especialistas. Essas pessoas, por desconhecerem tanto a diversidade de serpentes quanto a problemática de invasões biológicas, não são capacitadas para realizar o procedimento correto para destinação do espécime visualizado. No entanto, uma situação que chama a atenção é a dos espécimes que foram encaminhados ou resgatados por órgãos competentes. Dentro da nossa amostra, 38,3% dos registros foram de indivíduos encaminhados para órgãos competentes, na maioria das vezes alguma unidade do Corpo de Bombeiros. Essa instituição desempenha papel fundamental resgatando animais em situações emergenciais, contando com profissionais treinados para realizar tais operações. Porém, quando capturadas por agentes dessas instituições,

o destino de exemplares de *P. guttatus* – e de outras espécies exóticas – ainda pode ser o ambiente natural. Considerando os registros levantados aqui, essa situação ocorreu pelo menos uma vez, quando um Grupamento de Defesa Ambiental capturou um indivíduo de *P. guttatus* no município do Guarujá (SP), a identificando como muçurana e realizando sua soltura no Morro do Icanhema, também no Guarujá (Apêndice I).

Outra situação preocupante é sobre o esforço atualmente empregado em mapear acuradamente a distribuição geográfica das espécies exóticas no Brasil. Durante o decorrer deste estudo, uma situação que chamou a atenção foi o ritmo acelerado de novas localidades de ocorrência sendo disponibilizadas online, sobretudo no Facebook. Mesmo que o período de buscas deste estudo tenha sido de apenas um mês, os quatro últimos registros foram feitos durante esse período (Apêndice I). Quando levadas em consideração a frequência temporal de registros (Figura 3B) e a crescente adesão de usuários a determinadas plataformas de ciência cidadã, torna-se óbvio que a probabilidade de novos registros só tende a crescer. Esse panorama fica ainda mais evidente quando pensamos que, passados apenas quatro anos do levantamento feito por Fonseca et al. (2019), o número de localidades de ocorrência conhecidas para *P. guttatus* no Brasil mais do que dobrou. Dessa forma, fica clara a necessidade de iniciativas além da publicação de artigos científicos para monitorar mais rapidamente os novos registros de *P. guttatus* que estão por vir.

Nesse contexto, uma alternativa pode ser a criação de uma plataforma de ciência cidadã especializada em mapear táxons exóticos à fauna brasileira. Atualmente, diversos projetos envolvendo a participação ativa de diferentes segmentos da sociedade têm ganhado destaque. Um dos mais conhecidos é o Sistema Urubu, desenvolvido para monitorar os atropelamentos de fauna em estradas brasileiras, que revolucionou a forma de coleta de dados nessa área de pesquisa (Castro & Bager, 2017). Com um sistema baseado em um aplicativo gratuito e disponível para Android e IOs, a rede conta com milhares de usuários e um processo rigoroso de validação de informações realizado por especialistas de fauna, garantido a qualidade individual de cada registro. Assim, tomando como exemplo modelos de plataformas de ciência cidadã já comprovadamente eficientes em diferentes campos das áreas biológicas, seria possível facilitar e acelerar nosso entendimento sobre a distribuição geográfica não somente de *P. guttatus*, mas de outras espécies alienígenas presentes no território brasileiro.

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Somos gratos a Orisvaldo dos Santos, que encontrou e nos comunicou sobre a presença de espécime de *Pantherophis guttatus* na área de estudo do Projeto Dacnis, em São José dos Campos; Henrique Abrahão Charles ("Biólogo Henrique") e Maurício Modolo, pela ajuda em triar e atualizar constantemente nosso banco de dados sobre as localidades de ocorrência de *P. guttatus* no Brasil; e a Elsie L. Rotenberg pela revisão final e sugestões ao longo da confecção do manuscrito.

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Editor: Henrique C. Costa



Figura 1. Espécime de *Pantherophis guttatus* encontrado em São Francisco Xavier, município de São José dos Campos, estado de São Paulo, na área de estudos do Projeto Dacnis.

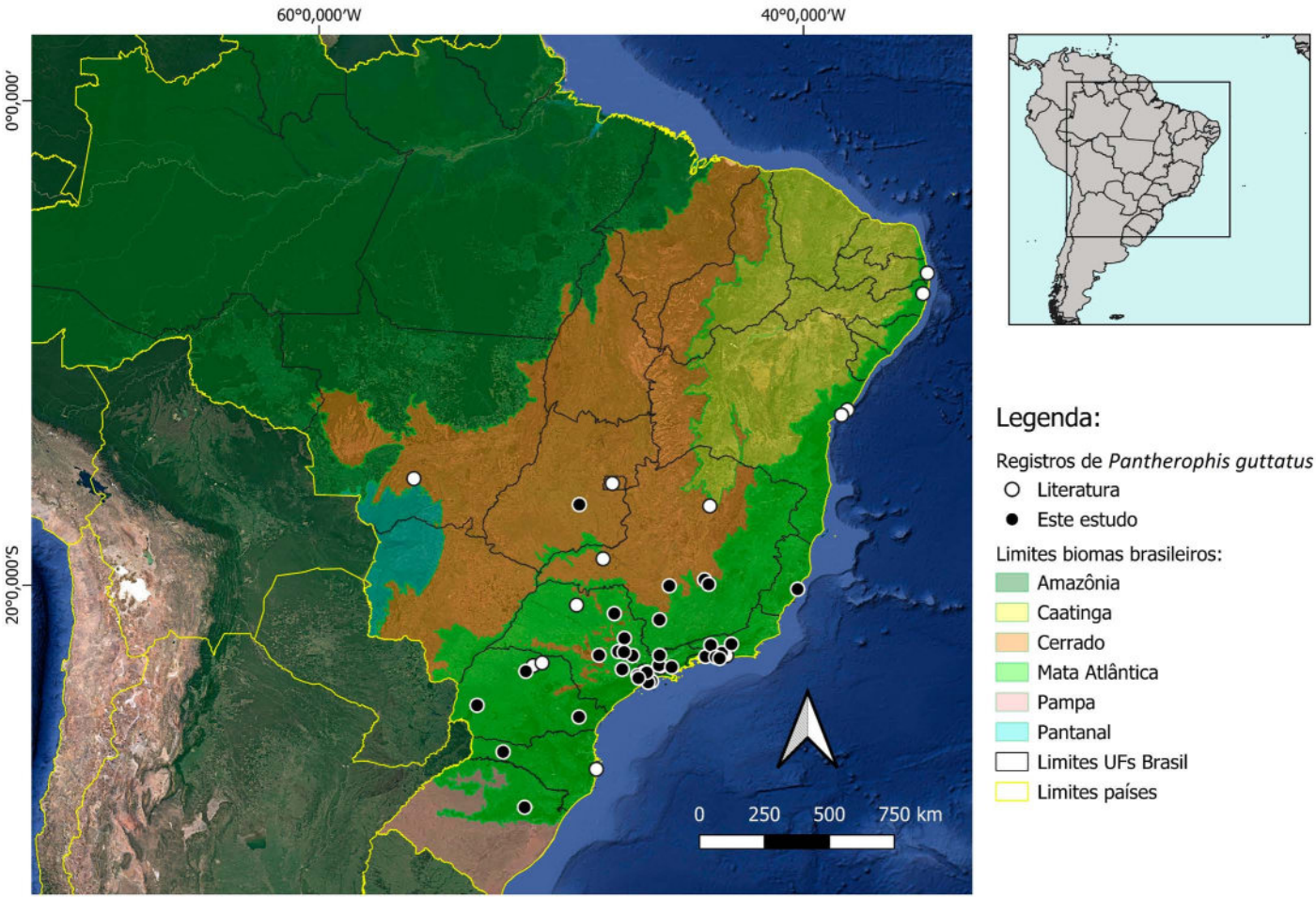

Figura 2. Registros de *Pantherophis guttatus* no Brasil.

