

ANNOTATED LIST OF THE NON-MARINE MOLLUSCA OF THE
MOLUCCAN ISLANDS AMBON, HARUKU, SAPARUA
AND NUSA LAUT

by

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In October 1949 Dr M. A. LIEFTINCK, Director of the Museum Zoolo-gicum at Bogor, Java, paid a short visit to the island of Ambon in the southern Moluccas. He collected a number of land shells there, and sent them to me for identification.

This led me to compile a list of all the non-marine species, the ter-restrial as well as the freshwater ones, recorded from this island up till now. In addition I added all that is known from Haruku, Saparua and Nusa Laut, the so-called Uliassers, three small islands which form one organic group with Ambon.

The malacological literature on Ambon and dependencies is very fragmentary and scattered in various publications. Although almost any zoological expedition visiting the eastern part of the Malay Archipelago called at Amboina¹⁾ for one or more days: Coquille, Astrolabe, Sulphur, Astrolabe et Zélée, Challenger, Gazelle, A. R. WALLACE, Mrs IDA PFEIFFER, R. SEMON, Preussische Expedition nach Ostasien, K. MARTIN, A. STRUBELL, Governor General DUYMAER VAN TWIST, Siboga, L. F. DE BEAUFORT, Crown-prince LEOPOLD of Belgium etc.; and although one might consequently expect that the malacofauna of the main island has been satisfactorily investigated, we see, on the contrary, that instead of presenting a fairly complete survey, the account of the non-marine molluscs living in the island and its three small satellites is fragmentary and can certainly be augmented in the future.

The following is a list of species in systematic sequence, arranged after THIELE, Handbuch der systematischen Weichtierkunde, 1929 - 1935. At each species is quoted (1) the original diagnosis, (2) such later descriptions and figures as are expedient for a better understanding of the

¹⁾ Amboina is the proper name for the capital town of the island Ambon.

species, (3) the records in literature for Ambon, Haruku, Saparua and Nusa Laut, and (4) the localities in each of these four islands. In this last section the material which I have seen and checked myself is mentioned with an !; the material not seen by me is quoted with the author relating to it.

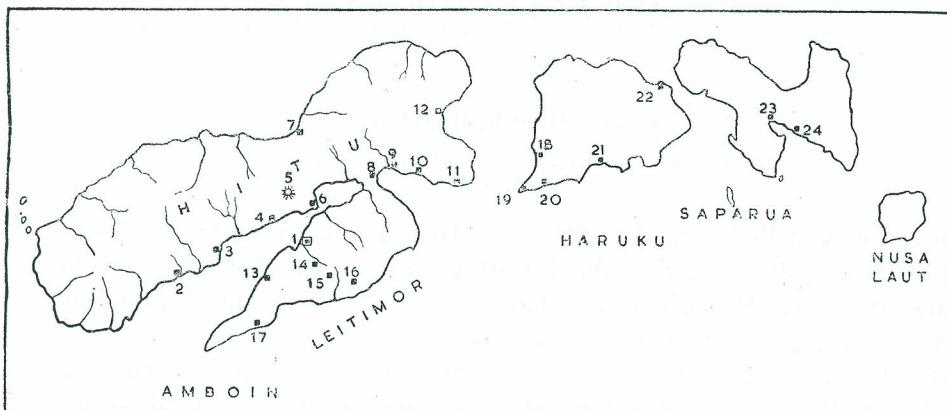


Fig. 1. Sketch map of the islands Ambon, Haruku, Saparua and Nusa Laut. (For Amboin read Ambon.)

A m b o i n . 1. Amboina (town), with environs: Batugadja, Batugantong, Batumerah, Military Hospital, Weyniu River, Elefant River, residence of Governor, garden of RUMPHIUS; 2. River (Wai) Hatu; 3. Laha; 4. Batu Lubang; 5. Mt Carbau; 6. Rumatiga; 7. Hitu Lama; 8. Paso; 9. Pohonmanga; 10. Suli; 11. Cape Tial; 12. Waai; 13. Erie (= Nusanive); 14. Cave Lian Ikan; 15. Kusu Kusu-sare; 16. Ema; 17. Latuhalat. — H a r u k u . 18. Haruku; 19. Cape Batu Kapal; 20. Oma; 21. Aboru; 22. Hulaliu. — S a p a r u a . 23. Saparua; 24. Sirisori.

In his book on the zoogeographic history of the Sunda Archipelago RENSCH (Die Geschichte des Sundabogens, Eine tiergeographische Untersuchung, 1936) mentioned p. 239 the following endemic species of Ambon:

<i>Euplecta minima</i>	<i>Tornatellina moluccana</i>
<i>Xesta strubelli</i>	<i>Palaina angulata</i>
<i>Planispira reinachae</i>	, <i>carbabica</i>
<i>Macrocycloides microcyclis</i>	<i>Diplommatina strubelli</i>
<i>Charopa kobelti</i>	<i>Ditropis ingenua</i>
<i>Opeas aculeus</i>	, <i>moellendorffii</i>
<i>Nesopupa moluccana</i>	" <i>Helicina</i> " <i>derepta</i>
<i>Anostomella ascendens</i>	

Of this list *Anostomella* is the only endemic genus in Ambon. Meanwhile *Charopa kobelti* C. R. BOETTGER, 1908 (syn. *Ptychodon celebica*

SARASIN, 1899) and *Opeas aculeus* (TAPPARONE CANEFRI, 1883), syn. *Opeas gracile* (HUTTON, 1834) have been found in other islands.

Almost as interesting for the zoogeography of an island as the endemic genera and species are those taxonomic units which do not occur there. For Ambon and the three neighbouring islands there are no records of any member of the Clausiliidae, *Helicarion*, *Planorbis*, *Lymnaea*, *Corbicula*, Unionidae, *Hemiplecta* and *Amphidromus*. The pretended occurrence of species of *Hemiplecta*, *Papuina*, *Amphidromus* and a few other genera in Ambon is almost certainly erroneous. These doubtful records follow after the list of species actually found in the island. The species are not mentioned in the account of each separate island following the systematic part.

The flora of Ambon was amply treated by RUMPHIUS in his *Herbarium Amboinense*, edited posthumously between 1741 - 1750 (6 vols). During the two centuries which have elapsed since, many other publications on the Amboinese flora have appeared. For a general impression naturalists are referred to a travelling account by RANT (1934, *Natuurk. Tijdschr. Ned. Indië*, 94, p. 100-133, pl. 1-4). It must, however, be emphasized that in recent years many details have changed in consequence of the Japanese occupation (1942 - 1945).

What is known of the geology of the island dates from explorations by VERBREEK in 1898 and 1904 (VERBEEK, 1905, *Jaarb. Mijnw. Wetensch. Gedeelte*). RUTTEN summarized the principal results in his well-known handbook on the Geology of the Dutch East Indies (1927, p. 716-720). From a malacological point of view it is important that limestone rocks or lime containing sediments are scarce in the islands. Hence the soil of Ambon is not of top-quality for the development of a rich land mollusc fauna.

The famous 17th century naturalist G. E. RUMPHIUS who had his residence in Ambon from 1653 until his death in 1702, made large shell collections there. An account of his investigations, with many biological details, was published posthumously in 1705 (*Amboinsche Rariteitkamer*, Amsterdam, 1705). The work deals mostly with marine shells, but only very little with land and freshwater shells. It is the first publication in which non-marine molluscs from Ambon are mentioned.

With the exception of a few sites which I could not find on any topographical map, all the localities mentioned in literature and on the labels of the material which I could study are indicated on the accompanying map (fig. 1).

Theodoxus angulosus (RÉCLUZ, 1843).

- 1843 RÉCLUZ, Proc. Zool. Soc. London, p. 173 (*Nerita*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 158, pl. 17,
 fig. 5, 6 and 10 (*Neritina*).
 1891 BOETTGER, Ber. Senckenb. p. 301 (*Neritina (Clithon) angulosa*).

Ambon: Batugadja (BOETTGER, 1891).

Theodoxus avellanus (RÉCLUZ, 1842).

- 1842 RÉCLUZ, Revue Zool. (Soc. Cuv.) 5, p. 76 (*Nerita*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 174, pl. 18,
 fig. 5-9 and 11-12 (*Neritina*).
 1891 BOETTGER, Ber. Senckenb. p. 302 (*Neritina (Clithon) avellana*).

Ambon: Batugadja and Hitu Lama (BOETTGER, 1891).

Theodoxus bicolor (RÉCLUZ, 1843).

- 1843 RÉCLUZ, Proc. Zool. Soc. London, p. 172 (*Nerita*).
 1844 RÉCLUZ, Proc. Zool. Soc. London, p. 199 (*Nerita subpunctata*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 181, pl. 18,
 fig. 18 and 21 (*Neritina*) and p. 179, pl. 18, fig. 19, 20, 22-24 (*Neritina subpunctata*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 75 (*Neritina subpunctata*).
 1891 BOETTGER, Ber. Senckenb. p. 304 (*Neritina (Clithon) subpunctata* var. *moluccensis*).
 1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Neritina (Clithon) subpunctata*).
 1908 SCHEPMAN, Siboga Exp. Monogr. 49-1-a, p. 12 (*Neritina (Clithon) subpunctata*).

Ambon: TAPPARONE CANEFRI, 1883; MARTENS, 1879 and 1894; Batugadja (BOETTGER, 1891); Ambon!; kali west of Paso, north coast of Ambon!

Nusa Laut: Hot river, Stat. 234 Siboga Exped.! (SCHEPMAN, 1908).

Theodoxus corona (LINNÉ, 1758).

- 1705 RUMPHIUS, Amb. Rariteitk. p. 78, pl. 22, fig. O (*Valvata spinosa*).
 1758 LINNÉ, Syst. Nat. Ed. X, p. 777 (*Nerita*).
 1822 LAMARCK, Anim. s. Vert. 6, pt. 2, p. 185 (*Neritina corona*) and p. 185 (*N. brevispina*).
 1836 SOWERBY, Conch. Ill. no. 41, fig. 14 (*Neritina subgranosa*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Neritina corona*).
 1862 MARTENS, Malak. Blätt. 10, p. 120 (*Neritina brevispina*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 156, pl. 17,
 fig. 1-4 and 9 (*Neritina brevispina*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 73 (*Neritina brevispina*) and p. 74 (*Neritina subgranosa*).
 1891 BOETTGER, Ber. Senckenb. p. 302 (*Neritina (Clithon) brevispina*).

- 1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Neritina (Clithon) brevispina*).
 1902 MARTENS, Rumphius Gedenkb. p. 115 (*Neritina brevispina*).
 1908 SCHEPMAN, Siboga Exp. Monogr. 49-1-a, p. 11 (*Neritina (Clithon) brevispina* var. *mutica*).
 1915 SCHEPMAN, Bijdr. t. d. Dierk. 20, p. 32 (*Neritina (Clithon) brevispina*).

Ambon: RUMPHIUS; BLEEKER, 1856; MARTENS, 1862; TAPPARONE CANEFRI, 1883; MARTENS, 1894; Ambon!; in rivulets near Batugadja and Batugantong, near the town of Amboina (MARTENS, 1879 and 1902); Hitu Lama and Waai (BOETTGER, 1891); river near Batumerah! (SCHEPMAN, 1915); river north of the town near the bay!; river south-east of the town!; kali west of Paso, north coast of Ambon!

Nusa Laut: rivulet! (SCHEPMAN, 1908).

Theodoxus diadema (RÉCLUZ, 1841).

- 1841 RÉCLUZ, Rev. Zool. (Soc. Cuv.) 4, p. 277 (*Nerita*).
 1879 MARTENS, in: MART-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 154, pl. 15, fig. 22-26 (*Neritina*).
 1891 BOETTGER, Ber. Senckenb. p. 303 (*Neritina (Clithon) diadema*).

Ambon: Batugadja (BOETTGER, 1891); river north of the town near the bay!

Theodoxus faba (SOWERBY, 1836).

- 1836 SOWERBY, Conch. III. no. 38, fig. 10 (*Neritina*).
 1879 MARTENS, in: MART-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 176, pl. 18, fig. 14-17 (*Neritina*).
 1891 BOETTGER, Ber. Senckenb. p. 303 (*Neritina (Clithon) faba*).

Ambon: BOETTGER, 1891.

Theodoxus fuliginosus (VON DEM BUSCH, 1843).

- 1843 VON DEM BUSCH, in: PHILIPPI, Abb. Conch. Vol. I, Pt. 2, p. 26, pl. 1, fig. 5 (*Neritina*).
 1879 MARTENS, in: MART-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 185, pl. 19, fig. 18, 19 (*Neritina*).
 Ambon!

Ambon!

Theodoxus olivaceus (RÉCLUZ, 1843).

- 1843 RÉCLUZ, Proc. Zool. Soc. London, p. 172 (*Nerita*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 183, pl. 19, fig. 5-7 (*Neritina*).
 1891 BOETTGER, Ber. Senckenb. p. 304 (*Neritina (Clithon) olivacea*).
 1908 SCHEPMAN, Siboga Exp. Monogr. 49-1-a, p. 12 (*Neritina (Clithon) olivacea*).

Ambon: rivulet near Batugantong (MARTENS, 1879); Batugadja (BOETTGER, 1891); rivulet near military hospital!; river south-east of the town!

Nusa Laut: Hot river, Stat. 284 Siboga Exped.! (SCHEPMAN, 1908).

Theodoxus ovalaniensis (LESSON, 1831).

- 1831 LESSON, Voy. Coquille, Zool. 2, p. 379 (*Neritina*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 193, pl. 20,
 fig. 1-24 (*Neritina*).
 1891 BOETTGER, Ber. Senckenb. p. 305 (*Neritina (Clithon) ualanensis*).

Ambon: near Weynitu, in brackish water (MARTENS, 1879); Ambon (BOETTGER, 1891); Ambon!; river about 2 km north of the town!

Theodoxus squarrosus (RÉCLUZ, 1843).

- 1843 RÉCLUZ, Proc. Zool. Soc. London, p. 174 (*Nerita*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 162, pl. 16,
 fig. 13-18 (*Neritina*).
 1891 BOETTGER, Ber. Senckenb. p. 304 (*Neritina (Clithon) squarrosa*).
 1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Neritina (Clithon) squarrosa*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 80 (*Neritina*).

Ambon: in fresh water (MARTENS, 1879); Batugadja (BOETTGER, 1891); Ambon (MARTENS, 1894 and 1897); Ambon!; Batugantong!; kali west of Paso, north coast of Ambon!

Neritodryas cornea (LINNÉ, 1758).

- 1758 LINNÉ, Syst. Nat. Ed. X, p. 777 (*Nerita*).
 1836 SOWERBY, Conch. Ill. no. 99, fig. 50 (*Neritina subsulcata*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 140, pl. 12,
 fig. 14-18 (*Neritina cornea*) and p. 142, pl. 12, fig. 11-12 (*Neritina subsulcata*).
 1884 SMITH, Proc. Zool. Soc. London, p. 262 (*Neritina*).
 1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Neritina (Neritodryas) cornea*).

Ambon: SMITH, 1884; MARTENS, 1894; Ambon!; river north of the town near the bay!

Neritodryas dubia (GMELIN, 1790).

- 1790 GMELIN, Syst. Nat. Ed. XIII, p. 3676 (*Nerita*).
 1877 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 283 (*Neritina (Neritodryas) dubia*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 136, pl. 12,
 fig. 1-7 (*Neritina*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 70 (*Neritina*).
 Ambon! and MARTENS, 1877; TAPPARONE CANEFRI, 1883.

Neritina auriculata LAMARCK, 1816.

