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Catalogue of the non-marine Mollusca of Sumatra and of its satellite islands*)

by

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INTRODUCTION

The following account of the non-marine Mollusca of the Island of Sumatra, the second largest of the Greater Sunda Islands (surface 440.000 km²) is based on the following collections:

1. Zoological Museum, Amsterdam, including the material collected by Prof. MAX WEBER, Dr. L. P. DE BUSSY, Jhr. Dr. F. C. VAN HEURN, Prof. J. C. VAN DER MEER MOHR, Dr. E. JACOBSON, and many others.
2. Rijksmuseum van Natuurlijke Historie, Leiden.
3. Museum Zoologicum Bogoriense, Bogor (Java).
4. Naturhistorisches Museum, Basle (Switzerland).
5. Zoologisches Museum, Zürich (Switzerland).
6. Muséum d'Histoire Naturelle, Geneva (Switzerland).
7. Naturmuseum Senckenberg, Frankfurt am Main (Germany).
8. Mr. J. P. VAN NIEL, who lived in Sumatra from 1951 to 1956 and made great efforts to collect molluscs in his leisure time. This material has been presented to the Zoological Museum, Amsterdam.
9. Various private cabinet owners in the Netherlands and one in Switzerland who received their material from relations overseas.

In the list of localities these collections will be referred to by the following symbols:

ZMA	Zoological Museum, Amsterdam
RMNH	Rijksmuseum van Natuurlijke Historie, Leiden
MBo	Museum Zoologicum Bogoriense, Bogor
MBa	Naturhistorisches Museum, Basel
MZh	Zoologisches Museum, Zürich
MGv	Muséum d'Histoire Naturelle, Geneva
SMF	Senckenberg Museum, Frankfurt
Nl	Mr. J. P. van Niel
Br	Mr. A. C. van Bruggen, Leiden
Bt	Mr. L. J. M. Butot, Haarlem
By	Dr. P. Bohny, Basle
Dr	Mr. J. Drijver, Wageningen
Ls	Dr. F. E. Loosjes, Wageningen
Nb	Mr. W. H. Neuteboom, Heemskerk
Sl	Mr. L. van der Slik, Rotterdam
Vm	Mr. L. A. W. C. Venmans, Moergestel

*) Received February 12, 1958.

In addition to these collections all the records in literature dealing with Sumatra have been included. I have checked many of these records, but in other cases the material was not available for study.

Localities already mentioned by previous authors have not been duplicated in this report, unless a new investigation of the material seemed desirable. Hence most references are of new localities and of new altitude records.

Some species have not been seen by me at all.

For each entry are quoted: a. the original diagnosis of the species, b. a handbook or serial manual in which the species is well described and figured, c. the publications dealing with the occurrence of the species in Sumatra.

The localities have chiefly been enumerated in the order from Northwest to Southeast.

The importance of this checklist can be summarized as follows: 1. the publication of many new species, and 2. the extension of the distribution range of most species.

I profited a great deal from the basic list of Sumatran molluscs published in 1928 by E. DEGNER (*Treubia*, 10: 355—390). Since that year many collectors have succeeded in augmenting the number of species and in bringing more ecological details.

In spite of all these observations the present state of our knowledge of the malacofauna of Sumatra is still very imperfect. Some districts have been studied rather thoroughly, but many regions remain unexplored.

From a zoogeographical point of view it is interesting to observe that the fauna of the northern part of the island has distinct affinities to that of the Malay Peninsula. These species are chiefly found in the provinces of Atjeh, Sumatra's East Coast and Tapanuli, but rarely beyond the equator.

The southern part, on the other hand, is inhabited by a number of species which are also known from Java, but which rarely penetrate more northward than the provinces of Palembang and Southern Benkulen.

Between the two regions is a transition zone where elements of the two migration routes meet and where, in addition, various other, presumably endemic, species have developed.

I shall come back to these differences later in the paragraph on the geological history of the island.

A special appendix deals with the molluscan fauna of the satellite islands of Sumatra. Some of these satellites have been rather well investigated and a more or less exhaustive account of their non-marine Mollusca could be drawn up (Pulu Weh, Simalur, Nias, Mentawai, Enggano, Bangka, Pulu Berhala). Others, on the contrary, have hardly been explored at all. Hence the greater or smaller length of the faunal lists of each individual island is not so much an evidence of the richness of its fauna, as a testimony of the degree of perfection of its exploration.

In table 1 the non-marine malacofauna of Sumatra is compared with the molluscan fauna of Malaya, Java, Borneo and the more important of the satellite islands (the very small ones like Pulu Pandang, the Riouw Islands, Singkep, Rotan have been omitted).

Species Names	Malaya	Sumatra			Java	Borneo	Weh	Simalur	Babi	Nias	Batu	Mentawai	Enggano	Billiton	Bangka	Berhala
		North	Centr.	South												
<i>Amphidromus sumatranus</i>																
<i>singalangensis</i>			x													
— <i>bülowi</i>			x													
<i>Pseudopartula dohertyi</i>			x													
— <i>galericulum</i>																
<i>gedeana</i>				x	x											
<i>Bradybaena similaris</i>	x	x	x	x	x		x			x				x	x	
<i>Discartemon vandermeermohri</i>		x					x									
— <i>sangkarensis</i>			x													
<i>Sinoennea sumatrensis</i>		x														
<i>Huttonella bicolor</i>	x	x			x	x										
<i>Pseudodon vondenbuschianus</i>		x		x	x	x										
<i>Rectidens gracilis</i>		x		x												
— <i>sumatrensis</i>		x	x		x											
<i>Contradens semmelinki laticeps</i>			x													
— <i>ascia dimotus</i>		x	x	x												
— — —																
<i>fa. arenicola</i>			x	x												
— — — <i>verbeeki</i>			x													
<i>Pilsbryconcha expressa</i>			x													
— <i>exilis</i>				x	x											
<i>Physunio superbus</i>			x													
<i>Prohyriopsis stolata</i>			x													
<i>Polymesoda bengalensis</i>		x		x	x										x	
— <i>coaxans</i>		x		x	x											
— <i>expansa</i>		x		x	x											
— <i>buschi</i>				x		x										
— <i>excavata</i>				x												
— <i>suborbicularis</i>		x		x						x						
<i>Batissa violacea</i>		x	x	x	x					x						
<i>Corbicula javanica</i>		x	x	x	x											
— <i>gustaviana</i>			x													
— <i>sumatrana</i>		x	x													
— <i>lacustris</i>			x													
— <i>moltkiana</i>		x	x	x												
— <i>pullata</i>		x	x	x												
— <i>rivalis</i>		x			x											
— <i>tobae</i>		x														
— <i>gracilis</i>		x	x	x	x											
— <i>tumida</i>				x		x										
<i>Pisidium sumatranum</i>		x	x													
<i>Sphaerium ceciliae</i>		x														

1) ~~~~~ = Sumatra without precise locality.