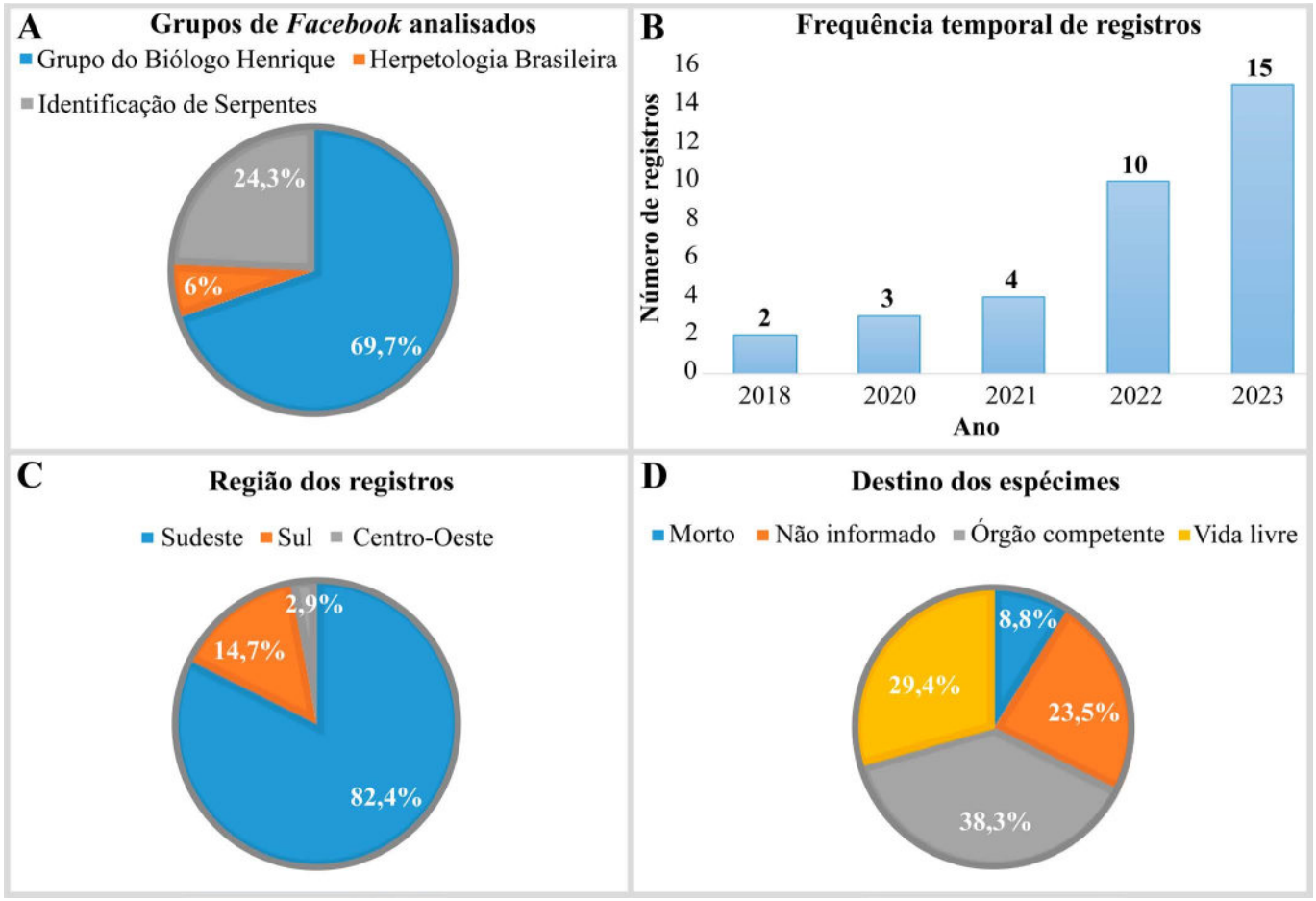

Figura 3. Compilação dos novos registros de *Pantherophis guttatus* no Brasil, abrangendo: (A) distribuição percentual de registros em relação aos três grupos do *Facebook* analisados; (B) frequência anual total de novas localidades de ocorrência; (C) distribuição percentual de registros por região geográfica; e (D) distribuição percentual de registros com base no destino de cada espécime encontrado.

APÊNDICE

Apêndice I. Novas localidades de ocorrência de *Pantherophis guttatus* no Brasil.

Registro 1

Data: 23/11/2018

Usuário: Henrique Abrahão Charles

Município (estado): Guarujá (SP)

Localidade: Bairro Jardim Boa Esperança

Local: Interior de residência

Destino: Permaneceu em vida livre

Link: *https://encurtador.com.br/Im9gP*



Figura 4. Espécime de *P. guttatus* encontrado no município de Guarujá, estado de São Paulo.

Registro 2

Data: 16/12/2018

Usuário: Ana Paula Ligneul

Município (estado): Teresópolis (RJ)

Localidade: Não informado

Local: Próximo de residência

Destino: Permaneceu em vida livre

Link: *https://encurtador.com.br/2v69C*



Figura 5. Espécime de *P. guttatus* encontrado no município de Teresópolis, estado do Rio de Janeiro.

Registro 3

Data: 30/09/2020

Usuário: Rafael Grassi

Município (estado): Botucatu (SP)

Localidade: Não informado

Local: Não informado

Destino: Não informado

Link: *https://encurtador.com.br/heBUI*



Figura 6. Espécime de *P. guttatus* encontrado no município de Botucatu, estado de São Paulo.

Registro 4

Data: 11/11/2020

Usuário: Deyves Moreira

Município (estado): São Paulo (SP)

Localidade: Distrito São Mateus

Local: Interior de escola

Destino: Corpo de Bombeiros

Link: *https://encurtador.com.br/H5foz*



Figura 7. Espécime de *P. guttatus* encontrado no município de São Paulo, estado de São Paulo.

Registro 5

Data: 17/11/2020

Usuário: Marcelo Simões

Município (estado): Campinas (SP)

Localidade: Bairro Barão Geraldo

Local: Interior de residência

Destino: Não informado

Link: *https://abrir.link/tgFiO*



Figura 8. Espécime de *P. guttatus* encontrado no município de Campinas, estado de São Paulo.

Registro 6

Data: 14/09/2021

Usuário: Thiago Bastos

Município (estado): São João do Meriti (RJ)

Localidade: Não informado

Local: Atravessando Avenida Dutra

Destino: Morto

Link: *https://abrir.link/vxktS*



Figura 9. Espécime de *P. guttatus* encontrado no município de São João do Meriti, estado de São Paulo.

Registro 7

Data: 06/11/2021

Usuário: Bia Nable

Município (estado): Belo Horizonte (MG)

Localidade: Parque Municipal da Serra do Curral

Local: Dentro de unidade de conservação

Destino: Permaneceu em vida livre

Link: *https://abrir.link/mRXoU*



Figura 10. Espécime de *P. guttatus* encontrado no município de Belo Horizonte, estado de Minas Gerais.

Registro 8

Data: 18/12/2021

Usuário: Tarik Câmara/Fernando Felippe

Município (estado): Apucarana (PR)

Localidade: Núcleo Habitacional Afonso Alves Camargo

Local: Interior de residência

Destino: Instituto de Água e Terra, Londrina (PR)

Link: *https://abrir.link/xTMTR*



Figura 11. Espécime de *P. guttatus* encontrado no município de Apucarana, estado do Paraná.

Registro 9

Data: 21/11/2021

Usuário: Andressa Sato

Município (estado): Alfenas (MG)

Localidade: Não informado

Local: Próximo de residência

Destino: Corpo de Bombeiros

Link: *https://abrir.link/eFRUr*



Figura 12. Espécime de *P. guttatus* encontrado no município de Alfenas, estado de Minas Gerais.

Registro 10

Data: 08/02/2022

Usuário: Misael Dutra

Município (estado): Bento Gonçalves (RS)

Localidade: Bairro São Bento

Local: Interior de residência

Destino: Centro de Triagem de Animais Silvestres, Porto Alegre (RS)

Link: *https://encurtador.com.br/qclKN*



Figura 13. Espécime de *P. guttatus* encontrado no município de Bento Gonçalves, estado do Rio Grande do Sul.

Registro 11

Data: 16/02/2022

Usuário: Felipe Guedes

Município (estado): Curitiba (PR)

Localidade: Bairro Bigorrilho

Local: Interior de residência

Destino: Corpo de Bombeiros

Link: *https://encurtador.com.br/Zg6Wu*



Figura 14. Espécime de *P. guttatus* encontrado no município de Curitiba, estado do Paraná.

Registro 12

Data: 19/03/2022

Usuário: Guilherme Fernandes

Município (estado): Rio de Janeiro (RJ)

Localidade: Bairro Recreio dos Bandeirantes

Local: Interior de residência

Destino: Corpo de Bombeiros

Link: *https://abrir.link/yUJnx*

Figura: Indisponível.

Registro 13

Data: 05/04/2022

Usuário: Mark Frankson

Município (estado): Ribeirão das Neves (MG)

Localidade: Não informado

Local: Interior de residência

Destino: Morto

Link: *https://abrir.link/VzLNi*



Figura 15. Espécime de *P. guttatus* encontrado no município de Ribeirão das Neves, estado de Minas Gerais.

Registro 14

Data: 11/04/2022

Usuário: Gabriel S. Queiroz

Município (estado): Praia Grande (SP)

Localidade: Não informado

Local: Atravessando Avenida Presidente Kennedy

Destino: Morto

Link: https://abrir.link/jNOSQ

Figura: Indisponível.

Registro 15

Data: 28/04/2022

Usuário: Viviane Gluzezak

Município (estado): Xanxerê (SC)

Localidade: Não informado

Local: Próximo de residência

Destino: Hospital Veterinário de Xanxerê (SC)

Link: *https://abrir.link/jNOSQ*

Registro 16

Data: 22/10/2022

Usuário: João Junior

Município (estado): Guaratiba (RJ)

Localidade: Não informado

Local: Atravessando estrada não pavimentada

Destino: Permaneceu em vida livre

Link: *https://abrir.link/QwZki*

Figura: Indisponível



Figura 16. Espécime de *P. guttatus* encontrado no município de Xanxerê, estado de Santa Catarina.

Registro 17

Data: 03/12/2022

Usuário: Bibiane Buga

Município (estado): Natividade da Serra

Localidade: Bairro Barro Branco

Local: Atravessando estrada não pavimentada

Destino: Permaneceu em vida livre

Link: *https://abrir.link/SuWSU*



Figura 17. Espécime de *P. guttatus* encontrado no município de Natividade da Serra, estado de São Paulo.

Registro 18

Data: 07/12/2022

Usuário: Thiago Moreira

Município (estado): Itapecerica da Serra (SP)

Localidade: Não informado

Local: Não informado

Destino: Instituto Butantan (SP)

Link: *https://abrir.link/NYbDk*



Figura 18. Espécime de *P. guttatus* encontrado no município de Itapecerica da Serra, estado de São Paulo.

Registro 19

Data: 14/12/2022

Usuário: Cláudio Fantinato

Município (estado): Ribeirão Preto (SP)

Localidade: Não informado

Local: Interior de residência

Destino: Não informado

Link: *https://abrir.link/ZglAz*



Figura 19. Espécime de *P. guttatus* encontrado no município de Ribeirão Preto, estado de São Paulo.