- 1816 LAMARCK, Encycl. Méth. Explic. Planches, pl. 455, fig. 6.
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 30, pl. 6,
 fig. 13-15 and 24-27.
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 83.
 1891 BOETTGER, Ber. Senckenb. p. 300 (*Neritina (Neritaea) auriculata*).

Ambon: TAPPARONE CANEFRI, 1883; BOETTGER, 1891; mouth of rivulet Weynitu (MARTENS, 1879).

Neritina congregata MARTENS, 1879.

1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 57, pl. 8, fig. 7-9.

1891 BOETTGER, Ber. Senckenb. p. 301 (*Neritina (Neritaea) congregata*).

Ambon: Batugadja (BOETTGER, 1891).

Neritina labiosa SOWERBY, 1836.

1836 SOWERBY, Conch. Ill. no. 49, fig. 48.

1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 20, pl. 5, fig. 5-8, pl. 1, fig. 8,9.

Ambon!

Neritina macgillivrayi REEVE, 1855.

1855 REEVE, Conch. Icon. Vol. 9, pl. 4, fig. 16.

1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 23, pl. 9., fig. 9-10.

1908 BOETTGER, Nachr. Blatt, 40, p. 185 (*Neritina (Neritona) macgillivrayi*).

Ambon: in overgrown lake, 500 m above sea-level (BOETTGER, 1908).

Neritina petiti (RÉCLUZ, 1841).

1841 RÉCLUZ, Rev. Zool. (Soc. Cuv.) 4, p. 273 (*Nerita*).

1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 58, pl. 8, fig. 1-3.

1894 MARTENS, Jen. Denkschr. 8, p. 84.

Ambon!

Neritina pulligera (LINNÉ, 1767).

1705 RUMPHIUS, Amb. Rariteitk. p. 76, pl. 22, fig. 4 (*Valvata decima sive rubella*).

1767 LINNÉ, Syst. Nat. Ed. XII, p. 1253 (*Nerita*).

1848 MOUSSON, Mitt. Naturf. Ges. Zürich, 1, p. 269 (*iris*).

1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p.70.

1862 MARTENS, Malak. Blätt. 10, p. 120.

1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 49, pl. 1, fig. 4-5 (*pulligera*) and p. 52, pl. 9, fig. 5, 6 (*iris*).

1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 60.

1891 BOETTGER, Ber. Senckenb. p. 301 (*Neritina (Neritaea) pulligera*).

1894 MARTENS, Jen. Denkschr. 8, p. 84.

1902 MARTENS, Rumphius Gedenkb. p. 115.

1915 SCHEPMAN, Bijdr. t.d. Dierk. 20, p. 30 (*Neritina (Neritaea) pulligera*).

Ambon: Hitu (RUMPHIUS, 1705); brook Batugantong, near the town of Amboina (MARTENS, 1879 and 1902); Laha, north Ambon (MARTENS, 1879 and 1902); Batugadja (BOETTGER, 1891); river near Batumerah (SCHEPMAN, 1915); Ambon! and BLEEKER, 1856; MARTENS, 1862; TAPPARONE CANEFRI, 1883; MARTENS, 1894; kali west of Paso, north coast of Ambon! river north of the town near the bay! Batumerah!

Neritina zigzag LAMARCK, 1822.

- 1822 LAMARCK, Anim. s. Vert. Vol. 6, Pt 2, p. 185.
 1831 LESSON, Voy. Coquille, Zool. 2, p. 379 (*waigiensis*).
 1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3, p. 195 (*Nerita communis*).
 1879 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10, p. 101, pl. 10,
 fig. 20-24, pl. 2, fig. 6-7 (*ziczac*), p. 113, pl. 2, fig. 3, 4, pl. 11, fig. 1-9 (*communis*).
 1891 BOETTGER, Ber. Senckenb. p. 301 (*Neritina* (*Neritaea*) *ziczac*).

Ambon: mouth of the Elefant- and Weynitu-rivers, in somewhat brackish water (MARTENS, 1879); Batugadja (BOETTGER, 1891); Ambon! river north of the town near the bay!

Septaria parva (MOUSSON, 1849).

- 1849 MOUSSON, Land & Süssw. Moll. Java, p. 119, pl. 22, fig. 8 (*Navicella*).
 1881 MARTENS, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. II, Pt. 10a, p. 18, pl. 2,
 fig. 19-22 (*Navicella*).
 1891 BOETTGER, Ber. Senckenb. p. 305.
 1934 RENSCH, Zool. Jahrb. (Syst.) 65, p. 417.

Ambon: in rivulet of Batugantong (MARTENS, 1881); Batugadja and Batumerah (BOETTGER, 1891); Ambon!; and RENSCH, 1934; Batugadja!

Septaria suborbicularis (SOWERBY, 1825).

- 1705 RUMPHIUS, Amb. Rariteitk. p. 123, pl. 40, fig. O (Nootedoppen).
 1825 SOWERBY, Catal. Tankerville Coll. App. p. X (*Navicella*).
 1841 LE GUILLOU, Rev. Zool. (Soc. Cuv.) 4, p. 376 (*Navicella janelli*).
 1881 MARTENS, in: MART.-CHEMN., N. Syst. Conch. Cab. Vol. II, Pt. 10a, p. 31, pl. 6,
 fig. 5-14 (*Navicella suborbicularis*) and p. 25, pl. 4, fig. 16-19 (*Navicella janelli*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 84.
 1891 BOETTGER, Ber. Senckenb. p. 305.
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 158 (incl. subvar. *furecato-radiata*).
 1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Navicella*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 85 (*janelli*) and p. 84
 (*suborbicularis* and var. *compressa*).
 1902 MARTENS, Rumphius Gedenkb. p. 124 (*Septaria* (*Navicella*) *suborbicularis*).

Ambon: RUMPHIUS, 1705; TAPPARONE CANEFRI, 1883; MARTEN, 1894 and 1897; rivulet of Batugantong (MARTENS, 1881 and 1902); Batugadja (BOETTGER, 1891); in brook near Ema Leitimor (SCHEPMAN, 1893); Ambon!; Batugadja!; Ema!; kali south east of Ambon!; kali west of Paso, north coast of Ambon!; rivulet near the hospital, about 10 minutes from the sea, on stones in the water!

Geophorus oxytropis (SOWERBY, 1839).

- 1839 SOWERBY, in: BEECHEY's Voy. Zool. p. 146, pl. 38, fig. 24 (*Helicina*).
 1867 MARTENS, Ostas. Landschn. p. 166, pl. 4, fig. 20 (*Helicina*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 20, p. 166 (*Helicina*).
 1886 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 24, p. 188 (*Helicina*).

- 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 157 (*Helicina*).
 1931 RENSCH, Zool. Jahrb. (Syst.) 61, p. 395.

Ambon: TAPPARONE CANEFRI, 1883 and 1886; RENSCH, 1931; at the base of limestone rocks (MARTENS, 1867); south east coast!; secondary wood!

Saparua: Mt Rila, in cleft in coral limestone (SCHEPMAN, 1893); Saparua!

Aphanoconia suturalis (MARTENS, 1864).

- 1864 MARTENS, Monatsber. Akad. Berlin, p. 120 (*Helicina*).
 1867 MARTENS, Ostas. Landschn. p. 168, pl. 4, fig. 18 (*Helicina*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 20, p. 166 (*Helicina*).
 1891 BOETTGER, Ber. Senckenb. p. 299 (*Helicina*).
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 157 (*Helicina*).

Ambon: MARTENS, 1864; TAPPARONE CANEFRI, 1883; in gardens and on the hills (MARTENS, 1867); Ema, south Ambon, and Rumatiga, north Ambon (BOETTGER, 1891); south east coast!; secondary wood!; Ema, Leitimor!

Haruku: Hulaliu (BOETTGER, 1891).

Saparua: Mt Rila, in cleft in coral limestone (SCHEPMAN, 1893); Mt Rila!

Palaeohelicina idae (PFEIFFER, 1856).

- 1856 PFEIFFER, Proc. Zool. Soc. London, p. 339 (*Helicina*).
 1862 MARTENS, Malak. Blätt. 10, p. 119 (*Helicina*).
 1867 MARTENS, Ostas. Landschn. p. 170, pl. 4, fig. 19 (*Helicina*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 273 (*Helicina*) and Ibid. 20, p. 167 (*Helicina*).
 1884 SMITH, Proc. Zool. Soc. London, p. 261 (*Helicina*).
 1891 BOETTGER, Ber. Senckenb. p. 299 (*Helicina*).
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 157 (*Helicina*).

Ambon: MARTENS, 1862, 1867; TAPPARONE CANEFRI, 1883; SMITH, 1884; Ambon!; Ema, south Ambon, and Waai, north Ambon (BOETTGER, 1891); south east coast!; secondary wood!

Haruku: BOETTGER, 1891; Hulaliu!

Saparua: Mt Rila, in cleft in coral limestone (SCHEPMAN, 1893); Mt Rila!

(?Palaeohelicina) derepta (TAPPARONE CANEFRI, 1883).

- 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 20, p. 167, pl. 1, fig. 7-8 (*Helicina*).

Ambon: TAPPARONE CANEFRI, 1883.

The species is endemic in Ambon.

It is uncertain to which genus this species must be assigned. As the author placed it between *Helicina parva* and *Helicina idae* it may be classified as a *Palaeohelicina*.

Leptopoma latilabre MARTENS, 1867.

- 1867 MARTENS, Ostas. Landschn. p. 144, pl. 4, fig. 4, fig. 5 (*vitreum ♀ latilabre*).
 1902 KOELT, Cyclophoridae, in: Tierreich, p. 11.

Ambon !

Leptopoma melanostoma (PETIT, 1841).

- 1841 PETIT, Rev. Zool. (Soc. Cuv.) 4, p. 308 (*Cyclostoma*).
 1884 SMITH, Proc. Zool. Soc. London, p. 261.
 1902 KOELT, Cyclophoridae, in: Tierreich, p. 12.

Ambon : SMITH, 1884.

Leptopoma perlucidum (GRATELOUP, 1840).

- 1831 LESSON, Voy. Coquille, Zool. 2, p. 346, pl. 13, fig. 6 (*Cyclostoma vitrea non Cyclostoma vitreum DRAPARNAUD, 1801*).
 1840 GRATELOUP, Actes Soc. Linn. Bordeaux, 11, p. 169 (*Cyclostoma perlucida*).
 1862 MARTENS, Malak. Blätt. 10, p. 118-119 (*vitreum*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 259 (*vitreum*).
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 155 (*vitreum*).
 1894 MARTENS, Jenaische Denkschr. 8, p. 84 (*vitreum*).
 1902 KOELT, Cyclophoridae, in: Tierreich, p. 15 (*vitreum*).

Ambon : MARTENS, 1862 and 1894; TAPPARONE CANEFRI, 1883; SCHEPMAN, 1893; Ambon !

Leptopoma perlucidum intermedium MARTENS, 1867.

- 1867 MARTENS, Ostas. Landschn. p. 144, pl. 4, fig. 4 (*vitreum ♂ intermedium*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 261 (*Leptopoma intermedium*).
 1891 BOETTGER, Ber. Senckenb. p. 289 (*Leptopoma intermedium*).

Ambon : MARTENS, 1867; TAPPARONE CANEFRI, 1883; Ambon !; secondary wood !

Saparua : Papero (BOETTGER, 1891).

Leptopoma perlucidum minus MARTENS, 1867.

- 1867 MARTENS, Ostas. Landschn. p. 144, pl. 4, fig. 6 (*vitreum ♂ minus*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 20, p. 165 (*bicolor*).
 1891 BOETTGER, Ber. Senckenb. p. 290 (*pellucidum* var. *minor*).

Ambon : MARTENS, 1867; TAPPARONE CANEFRI, 1883; Ambon !; Ema, south Ambon, and Waai, north Ambon (BOETTGER, 1891); secondary wood !

Haruku : Hulaliu (BOETTGER, 1891).

Saparua : Sirisori and Papero (BOETTGER, 1891).

Lagochilus bicarinatum (MARTENS, 1864).

- 1864 MARTENS, Monatsber. Akad. Berlin, p. 118 (*Cyclotus*).
1867 MARTENS, Ostas. Landschn. p. 128, pl. 2, fig. 16 (*Cyclotus*).
1891 BOETTGER, Ber. Senckenb. p. 291.

Ambon: MARTENS, 1867; Ema, south Ambon, and Waai, north Ambon (BOETTGER, 1891).

BOETTGER (1891) classified this species with *Lagochilus* on account of two shells collected by STRUBELL at Ema and Waai respectively. He gave an additional description in which especially the feature of a short incision in the upper corner of the peristome is mentioned. This is the more remarkable as MARTENS (1867, p. 129) described and figured the peristome as continuous.

Unless the original shells of MARTENS can be re-examined (they are not in the Berlin Museum and not in the Frankfort Museum) the systematic position of this species remains uncertain.

Ditropis ingenua BOETTGER, 1891.

- 1891 BOETTGER, Ber. Senckenb. p. 292, pl. 4, fig. 7, 7a-b.
1902 KOBELT, Cyclophoridae in: Tierreich, p. 75.

Ambon: Hitu Lama (BOETTGER, 1891); Hitu Lama!

The species is endemic in Ambon.

Ditropis moellendorffii BOETTGER, 1891.

- 1891 BOETTGER, Ber. Senckenb. p. 292, pl. 4, fig. 8, 8a-b.
1902 KOBELT, Cyclophoridae in: Tierreich, p. 76.

Ambon: Hitu Lama (BOETTGER, 1891); Hitu Lama!

The species is endemic in Ambon.

Ditropis spiralis BOETTGER, 1891.

- 1891 BOETTGER, Ber. Senckenb. p. 293, pl. 4, fig. 9, 9a-b.
1902 KOBELT, Cyclophoridae in: Tierreich, p. 78.

Haruku: Oma (BOETTGER, 1891); Oma!

The species is endemic in Haruku.

Platyrhaphis harucuana (BOETTGER, 1891).

- 1891 BOETTGER, Ber. Senckenb. p. 295, pl. 4, fig. 10, 10a-b (*Cyclotus (Platyrhaphis) harucuanus*).
1902 KOBELT, Cyclophoridae in: Tierreich, p. 182.

Haruku: Oma (BOETTGER, 1891).

The species is endemic in Haruku.

Platyrhaphes plicosa (MARTENS, 1862).

- 1862 MARTENS, Malak, Blätt. 10, p. 85 (*Cyclotus*).
 1867 MARTENS, Ostas. Landschn. p. 125, pl. 2, fig. 13, 14 (*Cyclotus*).
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 156 (*Cyclotus plicosus*).
 1902 KOBELT, Cyclophoridae in: Tierreich, p. 186.

Saparua: Mt Rila, in cleft in coral limestone (SCHEPMAN, 1893); Mt Rila, coral limestone!

Cyclotus politus amboinensis PFEIFFER, 1852.

- 1852 PFEIFFER, Proc. Zool. Soc. London, p. 82 (*Cyclotus amboinensis*).
 1862 MARTENS, Malak. Blätt. 10, p. 119 (*Cyclotus amboinensis*).
 1867 MARTENS, Ostas. Landschn. p. 121, pl. 2, fig. 4, 5 (*Cyclotus amboinensis*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 20, p. 164 (*Cyclotus amboinensis*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1061 (*Cyclotus amboinensis*).
 1891 BOETTGER, Ber. Senckenb. p. 294 (*Cyclotus (Pseudocyclophorus) amboinensis*).
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 156 (*Cyclotus amboinensis*).
 1902 KOBELT, Cyclophoridae, in: Tierreich, p. 189 (*Cyclotus (Pseudocyclophorus) amboinensis*).
 1908 BOETTGER, Nachr. Blätt., 40, p. 184 (*Cyclotus (Pseudocyclophorus) amboinensis*).
 1931 RENSCH, Zool. Jahrb. (Syst.) 61, p. 373 (*Cyclotus politus politus*).