In table 2 a comparison is given of the total number of land and freshwater Mollusca of Sumatra, Java and the Netherlands *).

TABLE 2.

Name of country	Surface in 100 km ²	Number of species of molluscs			
		Land	Total fr. w.	Freshw. Gastr.	Freshw. Biv.
Java	126	171	105	89	16
Sumatra	440	192	133	104	29
Netherlands	34	93	65	39	26

For the correct understanding of these tables the following points must be taken into account:

1. The species concept in the tables 1 and 2 is taken in the conservative sense, i.e. any species whose taxonomic position or geographical presence seemed debatable has been omitted.
2. In counting the species for table 2 all subspecies, varieties, formae of a certain species have been combined with the main form and counted as one number.
3. In table 2 the *Ellobiidae* (except *Carychium*) have been excluded.
4. In the columns of the satellite islands of table 1 only those species are recorded which also occur in Sumatra. Those species which are endemic in the islands are not included.

ZOOGEOGRAPHICAL CONSIDERATIONS

In the study of zoogeography the list of species and the map are the principal tools. Too often, in the past, cooperation between the two instruments has been inadequate, either the knowledge of the fauna, or the state of development of the map being insufficient.

As I have said already in the Introduction it has often occurred to me during the present study that a good many Sumatran non-marine molluscs show affinities to the fauna of Malaya, others to that of Java. Their relation to the fauna of Borneo is negligible.

The affinities to Malaya occur in the northern and northeastern regions. Species such as *Lagochilus garreli*, *Opisthoporus bialatus*, *Pupina artata*, *Alycaeus liratulus*, *Opisthostoma paulucciae*, *Diplommatina tweediei*, *D. sinulabris*, *D. ventriculus*, *Indoplanorbis exustus*, *Atopos rugosus*, *Trochomorpha castra*, *Pseudoplecta bijuga*, *Geotrochus lychnia*, *Macrochlamys malaccana* are identical in both regions.

Similarities are most evident in the area of the pre-Tertiary mountains of Central Atjeh and in the early-Quaternary tuffaceous layers of the Karo Highlands in Sumatra's East Coast and Tapanuli, reaching southward as far as the town of Padang Sidempuan.

*) A similar comparison of the non-marine Molluscs of Java, the Netherlands and a few other European countries can be found in my paper on the freshwater Gastropods of Java (1956, Treubia, 23 : 262)

The affinities with the fauna of Java come to the fore in the southern part of Sumatra. For these species *Lagochilus ciliocinctum*, *Brotia testudinaria*, *Microcystina vitreiformis*, *Elaphroconcha bataviana*, *E. javacensis*, *Dyakia rumphi*, *Amphidromus palaceus*, *Pseudopartula galericulum gedeana*, *Pilsbryoconcha exilis* the northern boundary lies approximately between the Gumai Mountains and Mount Kaba where the River Musi traverses the Central Mountain Range, Bukit Barisan. As in the north, this southern boundary coincides with a geological structure: the gap between the pre-Tertiary mountains of the Central Range to the north of it, and the Gumai Mountains (pre-Tertiary) and Pasumah Highland (Quaternary tufas) to the south of it.

As no land and freshwater Mollusca can possibly migrate over sea, the presence of identical species in areas nowadays separated by sea-water proves that these regions were connected in the geological past. Hence northeastern Sumatra must have been connected with Malaya, and southern Sumatra with Java. Little is known about the speed with which such a migration could take place, and how many years would be required for certain species to settle in the new territory. Yet this interchange of faunal elements cannot have taken place in the very remote past, because the species occurring on both sides of the Straits of Malacca or of Sunda Strait are still absolutely identical and have not formed local subspecies or modifications in consequence of long isolation.

The most probable explanation is that during the Pleistocene glacial period when great quantities of water were withdrawn from the oceans and piled up as ice in the polar regions and in the high mountains, the level of the sea was lowered to such an extent (40 to 60 m) that vast areas of dry land emerged. In this way there resulted connections with Malaya in the north and with Java in the south. The rivers of the adjacent regions lengthened their courses, met, and became confluent in the deepest depressions. Leaching by both rain and floods quickly reduced soil-salinity, making the environment suitable for non-marine molluscan occupants. During this period snails and bivalves could freely migrate, until, in a milder interglacial period, the ice melted, the sea level rose and the low-lying valleys were again submerged, thus dividing populations of identical species.

The intermediate part of Sumatra, between Padang Sidempuan and Mt. Kaba, is chiefly a region of pre-Tertiary mountains, with only small and local intercalations of early-Quaternary tuffaceous layers. These last-mentioned deposits surround the towns of Padang Pandjang, Bukit Tinggi (= Fort de Kock) and Pajakomboh, the lakes of Manindjau and Singkarah, and — perhaps — the valley N.W. of Mount Korintji. By their richer content of carbonate of lime these regions form a particularly attractive environment for snail life.

