

The following classification of the Amphibulininae is mainly according to Zsch (1959-1960):

- Simpulopsis* (*Simpulopsis*) Beck, 1837. Type-species: *S. (S.) subulosa* (Férussac) - Lesser Antilles, Brazil, Guatemala, Mexico.
- Simpulopsis* (*Eudisopsis*) Albers, 1860. Type-species: *S. (E.) pseudarcuata* (Hortons) - Guyanas, Brazil.
- Pirella* Webb & Van Branda, 1816. Type-species: *P. pallidum* (Férussac) - Brazil.
- Genus Shuttleworth, 1854. Type-species: *G. nigralveola* Shuttleworth - Puerto Rico.
- Amphibulina* (*Amphibulina*) Lamarck, 1805. Type-species: *A. (A.) patula* (Bruguière) - Lesser Antilles.
- Amphibulina* (*Ribulopsis*) Fischer, 1873. Type-species: *A. (R.) suberosa* (DeKay) - Lesser Antilles.
- Pollada* Fischer, 1856. Type-species: *P. appendiculata* (Pfeiffer) - Lesser Antilles.

It was thought advisable to give full bibliographic data in the catalogue and not to cite the papers separately in a list of references. A bibliography on the Bulminidae will be published in future.

The type locality of each species, as recorded in the original publication, and the depository of the type, if known, are given.

The following abbreviations have been used:

- ANSP - Academy of Natural Sciences, Philadelphia.
- BMNH - British Museum (Natural History), London.
- DZSP - Departamento de Zoología, Universidade de São Paulo, São Paulo.
- MUSNG - Muséum d'Histoire Naturelle, Geneva.
- MUSN - Muséum National d'Histoire Naturelle, Paris.
- NMBN - Naturhistorisches Museum, Bern.
- UMMZ - Museum of Zoology, University of Michigan, Ann Arbor.
- ZMB - Zoologisches Museum der Humboldt Universität, Berlin.

CATALOGUE

- arcuata*, *Simpulopsis*, Pfeiffer, 1861. Proc. zool. Soc. Lond. 1861: 27 (Mexico, La Florida [Edo. Oaxaca]) [BMNH].
- albipunctulata*, Gervais, Shuttleworth, 1854. Mitt. naturf. Ges. Bern 1854: 16 ([Puerto Rico] Itomacac) [type-species: NMBN].
- Amphibulina* *Rufinopsis*, 1813. Analyse de la nature: 17 [imend.].
- Amphibulina* *Lamarck*, 1805. Anais Mus. natn. Hist. nat. Paris 6: 304.

Catalogue of Bulminidae (Gastropoda, Euthyneura),
I. Amphibulininae

A.S.H. BREURE

Utrecht

INTRODUCTION

The Bulminidae constitute a relatively large family, mainly confined to South America. At present the family includes 144 genera and subgenera. The number of specific and subspecific names available is estimated at about 3000.

The subdivision of the family into Bulmininae, Amphibulininae, Placorythininae, Odontostominae and Oculicarininae is mainly based on shell features. This schema into concepts of the Bulminidae, already held by Pilsbry (1895-1902) and Thiele (1929-1931), is also favoured by the present author. More recent authors, e.g. Zsch (1959-1960), have accorded family rank to the subfamilies, the Placorythininae excepted. However, the differences between the subfamilies are comparatively slight, e.g. the Amphibulininae seems to differ from the Bulmininae only in the palatal organ and the free retractor muscle system (Van Moë, 1971).

The Amphibulininae are in my opinion entirely confined to South America. A few African genera are included in this subfamily, which may better be placed elsewhere. The genus *Aulys* Odhner, 1928, occurring in Cameroon (West Africa), is placed here by Odhner (1928) on account of the anatomy. Baker (1953) placed the *Aulysidae* in the Hetererthis, near the Succineaidae. Another African genus included in the Amphibulininae is *Prostaurilla* Connolly, 1929. It occurs in South Africa and its anatomy is unknown. Some Asiatic species, referred to this subfamily, are also excluded from the present catalogue.