Ambon: PFEIFFER, 1852; MARTENS, 1862 and 1867; TAPPARONE CANEFRI, 1883; TENISON WOODS, 1888; KOBELT, 1902; RENSCH, 1931; Ema, south Ambon, Rumatiga and Waai, north Ambon (BOETTGER, 1891); Cape Tial, Hitu, (BOETTGER, 1908); Ambon!; secondary wood!; north of the town near the bay!

Haruku: Hulaliu (BOETTGER, 1891).

Saparua: Papero (BOETTGER, 1891); Mt Rila, cleft in coral limestone (SCHEPMAN, 1893); Mt Rila, cleft in coral limestone!

Pupinella ceramica (MARTENS, 1864).

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 118 (*Raphaulus*).
 1867 MARTENS, Ostas. Landschn. p. 155, pl. 4, fig. 9.
 1891 BOETTGER, Ber. Senckenb. p. 289.
 1902 KOBELT, Cyclophoridae in: Tierreich, p. 292.

Ambon: MARTENS, 1867; KOBELT, 1902; Ambon!

Saparua: Papero (BOETTGER, 1891); Papero!

Callianella amboinensis (MARTENS, 1865).

- 1865 MARTENS, Monatsber. Akad. Berlin, p. 53 (*Callia*).
 1867 MARTENS, Ostas. Landschn. p. 157, pl. 4, fig. 13 (*Pupina*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1072 (*Pupina (Callia) amboinensis*).
 1891 BOETTGER, Ber. Senckenb. p. 288 (*Callia*).
 1902 KOBELT, Cyclophoridae in: Tierreich, p. 334.

Ambon: MARTENS, 1865 and 1867; TENISON WOODS, 1888; KOBELT, 1902; Ema, south Ambon (BOETTGER, 1891).

Saparua: Papero (BOETTGER, 1891); Papero!

Callianella wallacei (PFEIFFER, 1862).

1862 PFEIFFER, Proc. Zool. Soc. London, p. 117, pl. 12, fig. 1 (*Callia*).

1867 MARTENS, Ostas. Landschn. p. 158, pl. 4, fig. 12 (*Pupina*).

1891 BOETTGER, Ber. Senckenb. p. 289 (*Callia*, inclus. var. *pusilla*).

1902 KOBELT, Cyclophoridae, in: Tierreich. p. 335.

Ambon: MARTENS, 1867; Ema, south Ambon, and Waai, north Ambon, Rumatiga, Hitu, north Ambon (var. *pusilla*) (BOETTGER, 1891); Waai, Hitu, north Ambon! Ema, Leitimor, south Ambon!

Saparua: Papero (BOETTGER, 1891); Saparua!

Palaina angulata BOETTGER, 1891.

1891 BOETTGER, Ber. Senckenb. p. 286, pl. 4, fig. 4, 4a-b.

1902 KOBELT, Cyclophoridae, in: Tierreich, p. 394.

1908 BOETTGER, Nachr. Blatt, 40, p. 184 (*Palaina (Eupalaina) angulata*).

Ambon: KOBELT, 1902; Batumerah, south Ambon; Kusu Kusu, along the road (BOETTGER, 1891); Cape Tial, Hitu, (BOETTGER, 1908); secondary wood!; Kusu Kusu, along road!; Batumerah, Leitimor, south Ambon!; Cape Tial, Hitu, north Ambon!

Haruku: Oma (BOETTGER, 1891); Haruku (KOBELT, 1902);

The species is endemic in the Ambon group of islands.

Palaina carbavica BOETTGER, 1891.

1891 BOETTGER, Ber. Senckenb. p. 286, pl. 4, fig. 5, 5a-b.

1902 KOBELT, Cyclophoridae, in: Tierreich, p. 407 (*Palaina (Cylindropalaina) carbavica*).

Ambon: Mt Carbau, Hitu, north Ambon; near Ema, south Ambon (BOETTGER, 1891); Mt Carbau, Hitu, north Ambon!; Ema, Leitimor, south Ambon!

Haruku: Hulaliu (BOETTGER, 1891); Haruku (KOBELT, 1902); Hulaliu!

The species is endemic in the Ambon group of islands.

Anostomella ascendens (MARTENS, 1864).

1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 538 (*Pupa*).

1867 MARTENS, Ostas. Landschn. p. 386, pl. 22, fig. 23 (*Pupa*).

1887 ANCEY, Bull. Soc. Malac. France, 4, p. 279 (*Diancta (Anostomella) ascendens*).

1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1054 (*Pupa*).

1891 BOETTGER, Ber. Senckenb. p. 287.

1902 KOBELT, Cyclophoridae, in: Tierreich, p. 422.

Ambon: MARTENS, 1864; ANCEY, 1887; TENISON WOODS, 1888; KOBELT, 1902; on limestone hills behind the town (MARTENS, 1867); Ema and

Batumerah, south Ambon; Hitu Lama, north Ambon (BOETTGER, 1891); Batumerah!; Leitimor!

Haruku: Oma (BOETTGER, 1891).

Saparua: Papero (BOETTGER, 1891); Papero!

The genus is endemic in Ambon and neighbouring islands.

Diplommatina papuana (TAPPARONE CANEFRI, 1883).

1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 269, pl. 10, fig. 16-17 (*Moussonia*).

1902 KOBELT, Cyclophoridae, in: Tierreich, p. 478.

Ambon: secondary wood!

Diplommatina strubelli BOETTGER, 1891.

1891 BOETTGER, Ber. Senckenb. p. 285, pl. 4, fig. 3, 3a-b (*Diplommatina (Moussonia) strubelli*).

1902 KOBELT, Cyclophoridae, in: Tierreich, p. 478 (*Diplommatina (Moussonia) strubelli*).

Ambon: KOBELT, 1902; Hitu Lama, north Ambon (BOETTGER, 1891); secondary wood!

Viviparus javanicus (VON DEM BUSCH, 1841).

1841 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1, p. 114, pl. 1, fig. 11, 12 (*Paludina*).

1891 BOETTGER, Ber. Senckenb. p. 285 (*Paludina javanica* var. *virescens*).

1909 SCHEPMAN, Siboga Exp. Monogr. 49-1-b, p. 197 (*Vivipara*).

Ambon: Waai, north Ambon (BOETTGER, 1891); brook at Ambon (SCHEPMAN, 1909); brook at Ambon!

MARTENS (1897, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 24) doubted the occurrence of *Viviparus* in Ambon. The record by SCHEPMAN (1909) of a live specimen takes all doubt away.

Omphalotropis ceramensis (PFEIFFER, 1862).

1862 PFEIFFER, Proc. Zool. Soc. London, p. 117 (*Hydrocena (Omphalotropis) ceramensis*).

1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 118 (*bicarinatus*).

1867 MARTENS, Ostas. Landschn. p. 160, pl. 4, fig. 11.

1891 BOETTGER, Ber. Senckenb. p. 296.

1893 SCHEPMAN, Notes Leyden Mus. 15, p. 157.

Ambon: MARTENS, 1864; interior of the island near the cave Batu Lubang (MARTENS, 1867); Ema, south Ambon, and Waai, north Ambon (BOETTGER, 1891); Ema, south Ambon!; secondary wood!

Haruku: BOETTGER, 1891.

Saparua: Mt Rila, in cleft in coral limestone (SCHEPMAN, 1893); Mt Rila!

Omphalotropis ornata BOETTGER, 1891.

1891 BOETTGER, Ber. Senckenb. p. 296, pl. 4, fig. 11, 11a-b (*Omphalotropis (Paratropis) ornata*).

Haruku: Hulaliu (BOETTGER, 1891).

Pseudocyclotus liratulus (MARTENS, 1864).

1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 117 (*Cyclotus*).

1867 MARTENS, Ostat. Landschn. p. 127, pl. 2, fig. 15 (*Cyclotus*).

1877 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 261 (*Cyclotus*).

1891 BOETTGER, Ber. Senckenb. p. 294 (*Cyclotus (Japonia) liratulus*).

1893 SCHEPMAN, Notes Leyden Mus. 15, p. 156 (*Cyclotus*).

1908 BOETTGER, Nachr. Blatt, 40, p. 185 (*Adelomorpha*).

Ambon: MARTENS, 1864, 1877; limestone rocks in the Bay of Ambon, near Batumerah (MARTENS, 1867); Ema, south Ambon; Rumatiga, north Ambon (BOETTGER, 1891); Cape Tial, Hitu, (BOETTGER, 1908); south-east coast!; secondary wood!

Saparua: Mt Rial, in cleft in coral limestone (SCHEPMAN, 1893); Mt Rila, coral limestone!

Faunus ater (LINNÉ, 1758).

1705 RUMPHIUS, Amb. Rariteitk. p. 101, pl. 30, fig. R (*Strombus palustris laevis*).

1758 LINNÉ, Syst. Nat. Ed. X, p. 746 (*Strombus*).

1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Melania atra* = *Pirena atra*).

1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 410, pl. 44, fig. 3.

1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 49.

1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1087.

1891 BOETTGER, Ber. Senckenb. p. 308.

1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 191.

Ambon: RUMPHIUS, 1705; BLEEKER, 1856; BROT, 1874; TAPPARONE CANEFRI, 1883; TENISON WOODS, 1888; BOETTGER, 1891; Weynitu, mouth of a rivulet (MARTENS, 1897); Ambon!; river 2 km north of the town!

Thiara acanthica (LEA, 1850).

1850 LEA, Proc. Zool. Soc. London, p. 194 (*Melania*).

1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 278, pl. 28, fig. 10 (*Melania*).

1891 BOETTGER, Ber. Senckenb. p. 280 (*Melania (Plotia) acanthica*).

Ambon: Hitu Lama, north Ambon (BOETTGER, 1891); Hitu Lama!; kali west of Paso!

Thiara amarula (LINNÉ, 1758).

- 1705 RUMPHIUS, Amb. Rariteitk. p. 106, pl. 33, fig. FF (*Voluta fluviaialis*).
 1758 LINNÉ, Syst. Nat. Ed. X, p. 774 (*Helix*).
 1848 PHILIPPI, Zeitschr. f. Malak. 5, p. 154 (*Melania villosa*).
 1850 LEA, Proc. Zool. Soc. London, p. 194 (*Melania diadema*).
 1856 BLEEKER, Reis Minahassa en Molukse Archip. in 1855, p. 69-70 (*Melania*).
 1862 MARTENS, Málak. Blätt. 10, p. 121 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 293, pl. 29, fig. 2 (*Melania diadema* non *M. amarula* p. 289, pl. 29, fig. 1) and p. 296, pl. 30, fig. 3, 3a-d (*M. villosa*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1084 (*Melania diadema*).
 1891 BOETTGER, Ber. Senckenb. p. 282 (*Melania (Tiara) diadema* and *villosa*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 66 and 68 (*Melania diadema*).
 1902 MARTENS, Rumphius Gedenkb. p. 120 (*Melania diadema* = *amarula*).

Ambon: RUMPHIUS, 1705; BLEEKER, 1856; BROT, 1874; TENISON WOODS, 1888; MARTENS, 1897; Laha, north west Ambon (MARTENS, 1862 and 1902); Batugadja and Hitu Lama (BOETTGER, 1891); Ambon!

There is a lot of confusion concerning *Thiara amarula* (L.). MARTENS (1902) referred already to this fact, but he did not accept the consequences of strict nomenclatural rules. The following points must be considered:

- (1) LINNÉ (1758) when describing *Helix amarula* referred to RUMPHIUS (1705) and adopted the not-binominal name which the latter author had used.
- (2) This is the species which LEA (1850) described as *Melania diadema*, a name generally employed in most later publications.
- (3) What BROT (1874) and several subsequent authors took for *Melania amarula* is a species from Madagascar and Reunion, with fewer spines and less slender shape.
- (4) Consequently most of the publications referring to *Melania diadema* or *Thiara diadema* must be revised. Without having checked all these references it is impossible to say if the samples really belong to *Th. amarula* or to another species.

Thiara pagoda (LEA, 1850).

- 1850 LEA, Proc. Zool. Soc. London, p. 197 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 277, pl. 28, fig. 5, 5a-c (*Melania*).
 1891 BOETTGER, Ber. Senckenb. p. 281 (*Melania (Plotia) pagoda*).

Ambon: Hitu Lama (BOETTGER, 1891); Ambon!; Hitu Lama!; river north of the town near the Bay!; pond near the governor's residence!

***Thiara rудicostis* (BROT, 1874).**

- 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 280, pl. 28, fig. 7, 7a (*Melania*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1084 (*Melania*).
 1891 BOETTGER, Ber. Senckenb. p. 281 (*Melania (Plotia) rудicostis*).

Ambon: BROT, 1874; TENISON WOODS, 1888; Hitu Lama, north Ambon (BOETTGER, 1891); Ambon!; Hitu Lama!

***Thiara rудis* (LEA, 1850).**

- 1850 LEA, Proc. Zool. Soc. London, p. 186 (*Melania*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 305, pl. 32, fig. 1, 1a-c (*Melania*).
 1934 RENSCH, Zool. Jahrb. (Syst.) 65, p. 408 (*Melania (Tiaropsis) rудis*).

Ambon: LEA, 1850; BLEEKER, 1856; BROT, 1874; RENSCH, 1934.

***Thiara scabra* (MÜLLER, 1774).**

- 1774 MÜLLER, Hist. Verm. Vol. 2, p. 136 (*Buccinum*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 266, pl. 27, fig. 14, 14a-e, 15, 15a (*Melania*).
 1891 BOETTGER, Ber. Senckenb. p. 282 (*Melania (Plotia) scabra*).

Ambon: Hitu Lama, north Ambon (BOETTGER, 1891).

***Thiara setosa* (SWAINSON, 1824).**

- 1824 SWAINSON, Qua. Journ. Sci. no. 33, p. 13 (*Melania*).
 1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3, p. 145-146, pl. 56, fig. 8-11 (*Melania*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Melania*).
 1862 MARTENS, Malak. Blätt. 10, p. 121 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 297, pl. 30, fig. 5, 5a, 6, pl. 31, fig. 1, 1a (*Melania*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 45 (*Melania*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1048 (*Melania*).
 1891 BOETTGER, Ber. Senckenb. p. 282 (*Melania (Tiara) setosa* var. *minor*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 66 (*Melania*).
 1915 SCHEPMAN, Bijdr. t. d. Dierk. 20, p. 26 (*Melania*).
 1934 RENSCH, Zool. Jahrb. (Syst.) 65, p. 409 (*Melania (Tiaropsis) setosa*).

Ambon: BLEEKER, 1856; MARTENS, 1862 and 1897; BROT, 1874; TENISON WOODS, 1888; TAPPARONE CANEFRI, 1883; RENSCH, 1934; river in the town of Ambon (QUOY & GAIMARD, 1834); Hitu Lama, north Ambon (BOETTGER, 1891); river near Batumerah (SCHEPMAN, 1915); Amboina!; river near Batumerah!; river north of the town near the bay!

Melanoides blatta (LEA, 1850).

- 1850 LEA, Proc. Zool. Soc. London, p. 184 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 123, pl. 15, fig. 4, 4a (*Melania*).
Ambon !

Melanoides clavus (LAMARCK, 1822).