The molluscan fauna of this central part has no special affinities; it is composed of ubiquitous elements, of species related to other parts of Sumatra, and of some forms which so far have not been found elsewhere and can, consequently, be taken as endemic species. The following is a list of these species: *Leptopoma fultoni*, *Cyclotus discriminendus*, *Pupina superba*, *P. sangkarensis*, *Alycaeus praetextus*, *Emmericiopsis lacustris*, *Turbacmella dohertyi*, *Physastra stagnalis*, *Atopos schildii*, *Pseudononia gracilentia*, *P. abbreviata*, *P. loosjesi*, *P. brachyptycta*, *Acrophaedusa*

thrausta, *A. alticola*, *Pareuplecta prairieana*, *Hemiplecta oblique-undulata*, *Elaphroconcha minangkabau*, *Dyakia smithiana*, *D. perstriata*, *Helicarion hyaleus*, *Chloritis pandjangensis*, *Amphidromus bulowi*, *Pseudopartula dohertyi* and *Discartemon sangkarensis*.

SYSTEMATIC PART

Clithon aculeatus (MÜLLER, 1774)

- 1774 MÜLLER, Hist. Verm. 2: 193 (*Nerita aculeata* — in paludosis Africae torridae)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 70, Taf. 8, Fig. 13—15 (*Neritina aculeata* — Palembang)
1928 DEGNER, Treubia, 10: 384 (*Neritina aculeata* — Sumatra)

Localities: Hanna Estate, near Gunting Saga, about 10 m above sea level, 1954 (NI); Palembang (ZMA, By); River Musi near Palembang, behind swimming pool and near the Dutch shop, 1948 (ZMA and Nb).

Clithon bicolor (RÉCLUZ, 1843)

- 1843 RÉCLUZ, Proc. Zool. Soc. London, 172 (*Nerita bicolor* — Agoos, Luzon, in a mountain stream)
1844 RÉCLUZ, Proc. Zool. Soc. London, 199 (*Nerita subpunctata* — Sinait, prov. of Ilocos, isle of Luzon, in a small mountain stream)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 179, Taf. 18, Fig. 19, 20, 22—24 (*Neritina subpunctata* — Residentschaft Agam), 181, Taf. 18, Fig. 18, 21 (*Neritina bicolor* — various localities, not from Sumatra)
1928 DEGNER, Treubia, 10: 385 (*Neritina subpunctata* — Sumatra)

Not seen.

Clithon corona (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X: 777 (*Nerita corona* — in Asiae fluviis)
1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2: 185 (*Neritina corona* — rivières de l'Inde, de l'île de France) (*Neritina brevispina* — Timor)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 156, Taf. 17, Fig. 1—4, 9 (*Neritina brevispina* — Sumatra)
1928 DEGNER, Treubia, 10: 385 (*Neritina brevispina* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 185 (*Theodoxus brevispina* — Strand der Telok Karangberak; Poelau Taboean)

Localities: Padang, Muara, May 1952 (Dr).

Clithon diadema (RÉCLUZ, 1841)

- 1841 RÉCLUZ, Rev. Zool. (Soc. Cuv.) 4: 277 (*Nerita diadema* — Iles de la Mer du Sud)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 154, Taf. 15, Fig. 22—26 (*Neritina diadema* — not from Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 21, pl. 21, fig. 10—10a (*Neritina diadema* — Indrapoera)
1928 DEGNER, Treubia, 10: 385 (*Neritina diadema* — Sumatra)

Localities: Indrapura (RMNH).

Clithon flavovirens (VON DEM BUSCH, 1843)

- 1843 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1: 26, Taf. 1, Fig. 6 (*Neritina flavovirens* — Java)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 184 and 283, Taf. 19, Fig. 1, 2 (*Neritina flavovirens* — Java, Bali, Borneo)

Localities: Apenberg, near Padang, on the rocks, 1952 (Dr).
New record for Sumatra.

Clithon fuliginosus (VON DEM BUSCH, 1843)

- 1843 VON DEM BUSCH, in PHILIPPI, Abb. & Besch. 1: 26, Taf. 1, Fig. 5 (*Neritina fuliginosa* — Java)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 185, Taf. 19, Fig. 18—19 (*Neritina fuliginosa* — Java, Batavia)

Localities: Padang (RMNH). New record for Sumatra.

Clithon olivaceus (RÉCLUZ, 1843)

- 1843 RÉCLUZ, Proc. Zool. Soc. London, 172 (*Nerita olivacea* — Agoos, Philippine Islands)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 183, Taf. 19, Fig. 5—7 (*Neritina olivacea* — Philippinen, Ambon)

Localities: Sumatra (ZMA); Padang (ZMA); Padang, Muara, May 1952 (Dr). New record for Sumatra.

Clithon oualaniensis (LESSON, 1831)

- 1831 LESSON, Voy. Coq. Zool. 2: 379 (*Neritina oualaniensis* — Oualan)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 193, Taf. 20, Fig. 1—24 (*Neritina ualanensis* — bei Palembang)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 218 (*Neritina ualanensis* — Sumatra)
1928 DEGNER, Treubia, 10: 385 (*Neritina ualanensis* — Sumatra)

Localities: Tandjong Tiram, Batu Bara District, October 1953, in pools on the mud flats; burrows in the mud when the mud flats become too hot (NI).

The record of *Clithon squarrosus* (RÉCLUZ, 1843) by DEGNER (1928, Treubia, 10: 385) for Indrapura is a mistake. The publication of PRASHAD (1921, Rec. Ind. Mus. 22: 500) to which DEGNER referred, mentioned Anak Laut, Sabang, but not Indrapura.

Neritodryas cornea (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X: 777 (*Nerita cornea* —)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 140, Taf. 12, Fig. 14—18 (*Neritina cornea* — N. W. Küste von Sumatra)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 218 (*Neritina cornea* — Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 21, pl. 1, fig. 11, 11a, 11b (*Neritina cornea* — Indrapoera)
1927 OOSTINGH, Misc. Zool. Sum. 10: 4 (*Theodoxis cornea* — Pulu Sitjanang, N. of Laboehan Deli, mangrove swamp; puddle near Soengai Terdjoen; Kampong Soengaipariok near Bandarchalipa, on Nipah)
1928 DEGNER, Treubia, 10: 384 (*Neritina cornea* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 185 (*Neritodryas cornea* — Küste zwischen Tirembaroe und Tirem)

Localities: Batu Bara, near Tandjong Tiram, on Nipah stem, 1955 (NI); Pangkalan Dadar, near Bandar Chalipa, 1956 (NI); Sumatra (RMNH); River Indrapura (RMNH).