- Type-species (Gray, 1847): *Amphibulima cucullata* Lamarck = *A. patula* (Brugolère).
- appendiculata*, Sowerby, Pfeiffer, 1847. Z. Malak. 4: 146 (Guadeloupe).
- arvensis*, Hélix (Cochlidyfa), Moricand, 1836. Mém. Soc. Phys. Hist. nat. Genève 7: 416, pl. 2 fig. 1 ([Brazil] Paraíba).
- Boussieri*, Hélix (Boussier), Moricand, 1846. Mém. Soc. Phys. Hist. nat. Genève 11: 156, pl. 5 figs. 24-25 ([Brazil] Bahia) [paratype: MHNG].
- Burbytopia* Pfeiffer, 1855. Malak. Bl. 2: 117. Type-species (Marrers, 1860): *Hélix nigra* Lereour = *Amphibulima (A.) nigra* (Lereour).
- bucellensis*, Hélix (Cochlidyfa), 'Sowerby' Moricand, 1836. Mém. Soc. Phys. Hist. nat. Genève 7: 416 [nomen nudum].
- brasilensis*, Succinea, Moricand, 1846. Mém. Soc. Phys. Hist. nat. Genève 11: 148, 166, pl. 3 fig. 3 ([Brazil] S. Gonçalves).
- brasilii*, Amphibulima, Pilsbry, 1899. Mas. Conch. (2) 12: 218, pl. 61 figs. 28-31 (Dominica, 1000 feet) [lectotype: ANSP 9484].
- Bulmalopsis* Pilsbry, 1899. Mas. Conch. (2) 12: 220 [proposed as a new name for *Eudopatra* Albert, 1860 not *Eudopatra* Hilborn, 1816 (Lepidopt.)].
- christopherei*, Amphibulima patula, Pilsbry, 1902. Mas. Conch. (2) 14: 304, pl. 60 figs. 11-12, pl. 62 figs. 27-30 (St. Kitts) [lectotype: ANSP 5723].
- cristo-nova*, Hélix (Cochlidyfa), Moricand, 1836. Mém. Soc. Phys. Hist. nat. Genève 7: 416, pl. 2 fig. 19 ([Brazil] aux environs de Bahia [= Salvador]).
- corrigatus*, Simpulopsis, Guppy, 1866. Ann. Mag. nat. Hist. (3) 17: 53 (Trinidad, near Sarazana Grande) [BMNH].
- cucullata*, Amphibulima, Lamarck, 1805. Ann. Mus. natn. Hist. nat. Paris 6: 365, pl. 53 fig. 1 [no type locality].
- camagi*, Simpulopsis, Pfeiffer, 1861. Proc. zool. Soc. Lond. 1861: 27, pl. 3 fig. 2 (Mexico) [BMNH].
- diversata*, Simpulopsis, Pfeiffer, 1856. Malak. Bl. 3: 260 ([Brazil] Petropolis prope Rio de Janeiro).
- depressa*, Pellenis, Fischer, 1856. Actus Soc. Iam. Bordeaux 26: 449, pl. 6 figs. 3-11 (Guadeloupe).
- depressa*, Succinea, Rang, 1835. Mag. Zool. 5, cl. V: pl. 55 + text (Guadeloupe, dans les montagnes) [synonym: MNHN].
- dominicensis*, Amphibulima patula, Pilsbry, 1899. Mas. Conch. (2) 12: 217, pl. 61 figs. 16-18 (Dominica) [lectotype: ANSP 26051].
- Dominicensis*, Simpulopsis, Pfeiffer, 1858. Malak. Bl. 5: 146. ([Hispaniola] St. Diego Campos [?]).
- Eudopatra* Albert in Marrers, 1860. Die Helixen, 2nd ed.: 221. Type-