- 1822 LAMARCK, Anim. s. Vert. 6, Pt. 2, p. 165 (*Melania*).
 1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3, p. 157, pl. 56, fig. 45-47 (*Melania papuensis*).
 1850 LEA, Proc. Zool. Soc. London, p. 184 (*Melania costellaris*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 175, pl. 21, fig. 17 (*Melania clavus*), p. 181, pl. 21, fig. 7, 7a (*Melania costellaris*) and p. 186, pl. 21, fig. 10, 10a (*Melania papuensis*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 29 (*Melania papuensis*).
 1891 BOETTGER, Ber. Senckenb. p. 278 (*Melania*).
 1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Melania*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 50 (*Melania*).
 1934 RENSCH, Zool. Jahrb. (Syst.) 65, p. 415 (*Melania (Stenomelania) clavus*).

Ambon : TAPPARONE CANEFRI, 1883 ; BOETTGER, 1891 ; MARTENS, 1894 ; RENSCH, 1934 ; Batugantong (MARTENS, 1897) ; Ambon !

Melanoides crenulata (DESHAYES, 1838).

- 1838 DESHAYES, in: LAMARCK, Anim. s. Vert. Ed. II, vol. 8, p. 434 (*Melania*).
 1862 MARTENS, Malak. Blätt. 10, p. 122 (*Melania*).
 1874 BROT, in MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 114, pl. 14, fig. 9a-f (*Melania*).
Ambon : Laha (MARTENS, 1862) ; Ambon !

Melanoides crepidinata (REEVE, 1859).

- 1859 REEVE, Conch. Icon. Vol. 12, fig. 120 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 238, pl. 13, 13a (*Melania*).
 1891 BOETTGER, Ber. Senckenb. p. 280 (*Melania (Striatella) cf crepidinata*).
Ambon : BOETTGER, 1891.

Melanoides granifera (LAMARCK, 1816).

- 1816 LAMARCK, Encycl. Méth. (Vers) pl. 458, fig. 4a, b, Liste p. 12 (n. et f.) (*Melania*).
 1822 LAMARCK, Anim. s. Vert. 6, Pt. 2, p. 167 (*Melania*).
 1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3, p. 152 ,pl. 56, fig. 26-29 (*Melania celebensis*).
 1842 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1, Melania, p. 2, pl. 1, fig. 13 (*Melania semigranosa*).
 1862 MARTENS, Malak. Blätt. 10, p. 121 (*Melania semigranosa*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 321, pl. 33, fig. 13, 13a (*Melania granifera*), p. 317, pl. 32, fig. 15, 15a-c (*Melania celebensis*).
 1891 BOETTGER, Ber. Senckenb. p. 283 (*Melania (Tarebia) granifera*).

- 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 71 (*Melania*).
 1915 SCHEPMAN, Bijdr. t. d. Dierk. 20, p. 27 (*Melania (Tarebia) celebensis*).
 1934 RENSCH, Zool. Jahrb. (Syst.) 65, p. 404 (*Melania (Tarebia) granifera granifera*).
 Ambon: RENSCH, 1934; rivulets (MARTENS, 1862); Hitu Lama, Seelan Lake, Batugantong (BOETTGER, 1891); Batugantong (MARTENS, 1897); river near Batumerah (SCHEPMAN, 1915); Ambon!; river near the hospital!; river near Batumerah!; Seelan Lake!; kali west of Paso!; pond near the governor's residence!

***Melanoides plicaria* (BORN, 1780).**

- 1705 RUMPHIUS, Amb. Rariteitk. p. 101, pl. 30, fig. P (*Strombus fluvialis*).
 1780 BORN, Testacea Mus. Caes. Vindob. p. 389, pl. 16, fig. 14 (*Helix*).
 1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3, p. 158, pl. 56, fig. 43, 44 (*Melania funiculus*).
 1850 LEA, Proc. Zool. Soc. London, p. 189 (*Melania hastula*).
 1862 MARTENS, Malak. Blätt, 10, p. 121 (not improbably *Melania aspirans*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 129, pl. 16, fig. 3, 3a-d (*Melania hastula*), p. 136, pl. 17, fig. 1, 1a-b (*Melania funiculus*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 24 (*Melania scutulata*).
 1891 BOETTGER, Ber. Senckenb. p. 279 (*Melania hastula* and *M. funiculus*).
 1894 MARTENS, Jen. Denkschr. 8. p. 84 (*Melania funiculus*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 41 (*Melania*).
 1902 MARTENS, Rumphius Gedenkb. p. 120 (*Melania*).
 1915 SCHEPMAN, Bijdr. t. d. Dierk. 20, p. 23 (*Melania (Stenomelania) funiculus*).

Ambon: RUMPHIUS, 1705; MARTENS, 1862; TAPPARONE CANEFRI, 1883; MARTENS, 1894, 1897 and 1902; Batugadja (BOETTGER, 1891); river near Batumerah (SCHEPMAN, 1915); Ambon!; river near Batumerah!

***Melanoides punctata* (LAMARCK, 1822).**

- 1822 LAMARCK, Anim. s. Vert. 6, Pt. 2, p. 165 (*Melania*).
 1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3, p. 151, pl. 56, fig. 22-25 (*Melania moluccensis*).
 1844 HINDS, Ann. Mag. Nat. Hist. 14, p. 9 (*Melania fulgurans*).
 1850 LEA, Proc. Zool. Soc. London, p. 187 (*Melania mindorensis*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Melania moluccensis*).
 1860 BROT, Rev. Zool. (2) 12, p. 258, pl. 16, fig. 4 (*Melania litigiosa*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 168, pl. 20, fig. 4, 4a (*Melania punctata*), p. 166, pl. 20, fig. 2 (*Melania moluccensis*), p. 170, pl. 20, fig. 5, 5a-b (*Melania litigiosa*), p. 169, pl. 20, fig. 6, 6a (*Melania mindorensis*) and p. 183, pl. 21, fig. 13 (*Melania fulgurans*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1081 (*Melania moluccensis*).
 1891 BOETTGER, Ber. Senckenb. p. 279 (*Melania punctata* and *M. fulgurans*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 48 (*Melania litigiosa*) and p. 49 (*Melania mindorensis*).
 1915 SCHEPMAN, Bijdr. t. d. Dierk. 20, p. 24 (*Melania (Stenomelania) moluccensis*) and p. 25 (*Melania (Stenomelania) pantherina*).

Ambon: BLEEKER, 1856; BROT, 1874; TENISON WOODS, 1888; MARTENS, 1897; freshwater in Ambon (QUOY & GAIMARD, 1834); Batugadja (BOETTGER, 1891); river near Batumerah (SCHEPMAN, 1915); river near Batumerah!; river north of the town near the bay!

Melanoides tuberculata (MÜLLER, 1774).

- 1774 MÜLLER, Hist. Verm. Vol. 2, p. 191 (*Nerita*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 247, pl. 26, fig. 11, 11a-h (*Melania*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 58 (*Melania tuberculata* var. *seminuda*).

Ambon: MARTENS, 1897; Ambon!; pond near the governor's residence!

Melanoides turris (BROT, 1872).

- 1872 BROT, Matér. étude fam. Mélaniens, Pt. 3, 38, pl. 11, fig. 11 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 146, pl. 18, fig. 5, 5a (*Melania*).
 1891 BOETTGER, Ber. Senckenb. p. 280 (*Melania*).

Ambon: BOETTGER, 1891; Ambon!; Batugadja!; river north of the town near the bay!

Melanoides uniformis (QUOY & GAIMARD, 1834).

- 1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3, p. 154, pl. 56, fig. 30-33 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 124, pl. 15, fig. 3, 3a, pl. 16, fig. 1 (*Melania*).
 1915 SCHEPMAN, Bijdr. t. d. Dierk. 20, p. 25 (*Melania (Stenomelania) uniformis*).

Ambon: river near Batumerah (SCHEPMAN, 1915); Ambon!; kali west of Paso!; river near Batumerah!; river north of the town near the bay!

Melanoides wickmanni (MARTENS, 1897).

- 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 54, pl. 3, fig. 26-27 (*Melania*).

Ambon: pond near the governor's residence!

Balanocochlis inermis (LESSON, 1830).

- 1830 LESSON, Voy. Coquille, Zool. 2, pt. 1, p. 352 (*Melania*).
 1842 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1, p. 3, pl. 1, fig. 8-9 (*Melania glans*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 14, pl. 1, fig. 3, 3a (*Melania glans*) and p. 15 (*Melania inermis*).
 1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Melania glans*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 30 (*Melania glans*).
 1934 RENSCH, Zool. Jahrb. (Syst.) 65, p. 415.

Ambon: MARTENS, 1894 and 1897; RENSCH, 1934; Ambon!

Strubellia paradoxum (KÜTHE, 1935).

- 1892 STRUBELL, Verh. Naturh. Ver. preuss. Rheinl. 49, p. 62 (*Aeochlidium paradoxum* nom. nud.).
1935 KÜTHE, Zool. Jahrb. (Syst.) 66, p. 513-540, pl. 8, and 19 textfigs (*Aeochlidium*).
1937 ODHNER, Zool. Anz. 120, p. 237-238.
1938 ODHNER, Basteria, 3, p. 8.
1952 ODHNER, Vie et Milieu, 3, p. 136-147, pl. 2, fig. 7.

Ambon: STRUBELL, 1892; rivulet Batugadja (KÜTHE, 1935); Batugadja (ODHNER, 1937, 1938 and 1952).

Aeochlidium amboinense (BÜCKING, 1933).

- 1892 STRUBELL, Verh. Naturh. Ver. preuss. Rheinl. 49, p. 62 (*Aeochlidium amboinense* nom. nud.).
1933 BÜCKING, Zool. Jahrb. (Syst.) 64, p. 549, pl. 2, 27 textfigs (*Hedyle*).
1937 ODHNER, Zool. Anz. 120, p. 52.
1938 ODHNER, Basteria, 3, p. 8.
1952 ODHNER, Vie et Milieu, 3, p. 136-137, pl. 3, fig. 15.

Ambon: STRUBELL, 1892; rivulet Batugadja (BÜCKING, 1933); Batugadja (ODHNER, 1937, 1938 and 1952).

It is remarkable that this and the preceding species, both marine nudibranchs, were found by A. STRUBELL in a freshwater habitat, at some distance from the sea. STRUBELL tried to explain this fact by reminding of similar cases of various other marine animals occasionally migrating into fresh water, as have been observed in other parts of the world.

The following is another tentative explanation: The nudibranchs lived on the bottom. In this part of the river a salt or brackish water current with a high specific gravity flows along the bottom landinward, while at the same time and in the same place a superficial current of lighter fresh water flows seaward. In a vertical transverse section of the river the upper layers of water are fresh (containing freshwater organisms), the lower layers brackish to almost salt (containing brackish and marine organisms). Hence it is not impossible that the two nudibranchs could live in a freshwater river and yet were in their proper milieu conditions.

Melampus caffer (KÜSTER, 1844).

- 1844 KÜSTER, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 16, p. 36, pl. 5, fig. 6-8 (*Auricula*).
1856 PFEIFFER, Mon. Auric. Viv. p. 40.
1891 BOETTGER, Ber. Senckenb. p. 277.

Ambon: Latuhalat!; Ambon (BOETTGER, 1891); Ambon!

Melampus costatus (QUOY & GAIMARD, 1832).

- 1832 QUOY & GAIMARD, Voy. Astrolabe, Zool. 2, p. 173, pl. 13, fig. 43-46 (*Auricula*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 55.

Ambon!

Melampus fasciatus (DESHAYES, 1830).

- 1830 DESHAYES, Encycl. Méth. Vers, 2, p. 90 (*Auricula*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 38.
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 242.
 1891 BOETTGER, Ber. Senckenb. p. 278.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 161, pl. 8, fig. 4.

Ambon: TAPPARONE CANEFRI, 1883; MARTENS, 1897; Ema, south Ambon (BOETTGER, 1891); Ambon!; beach near the town, on rock!; Erie!

Melampus luteus (QUOY & GAIMARD, 1832).

- 1832 QUOY & GAIMARD, Voy. Astrolabe, Zool. 2, p. 163, pl. 13, fig. 25-27 (*Auricula*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 36.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 163-164.

Ambon: on rocks near the town along the beach!; Ambon!

Melampus nucleolus MARTENS, 1865.

- 1865 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 55.
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 231.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 164, pl. 8, fig. 21.

Ambon: MARTENS, 1865; TAPPARONE CANEFRI, 1883; near the mouth of the rivulet Weynitu, on soft mud, in mangrove bush (MARTENS, 1897); Weynitu!

Melampus sinaporenensis PFEIFFER, 1855.

- 1855 PFEIFFER, Malak. Blätt. 2, p. 8.
 1856 PFEIFFER, Mon. Auric. Viv. p. 41.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 165, pl. 8, fig. 5 and 23 (*M. singaporenensis*).

Ambon: MARTENS, 1897.

Melampus sulculosus MARTENS, 1865.

- 1865 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 55.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 167, pl. 8, fig. 20.

Ambon: mouth of the Weynitu river (MARTENS, 1865 and 1897); Ambon!

Cassidula mustelina (DESHAYES, 1830).

- 1830 DESHAYES, Encycl. Méth. Vers, 2, p. 92 (*Auricula*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 116.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 144-145, pl. 8, fig. 5.

Ambon!

Cassidula sulculosa (MOUSSON, 1849).

- 1849 MOUSSON, Land & Süssw. Moll. Java, p. 45, pl. 5, fig. 8 (*Auricula*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 114.
 1862 MARTENS, Malak. Blätt. 10, p. 126.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 146.

Ambon: mangrove bush (MARTENS, 1862); mouth of rivulet Weynitu (MARTENS, 1897); Ambon!

Cassidula turgida PFEIFFER, 1854.

- 1854 PFEIFFER, Malak. Blätt. 1, p. 154.
 1856 PFEIFFER, Mon. Auric. Viv. p. 115.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 143.

Ambon: near Weynitu, on soft mud, between roots of mangrove trees (MARTENS, 1897).

Pythia crassidens (L. ROUSSEAU, 1854).

- 1854 ROUSSEAU, in: HOMBROON & JACQUINOT, Voy. Pôle Sud, Zool. 5, p. 40, pl. 10, fig. 12-14 (*Scarabus*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 99.
 1862 MARTENS, Malak. Blätt. 10, p. 126 (*Scarabus*).
 1891 BOETTGER, Ber. Senckenb. p. 275 (*Scarabus*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 138.
 1908 BOETTGER, Nachr. Blatt, 40, p. 184.

Ambon: ROUSSEAU, 1854; PFEIFFER, 1856; MARTENS, 1862; north Ambon (MARTENS, 1897); Waai, north Ambon (BOETTGER, 1891); Ambon!; Wai Hatu!

Haruku: MARTENS, 1897; Hulaliu (BOETTGER, 1891); Cape Batu Kapal (BOETTGER, 1908); Aboru!; Hulaliu!

Saparua: MARTENS, 1897; Sirisori (BOETTGER, 1891); Sirisori!

Pythia pantherina (A. ADAMS, 1850).

- 1850 ADAMS, Proc. Zool. Soc. London, p. 152 (*Scarabus*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 94.
 1891 BOETTGER, Ber. Senckenb. p. 276 (*Scarabus*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 136.
 1908 BOETTGER, Nachr. Blatt, 40, p. 184.

Ambon: Cape Tial, Hitu (BOETTGER, 1908); Ambon!

Haruku: MARTENS, 1897; Hulaliu (BOETTGER, 1891); Aboru!

Saparua: MARTENS, 1897; Sirisori (BOETTGER, 1891); Sirisori!

Pythia pollex (HINDS, 1842).