Neritodryas dubia (GMELIN, 1790)

- 1790 GMELIN, Syst. Nat. Ed. XIII: 3678 (*Nerita dubia* —)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 136, Taf. 12, Fig. 1—7 (*Neritina dubia* — not from Sumatra)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 218 (*Neritina dubia* — Sumatra)
1928 DEGNER, Treubia, 10: 384 (*Neritina dubia* — Sumatra)

Localities: Sumatra (RMNH); Pantai Tjermin, 30 April 1937 (ZMA); river near Padang, April 1952 (ZMA, Dr and Vm); Maringei River, near Labuan Maringei, Lampong Districts, January 1883 (ZMA).

Neritodryas subsulcata (SOWERBY, 1836)

- 1836 SOWERBY, Conch. Ill. no. 50, fig. 50 (*Neritina subsulcata* — Mindoro, P.I.)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 142, Taf. 12, Fig. 11—12 (*Neritina subsulcata* — not from Sumatra).
1931 OOSTINGH, Arch. Moll. Kunde, 63: 185, Taf. 19, Fig. 1a—b (*Neritodryas subsulcata* — Nebenfluss der Wai Samang, Benkoelen)

Not seen.

Neritina aciculata REEVE, 1855

- 1855 REEVE, Conch. Icon. 9, pl. 24, fig. 108 (*Neritina aciculata* — Island of Nicobar)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 37 (*Neritina aciculata* — Sumatra)
1928 DEGNER, Treubia, 10: 383 (*Neritina aciculata* — Sumatra)

Not seen.

Neritina auriculata LAMARCK, 1822

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2: 186 (*Neritina auriculata* — Eaux douces de la Nouvelle Hollande ou des îles avoisinantes)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 30, Taf. 6, Fig. 13—15 and 24—27 (*Neritina auriculata* — Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 23 (*Neritina auriculata* — Indrapoera)
1928 DEGNER, Treubia, 10: 383 (*Neritina auriculata* — Sumatra)

Localities: Indrapura (RMNH); Sungei Tuan, Deli, 21 April 1919 (ZMA).

Neritina bicanaliculata RÉCLUZ, 1849

- 1849 RÉCLUZ, in: SOWERBY, Thes. Conch. 2, *Neritina*, p. 509, pl. 113, fig. 135—137 (*Neritina bicanaliculata* — Id. of Luzon)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 35, Taf. 9, Fig. 3—4 (*Neritina bicanaliculata* — Luzon, Philippinen)

Localities: Pulau Pontjan Besar and Pulau Pontjan Ketjil, two small islands in the Bay of Sibolga, Tapanuli, living on fallen cocoa-nut leaves in a small brackish water pond behind the beach wall, 16 May 1954 (N1). New records for Sumatra.

Neritina gagates LAMARCK, 1822

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2: 185 (*Neritina gagates* — Hab.)
1849 SOWERBY, Thes. Conch. 2, *Neritina*, p. 537, pl. 112, fig. 103—104 (*Neritina gagates* — Island of Sumatra, on stones)
1855 REEVE, Conch. Icon. 9, pl. 10, fig. 47 (*Nerita* sic! *gagates* — Sumatra, on stones)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 94, Taf. 16, Fig. 11—12 (*Neritina gagates* — Sumatra?)
1928 DEGNER, Treubia, 10: 384 (*Neritina gagates* — Sumatra)

Not seen.

Neritina guerini (RÉCLUZ, 1841)

- 1841 RÉCLUZ, Rev. Zool. (Soc. Cuv.) 4: 314 (*Nerita guerini* — Sumatra, probablement dans les eaux salées)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10: 261 (*Neritina guerini* — Sumatra?)
1928 DEGNER, Treubia, 10: 383 (*Neritina guerini* — Sumatra)

Not seen.

Neritina pennata (BORN, 1778)

- 1778 BORN, Index Mus. Caes. Vindob. p. 420 (*Nerita pennata* —)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10:67, Taf. 7, Fig. 17—20, Taf. 2, Fig. 1—2 (*Neritina pennata* — Sumatra)
1928 DEGNER, Treubia, 10:383 (*Neritina pennata* — Sumatra)

Localities: Sumatra (RMNH).

Neritina petiti RéCLUZ, 1841

- 1841 RéCLUZ, Rev. Zool. (Soc. Cuv.) 4:273 (*Neritina petiti* — Saint Domingue)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10:58, Taf. 8, Fig. 1—3 (*Neritina petiti* — not from Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63:187 (*Neritina petiti* — Nebenfluss der Wai Samang, etwa 2½ km nordöstlich von der Küste des Indischen Ozeans, Benkoelen)

Not seen.

Neritina pulligera (LINNÉ, 1767)

- 1767 LINNÉ, Syst. Nat. Ed. XII:1253 (*Nerita pulligera* — Hab.)
1849 MOUSSON, Land u. Süsw. Moll. Java, p. 81, Taf. 12, Fig. 10 (*Neritina iris* — Java)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10:29, Taf. 1, Fig. 4—5 (*Neritina pulligera* — not from Sumatra), 52, Taf. 9, Fig. 5—6 (*Neritina iris* — Sumatra)
1928 DEGNER, Treubia, 10:383 (*Neritina iris* and *N. pulligera* — Sumatra)

Localities: Sumatra (ZMA); Padang, 1930 (RMNH); Indarung near Padang, 16 February 1950 (RMNH); Ujung Karang, near Padang, in rivermouth, 14 December 1950 (Dr).

Neritina pulligera (LINNÉ, 1767) forma sumatrana DAUTZENBERG, 1899

- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34:23, pl. 1, fig. 12 (*Neritina pulligera* var. *sumatrana* — Indrapoera)
1928 DEGNER, Treubia, 10:383 (*Neritina pulligera* var. *sumatrana* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63:186, Taf. 19, Fig. 2a, b (*Neritina pulligera* fa *sumatrana* — Wai Saliman, bei Fusspfad nach Koeboe-saliman; Nebenfluss der Wai Samang, Benkoelen)

Localities: Sumatra (ZMA); Indrapura river (RMNH); Ajerbangis, Padang Lowlands, November 1913 (RMNH).