Registro 20

Data: 24/01/2023

Usuário: Nadia Mikalzenzen

Município (estado): Cascavel (PR)

Localidade: Bairro Cascavel Velho

Local: Interior de residência

Destino: Corpo de Bombeiros

Link: *https://abrir.link/xyJtQ*

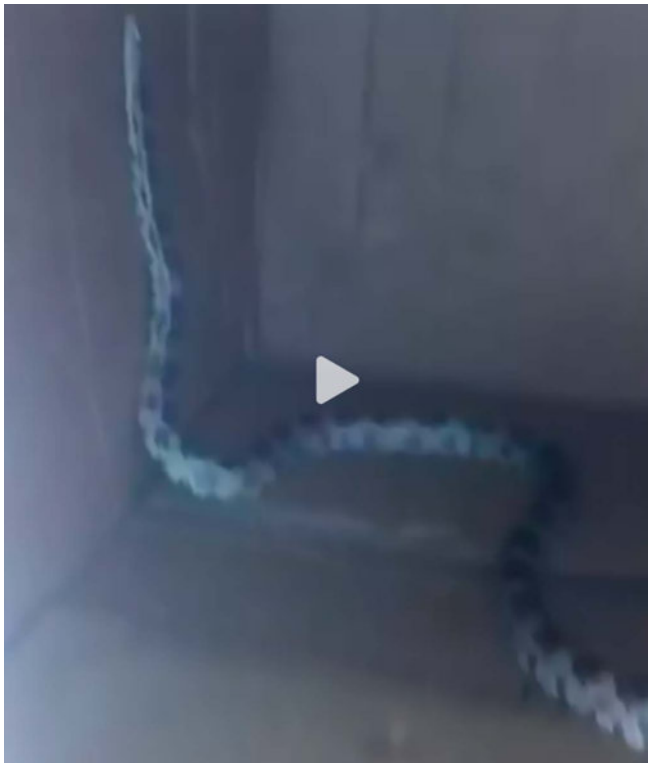

Figura 20. Espécime de *P. guttatus* encontrado no município de Cascavel, estado do Paraná.

Registro 21

Data: 16/03/2023

Usuário: Bell Ismael

Município (estado): Lagoa da Prata (MG)

Localidade: Reserva da Prainha

Local: Atravessando estrada pavimentada

Destino: Não informado

Link: *https://abrir.link/wCJkl*



Figura 21. Espécime de *P. guttatus* encontrado no município de Lagoa da Prata, estado de Minas Gerais.

Registro 22

Data: 31/03/2023

Usuário: Cabelim Barbosa Santos

Município (estado): Goiânia (GO)

Localidade: Bairro Setor Central

Local: Interior de residência

Destino: Corpo de Bombeiros

Link: https://abrir.link/XsBoU



Figura 22. Espécime de *P. guttatus* encontrado no município de Goiânia, estado de Goiás.

Registro 23

Data: 29/04/2023

Usuário: Hordas Orates

Município (estado): Embu-Guaçu (SP)

Localidade: Não informado

Local: Interior de galinheiro

Destino: Permaneceu em vida livre

Link: *https://abrir.link/vvNqE*

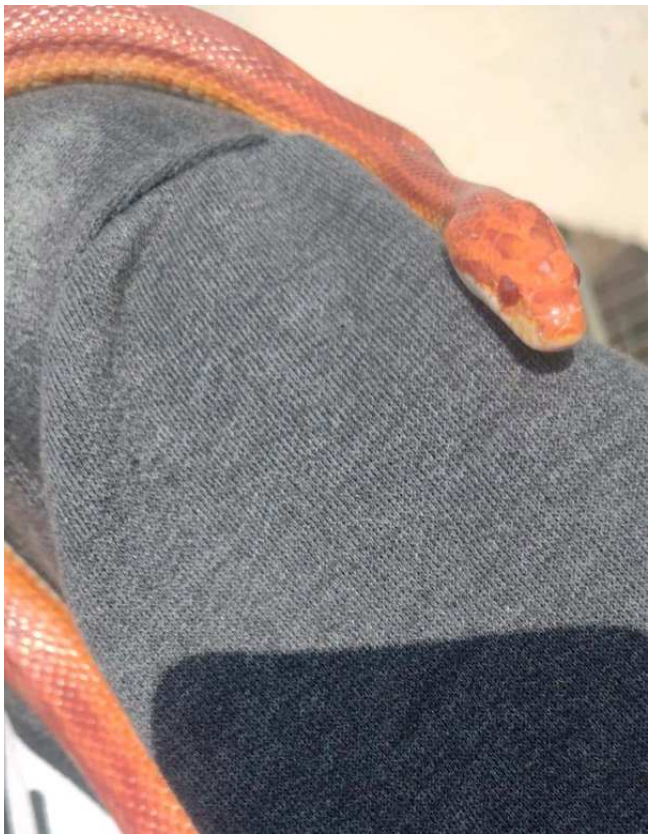

Figura 23. Espécime de *P. guttatus* encontrado no município de Embu-Guaçu, estado de São Paulo.

Registro 24

Data: 15/05/2023

Usuário: Lucas Vidal

Município (estado): Jacareí (SP)

Localidade: Não informado

Local: Atravessando estrada pavimentada

Destino: Não informado

Link: *https://abrir.link/lhVZc*



Figura 24. Espécime de *P. guttatus* encontrado no município de Jacareí, estado de São Paulo.

Registro 25

Data: 13/07/2023

Usuário: Nilton Costa

Município (estado): Santa Bárbara d'Oeste (SP)

Localidade: Parque dos Ipês

Local: Não informado

Destino: Corpo de Bombeiros

Link: *https://abrir.link/MSkOS*

Figura: Indisponível.

Registro 26

Data: 14/08/2023

Usuário: Ronaldo Oliveira

Município (estado): Mangaratiba (RJ)

Localidade: Não informado

Local: Atravessando estrada pavimentada

Destino: Permaneceu em vida livre

Link: *https://abrir.link/gXSOu*



Figura 25. Espécime de *P. guttatus* encontrado no município de Mangaratiba, estado do Rio de Janeiro.

Registro 27

Data: 14/08/2023

Usuário: Rafael Carvalho

Município (estado): Sorocaba (SP)

Localidade: Bairro Jardim Portobello, UPA do Éden

Local: Interior de UPA

Destino: Corpo de Bombeiros

Link: *https://abrir.link/fcXFq*



Figura 26. Espécime de *P. guttatus* encontrado no município de Sorocaba, estado de São Paulo.

Registro 28

Data: 11/09/2023

Usuário: Eduardo Silva Vieira

Município (estado): Diadema (SP)

Localidade: Bairro Inamar

Local: Interior de residência

Destino: Não informado

Link: *https://abrir.link/hDBqD*



Figura 27. Espécime de *P. guttatus* encontrado no município de Diadema, estado de São Paulo.

Registro 29

Data: 19/09/2023

Usuário: Gabriel Rocha

Município (estado): Piracicaba (SP)

Localidade: Não informado

Local: Interior de residência

Destino: Não informado

Link: *https://abrir.link/xMZbd*



Figura 28. Espécime de *P. guttatus* encontrado no município de Piracicaba, estado de São Paulo.

Registro 30

Data: 29/09/2023

Usuário: Thales Montela

Município (estado): Barra do Piraí (RJ)

Localidade: Não informado

Local: Não informado

Destino: Não informado

Link: *https://abrir.link/ZhgMy*



Figura 29. Espécime de *P. guttatus* encontrado no município de Barra do Piraí, estado do Rio de Janeiro.

Registro 31

Data: 09/10/2023

Usuário: Jhonath Moreira Pucente

Município (estado): Serra (ES)

Localidade: Bairro Civit I

Local: Próximo de residência

Destino: Permaneceu em vida livre

Link: *https://abrir.link/oAfsq*

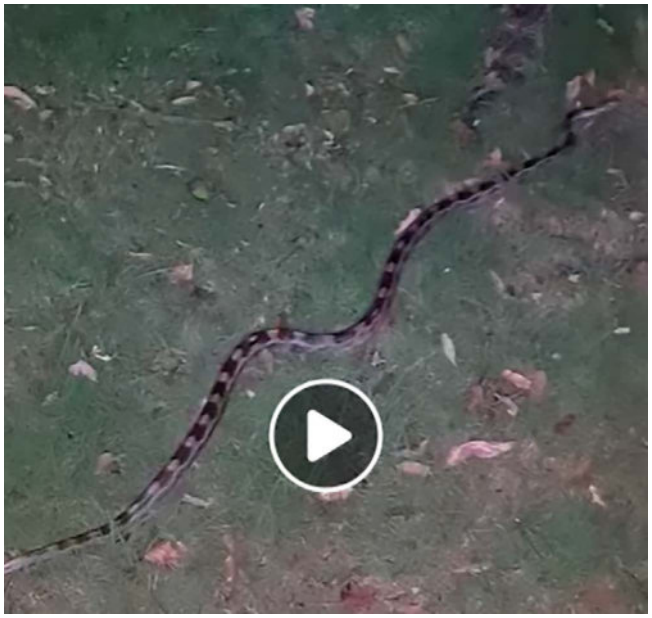

Figura 30. Espécime de *P. guttatus* encontrado no município de Serra, estado do Espírito Santo.

Registro 32

Data: 11/10/2023

Usuário: Eric Silva

Município (estado): São Paulo (SP)

Localidade: Parque Natural Municipal Fazenda do Carmo

Local: Dentro de unidade de conservação

Destino: Permaneceu em vida livre

Link: *https://abre.ai/kpbw*



Figura 31. Espécime de *P. guttatus* encontrado no município de São Paulo, estado de São Paulo.



SAPO DE CHIFRE DA CAATINGA

Ceratophrys joazeirensis

J. V. A. de Oliveira

Pernambuco, Brasil.