- 1842 HINDS, Ann. Mag. Nat. Hist. 10, p. 82 (*Scarabus*).
 1844 HINDS, Voy. Sulphur, Zool. Moll. p. 60, pl. 16, fig. 9-10 (*Scarabus*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 86.

- 1891 BOETTGER, Ber. Senckenb. p. 276 (*Scarabus*).
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 139.

Haruku: MARTENS, 1897; Hulaliu (BOETTGER, 1891).
 Saparua: MARTENS, 1897; Sirisori (BOETTGER, 1891).

Pythia scarabaeus (LINNÉ, 1758).

- 1705 RUMPHIUS, Amb. Rariteitk. p. 91, pl. 27, fig. I (*Cochlea imbrium*).
 1758 LINNÉ, Syst. Nat. Ed. X, p. 768 (*Helix*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Scarabus imbrium*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 82.
 1877 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 286.
 1884 SMITH, Proc. Zool. Soc. London, p. 261.
 1891 BOETTGER, Ber. Senckenb. p. 276 (*Scarabus*).
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 153.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 133.
 1902 MARTENS, Rumphius Gedenkb. p. 117.
 1908 BOETTGER, Nachr. Blatt, 40, p. 184.

Ambon: RUMPHIUS, 1705; BLEEKER, 1856; MARTENS, 1877, 1897 and 1902; SMITH, 1884; Hitu (BOETTGER, 1908); Ambon!; south coast of Ambon!; river south east of Ambon!; beach near the town, on Crinum sp.!; Suli!; near Erie!; Latuhalat!; near Bluting!; near Batumerah!;

Haruku: Cape Batu Kapal (BOETTGER, 1908); Aboru (SCHEPMAN, 1893); Haruku (MARTENS, 1897 and 1902); Aboru!

Saparua: SCHEPMAN, 1893; MARTENS, 1897 and 1902; Sirisori (BOETTGER, 1891).

Pythia semisulcata (A. ADAMS, 1850).

- 1850 ADAMS, Proc. Zool. Soc. London, p. 151 (*Scarabus*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 93.
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 153.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 139.

Haruku: Aboru (SCHEPMAN, 1893); Aboru!

Saparua: SCHEPMAN, 1893; MARTENS, 1897.

Pythia striata (REEVE, 1842).

- 1842 REEVE, Ann. Mag. Nat. Hist. 9, p. 220, pl. 4, fig. 9 (*Scarabus*).
 1856 PFEIFFER, Mon. Auric. Viv. p. 94.
 1891 BOETTGER, Ber. Senckenb. p. 277 (*Scarabus*).
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 154.
 1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 138.
 1908 BOETTGER, Nachr. Blatt, 40, p. 184.

Ambon: Ema, south Ambon (BOETTGER, 1891); south Ambon (MARTENS, 1897); Cape Tial, Hitu (BOETTGER, 1908).

Haruku: MARTENS, 1897; Hulaliu (BOETTGER, 1891); Aboru (SCHEPMAN, 1893); Hulaliu!; Aboru!

Pythia wallacei PFEIFFER, 1861.

- 1861 PFEIFFER, Proc. Zool. Soc. London, p. 160.
1884 SMITH, Proc. Zool. Soc. London, p. 261.

Ambon: SMITH, 1884.

Ellobium auris-judae (LINNÉ, 1758).

- 1758 LINNÉ, Syst. Nat. Ed. X, p. 728 (*Bulla*).
1856 PFEIFFER, Mon. Auric. Viv. p. 130 (*Auricula auris Judae*).
1877 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 287 (*Auricula Judae*).
1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 217 (*Auricula*).
1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 154 (*Auricula Judae*).
1902 MARTENS, Rumphius Gedenkb. p. 123 (*Auricula Judae*).

Ambon: MARTENS, 1877, 1897 and 1902; TAPPARONE CANEFRI, 1883;
Ambon!

Ellobium auris-midae (LINNÉ, 1758).

- 1705 RUMPHIUS, Amb. Rariteitk. p. 107 and 120, pl. 33, fig. HH (*Cylinder lutarius*).
1758 LINNÉ, Syst. Nat. Ed. X, p. 728 (*Bulla*).
1856 BLEEKER, Reis Minahassa en Molucksche Archip. in 1855, vol. 2, p. 70 (*Auricula Midae*).
1856 PFEIFFER, Mon. Auric. Viv. p. 124 (*Auricula auris Midae*).
1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 150 (*Auricula Midae*).
1902 MARTENS, Rumphius Gedenkb. p. 121 and 123 (*Auricula Midae*).

Ambon: RUMPHIUS, 1705; BLEEKER, 1856; MARTENS, 1897 and 1902;
Ambon!

Siphonaria laciniosa (LINNÉ, 1758).

- 1758 LINNÉ, Syst. Nat. Ed. X, p. 781 (*Patella*).
1823 SOWERBY, Gen. Rec. Foss. Shells, 1, Pt. 21, pl. 143, fig. 1 (*sipho*) and fig. 4 (*exigua*).
1946 HUBENDICK, Kgl. Svensk. Vet. Akad. Handl. 23, no. 5, p. 47, pl. 3, fig. 16-19.

Ambon: rocky shore (HUBENDICK, 1946); Ambon!; Erie!

Physastra moluccensis (LESSON, 1830).

- 1830 LESSON, Voy. Coquille, Zool. 2, p. 332 (*Physa*).
1856 BLEEKER, Reis Minahassa en Molucksche Archip. in 1855, vol. 2, p. 70 (*Physa*).
1867 MARTENS, Malak. Blätt. 14, p. 218 (*Physa*).
1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 245 (*Physa*).

Ambon: LESSON, 1830; BLEEKER, 1856; MARTENS, 1867; TAPPARONE CANEFRI, 1883.

Atopos leuckarti SIMROTH, 1891.

- 1891 SIMROTH, Zeitschr. wiss. Zool. 52, p. 600, pl. 37, fig. 2.
 1925 HOFFMANN, Vidensk. Medd. Dansk naturh. Foren. 81, p. 26 and 29.

Ambon: SIMROTH, 1891; HOFFMANN, 1925.

Atopos strubelli SIMROTH, 1891.

- 1891 SIMROTH, Zeitschr. wiss. Zool. 52, p. 600, pl. 37, fig. 3.
 1925 HOFFMANN, Vidensk. Medd. Dansk naturh. Foren. 81, p. 26 and 29.

Ambon: SIMROTH, 1891; HOFFMANN, 1925.

Laevicaulis alte (FÉRUSSAC, 1823).

- 1823 FÉRUSSAC, Hist. Nat. génér. et partic. Moll. p. 96 x, pl. 8A, fig. 8, pl. 8B, fig. 6 (*Vaginulus*).
 1893 SIMROTH, Sitz. Ber. naturf. Ges. Leipzig, 17-18 (1891-1892), p. 66 and 85 (*Vaginula bocagei* pars).
 1925 HOFFMANN, Jen. Zeitschr. Naturw. 61, p. 121 (*Meisenheimeria*).
 1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124, p. 28 (*Meisenheimeria*).

Ambon: SIMROTH, 1893; HOFFMANN, 1925; GRIMPE & HOFFMANN, 1925.

Filicaulis bleekeri (KEFERSTEIN, 1865).

- 1865 KEFERSTEIN, Zeitschr. wiss. Zool. 15, p. 118, pl. 9, fig. 1-7 (*Veronicella (Vaginulus)*).
 1867 MARTENS, Ostas. Landschn. p. 176 (*Vanigulus hasselti* pars).
 1925 HOFFMANN, Jen. Zeitschr. Naturw. 61, p. 135 (*Vanigula bleekeri*), p. 136. (*Vaginulus hasselti* pars).
 1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124, p. 31 (*Vaginula*).

Ambon: MARTENS, 1867; HOFFMANN, 1925; GRIMPE & HOFFMANN, 1925.

Semperula maculata (TEMPLETON, 1858).

- 1858 TEMPLETON, Ann. Mag. Nat. Hist. (3) 1, p. 49, pl. 2B, fig. 1-5 (*Vaginula*).
 1867 MARTENS, Ostas. Landschn. p. 176 (*Vaginulus hasselti* pars).
 1925 HOFFMANN, Jen. Zeitschr. Naturw. 61, p. 175 (*S. maculata*) and p. 177 (*S. hasselti* and *bocagei* pars).
 1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124, p. 38.

Ambon: MARTENS, 1867; HOFFMANN, 1925; GRIMPE & HOFFMANN, 1925.

Tornatellina moluccana BOETTGER, 1891.

- 1891 BOETTGER, Ber. Senckenb. p. 274, pl. 4, fig. 1, 1a-b.
 1915 PILSBRY, Man. of Conch. (2) 23, p. 186, pl. 38, fig. 12 and 13.

Ambon: Ema, south Ambon (BOETTGER, 1891 and PILSBRY, 1915).

The species is endemic in Ambon.

An immature shell of *Tornatellina* was collected by Dr LIEFTINCK in secondary wood in Ambon. It is not certain to which species it belongs.

Nesopupa moellendorffi (BOETTGER, 1890).1890 BOETTGER, Ber. Senckenb. p. 252, pl. 9, fig. 4 (*Ptychochilus*).

1920 PILSBRY & COOKE, Man. of Conch. (2) 25, p. 341, pl. 32, fig. 4, 5.

Ambon: secondary wood!

PILSBRY added to his description: "Very close to *Nesopupa moreleti*, probably not specifically distinct".

The two shells which Dr LIEFTINCK collected in Ambon have more affinities to the small and plump *N. moellendorffi* than to the larger and slenderer *N. moreleti*. They have the typical heart-shaped aperture of *N. moellendorffi* and also the protracted curve in the right margin of the peristome. Both specimens have 5 teeth. Their dimensions are:

height	1.8	1.8	mm
width	1.05	1.05	
height of aperture	0.7	0.7	

Nesopupa moluccana (BOETTGER, 1891).1891 BOETTGER, Ber. Senckenb. p. 269, pl. 3, fig. 11, 11a (*Vertigo (Ptychochilus)*).

1920 PILSBRY & COOKE, Man. of Conch. (2) 25, p. 338, pl. 32, fig. 11, 12.

Ambon: Ema, south Ambon (BOETTGER, 1891); PILSBRY & COOKE, 1920); secondary wood!

The species is endemic in Ambon.

Costigo saparuanus (BOETTGER, 1891).1891 BOETTGER, Ber. Senckenb. p. 270, pl. 3, fig. 12, 12a (*Vertigo (Costigo)*).

1920 PILSBRY & COOKE, Man. of Conch. (2) 25, p. 367, pl. 31, fig. 12.

Saparua: Sirisori (BOETTGER, 1891; PILSBRY & COOKE, 1920); Sirisori!

The species is endemic in Saparua.

Gastrocopta recondita (TAPPARONE CANEFRI, 1888).1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 106, pl. 2, fig. 3-4 (*Pupa*).1891 BOETTGER, Ber. Senckenb. p. 270 (*Leucockilus*).

Haruku: Hulaliu (BOETTGER, 1891).

Pupisoma orcula (BENSON, 1850).1850 BENSON, Ann. Mag. Nat. Hist. (2) 6, p. 251 (*Helix*).1888 MOELLENDORFF, Nachr. Blatt, 20, p. 108 (*philippinicum*).1890 MOELLENDORFF, Ber. Senckenb. p. 223, pl. 8, fig. 4 (*philippinicum*).1891 BOETTGER, Ber. Senckenb. p. 268 (*philippinicum*).1903 GUDE, Journ. Malac. 10, p. 94 (*philippinicum*).

1920 PILSBRY, Man. of Conch. (2) 26, p. 31, pl. 2, fig. 1-5.

Ambon: Hitu Lama, north Ambon (BOETTGER, 1891); Ambon (GUDE, 1903).

Subulina octona (BRUGUIÈRE, 1792).

- 1792 BRUGUIÈRE, Encycl. Méth. Vers, 1, p. 325 (*Bulimus*).
 1891 BOETTGER, Ber. Senckenb. p. 273.
 1906 PILSBRY, Man. of Conch. (2) 18, p. 72, pl. 12, fig. 8, 9 and p. 222, pl. 39, fig. 28-37, 39, 40.

Ambon: near Ema, and in the gardens of the town (BOETTGER, 1891); Ambon!

Haruku: BOETTGER, 1891.

Opeas clavulinum (POTIEZ & MICHAUD, 1838).

- 1838 POTIEZ & MICHAUD, Gal. Moll. Douai, 1, p. 136, pl. 14, fig. 9-10 (*Bulimus*).
 1891 BOETTGER, Ber. Senckenb. p. 271.
 1906 PILSBRY, Man. of Conch. (2) 18, p. 135, pl. 23, fig. 17, 21, 23.

Ambon: stalactite cave Lian Ikan, near the town of Amboina; Ema, south Ambon; Waai, north Ambon (BOETTGER, 1891); Waai!; secondary wood!

Haruku: Oma (BOETTGER, 1891).

Opeas gracile (HUTTON, 1834).

- 1834 HUTTON, Journ. As. Soc. Bengal, 3, p. 93 and 84-85 (*Bulimus*).
 1867 MARTENS, Ostas. Landschn. p. 375, pl. 22, fig. 13, pl. 19, fig. 5 (*Stenogryra*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 87 (*Stenogryra panayensis*) and Ibid. 20, p. 144 (*St. gracilis, panayensis, aculeus*).
 1891 BOETTGER, Ber. Senckenb. p. 272 (*O. gracile* and *O. junceum*).
 1906 PILSBRY, Man. of Conch. (2) 18, p. 176-177 (*aculeus*).

Ambon: MARTENS, 1867; TAPPARONE CANEFRI, 1883; PILSBRY, 1906; Ema and Batumerah; near Kusu Kusu — sarc; Hitu Lama; Mt Carbau, north Ambon; stalactite cave Lian Ikan, near the town of Amboina (BOETTGER, 1891); Ema, Leitimor!; secondary wood!

Haruku: Oma (BOETTGER, 1891).

Saparua: Sirisori (BOETTGER, 1891).

Charopa microdiscus VAN BENTHEM JUTTING, 1951.

- 1951 VAN BENTHEM JUTTING, Basteria, 15, p. 28-29, fig. 1.
 1952 VAN BENTHEM JUTTING, Treubia, 21, p. 398, fig. 62.

Ambon: secondary wood!

Ptychodon celebica (SARASIN & SARASIN, 1899).

- 1899 SARASIN & SARASIN, Land Moll. Celebes, p. 175, pl. 25, fig. 257 (*Endodonta*).
 1908 BOETTGER, Nachr. Blatt, 40, p. 181, fig. 1-3 (*Charopa (Charopa) kobelti*).
 1952 VAN BENTHEM JUTTING, Treubia, 21, p. 399, fig. 63.

Ambon: VAN BENTHEM JUTTING, 1952; Cape Tial, Hitu, north Ambon (BOETTGER, 1908); secondary wood!

By the courtesy of the authorities of the Senckenberg Museum I could examine the holotype of *Charopa (Ch.) kobelti* C. R. BOETTGER, 1908 (l.c.) from Cape Tial, Hitu. It is an immature shell in not too good condition. Nevertheless there is no doubt that it is identical with *Ptychodon celebica*.

The specimens collected by Dr LIEFTINCK are entirely devoid of teeth in the aperture. For the rest they agree with typical *Pt. celebica*.

Endodonta philippinica SEMPER, 1874.

1874 SEMPER, Reisen Archip. Philippinen, Vol. 3, p. 140.

1887 MOELLENDORFF, Jahrb. Malak. Ges. 14, p. 272.

1890 MOELLENDORFF, Ber. Senckenb. p. 221.

1891 BOETTGER, Ber. Senckenb. p. 263 (*philippinica*).

Saparua: Sirisori (BOETTGER, 1891).