Neritina sowerbiana (RéCLUZ, 1843)

- 1843 RéCLUZ, Proc. Zool. Soc. London, 174 (*Nerita sowerbiana* — Sinait, prov. of North Ylocos, Luçon; Id. of Guimaras)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10:171, Taf. 18, Fig. 1—4 and 10 (*Neritina sowerbiana* — not from Sumatra)
1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) 2, fasc. 19:65 (*Neritina sowerbiana* — Takengon, Atjeh)

Not seen.

Neritina squamaepicta (RéCLUZ, 1843)

- 1843 RéCLUZ, Proc. Zool. Soc. London, 169 (*Nerita squamaepicta* — Agoos, province of Pangasinan, isle of Luçon: in a rapid river)
1879 MARTENS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10:62, Taf. 5, Fig. 9—11 (*Neritina squamipicta* — Philippinen, wahrscheinlich auch Marianen)

Localities: Sumatra (RMNH); Padang, Muara, May 1952 (Dr). New records for Sumatra.

Neritina turrata (GMELIN, 1790)

- 1790 GMELIN, Syst. Nat. Ed. XIII : 3686 (*Nerita turrata* — Insularim antillarum aquis dulcibus)
1879 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10 : 105, Taf. 2, Fig. 5, Taf. 11, Fig. 18—23 (*Neritina turrata* — Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 20, pl. 1, fig. 8, 8a, 8b (*Neritina turrata* — Indrapoera)
1928 DEGNER, Treubia, 10 : 384 (*Neritina turrata* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 185 (*Theodoxus turratus* fa *typica* — Strand der Bai Balimbing Saleman; Küste zwischen Tirembaroe und Tirem)

Localities: Tjalang, West coast of Atjeh (ZMA); Singkel, Atjeh (RMNH); beach at Sibolga, Tapanuli, May 1954 (NI); Padang (ZMA); Padang, mouth of Muara and Sungei Talung Muara, May 1952 (Dr).

Neritina turrata (GMELIN, 1790) forma semiconica LAMARCK, 1822

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2 : 187 (*Neritina semi-conica* — Rivières de l'Amérique)
1879 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10 : 105, Taf. 11, Fig. 22—23 (*Neritina turrata* var. B. — not from Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 20, pl. 1, fig. 9, 9a (*Neritina turrata* var. *semiconica* — Indrapoera)
1928 DEGNER, Treubia, 10 : 384 (*Neritina turrata* var. *semiconica* — Sumatra)

Localities: Indrapura river (RMNH); Padang, Muara and Sungei Talung Muara, May 1952 (Dr).

Neritina variegata LESSON, 1831

- 1831 LESSON, Voy. Coq. Zool. 2 : 378 (*Neritina variegata* — Nouvelle Irlande)
1836 SOWERBY, Conch. Ill, pl. 100, fig. 54 (*Neritina sumatrensis* —)
1879 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10 : 98, Taf. 10, Fig. 11—17 (*Neritina variegata* — Sumatra)
1928 DEGNER, Treubia, 10 : 384 (*Neritina variegata* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66 : 339 (*Neritina variegata* — Brackwasser von Lho Seumaweh und von Blang Ne)

Localities: Belawan (RMNH).

Neritina violacea (GMELIN, 1790)

- 1790 GMELIN, Syst. Nat. Ed. XIII : 3685 (*Nerita violacea* — Habitat rara . . .)
1879 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10 : 37, Taf. 7, Fig. 1—14 (*Neritina crepidularia* — Palembang)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 218 (*Neritina crepidularia* — Sumatra)
1921 PRASHAD, Rec. Ind. Mus. 22 : 497, pl. 14, fig. 13—14 (*Neritina simoni* — Near mouth of Soengei Batang Kwis, Serdang), p. 499, pl. 14, fig. 15—16 (*Neritina weberi* — Mangrove swamp region in the mouth of Soengei Batang Kwis, Serdang)
1928 DEGNER, Treubia, 10 : 383 (*Neritina simoni*, *N. crepidularia* and *N. weberi* — Sumatra)

Localities: Mangrove swamp near Belawan, 16 March 1917; Mangrove swamp near Perbaungan, Serdang, 16 March 1917; Mouth of Sungei Batang Kwis, Serdang, 9 April 1918 (ZMA); Telok Nibung, on the way to Bagan Asahan, in fresh water, on cocoa-nut leaves, Nipah-stem and floating wood, May and December 1955; Pangkalan Dadar, near Bandar Chalipa, on Nipah-stems, submerged, 15 April 1956; Pulau Pondjan, Bay of Sibolga, Tapanuli, on cocoa-nut leaf, 10 April 1954 (all NI); Medan (RMNH).

Neritina violacea (GMELIN, 1790) forma **cornucopiae** BENSON, 1836

- 1836 BENSON, Journ. As. Soc. Bengal, 5 : 748 (*Neritina* ~~cornucopiae~~ — Hooghly River near Fort William and Tally's Nullah)
 1837 TROSCHER, Arch. Naturgesch. 3 : 179 (*Neritina melanostoma* — Unter Ganges)
 1921 PRASHAD, Rec. Ind. Mus. 22 : 498 (*Neritina crepidularia* var. *melanostoma* — Mangrove swamps at Belawan, Deli)
 1927 OOSTINGH, Misc. Zool. Sum. 10 : 5 (*Theodoxis violacea* fa *cornucopiae* — Soengei Terdjoen, NW of Laboehan Deli; Kampong Soengeipariok)
 1928 DEGNER, Treubia, 10 : 383 (*Neritina crepidularia* var. *melanostoma* — Sumatra)

Localities: Mangrove swamps near Belawan, Deli, 25 August 1918; Sungei Tuan, Deli, 20 July 1919 (both ZMA); Pangkalan Dadar, near Bandar Chalipa, 15 April 1956; Tandjong Tiram, Batu Bara district, on the beach, 1954; between Labuan Ruku and Tandjong Tiram, Batu Bara district, on Nipah palm, 8 May 1955 (all NI); Telok Nibung, on landing stage in the Asahan river, May 1950 (Dr); Sungei Tuan (RMNH); Gunung Tahan (RMNH); Belawan, mouth of the Deli river, January 1950 (Dr); Palembang (MZh).