Sombras, iluminação e texturização digital para adicionar realismo à ilustração.
João Victor A. Oliveira - @ilustracienciajv e @jvalvez
Ceratophrys joazeirensis

Distress call of *Boana geographica* (Spix, 1824) recorded in the state of Maranhão, Brazil

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Anuran vocalization can vary in different social contexts, including reproductive, aggressive, and defensive calls (Toledo and Haddad, 2009; Toledo et al., 2014). Among the defensive calls, three subcategories can be identified: alarm, warning, and distress calls (Toledo et al., 2014; Ferreira et al., 2019). This later is usually emitted with the mouth open and during subjugation by a potential predator (Toledo et al., 2005; Toledo et al., 2014; Ferreira et al., 2019). Although distress calls are known from almost 100 species in 38 genera, they are commonly observed in *Boana* and *Leptodactylus* species (Ferreira et al., 2019).

Boana geographica (Spix, 1824) belongs to the *B. semilineata* group (Faivovich et al., 2005) and is a treefrog with nocturnal foraging habits whose reproductive period extends throughout the year (Anjos et al., 2021). It is distributed from northern Bolivia and adjacent southeastern Peru to western Brazil (Frost, 2024). The known vocal repertory of *B. geographica* is restricted to its advertisement call (Fouquet et al., 2016). In this work, we describe the distress call of *B. geographica* recorded in the state of Maranhão, northeastern Brazil, and compare it to other species of *Boana*.

During fieldwork carried out on April 20, 2023 at Reserva Particular do Patrimônio Natural (RPPN) Mansinha (7°8'5.02"S; 47°26'5.13"W, datum WGS84), municipality of Carolina, near Chapada das Mesas National Park, state of Maranhão, northeastern Brazil, we collected an adult male *Boana geographica* (Fig. 1) on the banks of a small stream in the middle of a gallery forest. The individual was found on a tree trunk around 10h00 a.m., collected manually, and transported in a plastic bag to the support base. The animal emitted a distress call when removed from the plastic bag with immobilized legs.

We recorded the distress call using a smartphone with a sampling rate of 44.1 kHz and resolution of 32 bits. We analyzed the calls in the Raven Pro v.1.6.1 (Bioacoustics Research Program, 2019) software using the settings: window type = Hanning, window size = 512 samples; 3 dB filter bandwidth = 124 Hz; overlap = 95% (locked), hop size = 0.59 ms, DFT size = 512 samples, grid spacing = 86.1 Hz; brightness = 60%; contrast = 54%. We analyzed the following acoustic parameters: call duration, inter-call interval (s), minimum frequency (Hz), maximum frequency (Hz), dominant frequency (Hz), and bandwidth 90% (Hz) (Köhler et al., 2017). The minimum and maximum frequencies were obtained through "Frequency 5%" and "Frequency 95%" functions in Raven Pro v.1.6.1 (Bioacoustics Research Program, 2019). Note and call terminologies follow Köhler et al. (2017) using a note-centered approach. Sound figure was produced using the packages Seewave v.2.1.6 (Sueur et al., 2008) and tuneR v.1.3.3 (Ligges et al., 2017), in R v.4.0.4 (R Core Team 2021), with the following settings: window = Hanning; FFT size = 512 samples; FFT overlap = 70%; color scale = 60 dB relative. Following the recording process, the specimen was euthanized following approved procedures, fixed in 10% formalin, and preserved in 70% alcohol. The specimen was deposited in the Coleção Biológica da Universidade Estadual do Maranhão – UEMA *Campus* Paulo VI, São Luís, Maranhão, Brazil (CFMAN107). The video and audio were deposited at Fonoteca Neotropical Jacques Vielliard (FNJV 77623).

The distress call description was based on a 60 s recording containing 12 calls. The distress call consists of a pulsatile and harmonically complex structure with mean 43.83 harmonics [Standard Deviation (SD) 3.88 harmonics; 38–50 harmonics], emitted with the mouth open. The call duration was 0.635 s (SD 0.183 s; 0.413–0.977 s), inter-call interval of 4.143 s (SD 4.824 s; 0.322–16.588 s), minimum frequency (5%) of 1945 Hz (SD 518 Hz; 1291–2756 Hz), maximum frequency (95%) of 7428 Hz (SD 3626 Hz; 3617–16106 Hz), and dominant frequency of 2985 Hz (SD 221 Hz; 2583–3273 Hz). However, *B. geographica*

showed variation in the distress call, emitting longer single notes followed by two or three shorter notes grouped together (Fig. 2a). Analyzed separately, the longest notes (n = 3) had an average duration of 0.903 s (SD 0.084 s; 0.812–0.977 s), minimum frequency (5%) of 2325 Hz (SD 479 Hz; 1808–2756 Hz), maximum frequency (95%) of 5713 Hz (SD 1819 Hz; 3617–6890 Hz) and dominant frequency of 3043 Hz (SD 49 Hz; 3014–3100 Hz). These exhibited abrupt ascending frequency modulation at the beginning and descending at the end of the call, with a frequency bandwidth of 3387 Hz (SD 1920 Hz; 1205–4823 Hz), mainly included between the 5th and 8th harmonics (Fig. 2b). The shorter notes (n = 3) had an average duration of 0.546 s (SD 0.093 s; 0.413–0.687 s), minimum frequency (5%) of 1818 Hz (SD 489 Hz; 1291–2411 Hz), maximum frequency (95%) of 8000 Hz (SD 3972 Hz; 3789–16106 Hz), and dominant frequency of 2966 Hz (SD 255 Hz; 2583–3273 Hz). The short notes also exhibited abrupt ascending frequency modulation at the beginning and descending at the end of the call, showing greater energy distribution along the harmonics with a frequency bandwidth of 6182 Hz (SD 4078 Hz; 2497–14642 Hz; Fig. 2c).

Distress calls have been reported from 108 anuran species worldwide, of which 37% are from the Hylidae, with most of these from *Boana* (42 distress calls described; Forti et al., 2018; 2020). The distress call of *B. geographica* has the same characteristics (pulsatile and harmonically structure) as described for other species of the Hylidae (e.g., Toledo and Haddad, 2009; Guerra et al., 2017; Forti et al., 2020). Within the *B. semilineata* group, only *B. boans* has its distress calls described (Hödl and Gollman, 1986). Although Toledo and Haddad (2009) tested several individuals of *B. pombali* and *B. semilineata* for the emission of distress call, both species showed no response. The duration and dominant frequency of the *B. boans* distress call (0.427–1.350 s; 3000–4000 Hz; Höld and Gollman, 1986) is similar to the longer notes of *B. geographica* (mean 3043 Hz; SD 49 Hz; 3014–3100 Hz), except for the abruptly increasing and decreasing frequency modulation at the beginning and end, respectively, in *B. geographica*. Furthermore, the authors reported that no clear harmonic structures were observed in distress call of *B. boans* (Hödl and Gollman, 1986).

Although smartphones record acoustic signals differently from professional equipment, their use has increased in recent years (Roh et al., 2014; Modak et al., 2016; Weaver et al., 2020; Fernandes et al., 2023). Smartphones and cameras with built-in microphones are not recommended for recording frog calls, but their use is advocated in unexpected cases when professional equipment is unavailable (Köhler et al., 2017). Smartphones have different de-

tection ranges and frequency responses (Zilli, 2015), however, the quality of the built-in microphones impacts the temporal parameters of recorded calls more strongly than the dominant frequency (Kardous and Shaw, 2014; Köhler et al., 2017).

In this case, because there may be bioacoustic differences resulting from the equipment used (Köhler et al., 2017) or the degree of stress of the anurans (handled and preyed upon; Costa et al., 2022), we present temporal parameters of the different types of notes emitted but draw attention to the structural aspects and behavioral characteristics during the issuance of the distress call of *B. geographica*. This was an event recorded opportunistically during a study of this rare species. Toledo and Haddad (2009) attempted to induce distress calls from *B. geographica* but were unsuccessful. In this study, *Boana geographica* emitted a distress call when handled. Our results provide relevant data on acoustic communication in treefrogs and contribute to the understanding of bioacoustic parameters in the *B. semilineata* group.