- species: *Hélix pseudosuccinea* Moricand = *Simpulopsis (S.) pseudosuccinea* (Moricand).
- fluminata*, Gervais, Shuttleworth, 1854. Mém. naturf. Ges. Bern 1854: 35 ([Puerto Rico] Sierra de Laspuñla et ad Rio Blanco) [synonym: NMHN].
- Gervaisi* Shuttleworth, 1854. Mém. naturf. Ges. Bern 1854: 34. Type-species: *Gervaisi nigrescens* Shuttleworth.
- heringi*, Pellenis, Lemo, 1968. Papéis Dep. Zool. 5 Paulo 21: 197, figs. 1-3, pl. ([Brazil], São Paulo, Salesópolis, Botarefis, Povo Preto) [holotype: DZSP 17982].
- hopkinsi*, Sulmona, Drossit, 1859. Moll. terr. flav. Guyana fr.: 64, pl. 2 figs. 21-24 ([French Guyana] Belle-Mère).
- magnum*, Simpulopsis, Thompson, 1957. Occ. Papers Mus. Zool. Univ. Mich. 591: 4, pl. 1 (Venezuela, Eds. Aragua, Rancho Grande) [holotype: USMZ 193736].
- nulloata*, Gervais, Pilsbry, 1899. Mas. Conch. (2) 12: 216, pl. 62 figs. 36-40 (Puerto Rico, near San Juan) [holotype: ANSP 26052].
- Mazogaya* Ancoy, 1881. Naturaliste 3: 484. Type-species: *Succinea rubricornis* Deshayes = *Amphibulima (Bboldyfa)* rubricornis (Deshayes).
- meritassonae*, Succinea, 'Michaud' Villa & Villa, 1841. Dispositio synt.: 9 ([Brazil] Bahia).
- Miersi*, Simpulopsis, Pfeiffer, 1856. Malak. Bl. 3: 260 ([Brazil] Espírito Santo).
- nigrolanata*, Gervais, Shuttleworth, 1854. Mém. naturf. Ges. Bern 1854: 33 ([Puerto Rico] Sierra de Laspuñla) [synonym: NMHN].
- obliata*, Succinea, Sowerby, 1820/1822. Genera of shells, pl. Succinea fig. 2 [= *costa*].
- ovata*, Succinea, Sowerby, 1820/1822. Genera of shells, Succinea text p. 2 (Brazil).
- pellucida*, Parmacella, Férussac, 1821. Tabl. syst. moll., Lamarck: 25 (Brazil) [holotype: MNHN].
- perulata*, Amphibulima, Guppy, 1868. Ann. Mag. nat. Hist. (4) 1: 412 (Dominica).
- perulata*, Sulmona, Brugolère, 1792. Encycl. meth. Hist. nat. Vers 6: 365 (Guadeloupe).
- Pellenis* Fischer, 1856. Actus Soc. Iam. Bordeaux 26: 449. Type-species: *Pellenis depressa* Fischer = *P. appendiculata* (Pfeiffer).
- Pellenis* Wells & van Beneden, 1836. Mag. Zool. 6, cl. V: text for pls. 73-76. Type-species: *Parmacella pellucida* Férussac = *P. pellucida* (Férussac).
- proparva*, Hélix (Cochlidyfa), Orbiguy, 1835. Mag. Zool. 5, cl. V: 2. (Braziliens ortu [= Brazil, coastal area]).

- praeferacincta*, *Hérin* (Cochitlan), Morsicand, 1826. Mém. Soc. Phys. Hist. nat. Genève 7, 415, pl. 2 fig. 18 (Brazil) ex environs de Bahia [≠ Sabudá] [holotype: MING].
- pridi*, *Bullman* (Sabudá), Martens, 1877. Jb. dt. malak. Ges. 4, 351, pl. 12 fig. 6 (Puerto Rico, Caguasa bei Utula) [synotypes: ZMB 27218].
- Rautensii*, *Amphibolites*, Bland, 1875. Ann. Lync. nat. Hist. N.Y. 11: 199 (Montserrat).
- Rhodopya Fischeri*, 1873. J. Conchyl. Paris 21: 323. Type-species: *Saccinia rubra* Deshayes = *Amphibolites* (*R.*) *rubra* (Deshayes).
- rubra*, *Saccinia*, Deshayes, 1830. Mag. Zool. 1, cl. V.4, pl. 4 figs. 1-2 (Guedeslope) [paratypes: MNHN].
- rubromem*, *Hérin* (Sacristia), Morsicand, 1846. Mém. Soc. Phys. Hist. nat. Genève 11: 147, pl. 3 fig. 4 (Boliv., dans la province de Bahia) [paratype: MING].
- Simpulopsis Beck*, 1837. Index Mal., 100. Type-species (Gay, 1847): *Hérin sulcatus* Férussac = *S.* (*S.*) *sulcatus* (Férussac).
- similis*, *Bullman*, Martens, 1851. Test. noviss. 2: 11 (yolva Ferenensis subvarus [=Guaonada, Dept. Potosí]).
- sulcatus*, *Hérin* (Cochitlan), Férussac, 1821. Tabl. syst. moll., Lima-yon: 27 (Boliv.) [synotypes: MNHN].
- tipica*, *Hérin* (Cochitlan), Lemoine in Férussac, 1821. Tabl. syst. moll., Lima-yon: 26 [nomens nudum], 1821. Hist. nat. moll., pl. 11A fig. 4 (St. Vincent) [synotypes: MNHN].
- tryoni*, *Simpulopsis*, Pilsbry, 1899. Man. Conch. (2) 12: 218, pl. 64 fig. 92 (Brazil) [holotype: ANSP 26033].
- viracatina*, *Simpulopsis*, Smith, 1895. Proc. malac. Soc. Lond. 1: 305, pl. 21 figs. 4-5 (St. Vincent, Upper Richmond Valley, 2000 feet) [BMNH].
- Vitruvianus*, *Bullman*, Reuss, 1848. Conch. Icon. 5: pl. 46 fig. 200 [no type locality] [BMNH].

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