Neritina violacea (GMELIN, 1790) forma **exaltata** RÉCLUZ, 1850

- 1850 RÉCLUZ, Journ. de Conch. 1 : 65, pl. 3, fig. 3 (*Neritina exaltata* — Ile Negros)
 1921 PRASHAD, Rec. Ind. Mus. 22 : 499 (*Neritina crepidularia* var. *exaltata* — mangrove swamps at Belawan, Deli)
 1927 OOSTINGH, Misc. Zool. Sum. 10 : 4 (*Theodoxis violacea* fa *exaltata* — Sungei Terdjoen NW of Laboehan Deli, mangrove swamp; Pulu Sitjanang in puddles near Soengai Terdjoen; mangrove swamp between Pantaitjermin and Koeala Perbaengan, Serdang; Kampong Soengaipariok near Bandarchalipah, mangrove swamp)
 1928 DEGNER, Treubia, 10 : 383 (*Neritina crepidularia* var. *exaltata* — Sumatra)
 1931 OOSTINGH, Arch. Moll. Kunde, 63 : 188 (*Neritina violacea* fa *exaltata* — Sandstrand südlich von Tandjong Poelai Sekopong, Lampongs)

Localities: Mangrove swamps near Belawan, Deli; Sungei Tuan, Deli, 21 April 1919 (both ZMA); Pangkalan Dadar, near Bandar Chalipa, 15 April 1956; beach at Tandjong Tiram, Batu Bara district, 1954; between Telok Nibung and Bagan Asahan, near Tandjong Balai, on Nipah-stem, 23 May 1955 (all NI); Telok Nibung, landing stage in Asahan river, May 1950 (Dr); Belawan, mouth of Deli river (Dr).

Neritina waigiensis LESSON, 1831

- 1831 LESSON, Voy. Coq. Zool. 2 : 379 (*Neritina waigiensis* — Waigiou)
 1834 QUOY & GAIMARD, Voy. Astrol. Zool. 3 : 195, pl. 65, fig. 12—14 (*Neritina communis* — Vanikoro)
 1879 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10 : 113, Taf. 2, Fig. 3—4, Taf. 11, Fig. 1—9 (*Neritina communis* — not from Sumatra)
 1928 DEGNER, Treubia, 10 : 384 (*Neritina communis* — Sumatra)

Localities: Apenberg, near Padang, on the rocks, 1952; Sungei Talung, Muara, Padang, May 1952 (both Dr).

Neritina zigzag LAMARCK, 1822

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2 : 185 (*Neritina zigzag* — ?? Dans les rivières des Antilles)
 1879 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10 : 101, Taf. 10, Fig. 20—24, Taf. 2, Fig. 6—7 (*Neritina ziczac* — Sumatra)
 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 19, pl. 1, fig. 7, 7a (*Neritina ziczac* — Indrapoera)
 1921 PRASHAD, Rec. Ind. Mus. 22 : 500 (*Neritina ziczac* — Mouth of Soengei Batang Kwis, Serdang)

- 1927 OOSTINGH, Misc. Zool. Sum. 10 : 3 (*Theodoxis ziczac* — Soengei Terdjoen NW of Laboehan Deli, mangrove swamp; Kampong Soengai pariok near Bandar-chalipah, Soengei Padang district, mangrove swamp; Pulu We, near mouth of rivulet Kroeng Pantjoer)
- 1928 DEGNER, Treubia, 10 : 384 (*Neritina ziczac* — Sumatra)

Localities: Mouth of Sungei Batang Kwis, Serdang, 9 June 1918; Sungei Tuan, Deli, 20 July 1919 (both ZMA); Pangkalan Dadar, near Bandar Chalipa, 1956 (NI); small river near Padang, April 1952 (ZMA); Atjeh (RMNH); River Indrapura (RMNH).

Neritina solium (RÉCLUZ, 1845)

- 1845 RÉCLUZ, Proc. Zool. Soc. London, 120 (*Nerita solium* — Bencoonet, isle of Sumatra, in a muddy stream)
- 1849 SOWERBY, Thes. Conch. 2 : 529, pl. 115, fig. 207, 208 (*Neritina olivacea* syn. *solida* — Island of Luzon, on stones in rapid river)
- 1850 RÉCLUZ, Journ. de Conch. 1 : 148 (*Nerita solium* — I. Sumatra)
- 1855 REEVE, Conch. Icon. 9, pl. 3, fig. 15 (*Neritina dolium* — Bencoonet, Sumatra, in a muddy stream)
- 1879 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10 : 267 (*Neritina solium* — Bencoonet (Benkulen ? englisch Bencoolen) auf Sumatra, in einem schlammigen Strom)

Not seen. The species is of rather doubtful position and was alternately classified with *N. olivacea*, *N. bicolor* and *N. fuliginosa*. In the original description RÉCLUZ wrote *solium*. Emendations, as proposed by SOWERBY and by REEVE, to *solida* and *dolium* are inadmissible.

Septaria lineata (LAMARCK, 1816)

- 1816 LAMARCK, Encycl. Méth. (Vers) p. 611, Explic. Planches pl. 456, fig. 2 (*Navicella lineata*) and fig. 3—4 (*N. tessellaria* — Rivières de l'Inde)
- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2 : 182 (*Navicella lineata* and *N. tessellata* — Rivières de l'Inde)
- 1898 ALDRICH, Nautilus, 12 : 2 (*Navicella tessellata* — Marang)
- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 23, pl. 1, fig. 14, 14a (*Septaria tessellata* — Indrapoera), p. 25, pl. 1, fig. 15 (*S. tessellata* var. *lineata* — Indrapoera)
- 1921 PRASHAD, Rec. Ind. Mus. 10 : 501 (*Septaria tessellata* var. *lineata* — Mangrove swamps near Belawan, Deli)
- 1927 OOSTINGH, Misc. Zool. Sum. 10 : 5 (*Septaria tessellata* — Kampong Soengai pariok)
- 1928 DEGNER, Treubia, 10 : 385 (*Septaria tessellata* — Sumatra)
- 1931 OOSTINGH, Arch. Moll. Kunde, 63 : 189 (*Septaria tessellata* fa *typica* — Strand zwischen W. Bambang und W. Menanga, Benkoelen; Mittlere Halbinsel der Lampongs)

Localities: Pulau Pondjan ketjil in the Bay of Sibolga, Tapanuli, May 1954, living on a submerged cocoa-nut leaf in a pool behind the beach; it is not certain whether the water was fresh or brackish, but at spring tide the pool receives seawater (NI).