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Ariadne F. Sabbag

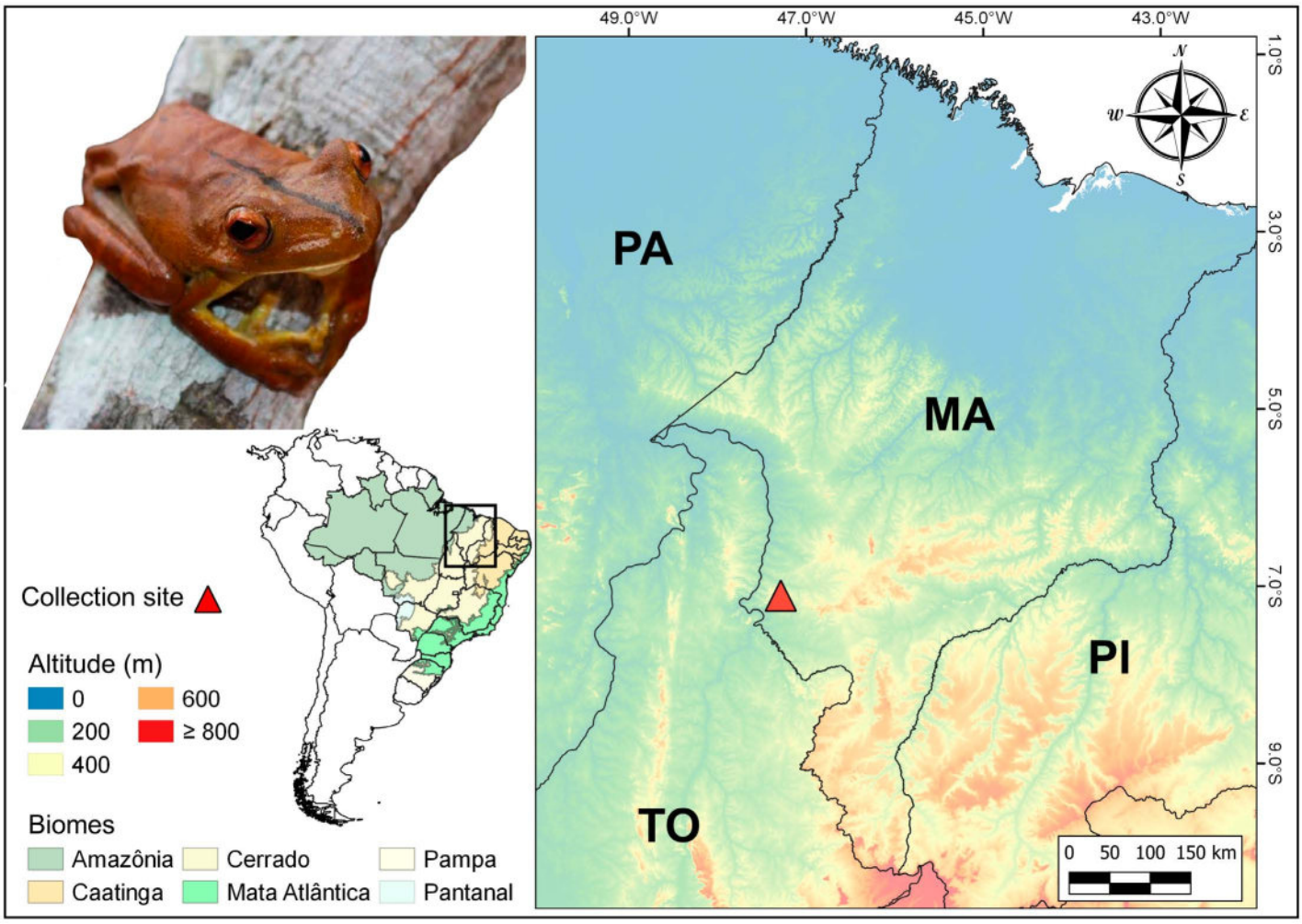

Figure 1. Location of *Boana geographica* recorded in the Reserva Particular do Patrimônio Natural (RPPN) Mansinha, municipality of Carolina, state of Maranhão, Northeastern Brazil.

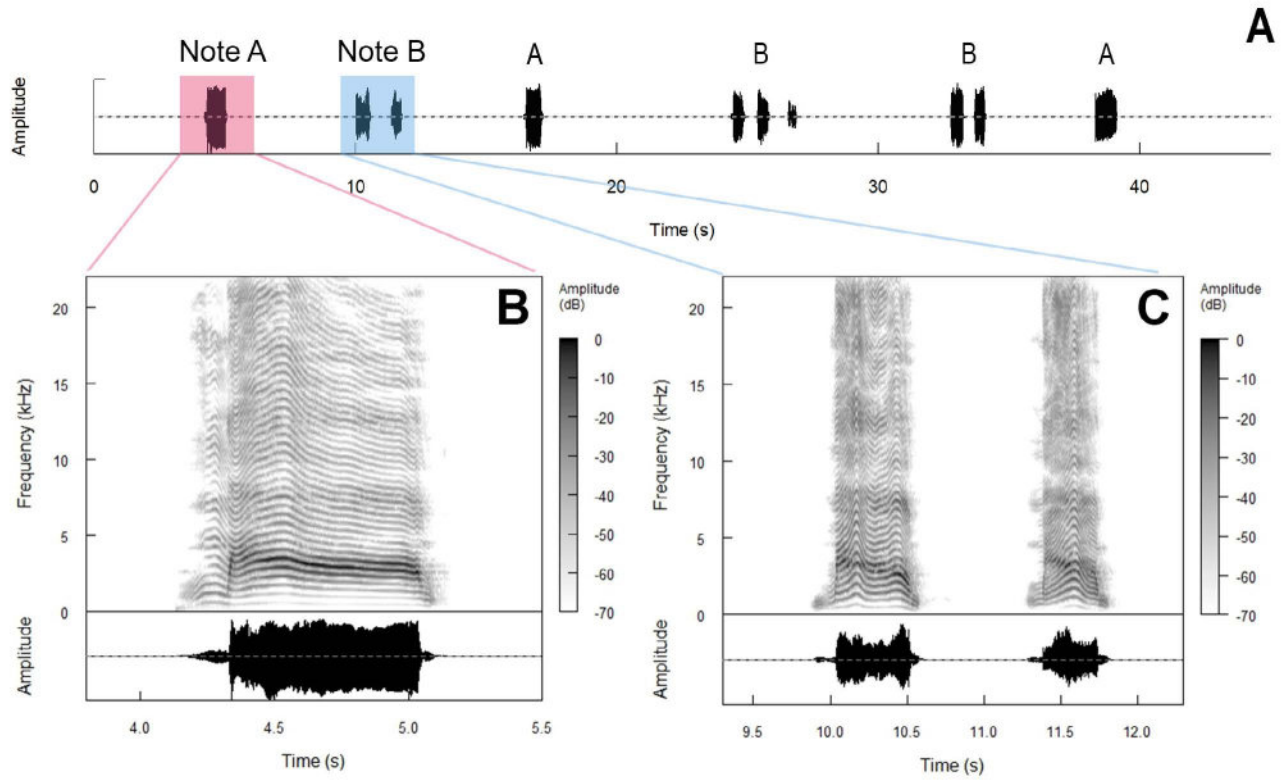

Figure 2. *Boana geographica* distress call recorded in the Reserva Particular do Patrimônio Natural (RPPN) Mansinha, municipality of Carolina, state of Maranhão, Northeastern Brazil. **A** – Oscillogram showing the complete distress call; **B** and **C** – Detail of the oscillogram and spectrogram of notes **A** and **B**, respectively.

Are local crops home to frogs? A case study in the Ibiapaba Plateau, state of Ceará, Northeast Brazil

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Abstract

Studies investigating the impact of agricultural landscapes on amphibian diversity are crucial to understanding their consequences on amphibian population dynamics. Nevertheless, some environments, such as montane ecosystems, are still understudied. Herein, we describe the anuran composition in several agricultural landscapes of the Ibiapaba Plateau, Ceará State, Northeast Brazil. We performed anuran sampling in January and February 2019, with a total sampling effort of 154 hours by 3 researchers in 29 collection days. We found 170 individuals in 20 species and six families, of which

65% were found in the National Park of Ubajara, Ceará, Brazil. The anuran fauna was similar regardless of the crop type, and the Hylidae and Leptodactylidae had the highest species richness and abundance. Overall, we observed that these crops are usually homes for generalist frogs that are more adapted to disturbed environments. This will support awareness of public policies aimed at herpetofaunal preservation and conservation in this mountain due to the increase of anthropogenic disturbances in these areas.

Keywords: Amphibians, Anthropogenic disturbances, rainforest enclaves.

INTRODUCTION

The environmental changes involving the expansion and retraction of the Amazon and Atlantic Rainforests resulted in the emergence of unique mountain ecosystems in the Caatinga biome, recognized as Relictual Forest Mountains (Andrade-Lima, 1982). These areas are characterized by a milder climate, higher precipitation, and higher humidity than the surrounding lowlands (Lupikasza & Szypula, 2019; Lucena et al., 2022). Because of these environmental characteristics, they provide suitable places for human habitation and are attractive for agricultural practices, resulting in consequences such as habitat fragmentation (Bhatta et al., 2019; Resende et al., 2018). Natural landscapes are replaced by avocado, banana, and sugarcane plantations (Charre-Medellín et al., 2021; Said et al., 2021), resulting in the loss of local biodiversity (Spehn et al., 2010) and consequently the imbalance of ecosystem functions.

Among these Relictual Forest Mountains, the Ibiapaba plateau in the state of Ceará is classified as an area of biological importance (Ab'Sáber, 2003; Tabarelli & Silva, 2003) with a high and unique biodiversity of vertebrates such as reptiles and amphibians (Loebmann & Haddad, 2010). However, this biodiversity is threatened because there has been an increase in anthropogenic areas on this mountain (Lima et al., 2022). Agricultural activities are common in this highland region, and pesticide use is prevalent (Silva et al., 2019). Contaminants such as atrazine, simazine, and methyl parathion have been detected in the surface and underground water supplies of the municipality of Tianguá, in the Ibiapaba plateau (Canuto et al., 2010; Gama et al., 2013; Silva et al., 2019). These contaminants represent a high risk to both human and environmental health.

Aside from agricultural activities, the Ibiapaba plateau is considered a hotspot for amphibians and reptiles in the state of Ceará. The herpetofauna of this mountain is composed of 122 species, of which 71 species (58.2 %) are recorded in the National Park of

Ubajara (Loebmann & Haddad, 2010; Castro et al., 2019). Additionally, some endemisms from the Relictual Forest Mountains occur in the Ibiapaba plateau, such as *Adelophryne baturitensis* Hoogmoed, Borges, and Cascon, 1994 (Hoogmoed et al., 1994) and the newly described *Pristimantis relictus* Roberto, Loebmann, Lyra, Haddad, and Ávila, 2022 (Roberto et al., 2022). These studies were conducted in pristine and protected environments; little fieldwork has been done in buffer zones and anthropized areas.

Studies of the impact of agricultural landscapes on amphibian diversity try to understand and assess the patterns and consequences of populations' dynamics from different perspectives. For instance, to assess which habitat characteristics better contribute to amphibian diversity (Silva et al., 2012; Li et al., 2020), to investigate the richness and abundance patterns (Li et al., 2018), species dispersion (Ribeiro et al., 2019), and reproductive dynamics (Boissinot et al., 2019). In addition, agricultural contaminants can have devastating impacts on amphibian survival and development because anurans are one the most sensitive groups to environmental disturbances (Marcogliese et al., 2009, Camacho-Rozo & Camacho-Reyes, 2022, Pérez-Iglesias et al., 2023).