Philalanka marangensis (ALDRICH, 1898).

1898 ALDRICH, Nautilus, 12, p. 2, pl. 1, fig. 6 (*Sitala carinifera* var. *marangensis*).

1914 LESCHKE, Mitt. naturh. Mus. Hamburg, 31, p. 207-208 and 229 (*Sitala tjibodasensis*).

1952 VAN BENTHEM JUTTING, Treubia, 21, p. 403, fig. 66 (*tjibodasensis*).

Ambon: VAN BENTHEM JUTTING, 1952; secondary wood!

As I mentioned already in 1952 (p. 404) I have seen specimens of *Philalanka marangensis* from Ambon with 3 spiral keels (in stead of 2) on the last whorl, and 2 (instead of 1) on each preceding one. As there are no other differences I do not see a reason to separate them.

Philalanka lieftincki n. sp. (fig. 2).

Shell small, low-conical, unicolorous brown to reddish-brown. Finely striated according to the growth lines. This sculpture is crossed by much more delicate spiral lines, only visible under strong magnification (about 25 times). Somewhat transparent; highly glossy.

Whorls 4 - 4½, regularly increasing in size. Well rounded, hence the suture is deep. Last whorl carinated along the periphery, with a thread-like keel. Top obtuse, base rounded. Umbilicus open, but narrow.

Aperture broadly lunar, oblique. Peristome not continuous, the ends connected by a thin, white callus against the penultimate whorl. Free margin sharp, not thickened or reflected. Columellar margin hardly or not twisted.

Dimensions (in mm):

height	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.6	1.5
width	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2
height of aperture	.9	.8	.8	.8	.7	.8	.8	.8	.8	.7
no. of whorls	4½	4½	4¼	4	4	4¼	4¼	4	4	4

Of the 17 shells which were collected 7 were too much damaged for measuring.

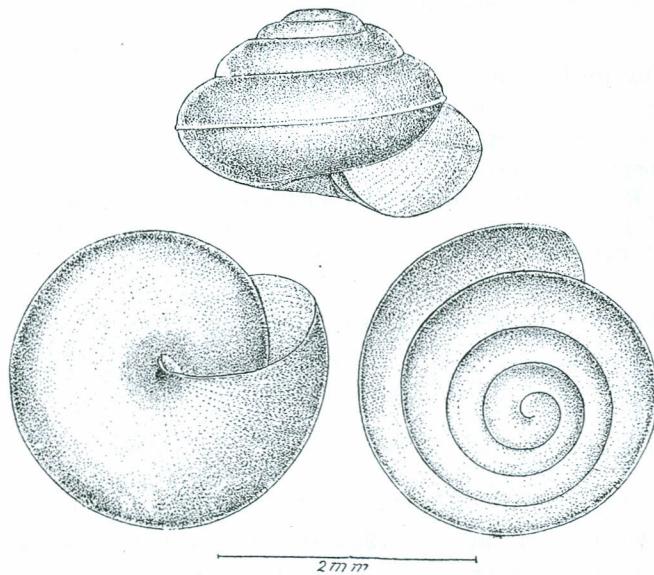


Fig. 2. *Philalanka lieftincki* n. sp. Shell from side, base and top. Ambo. ABDULKADIR del.

At first sight the new species is very similar to the Javanese *Ph. micromphala* v. B. JUTTING. *Ph. lieftincki* differs, however, in being smaller, brown (in stead of greenish as is *Ph. micromphala*), with a lower spire, a narrower umbilicus and a less reflected columella.

The new species has also some superficial likeness to *Lamprocystis ambonica*, but it differs in being smaller, with a higher spire, in having a fine spiral sculpture and a thread-like carina along the periphery (*L. ambonica* is only slightly angular in immature specimens). Finally the suture in *L. ambonica* is margined, but not so in the new species.

The classification as a *Philalanka* is only tentative, because no soft parts were available. The definite systematic position will depend on the dissection of the animal and the study of the radula.

Habitat: Amboin, 11 - 13 October 1949, in secondary wood! Collected by Dr M. A. LIEFTINCK.

Liardetia doliolum (PFEIFFER, 1846).

- 1846 PFEIFFER, Proc. Zool. Soc. London, p. 41 (*Helix*).
1908 BOETTGER, Nachr. Blatt, 40, p. 180 (*Kaliella*).
1950 VAN BENTHEM JUTTING, Treubia, 20, p. 410, fig. 28.

Ambon: Cape Tial, Hitu (BOETTGER, 1908).

Liardetia indifferens (BOETTGER, 1891).

- 1891 BOETTGER, Ber. Senckenb. p. 256, pl. 3, fig. 4, 4a-b (*Kaliella*).
1903 GUDE, Journ. Malac. 10, p. 94 (*Kaliella*).
1931 RENSCH, Zool. Jahrb. (Syst.) 61, p. 62 (*Kaliella*).
1950 VAN BENTHEM JUTTING, Treubia, 20, p. 408, fig. 25.

Ambon: GUDE, 1903; RENSCH, 1931; VAN BENTHEM JUTTING, 1950, Ema, south Ambon; Hitu Lama, north Ambon (BOETTGER, 1891); secondary wood!

Saparua: GUDE, 1903; VAN BENTHEM JUTTING, 1950; Sirisori (BOETTGER, 1891).

Liardetia miliacea (MARTENS, 1867).

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 524 (*Helix milium* non *H. milium* MORSE, 1861).
1867 MARTENS, Ostas. Landschn. p. 268, pl. 12, fig. 15 (*Helix miliacea*).
1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1031 (*Helix miliacea*).
1891 BOETTGER, Ber. Senckenb. p. 257 (*Kaliella milium*).
1893 SCHEPMAN, Notes Leyden Mus. 15, p. 150 (*Kaliella milium*).
1903 GUDE, Journ. Malac. 10, p. 94 (*Kaliella*).
1931 RENSCH, Zool. Jahrb. (Syst.) 61, p. 66-67 (*Kaliella*).

Ambon: MARTENS, 1864 and 1867; TENISON WOODS, 1888; GUDE, 1903; RENSCH, 1931; Ema, south Ambon (BOETTGER, 1891); Ema, Leitimor!; secondary wood!

Saparua: GUDE, 1903; Mt Rila, cleft in coral limestone (SCHEPMAN, 1893).

The classification of this species as a *Liardetia* is only tentative. Until anatomical data are known no definite opinion can be formed on its systematic status.

Coneuplecta bandongensis (BOETTGER, 1890).

- 1890 BOETTGER, Ber. Senckenb. p. 141, pl. 5, fig. 3 (*Sitala*).
1891 BOETTGER, Ber. Senckenb. p. 255 (*Sitala*).
1903 GUDE, Journ. Malac. 10, p. 94 (*Sitala*).
1950 VAN BENTHEM JUTTING, Treubia, 20, p. 388, fig. 5.

Ambon: GUDE, 1903; VAN BENTHEM JUTTING, 1950; Mt Carbau, and near Waai, north Ambon (BOETTGER, 1891); secondary wood!

Haruku: GUDE, 1903; VAN BENTHEM JUTTING, 1950; Oma (BOETTGER, 1891).

Lamprocystis ambonica BOETTGER, 1891.

- 1891 BOETTGER, Ber. Senckenb. p. 257, pl. 3, fig. 5, 5a (incl. var. *exigua*).
 1903 GUDE, Journ. Malac. 10, p. 94 (incl. var. *exigua*).
 1908 BOETTGER, Nachr. Blatt, 40, p. 181.

Ambon: GUDE, 1903; Ema, south Ambon; Mt Carbau, Waai and Hitu Lama, north Ambon (BOETTGER, 1891); Cape Tial, Hitu (BOETTGER, 1908); Ema, Leitimor!

Haruku: GUDE, 1903; Oma (BOETTGER, 1891).

Lamprocystis gemmula MOELLENDORFF, 1887.

- 1887 MOELLENDORFF, Jahrb. Malak. Ges. 14, p. 267, pl. 8, fig. 5, a-b (*Microcystis*).
 1891 BOETTGER, Ber. Senckenb. p. 258 (incl. var. *pallidior*).
 1903 GUDE, Journ. Malac. 10, p. 94 (incl. var. *pallidior*).

Ambon: GUDE, 1903; Hitu Lama, north Ambon (BOETTGER, 1891).

Lamprocystis subangulata BOETTGER, 1891.

- 1891 BOETTGER, Ber. Senckenb. p. 259, pl. 3, fig. 6, 6a.
 1903 GUDE, Journ. Malac. 10, p. 94.
 1908 BOETTGER, Nachr. Blatt, 40, p. 181.

Ambon: GUDE, 1903; Ema, south Ambon; Mt Carbau, north Ambon (BOETTGER, 1891); Cape Tial, Hitu (BOETTGER, 1908).

Microcystina sinica MOELLENDORFF, 1885.

- 1885 MOELLENDORFF, Jahrb. Malak. Ges. 12, p. 386, pl. 10, fig. 15 (*Microcystina* ? *sinica*).
 1887 MOELLENDORFF, Jahrb. Malak. Ges. 14, p. 40 (*M. sinica* var. *hainensis*).
 1891 BOETTGER, Ber. Senckenb. p. 258-259 (*Lamprocystis*).
 1901 MOELLENDORFF, in: SEMPER, Reisen Arch. Philipp. 8, p. 139.
 1939 YEN, Abh. Senckenb. Naturf. Ges. no. 444, p. 118, pl. 11, fig. 48.

Ambon: secondary wood!

It is the first record from Ambon. The species was known from southern China, the Philippines and Banda.

Dimensions (in mm) of the 6 specimens collected by Dr LIEFTINCK:

height	0.6	0.6	0.6	0.6	0.6	0.6
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width	1.0	1.0	—.97	—.95	—.85	—.75
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The records in literature mentioned:

width	1.0	(BOETTGER)	1.0	1.0	(MOELLENDORFF)
height	1.5		1.85	1.6	

Of the var. *hainanensis* MOELLENDORFF related that its diam. was only 1 mm.

Trochomorpha lardea MARTENS, 1864.

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 267.
 1867 MARTENS, Ostas. Landschn. p. 251, pl. 13, fig. 5.
 1891 BOETTGER, Ber. Senckenb. p. 262 (*Tr. planorbis* var. *lardea*).
 1903 GUDE, Journ. Malac. 10, p. 94.
 1952 VAN BENTHEM JUTTING, Treubia, 21, p. 418-419, fig. 77.

Ambon: MARTENS, 1867; GUDE, 1903; VAN BENTHEM JUTTING, 1952;
 Waai, north Ambon (BOETTGER, 1891).

Haruku: GUDE, 1903; Hulaliu (BOETTGER, 1891).

Trochomorpha planorbis (LESSON, 1831).

- 1831 LESSON, Voy. Coquille, Zool. 2, p. 312 (*Helix (Carocolla)*).
 1862 MARTENS, Malak. Blätt. 10, p. 115 (*Helix*).
 1867 MARTENS, Ostas. Landschn. p. 249, pl. 13, fig. 4, 7, 8.
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 99 and Ibid. 20, p. 145.
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 150 (*Tr. planorbis* var. *lessoni*).
 1903 GUDE, Journ. Malac. 10, p. 94 (*Tr. planorbis* var. *lessoni*).
 1952 VAN BENTHEM JUTTING, Treubia, 21, p. 411, fig. 72 and 73.

Ambon: MARTENS, 1862 and 1867; TAPPARONE CANEFRI, 1883; GUDE, 1903; Ambon!

Saparua: GUDE, 1903; Mt Rila, cleft in coral limestone (SCHEPMAN, 1893); Saparua!

Tanychlamys amboinensis (MARTENS, 1864).

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 266 (*Hyalina*).
 1867 MARTENS, Ostas. Landschn. p. 244, pl. 12, fig. 11 (*Hyalina*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 20, p. 145 (*Hyalina*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1027 (*Hyalinia*).
 1891 BOETTGER, Ber. Senckenb. p. 254 (*Macrochlamys*).
 1903 GUDE, Journ. Malac. 10, p. 93 (*Macrochlamys*).
 1952 VAN BENTHEM JUTTING, Treubia, 21, p. 322, fig. 6 and 7.

Ambon: MARTENS, 1864 and 1867; TAPPARONE CANEFRI, 1883; TENISON WOODS, 1888; GUDE, 1903; VAN BENTHEM JUTTING, 1952; Ema, south Ambon; Waai, north Ambon (BOETTGER, 1891); Ambon!; secondary wood!

Haruku: Oma (BOETTGER, 1891).

Tanychlamys martini (SCHEPMAN, 1893).

- 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 149, pl. 3, fig. 1 (*Macrochlamys*).
 1903 GUDE, Journ. Malac. 10, p. 94 (*Macrochlamys*).

Saparua: GUDE, 1903; Mt Rila, cleft in coral limestone (SCHEPMAN, 1893); Saparua!

The species is endemic in Saparua.

Euplecta minima BOETTGER, 1891.

- 1891 BOETTGER, Ber. Senckenb. p. 255, pl. 3, fig. 3, 3a-c.
1903 GUDE, Journ. Malac. 10, p. 93 (*Xestina*).

Ambon: GUDE, 1903; Hitu Lama, north Ambon (BOETTGER, 1891).

The species is endemic in Ambon.

Naninia citrina (LINNÉ, 1758).

- 1705 RUMPHIUS, Amb. Rariteitk. p. 92, pl. 27, fig. P (*Cochlea terrestris*).
1758 LINNÉ, Syst. Nat. Ed. X, p. 771 (*Helix*).
1830 LESSON, Voy. Coquille, Zool. 2, p. 306 (*Helix*).
1832 QUOY & GAIMARD, Voy. Astrolabe, Zool. 2, p. 140-141, pl. 11, fig. 1-4 (*Vitrina*).
1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Helix*).
1862 MARTENS, Malak. Blätt. 10, p. 106 and 114 (*Nanina*).
1867 MARTENS, Ostas. Landschn. p. 193 (*Nanina*).
1877 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 265 (*Nanina*).
1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 196 (*Nanina*).
1884 SMITH, Proc. Zool. Soc. London, p. 259 (*Nanina*).
1891 BOETTGER, Ber. Senckenb. p. 252 (*Xesta*).
1893 SCHEPMAN, Notes Leyden Mus. 15, p. 148 (*Nanina (Xesta)*).
1894 MARTENS, Jen. Denkschr. 8, p. 84 (*Nanina (Xesta)*).
1902 MARTENS, Rumphius Gedenkb. p. 118 (*Nanina (Xesta)*).
1903 GUDE, Journ. Malac. 10, p. 93 (*Xesta*).
1908 BOETTGER, Nacht. Blatt, 40, p. 180 (*Nanina (Xesta)*).
1915 SCHEPMAN, Bijdr. t. d. Dierk. 20, p. 18 (*Xesta*).

Ambon: all references mention: Ambon, without further details. Only BOETTGER, 1908 and SCHEPMAN, 1915 recorded Leitimor, whereas BOETTGER, 1891 recorded Ema. Near entrance of the Bay of Ambon!; secondary wood!;

Saparua!

Various colour-varieties of *Naninia citrina* have been recorded from Ambon, viz. *albocincta* TAPPARONE CANEFRI, 1883; *aurantia* MARTENS, 1867; *coagulata* PFEIFFER, 1856; *columellaris* BECK, 1837; *dimidiata* MARTENS, 1867; *opaca* MARTENS, 1867; *praetexta* TAPPARONE CANEFRI, 1883; *spiralis* LE GUILLOU, 1845; *tiara* BECK, 1837. Of these var. *dimidiata* has also been recorded from Saparua, and var. *opaca* also from Haruku.