Septaria lineata (LAMARCK, 1816) forma *clypeolum* (RÉCLUZ, 1843)

- 1843 RÉCLUZ, Proc. Zool. Soc. London, 157 (*Navicella clypeolum* — Philippine Islands)
- 1881 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10a : 37, Taf. 7, Fig. 8—15 (*Navicella tessellata* var. *clypeolum* — Sumatra)
- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 24, pl. 1, fig. 16 (*Septaria tessellata* var. *clypeolum* — Indrapoera)
- 1921 PRASHAD, Rec. Ind. Mus. 22 : 501 (*Septaria tessellata* var. *clypeolum* — Mangrove swamps at Belawan, Deli)

1928 DEGNER, Treubia, 10 : 386 (*Septaria tessellata* var. *clypeolum* — Sumatra)

Localities: Mouth of Sungei Batang Kwis, Deli, 9 June 1918; Sungei Tuan, Deli, 20 July 1919 (both ZMA).

***Septaria lineata* (LAMARCK, 1816) forma *compressa* (MARTENS, 1881)**

1881 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10a : 38, Taf. 8, Fig. 4—9 and 19—21 (*Navicella tessellata* var. *compressa* — Sumatra)

1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 25 (*Septaria tessellata* var. *compressa* — Indrapoera)

1921 PRASHAD, Rec. Ind. Mus. 22 : 501 (*Septaria tessellata* var. *compressa* — Mangrove swamps at Belawan, Deli)

1928 DEGNER, Treubia, 10 : 386 (*Septaria tessellata* var. *compressa* — Sumatra)

Not seen.

***Septaria lineata* (LAMARCK, 1816) forma *insignis* (REEVE, 1856)**

1856 REEVE, Conch. Icon. 9, pl. 5, fig. 21 (*Navicella insignis* — Sumatra)

1881 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10a : 37, Taf. 7, Fig. 16—17 (*Navicella tessellata* var. *subrostrata* — not from Sumatra)

1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 25 (*Septaria tessellata* var. *insignis* — Indrapoera)

1928 DEGNER, Treubia, 10 : 386 (*Septaria tessellata* var. *insignis* — Sumatra)

Not seen.

***Septaria porcellana* (LINNÉ, 1758)**

1758 LINNÉ, Syst. Nat. Ed. X : 781 (*Patella porcellana* — In O. Indiae)

1825 SOWERBY, Catal. Tankerville Coll. App. p. X (*Navicella suborbicularis* — Timor)

1881 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10a : 31, Taf. 6, Fig. 5—14 (*Navicella suborbicularis* — Sumatra)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 84 (*Septaria suborbicularis* — Sumatra)

1928 DEGNER, Treubia, 10 : 385 (*Septaria suborbicularis* — Sumatra)

1931 OOSTINGH, Arch. Moll. Kunde, 63 : 188 (*Septaria suborbicularis* — Küste zwischen Tirembaroe und Tirem, Lampongs)

Localities: Padang, January 1914, on rock moistened by waterfall (fresh water), not far from the beach (RMNH).

***Septaria sculpta* (MARTENS, 1881)**

1881 MARTENS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10a : 15, Taf. 2, Fig. 5—8 (*Navicella sculpta* — Sumatra, bei Kepahiang, in fliessendem Wasser)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 307 (*Septaria sculpta* — Sumatra)

1928 DEGNER, Treubia, 10 : 385 (*Septaria sculpta* — Sumatra)

Not seen.

***Hydrocena javana* (MOELLENDORFF, 1897)**

1897 MOELLENDORFF, Nachr. Blatt, 29 : 97 (*Georissa javana* — Java)

1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42 : 3 (*Georissa javana* — Between moss near Sampoeran Harimau, North Habinsaran)

Localities: Sampuran Harimau, North Habinsaran, between moss, 3 August 1928 (ZMA); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953; Brastagi, among leaves, on stones and decaying wood, 1750 m alt., May 1953 (both NI). New records for Sumatra.

Sulfurina behniana (L. PFEIFFER, 1859)

- 1859 L. PFEIFFER, Proc. Zool. Soc. London, 29 (*Helicina behniana* — Nicobar Islands)
1905 WAGNER, Denkschr. Akad. Wien, 77 : 375, Taf. 2, Fig. 9a, b, c (*Sulfurina behniana* — Nikobaren)
1907 WAGNER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 18 : 24, Taf. 3, Fig. 19—21 (*Sulfurina behniana* — Nikobaren)

Localities: Sibolga, Tapanuli, 28 June 1954 (NI). The species had already been mentioned from Pulau Hinako (Nias Archipelago) (VAN BENTHEM JUTTING, 1934, Misc. Zool. Sum. 84—85 : 5), but this is the first time that it is recorded from Sumatra. The shells from Sibolga are somewhat more angular at the periphery than those from P. Hinako.

Sulfurina martensi sumatrana WAGNER, 1905

- 1905 WAGNER, Denkschr. Akad. Wien, 77 : 375 (*Sulfurina martensi sumatrana* — Sumatra)
1907 WAGNER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 18 : 24 (*Sulfurina martensi sumatrana* — Sumatra)

Not seen.

Sulfurina parva (SOWERBY, 1842)

- 1842 SOWERBY, Proc. Zool. Soc. London, 8 (*Helicina parva* — Argao, Ins. Zebu)
1898 ALDRICH, Nautilus, 12 : 1 (*Helicina parva* — Marang)
1907 WAGNER, in MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 18 : 28, Taf. 4, Fig. 17—30, Taf. 5, Fig. 5—6 (*Sulfurina parva* — not from Sumatra)
1928 DEGNER, Treubia, 10 : 367 (*Sulfurina parva* — Sumatra)

Not seen.