There has been a human population and agricultural area increase in the Ibiapaba plateau in the last decades (ICMBio, 2002; Ipece, 2018a, b), affecting the local fauna (Araújo et al., 2017; Martins-Neto, 2022). However, the anuran fauna is unknown in these areas. We hypothesize that the growing expansion of land use for pasture and fruit and vegetable production with the intensive use of agrochemicals may negatively alter the assemblage of amphibians on the Ibiapaba plateau. In this study, we described the anuran composition in various crop areas in the Ibiapaba plateau, Ceará state, Northeast Brazil, and compare it with the species recorded in protected areas of this mountain.

MATERIAL AND METHODS

Study area

The present study was carried out on seven agricultural landscapes in the municipalities of Tianguá and Ubajara, both contained within a buffer zone of the National Park of Ubajara, state of Ceará, Northeast Brazil (Fig. 1). Rainfall in these areas are concentrated between January and May, and the mean temperature ranges from 22 °C to 26 °C (Ipece, 2018a, b). The main natural vegetation covers are Tropical seasonal deciduous forest and Tropical seasonal evergreen forest (Silveira et al., 2020). The sampling was conducted

in areas with four agricultural crops (AG): AG1 (3°43'25.0" S, 40°57'01.5" W, elephant grass), AG2 (3°43'07.7" S, 40°56'42.5" W, banana), AG3 (3°44'07.7" S, 40°58'17.8" W, bean), AG4 (3°47'37.9" S, 40°55'23.9" W, banana), AG5 (3°48'07.3" S, 40°57'03.0" W, elephant grass), AG6 (3°51'43.6" S, 40°53'57.6" W, sugarcane), and AG7 (3°52'20.8" S, 40°56'00.5" W, sugarcane). The locations were in areas of subsistence agriculture where permanent lentic water ponds were scant but remained humid because they contained an irrigation system. Pesticide use is a common practice in these crops (HTSM, personal observation).

Sampling

Anuran sampling occurred during the rainy season at night between 18 h to 01 h in January and February 2019 using visual and auditory searches (Heyer, 1994). We visited the seven sampling points daily for 40 minutes in each location for 11 consecutive days. The locations were sampled at alternating times during the sampling period to avoid biases in anuran activity. Our total sampling effort was approximately 154 hours/3 researchers. One individual of each species was manually collected, euthanized with an injection of lidocaine (2 %), fixed in 10 % formalin, and preserved in 70 % ethanol (collection permit SISBio-ICMBio: 66902-1). We followed the guidelines established by the National Council for the Control of Animal Experimentation in accordance with Law 11.794 of 2008, article 14 § 1º and with Normative Resolution 37, February 15, 2018 (Concea, 2018) and the recommendations of the Brazilian Guide for the Production, Maintenance or Use of Animals in Teaching or Scientific Research Activities (Jared et al., 2023). Voucher specimens were deposited in the Núcleo Regional de Ofiologia of the Universidade Federal do Ceará (NUROF-UFC), Fortaleza, Brazil. Anuran nomenclature follows Frost (2024), and conservation status follows IUCN (2024).

Statistical analyses

We evaluated the sampling effort through a sample-based accumulation curve with 1000 randomizations from an incidence matrix (Gotelli & Colwell, 2001). Each night of observation corresponded to a sample, resulting in 11 samples. The expected richness was obtained through the estimators Chao1 and Jackknife1 with 100 randomizations (Magurran & McGill, 2011), the diversity patterns through Shannon-Wiener diversity index and Equity of Pielou (Krebs, 2000), and the species dominance through the Berger-Parker index (d).

We used the Jaccard Similarity coefficient J' (Magurran & McGill, 2011) and the ANOSIM test with 1000 permuta-

tions to investigate the differences in species composition between each agricultural crop type. The anuran distribution in Brazilian biomes was obtained from literature records (Andrade et al., 2017; Araújo et al., 2020; Frost, 2024). Statistical analyses were performed using the packages BiodiversityR (Kindt & Coe, 2005), and Vegan (Oksanen et al., 2016) for R v.5.6.1 software (R Core Team, 2020).

RESULTS

We found 170 anurans in 20 species (Fig. 2) from the following families: Bufonidae (two species), Hylidae (nine species), Leptodactylidae (six species), Odontophrynidae (one species), Phyllomedusidae (one species), and Strabomantidae (one species). The most abundant species belonged to the families Leptodactylidae and Hylidae, in which *Scinax x-signatus* (Spix, 1824) and *Leptodactylus mystaceus* (Spix, 1824) were dominant. Except for *Pristimantis relictus* (endemic to the Relictual Forest Mountains of Ceará State), all frogs observed are widespread species in Brazil. The conservation status of *Pristimantis. relictus* is unknown because it was recently described, but it is abundant in these mountains. All other frogs observed were classified as 'Least Concern' (LC) according to IUCN Red List Categories and Criteria (IUCN, 2023, see. Table 1).

The species accumulation curve did not reach asymptote (Fig. 3), and the richness estimators Chao 1 (22.4, *sd* = 3.20) and Jackknife 1 (23.6, *sd* = 1.81) suggest at least three more species may occur in the studied areas. Among the seven agricultural landscapes of the Ibiapaba plateau sampled, we observed that the crops AG5 and AG6 were the most similar (j' = 0.55), followed by AG1 and AG4 (j' = 0.53) and AG5 and AG7 (j= 0.44), whereas AG1 and AG6 (J' = 0.13) were the most dissimilar concerning species composition. In addition, there is no significant influence of the agricultural type on anuran composition (R = -0.27, p = 0.76), meaning that regardless of the crop type, these environments usually harbor similar species that are common to anthropized landscapes (Fig. 4).

DISCUSSION

In general, we observed that these agricultural areas harbor more than 50% of the anuran species registered in the Ubajara National Park (Botero et al., 2014; Castro et al., 2019). Herpetofaunal studies carried out in a short period may not always represent the total local richness (e.g., Cavalcanti et al., 2014; Pedrosa et al., 2014), because anurans have different periods and reproductive strategies during the rainy season (Wells, 1977; Crump, 2015), and as a result, some species may reproduce at the beginning, middle, or end of the

rainy season. The richness estimators suggest at least three more species may occur in the area; thus, it is likely that some explosive breeding amphibians were not sampled in this study.

Hylidae and Leptodactylidae were the most diverse and abundant families, which is the common pattern for Neotropical regions (Duellman & Trueb, 1994). Similar results were found in other Relictual Forest Mountains where there was a predominance of hylids and leptodactylids (Castro et al., 2019; Freitas et al., 2023; Marques et al., 2023). It is common for habitat-generalist species to be abundant in anurofauna checklists (e.g., Oliveira et al., 2021; Azevedo et al., 2021), including in anthropized environments (Santana et al., 2012; Amorim et al., 2019; Garcia-Neto et al., 2020). Therefore, it is likely that the replacement of forested areas by crops is resulting in local fauna homogenization.

Leptodactylids usually breed near temporary ponds in shaded areas and eggs are laid in underground chambers, shallow flooded areas covered or bare of vegetation, and in foam nests floating in shallow waters (Prado et al., 2000; Hartmann et al., 2010; Kokubum et al., 2009). Likewise, some generalist treefrogs as *Dendropsophus* species, *Scinax x-signatus*, and *Boana raniceps* (Cope, 1862) have deposition of eggs and exotrophic tadpoles in natural or artificial lentic water (Vieira et al., 2009; Crump, 2015). Therefore, these species do not need specialized and complex environments for reproduction, which enable them to inhabit anthropized environments too.

Our results were similar to what other studies found in agricultural landscapes, in which the highest richness and abundance of anurans were composed of generalist species (e.g., Moreira et al., 2014; Guerra & Aráoz 2015; Oda et al., 2016). These studies reinforce findings that some hylids and leptodactylids tend to be abundant in agricultural environments (Prado & Rossa-Feres, 2014; Oda et al., 2016; Diaz-Ricuarte et al., 2022). Thus, the increase of anthropogenic disturbances in different environments might change the local species composition, prevailing habitat generalist species (Ferrante et al., 2017). Nonetheless, more studies are still needed to understand how local crops impact biodiversity as a role.

The studied agricultural areas are home to considerable anuran richness despite being mostly composed of generalist frogs. It is known that anthropized environments influence the community structure and species diversity (Shea et al., 2004). Additionally, the intermediate disturbance hypothesis suggests that local species diversity is influenced by the ecological disturbance frequency (Grime, 1973). This hypothesis was also

tested for some anuran communities (e.g., Souza et al., 2008; Westgate et al., 2012), however, further studies are still necessary to understand the main drivers and how the ecological disturbance frequency affects the richness patterns in the study area.

Different factors driven by anthropogenic actions such as hunting, mining, urban expansion, tourism, and energy production affect the Caatinga biodiversity (ICMBio, 2018). The increasing of agricultural lands in mountains, the cities' growth and untenable tourism in the Ibiapaba plateau (Freire-Filho et al., 2018) lead us to raise awareness of public policies that support herpetofaunal preservation and conservation in this "Brejo de altitude", given its high herpetofaunal diversity (Roberto & Loebmann 2016), and biological importance.