Naninia strubelli (BOETTGER, 1891).

- 1891 BOETTGER, Ber. Senckenb. p. 253, pl. 3, fig. 2, 2a (*Xesta*).
1893 SCHEPMAN, Notes Leyden Mus. 15, p. 149 (*Xesta*).

1899 FULTON, Proc. Malac. Soc. London, 3, p. 213 (*Xesta*).

1903 GUDE, Journ. Malac. 10, p. 93 (*Xesta*).

1908 BOETTGER, Nachr. Blatt, 40, p. 180 (*Nanina (Xesta)*).

Ambon: FULTON, 1899; GUDE, 1903; Ema (BOETTGER, 1891); Hitu (SCHEPMAN, 1893 and BOETTGER, 1908); Ema, Leitimor!;

Haruku: Hulaliu (BOETTGER, 1891).

Saparua: GUDE, 1903; Porto (SCHEPMAN, 1893); kampong!

The species has also been recorded from the little island of Pua, near Buano, off the NW coast of Ceram (SCHEPMAN, 1893).

The species is endemic in the Ambon group of islands.

Planispira chariessa PILSBRY, 1890.

1980 PILSBRY, Man. of Conch. (2) 6, p. 279, pl. 44, fig. 12, 13 and pl. 68, fig. 96-98.

1891 BOETTGER, Ber. Senckenb. p. 266 (*Helix (Planispira) zonaria* var. *nitidiuscula* subvar. *albina*).

Haruku: Hulaliu (BOETTGER, 1891); Hulaliu!

Of *Planispira zonaria* var. *nitidiuscula* collected by A. STRUBELL in Haruku, the 12% which BOETTGER identified as subvar. *albina* MARTS must be classified as *Planispira chariessa* PILSBRY.

Planispira reinachae BOETTGER, 1908.

1908 BOETTGER, Nachr. Blatt, 40, p. 182, fig. 4-6 (*Planispira (Trachia) reinachae*).

Ambon: Hitu, north Ambon (BOETTGER, 1908).

The species is endemic in Ambon.

Planispira zonaria (LINNÉ, 1767).

1767 LINNÉ, Syst. Nat. Ed. XII, p. 1245 (*Helix*).

1867 MARTENS, Ostas. Landschn. p. 307, pl. 16, fig. 6-11, pl. 19, fig. 6 (*Helix*).

1877 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 275 (*Helix (Planispira) zonaria*).

1882 MARTENS, Malak. Blätt. 10, p. 106 (*Helix*).

1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 181 and Ibid. 20, p. 151. (*Helix*).

1884 SMITH, Proc. Zool. Soc. London, p. 260 (*Helix (Planispira) zonaria*).

1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1036 (*Helix*).

1890 PILSBRY, Man. of Conch. (2) 6, p. 277, pl. 44, fig. 5-10.

Ambon: With the exception of LINNÉ, 1767 all the above quoted authors recorded the species from Ambon (without further details).

Dr LIEFTINCK collected an immature shell in secondary wood.

Various colour-varieties of *Planispira zonaria* have been recorded from Ambon, viz. *collis* MARTENS, 1867; *coluber*, BECK, 1837; *fasciata* MARTENS, 1867; *fasciolata* LESSON, 1830; *lineolata* MARTENS, 1867; *nitidiuscula* BOETTGER, 1891. Of these the var. *lineolata* has also been recorded from Saparua and the var. *nitidiuscula* both from Saparua and Haruku.

***Chloritis unguicula* (FÉRUSSAC, 1821).**

- 1821 FÉRUSSAC, Tabl. Syst. Limaçons, p. 43 (*Helix*).
 1839-1851 DESHAYES, in: FÉRUSSAC, Hist. Nat. génér. partie. Moll. 1, p. 12, pl. 76,
 fig. 3-4 (*Helix*).
 1865 WALLACE, Proc. Zool. Soc. London, p. 410 (*Semicornu*).
 1867 MARTENS, Ostas. Landschn. p. 283 (*Helix*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1039 (*Helix*).
 1890 PILSBRY, Man. of Conch. (2) 6, p. 249, pl. 50, fig. 32-34.
 1903 GUDE, Journ. Malac. 10, p. 94.
 1906 GUDE, Proc. Malac. Soc. London, 7, p. 111.

Ambon: WALLACE, 1865; MARTENS, 1867; TENISON WOODS, 1888;
 PILSBRY, 1890; GUDE, 1903 and 1906; Ambon!

***Chloritis unguiculastra* (MARTENS, 1864).**

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 524 (*Helix*).
 1867 MARTENS, Ostas. Landschn. p. 281, pl. 14, fig. 1 (*Helix unguiculastra* var. *amboinensis*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1038 (*Helix*).
 1890 PILSBRY, Man. of Conch. (2) 6, p. 248, pl. 50, fig. 39-41.
 1893 SCHEPMAN, Notes Leyden Mus. 15, p. 150 (*Helix (Chloritis) unguiculastra* var. *pilosa*).
 1903 GUDE, Journ. Malac. 10, p. 94 (*Chl. unguiculastra* var. *amboinensis* and var. *pilosa*).
 1906 GUDE, Proc. Malac. Soc. London, 7, p. 111 (*Chl. unguiculastra* var. *amboinensis* and var. *pilosa*).
 1908 BOETTGER, Nachr. Blatt, 40, p. 184 (*Chl. (Chl.) unguiculastra* var. *amboinensis*).

Ambon: MARTENS, 1864; TENISON WOODS, 1888; PILSBRY, 1890; GUDE, 1903 and 1906; garden of RUMPHIUS, on stones; Batugantong, Leitimor, and Pohonmanga, Hitu (MARTENS, 1867); Cape Tial, Hitu, 90 m alt. (BOETTGER, 1908); Ambon!; secondary wood!

Saparua: SCHEPMAN, 1893; GUDE, 1903.

***Chloritis ungulina* (LINNÉ, 1758).**

- 1705 RUMPHIUS, Amb. Rariteitk. p. 93, pl. 27, fig. R (no name).
 1758 LINNÉ, Syst. Nat. Ed. X, p. 772 (*Helix*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Helix*).
 1890 PILSBRY, Man. of Conch. (2) 6, p. 243, pl. 51, fig. 54-56 and var. *minor*, p. 243, pl. 51, fig. 57-59.
 1902 MARTENS, Rumphius Gedenkb. p. 118 (*Helix (Chloritis) ungulina*).
 1906 GUDE, Proc. Malac. Soc. London, 7, p. 40 (*Chl. ungulina* var. *minor*).

Ambon: RUMPHIUS, 1705; BLEEKER, 1856; GUDE, 1906; Ambon!

***Macrocyloides microcyclis* BOETTGER, 1891.**

- 1891 BOETTGER, Ber. Senckenb. p. 260, pl. 3, fig. 7, 7a.
 1903 GUDE, Journ. Malac. 10, p. 94.

Ambon: GUDE, 1903; Hitu Lama, north Ambon, and Ema and Kusu Kusu — sare, south Ambon (BOETTGER, 1891).

The species is endemic in Ambon.

Macrocycloides saparuana BOETTGER, 1891.

1891 BOETTGER, Ber. Senckenb. p. 260, pl. 3, fig. 8, 8a-b.
1903 GUDE, Journ. Malac. 10, p. 94.

Saparua: GUDE, 1903; Papero (BOETTGER, 1891).

The species is endemic in Saparua.

Macrocycloides sericina BOETTGER, 1891.

1891 BOETTGER, Ber. Senckenb. p. 261, pl. 3, fig. 9, 9a-b.
1903 GUDE, Journ. Malac. 10, p. 94.

Haruku: GUDE, 1903; Oma (BOETTGER, 1891).

The species is endemic in Haruku.

Gulella bicolor (HUTTON, 1834).

1834 HUTTON, Journ. As. Soc. Bengal, 3, p. 86 (*Pupa*).
1867 MARTENS, Ostas. Landschn. p. 384 (*Pupa*).
1891 BOETTGER, Ber. Senckenb. p. 252 (*Ennea (Huttonella) bicolor* var. *abbreviata*).
1950 VAN BENTHEM JUTTING, Treubia 20, p. 504, fig. 107.

Ambon: BOETTGER, 1891; VAN BENTHEM JUTTING, 1950; on dry limestone hills behind the town (MARTENS, 1867); Ambon!

Polymesoda coaxans (GMELIN, 1790).

1705 RUMPHIUS, Amb. Rariteitk. p. 138, pl. 43, fig. H (*Chama coaxans*).
1790 GMELIN, Syst. Nat. Ed. XIII, p. 3278 (*Venus*).
1897 MARTENS, in: WEBER, Erg. Reise Nied. Ost Indien, 4, p. 98 (*Cyrena*).
1902 MARTENS, Rumphius Gedenkb. p. 125 (*Cyrena*).

Ambon: RUMPHIUS, 1705; mouth of River Weynitu (MARTENS, 1897 and 1902).

Arrangement of the species according to the islands

AMBON

Theodoxus angulosus (RéCL.)
— avellanus (RéCL.)
— bicolor (RéCL.)
— corona (L.)
— diadema (RéCL.)
— faba (Sow.)
— fuliginosus (v. d. B.)
— olivaceus (RéCL.)
— oualaniensis (LESS.)
— squarrosus (RéCL.)

Neritodryas cornea (L.)
— dubia (GMEL.)
Neritina auriculata LAM.
— conglobata MRTS
— labiosa Sow.
— macgillivrayi RVE
— petitii (RéCL.)
— pulligera (L.)
— zigzag LAM.
Septaria parva (MOUSS.)

<i>Septaria suborbicularis</i> (Sow.)	<i>Melampus fasciatus</i> (DESH.)
<i>Geophorus oxytropis</i> (Sow.)	— <i>luteus</i> (Q. G.)
<i>Aphanoconia suturalis</i> (MRTS)	— <i>nucleolus</i> MRTS
<i>Palaeohelicina idae</i> (PFR.)	— <i>sincaporensis</i> PFR.
— ? <i>derepta</i> (TAPP. CAN.)	— <i>sulculosus</i> MRTS
<i>Leptopoma latilabre</i> MRTS	<i>Cassidula mustelina</i> (DESH.)
— <i>melanostoma</i> (PETIT)	— <i>sulculosa</i> (MOUSS.)
— <i>perlucidum</i> (GRAT.)	— <i>turgida</i> PFR.
— — <i>intermedium</i> MRTS	<i>Pythia crassidens</i> (ROUSS.)
— — <i>minus</i> MRTS	— <i>pantherina</i> (ADS)
<i>Lagoenilus bicarinatum</i> (MRTS)	— <i>scarabaeus</i> (L.)
<i>Ditropis ingenua</i> BTTG.	— <i>striata</i> (RVE)
— <i>moellendorffi</i> BTTG.	— <i>wallacei</i> PFR.
<i>Cyclotus politus amboinensis</i> PFR.	<i>Ellodium auris-judae</i> (L.)
<i>Pupinella ceramica</i> (MRTS)	— <i>auris-midae</i> (L.)
<i>Callianella amboinensis</i> (MRTS)	<i>Siphonaria laciniosa</i> (L.)
— <i>wallacei</i> (PFR.)	<i>Physastra moluccensis</i> (LESS.)
<i>Palaina angulata</i> BTTG.	<i>Atopos leuckarti</i> SIMR.
— <i>carbavica</i> BTTG.	— <i>strubelli</i> SIMR.
<i>Anostomella ascendens</i> (MRTS).	<i>Laevicaulis alte</i> (FÉR.)
<i>Diplommatina papuana</i> (TAPP. CAN.)	<i>Filicaulis bleekeri</i> (KEF.)
— <i>strubelli</i> BTTG.	<i>Semperula maculata</i> (TEMPLET.)
<i>Viviparus javanicus</i> (v. d. B.)	<i>Tornatellina moluccana</i> BTTG.
<i>Omphalotropis ceramensis</i> (PFR.)	<i>Nesopupa moellendorffi</i> (BTTG.)
<i>Pseudocyclotus liratulus</i> (MRTS)	— <i>moluccana</i> (BTTG.)
<i>Faunus ater</i> (L.)	<i>Pupisoma oreula</i> (BENS.)
<i>Thiara acanthica</i> (LEA).	<i>Subulina octona</i> (BRUG.)
— <i>amarula</i> (L.)	<i>Opeas clavulinum</i> (POT. & MICH.)
— <i>pagoda</i> (LEA)	— <i>gracile</i> (HUTT.)
— <i>rudicostis</i> (BROT.)	<i>Charopa microdiscus</i> v. B. JUTT.
— <i>rudis</i> (LEA)	<i>Ptychodon celebica</i> (SAR. & SAR.)
— <i>scabra</i> (MÜLL.)	<i>Philalanka marangensis</i> (ALDR.)
— <i>setosa</i> (SWAINS.)	— <i>lieftincki</i> n. sp.
<i>Melanoides blatta</i> (LAE)	<i>Liardetia doliolum</i> (PFR.)
— <i>clavus</i> (LAM.)	— <i>indifferens</i> (BTTG.)
— <i>crenulata</i> (DESH.)	— <i>miliacea</i> (MRTS)
— <i>crepidinata</i> (RVE)	<i>Coneuplecta bandongensis</i> (BTTG.)
— <i>granifera</i> (LAM.)	<i>Lamprocystis ambonica</i> BTTG.
— <i>plicaria</i> (BORN)	<i>Lamprocystis gemmula</i> MLLDFF
— <i>punctata</i> (LAM.)	— <i>subangulata</i> BTTG.
— <i>tuberculata</i> (MÜLL.)	<i>Microcystina sinica</i> MLLDFF
— <i>turris</i> (BROT.)	<i>Trochomorpha lardea</i> MRTS
— <i>uniformis</i> (Q. G.)	— <i>planorbis</i> (LESS.)
— <i>wichmanni</i> (MRTS)	<i>Tanychlamys amboinensis</i> (MRTS)
<i>Balanocochlis inermis</i> (LESS.)	<i>Euplecta minima</i> BTTG.
<i>Strubellia paradoxum</i> (KÜTHE)	<i>Naninia citrina</i> (L.) and varieties
<i>Acochlidium amboinense</i> (BÜCKING)	— <i>strubelli</i> (BTTG.)
<i>Melampus caffer</i> (KÜST.)	<i>Planispira reinachae</i> BTTG.
— <i>costatus</i> (Q. G.)	— <i>zonaria</i> (L.) and varieties

Chloritis unguicula (Fér.)
 — *unguiculastra* (MRTS)
 — *ungulina* (L.)

Macrocycloides microcyclis BTTG.
Gulella bicolor (HUTT.)
Polymesoda coaxans (GMEL.)

H A R U K U

Aphanoconia suturalis (MRTS)
Palaeohelicina idae (PFR.)
Leptopoma perlucidum minus MRTS
Ditropis spiralis BTTG.
Platyrhaphis harucuana (BTTG.)
Cyclotus politus amboinensis PFR.
Palaina angulata BTTG.
 — *carbabica* BTTG.
Anostomella ascendens (MRTS)
Omphalotropis ceramensis (PFR.)
 — *ornata* BTTG.
Pythia crassidens (ROUSS.)
 — *pantherina* (ADS)
 — *pollex* (HINDS)
 — *scarabaeus* (L.)