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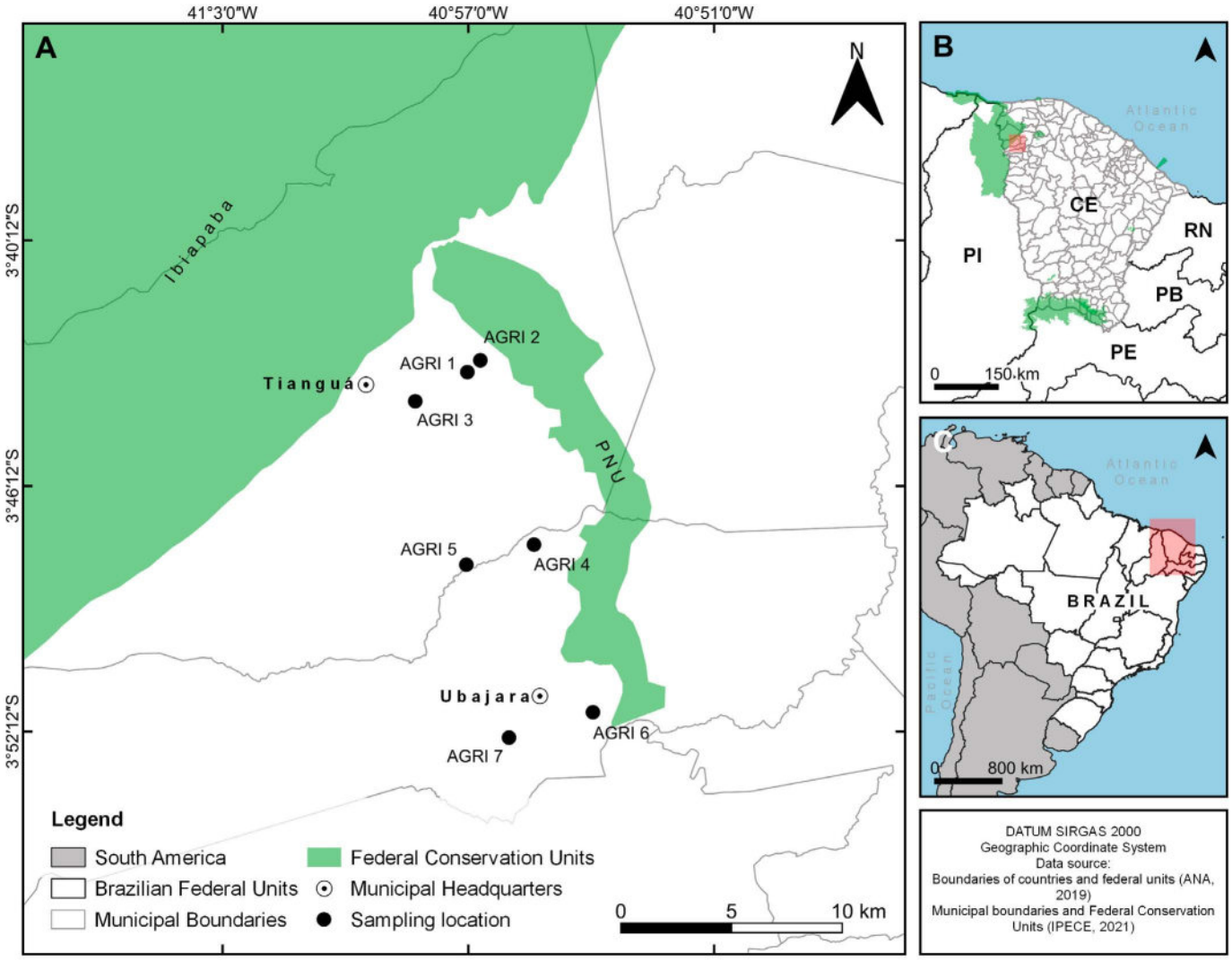


Figure 1. Geographical location of the study area in Ibiapaba plateau, Ceará state, Northeastern Brazil. Agriculture (AG), National Park (PARNA).



Figure 2. Anuran species found in the agricultural landscapes of Ibiapaba plateau, Ceará state, Northeastern Brazil. A = *Rhinella granulosa*; B = *Rhinella diptycha*; C = *Pristimantis relictus*; D = *Boana raniceps*; E = *Boana multifasciata*; F = *Corythomantis greeningi*; G = *Dendropsophus minutus*; H = *Dendropsophus nanus*; I = *Dendropsophus soaresi*, J = *Scinax nebulosus*; K = *Scinax x-signatus*; L = *Trachycephalus typhonius*; M = *Leptodactylus fuscus*, N = *Leptodactylus macrosternum*; O = *Leptodactylus mystaceus*; P = *Leptodactylus troglodytes*; Q = *Leptodactylus vastus*; R = *Physalaemus cuvieri*; S = *Pithecopus gonzagai*; and T = *Proceratophrys cristiceps*.

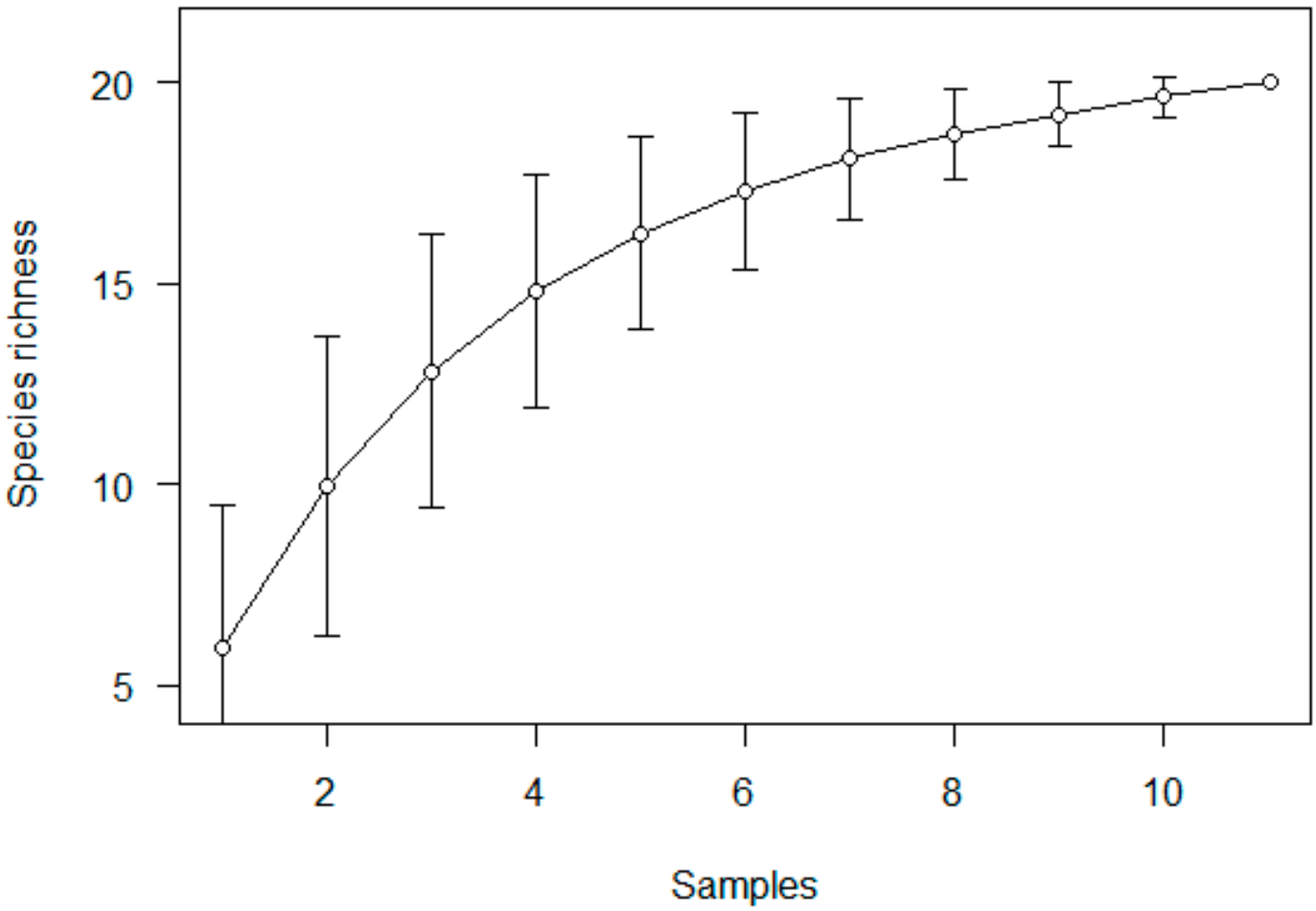


Figure 3. Accumulation curves for anurans sampled in the agricultural landscapes of Ibiapaba plateau, based on the number of samples, constructed from 1000 randomizations.

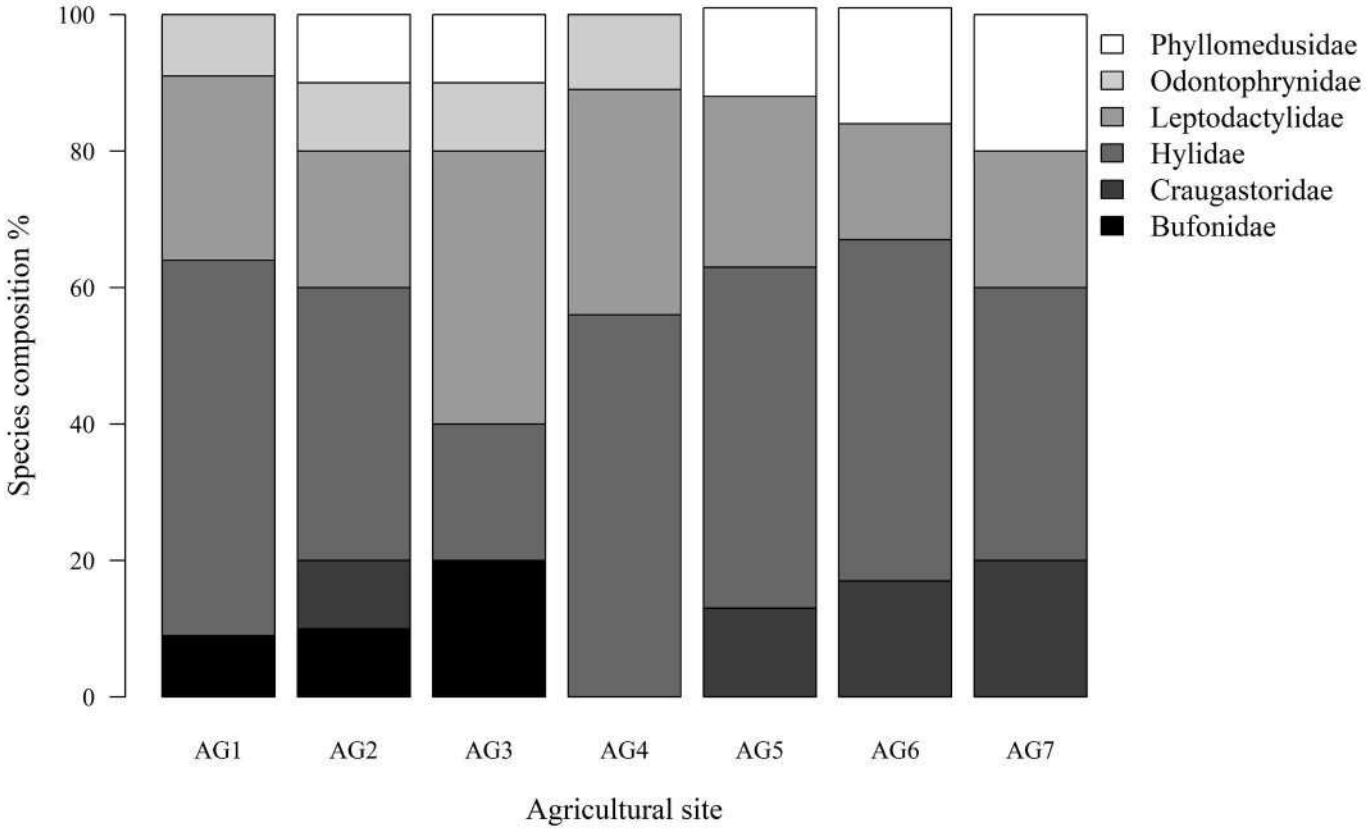


Figure 4. Species composition (%) of the six families found in each local crop in the Ibiapaba plateau, Ceará state, Northeast Brazil

Table 1. Anurans recorded in agricultural landscapes of Ibiapaba plateau, Ceará state, Northeast Brazil. Voucher species, biome of occurrence: Caatinga (CA), Cerrado (CE), Atlantic Rainforest (AT), Amazon Rainforest (AM), and wide distribution (WD). The localities in agricultural landscapes of Ibiapaba plateau where the species were recorded: AG1, AG2, AG3, AG4, AG5, AG6, AG7.

Taxa (author)	Voucher	Biome	Sampled sites
BUFONIDAE			
Rhinella diptycha (Cope, 1862)	CHUFC 15763	WD	1,2,4
Rhinella granulosa (Spix, 1824)	CHUFC 15772	CA, CE, AT	3
HYLIDAE			
Boana raniceps (Cope, 1862)	CHUFC 15774	WD	1,2,4,6
Boana multifasciata (Günther, 1859)	CHUFC 14617	CA, CE, AM	1,2
Corythomantis greeningi Boulenger, 1896	CHUFC 14619	CA, CE, AT	2
Dendropsophus minutus (Peters, 1872)	CHUFC 15994	WD	1,4,5,7
Dendropsophus nanus (Boulenger, 1889)	CHUFC 14609	WD	1,2,3,4,7
Dendropsophus soaresi (Caramaschi and Jim, 1983)	CHUFC 15970	CA, CE, AT	5
Scinax nebulosus (Spix, 1824)	CHUFC 15993	WD	1
Scinax x-*signatus* (Spix, 1824)	CHUFC 14615	WD	1,3,4,5,6
Trachycephalus typhonius (Linnaeus, 1758)	CHUFC 15861	WD	4,5,6
LEPTODACTYLIDAE			
Leptodactylus fuscus (Schneider, 1799)	CHUFC 15873	WD	3
Leptodactylus macrosternum Miranda-Ribeiro, 1926	CHUFC 15958	WD	1,4
Leptodactylus mystaceus (Spix, 1824)	CHUFC 14611	WD	1,2,3,4,5,7
Leptodactylus troglodytes Lutz, 1926	CHUFC 15835	WD	3,5,6
Leptodactylus vastus Lutz, 1930	CHUFC 14623	WD	2,4
Physalaemus cuvieri Fitzinger, 1826	CHUFC 15887	WD	1,3,4
ODONTOPHRYNIDAE			
Proceratophrys cristiceps (Müller, 1883)	CHUFC 14608	CA, AT	1,2,3,4
PHYLLOMEDUSIDAE			
Pithecopus gonzagai (Andrade *et al.* 2020)	CHUFC 14614	CA, CE, AT	2,3,5,6,7
STRABOMANTIDAE			
Pristimantis relictus (Roberto *et al.* 2022)	CHUFC 14606	CA	2,5,6,7

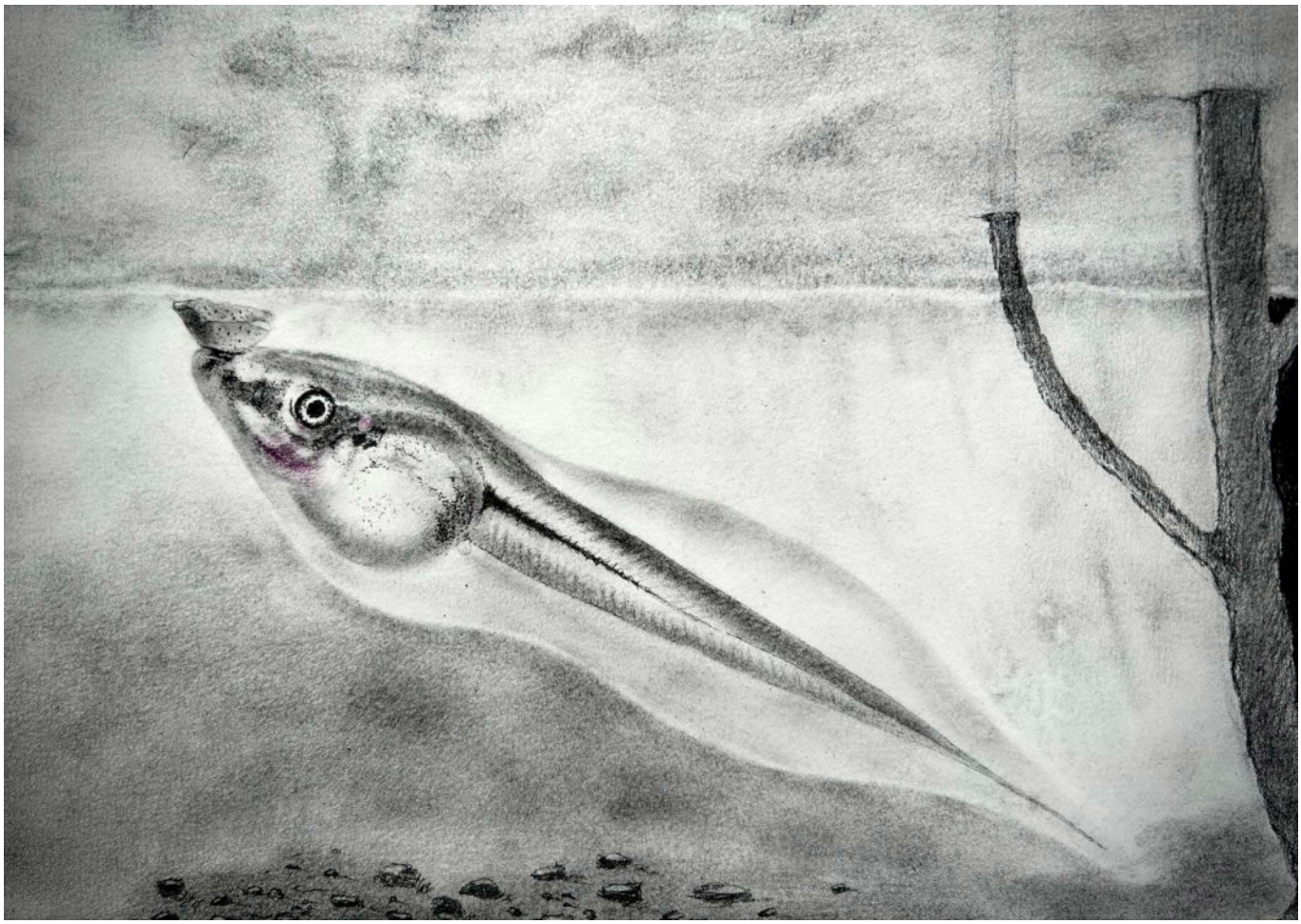
Table 2. Anuran diversity in the agricultural landscapes studied with data on species abundance, species richness (Jacknife 1 species richness estimator), dominant species (according to the Berger-Parker index), and evenness (Pielou's index).

Sampled sites	Individuals observed	Richness (observed)	Richness (estimated)	Dominant species	Shannon-Wiener	Pielou's index
AG1	25	11	14.3	*Dendropsophus nanus*	2.21	0.92
AG2	28	10	12	*Leptodactylus mystaceus*	2.08	0.90
AG3	54	10	10	*Scinax x-signatus*	2.12	0.92
AG4	19	9	12.3	*Dendropsophus nanus*	1.94	0.88
AG5	15	8	11	*Leptodactylus mystaceus*	1.95	0.94
AG6	17	6	6	*Boana raniceps*	1.69	0.94
AG7	12	5	5	*Leptodactylus mystaceus*	1.51	0.94
Total	170	20	23	*Scinax x-signatus*	2.68	0.89

Instruções para Autores

Para informações sob preparacão e submissão de manuscritos entre em contato com os editores gerais.

email de contato *edgeral.hb@gmail.com*



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