Pythia semisulcata (ADS)
 — *striata* (RVE)
Gastrocopta recondita (TAPP. CAN.)
Subulina octona (BRUG.)
Opeas clavulinum (POT. & MICH.)
 — *gracile* (HUTT.)
Coneuplecta bandongensis (BTTG.)
Lamprocystis ambonica BTTG.
Trochomorpha lardea MRTS
Tanychlamys amboinensis (MRTS)
Naninia citrina (L.) var. *opaca* MRTS
 — *strubelli* (BTTG.)
Planispira chariessa PILS.
 — *zonaria* (L.) var. *nitidiuscula* BTTG.
Macrocycloides sericina BTTG.

S A P A R U A

Geophorus oxytropis (SOW.)
Aphanoconia suturalis (MRTS)
Palaeohelicina idae (PFR.)
Leptopoma perlucidum intermedium MRTS
 — — *minus* MRTS
Platyrhaphis plicosa (MRTS)
Cyclotus politus amboinensis PFR.
Pupinella ceramica (MRTS)
Callianella amboinensis (MRTS)
 — *wallacei* (PFR.)
Anostomella ascendens (MRTS)
Omphalotropis ceramensis (PFR.)
Pseudocyclotus liratulus (MRTS)
Pythia crassidens (ROUSS.)
 — *pantherina* (ADS)
 — *pollex* (HINDS)

Pythia scarabaeus (L.)
 — *semisulcata* (ADS)
Costigo saparuana (BTTG.)
Opeas gracile (HUTT.)
Endodontia philippinensis SEMP.
Liardetia indifferens (BTTG.)
Liardetia miliacea (MRTS)
Trochomorpha planorbis (LESS.)
Tanychlamys martini (SCHEPM.)
Naninia citrina (L.)
 — — var. *dimidiata* (MRTS)
 — *strubelli* (BTTG.)
Planispira zonaria (L.) var. *lineolata* MRTS
 — — var. *nitidiuscula* BTTG.
Chloritis unguiculastra (MRTS)
Macrocycloides saparuana BTTG.

N U S A L A U T

Theodoxus bicolor (RÉCL.)
 — *corona* (L.)
 — *olivaceus* (RÉCL.)

Species erroneously recorded from Ambon

Pila ampullacea (LINNÉ, 1758) and *Pila conica* (GRAY, 1828).

The records of species of *Pila* in Ambon are very doubtful. RUMPHIUS (1705, Amb. Rariteitk.) does not mention any *Pila* from Ambon, although he knew the "Slijkslakken" (= mud-snails) very well from Makassar in Celebes and in other islands of the Archipelago (vide also MARTENS, 1902, Rumphius Gedenkb. p. 118). Unless new and authenticated records are reported the old references in literature and in collections must be regarded with the utmost reserve.

Brotia testudinaria (VON DEM BUSCH, 1842).

- 1842 VON DEM BUSCH in: PHILIPPI, Abb. & Beschr. 1, Melania, p. 3, pl. 1, fig. 14 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 49, pl. 6, fig. 3, 3a, 3b (*Melania*).
 1891 BOETTGER, Ber. Senckenb. p. 278 (*Melania (Sulcospira) testudinaria*).

Ambon: Batugadja (BOETTGER, 1891).

MARTENS (1897, in: WEBER, Erg. Reise Nied. Ost-Indien, 4, p. 32) doubted the occurrence of *Brotia testudinaria* in Ambon. Indubitable records are not known east of Celebes. Therefore BOETTGER's suggestion that a confusion of localities has taken place is almost certainly right.

Sulcospira perfecta (MOUSSON, 1849).

- 1849 MOUSSON, Land & Süßw. Moll. Java, p. 116, pl. 22, fig. 5 (*Melania*).
 1874 BROT, in: MART.-CHEMN. N. Syst. Conch. Cab. Vol. I, Pt. 24, p. 79, pl. 9, fig. 4, 4a (*Melania*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1079 (*Melania*).

Ambon: BROT, 1874; TENISON WOODS, 1888.

The occurrence of *Sulcospira perfecta*, a typical S. Celebes species, in Ambon is almost certainly erroneous. We have to await further investigation to form a definite opinion.

Stenogyra javanica REEVE.

MARTENS (1867, p. 377) mentioned *Stenogyra javanica* REEVE from Amboina. Without having seen these specimens it is impossible to form an opinion on their status. As I pointed out in my Revision of the Javanese landshells (Treubia, 21, 1952, p. 385-387) REEVE's original specimens of *Stenogyra javanica* were *Prosopeas achatinaceum* (PFR). Of the localities mentioned by MARTENS (l.c.) the Ternate reference is based on *Opeas ternatanum*. How the Ambon shells must be classified must be left to future investigation.

Hemiplecta monozonalis (LAMARCK, 1822).

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Pt. 2, 66 (*Helix*).
 1839-1851 DESHAYES, in: FÉRUSSAC, Hist. Nat. génér. partic. Moll. 1, p. 182, pl. 91, fig. 4 (*Helix*).
 1852 REEVE, Conch. Icon. Vol. 7, pl. 86, fig. 467 (*Helix*).
 1867 MARTENS, Ostas. Landschn. p. 236 (*Nanina*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1016 (*Nanina*).
 1903 GUDE, Journ. Malac. 10, p. 93 (*Hemiplecta*).
 1950 MERMOD, Rev. Suisse Zool. 57, p. 733 (the shell under this name in the Lamarck Collection is not *monozonalis*, but *clairvillia*).

The occurrence of *Hemiplecta monozonalis* in Amboina is highly improbable. Until new and authentic material is found the species can better be discarded from the fauna of Amboin.

Hemiplecta simplex (LAMARCK, 1822).

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Pt. 2, p. 77 (*Helix*).
 1839-1851 DESHAYES, in: FÉRUSSAC, Hist. Nat. génér. partic. Moll. 1, p. 162, pl. 25B, fig. 6 (*Helix*).
 1880 TRYON, Man. of Conch. (2) 2, p. 20, pl. 3, fig. 47 (*Nanina (Coelatura)*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1032 (*Helix*).
 1903 GUDE, Journ. Malac. 10, p. 93.
 1921 GERMAIN, Faune Malac. Iles Mascareignes, p. 462, footnote 3 (*Pseudocaelatura*).
 1950 MERMOD, Rev. Suisse Zool. 57, p. 748, fig. 46.

Again a dubious species for Amboin. We must await future research to form a definite opinion.

Hemiplecta humphreysiana var. *rappa* (MÜLLER, 1774).

- 1774 MÜLLER, Hist. Verm. 2, p. 67 (*Helix rapa*).
 1851 REEVE, Conch. Icon. Vol. 7, pl. 4, fig. 18 (*Helix rapa*).
 1903 GUDE, Journ. Malac. 10, p. 93.

What *Helix rapa* is like is difficult to understand. MÖRCH reported to MARTENS (1867, p. 235) that it was a beach-worn shell of *Hemiplecta humphreysiana*, but MARTENS himself classified it as *Nanina cidaris* (LAM.) The species is probably erroneously recorded for Amboin.

Naninia steursi (SHUTTLEWORTH, 1852).

- 1852 SHUTTLEWORTH, Mitt. naturf. Ges. Bern. p. 194 (*Nanina*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Nanina*).
 1867 MARTENS, Ostas. Landschn. p. 212, pl. 8, fig. 6, 6b (*Nanina cincta* non *Helix cincta* LEA, 1834).
 1953 REHDER, Nautilus, 66, p. 95-96.

Ambon: SHUTTLEWORTH, 1852; BLEEKER, 1856;

The occurrence of *Naninia steursi* in Amboin is erroneous. The species is an inhabitant of Celebes. The synonymy has recently been unravelled

by REHDER (l.c.). This author proved that *Helix cincta* LEA, 1834 is not a Malaysian species, but a Cuban one.

Naninia clairvillia (FÉRUSSAC, 1821).

- 1821 FÉRUSSAC, Hist. Nat. génér. partic. Moll. Tabl. Limaçons, p. 46, pl. 91, fig. 1-3 (*Helix*).
 1839-1851 DESHAYES, in: FÉRUSSAC, Hist. Nat. génér. partic. Moll. 1, p. 182, pl. 91, fig. 1-3 (*Helix*).
 1852 SHUTTLEWORTH, Mitt. naturf. Ges. Bern, p. 194 (*Nanina vitellus*).
 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Nanina vitellus*).
 1867 MARTENS, Ostas. Landschn. p. 199 and 396 (*Nanina vitellus*).
 1886 MARTENS, Sitz. Ber. Ges. naturf. Freunde Berlin, p. 113 (*Nanina vitellus* = *N. clairvillia*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1013 (*Nanina vitellus*).
 1903 GUDE, Journ. Malac. 10, p. 93 (*Xesta vitellus*).
 1950 MERMOD, Rev. Suisse Zool. 57, p. 735, fig. 35.

All the above references record Ambon as the habitat of this species. It is, however, as MARTENS (1867) suggested already, not an inhabitant of Ambon. This was confirmed by authentic material from the Togian Islands (MARTENS, 1872, Malak. Blätt, p. 161) and from Banggai (MARTENS, 1886). Whether the locality Gorontalo, North Celebes (MARTENS, 1867, p. 396) is right seems doubtful (vide P. & F. SARASIN, 1899, Land Moll. Celebes, p. 159).

The shell which REEVE (Conch. Icon. Vol.7, pl. 206, fig. 1454 a and b, 1854) described and figured as *Helix clairvillia* from Amboina, is, according to MARTENS (1886, p. 113), not this species but *Hemiplecta rugata* from Celebes.

MERMOD (1950) pointed out the confusion between *Helix monozonalis* LAM. and *Helix clairvillia* FÉR. The description of LAMARCK refers to *H. monozonalis*, but the shell in the LAMARCK cabinet is *H. clairvillia*.

Naninia ovivitellus (REEVE, 1854).

- 1854 REEVE, Conch. Icon. Vol. 7, pl. 202, fig. 1425, (*Helix*).
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1014 (*Nanina*).
 1903 GUDE, Journ. Malac. 10, p. 93 (*Xesta*).

What *Naninia ovivitellus* (REEVE) from Ambon is like I am unable to decide without having seen the shell.

Planispira tortilabia (LESSON, 1830).

- 1830 LESSON, Voy. Coquille, Zool. 2, p. 311, pl. 13, fig. 1 (*Helix*).
 1883 TAPPARONE CANEFRI, Ann. Mus. Civ. St. Nat. Genova, 19, p. 171 (*Helix*).
 1884 SMITH, Proc. Zool. Soc. London, p. 260 (*Helix (Planispira) tortilabia*).

- 1890 PILSBRY, Man. of Conch. (2) 6, p. 294, pl. 36, fig. 30-32 and pl. 60, fig. 7-9.
1903 GUDE, Journ. Malac. 10, p. 93.

Ambon: TAPPARONE CANEFRI, 1883 (?) ; SMITH, 1894; GUDE, 1903.

Planispira tortilabia is a native of Western New Guinea and the Aru Islands. Its occurrence in Ambon must be regarded with the utmost reserve.

***Chloritis concisa* (FÉRUSSAC, 1822).**

- 1822 FÉRUSSAC, Hist. Nat. génér. partic. Moll. pl. 78, fig. 3-4 (*Helix*).
1824 QUOY & GAIMARD, Voy. Uranie & Physicienne, Zool. 3, p. 470 (*Helix*).
1839-1851 DESHAYES, in: FÉRUSSAC, Hist. Nat. génér. partic. Moll. 1, p. 46 (*Helix*).
1890 PILSBRY, Man. of Conch. (2) 6, p. 262, pl. 49, fig. 15.
1914 BOETTGER, Proc. Malac. Soc. London, 11, p. 183, pl. 5, fig. 1-6 (*Sulcobasis concisa concisa*).
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belgique (Hors Série) 2, pt 20, p. 27.

Ambon: ADAM & LELOUP, 1939; Ambon!

In spite of the record by ADAM & LELOUP based on the find of a shell (without animal) by Crownprince LEOPOLD of Belgium, and in spite of two shells preserved in the Rijksmuseum of Natuurlijke Historie at Leiden, collected by C. JELLEMA, it is my opinion that *Chloritis concisa* does not live in Ambon, but that the shells were brought there accidentally by travellers or traders.

***Albersia zonulata* (FÉRUSSAC, 1821).**

- 1821 FÉRUSSAC, Tabl. Syst. Limaçons, p. 71 (*Helix zonulata* new name for *H. listeri*, Ibid. p. 32).
1839-1851 DESHAYES, in: FÉRUSSAC, Hist. Nat. génér. partic. Moll. 1, p. 138, pl. 15, fig. 1-2 (*Helix*).
1884 SMITH, Proc. Zool. Soc. London, p. 260 (*Helix*).
1891 PILSBRY, Man. of Conch. (2) 7, p. 91, pl. 19, fig. 6-8.
1903 GUDE, Journ. Malac. 10, p. 94.

Ambon: SMITH, 1884; GUDE, 1903.

I am afraid that the record for Ambon is erroneous. The species is an inhabitant of New Guinea.

***Papuina pileus* (MÜLLER, 1774).**

- 1774 MÜLLER, Hist. Verm. 2, p. 80 (*Helix*).
1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Helix*).
1865 WALLACE, Proc. Zool. Soc. London, p. 411 (*Geotrochus*).
1867 MARTENS, Ostas. Landschn. p. 323 (*Helix*).
1891 PILSBRY, Man. of Conch. (2) 7, p. 24, pl. 8, fig. 42-45.
1903 GUDE, Journ. Malac. 10, p. 94.

Ambon: BLEEKER, 1856; WALLACE, 1865; MARTENS, 1867; GUDE, 1903;
Ambon!

WALLACE and MARTENS doubted already the occurrence of *Papuina pileus* in Ambon. Later collectors have also found shells there, but in my opinion these shells are all introduced from the Aru Islands.

Papuina steursiana (SHUTTLEWORTH, 1852).

- 1852 SHUTTLEWORTH, Mitt. naturf. Ges. Bern, p. 200 (*Helix*).
- 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1042 (*Helix stursiana* sic!).
- 1891 PILSBRY, Man. of Conch. (2) 7, p. 33.
- 1903 GUDE, Journ. Malac. 10, p. 94.
- 1933 VAN BENTHEM JUTTING, Nova Guinea (Zool.) 17, p. 67.

Ambon: All the above cited authors mentioned the species from Amboina. Yet *Papuina steursiana* is a myth, and unless the type specimen will be found, nobody can tell how the species must be classified.

Amphidromus contrarius (MÜLLER, 1774).

- 1774 MÜLLER, Hist. Verm. 2, p. 95 (*Helix*).
- 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Bulimus*).
- 1896 FULTON, Ann. Mag. Nat. Hist. (6) 17, p. 77.

Ambon: BLEEKER, 1856!

The shell(s) mentioned by BLEEKER must be brought to Ambon accidentally. No species of *Amphidromus* are known to inhabit Ambon.

Amphidromus laevus (MÜLLER, 1774).

- 1774 MÜLLER, Hist. Verm. 2, p. 95 (*Helix laeva*).
- 1856 BLEEKER, Reis Minahassa en Moluksche Archip. in 1855, vol. 2, p. 70 (*Bulimus*).
- 1896 FULTON, Ann. Mag. Nat. Hist. (6) 17, p. 76.

Ambon: BLEEKER, 1856; Amboina!

The same remark as for the preceding species.

Helicostyla extensa (MÜLLER, 1774).

- 1774 MÜLLER, Hist. Verm. 2, p. 60 (*Helix*).
- 1867 MARTENS, Ostas. Landschn. p. 331 (*Helix*).
- 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3, p. 1043 (*Helix*).
- 1891 PILSBRY, Man. of Conch. (2) 7, p. 114, pl. 27, fig. 9-11 (*Cochlostyla*).

Ambon: TENISON WOODS, 1888.

This is again an erroneous record for Ambon. The species is a native of Goram Id.