Leptopoma fultoni ALDRICH, 1898

- 1898 ALDRICH, Nautilus, 12 : 1 and 3, pl. 1, fig. 11—12 (*Leptopoma fultoni* — Marang)
1902 KOBELT, Tierreich, 16 : 23 (*Leptopoma fultoni* — Marang)
1906 BULLEN, Proc. Malac. Soc. London, 7 : 129 (*Leptopoma fultoni* — Bongsoe)
1906 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II : 548, Taf. 56, Fig. 9—10 (*Leptopoma fultoni* — Sumatra)
1928 DEGNER, Treubia, 10 : 364 (*Leptopoma fultoni* — Sumatra)
1954 ZILCH, Arch. Moll. Kunde, 83 : 149 (*Leptopoma fultoni* — Sumatra)

Locality: Sumatra (SMF).

Leptopoma perlucidum (GRATELOUP, 1840)

- 1840 GRATELOUP, Actes Soc. Linn. Bordeaux, 11 : 169 (*Cyclostoma perlucida* — Manila)
1831 LESSON, Voy. Coq. Zool. 2:346, pl. 13, fig. 6 (*Cyclostoma vitrea*, non *C. vitreum* DRAPARNAUD, 1801 = *Paladithia vitrea*) (Nouvelle Guinée)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 61 (*Leptopoma vitreum* — Mt Bongsou)
Localities: Mt Bongson (RMNH); Mt Bongson (MBa).

Lagochilus ciliferum (MOUSSON, 1848)

- 1848 MOUSSON, Mitth. naturf. Ges. Zürich, 1 : 268 (*Cyclostoma ciliferum* — Java)
1867 MARTENS, Ostas. Landschn. 139 (*Cyclophorus cilifera* — ? Agam)
1907 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II : 547, Taf. 68, Fig. 11—17 (*Japonia cilifera* — Java)
1928 DEGNER, Treubia, 10 : 364 (*Japonia cilifera* — Sumatra)

Not seen.

Lagochilus ciliocinctum (MARTENS, 1865)

- 1865 MARTENS, Monatsber. Akad. Wiss. Berlin, 52 (*Cyclophorus ciliocinctus* — Südliches Java, bei Palabuan)
1906 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II: 529, Taf. 66, Fig. 9—10 (*Japonia ciliocincta* — Palabuan auf Java)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Japonia ciliocincta* — Langkapoera)

Localities: Pedada Bay, Lampong Districts, soil fauna, January 1922; Wai Lima, Lampong Districts, 11 December 1921; Mt Tanggamus, Giesting Estate, 600 m alt., 31 December 1939 (all ZMA); Langkapura, Lampong Districts (MBa).

Lagochilus grandipilum BOETTGER, 1891

- 1891 BOETTGER, Ber. Senckenb. p. 249 (*Lagochilus grandipilum* — Gunung Salak)
1906 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II: 513, Taf. 64, Fig. 11—12 (*Japonia grandipila* — Am Berge Gunung Salak auf Java)

Localities: Estate Kaju Aro, Mt Korintji, 1952 (ZMA and Dr). New records for Sumatra.

Lagochilus marangense ALDRICH, 1898

- 1898 ALDRICH, Nautilus, 12: 1 and 3, pl. 1, fig. 5 (*Lagocheilus marangensis* — Marang)
1902 KOBELT, Tierreich, 16: 48 (*Japonia marangensis* — Marang)
1928 DEGNER, Treubia, 10: 364 (*Japonia marangensis* — Sumatra)

Localities: Kampong Karangredjo, near Pematang Siantar, 350—400 m alt., 27 December 1953 (NI).

Lagochilus garreli (EYDOUX & SOULEYET, 1852)

- 1852 EYDOUX & SOULEYET, Voy. Bonite, 2: 538, pl. 30, fig. 33—37 (*Cyclostoma garreli* — Pulo Penang)
1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 118 (*Cyclophorus gaymansii* — Bei Kepahiang)
1867 MARTENS, Ostas. Landschn. p. 140, pl. 2, fig. 19 (*Cyclophorus garreli* — Bei Kepahiang an der Ostseite der centralen Bergkette, und am Berge Serillo)
1902 KOBELT, Tierreich, 16: 43 (*Japonia garreli* — Pulo Pinang bei Malakka; Sumatra)
1906 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II: 528, Taf. 66, Fig. 7—8 (*Japonia garreli* — Insel Pulo Pinang an Malakka und auf Sumatra)
1928 DEGNER, Treubia, 10: 364 (*Japonia garreli* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Japonia garreli* — Pik von Indrapoera)

Localities: Sirung Galing, Karo Highlands, 28 December 1919 (ZMA); Brastagi, 1750 m alt., May 1953, marching on rock (NI); Hanna Estate, near Kampong Gunting Saga, 10 m alt., July 1953, in jungle among dead leaves (NI); Ambalutu Estate near Kisaran, 50 m alt., March 1952 (NI); Pik von Indrapura, 600 m alt. (MBa); Batu Sangkar, near Pajakomboh, on limestone rocks near Bao Cave, in soil debris, 13 December 1955 (Bt).

Lagochilus townsendi CROSSE, 1879

- 1879 CROSSE, Journ. de Conch. 27: 200, pl. 8, fig. 3 (*Lagochilus townsendi* — Perak)
1902 KOBELT, Tierreich, 16: 56 (*Japonia townsendi* — Malakka, Perak)
1906 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II: 511, Taf. 64, Fig. 6—8 (*Japonia townsendi* — Auf der Insel Perak, Hinterindien)

Localities: Lho Tjapa, district Pidie, Atjeh, basin of River Alur (RMNH); Kampong Karangredjo, near Pematang Siantar, 350—400 m

alt., 27 December 1953 (N1); Pagar Alam, near Lahat, Palembang, June 1898 (RMNH). New records for Sumatra.

Lagochilus mundum, n. sp., (figure 1).

Shell small, low-conical. Ground-colour yellowish-white, with radial red-brown streaks and blotches. Thin, somewhat transparent, shining. Ornamented with several spiral ridges which bear short, stiff bristles when the shell is in fresh condition. There are 20 spirals on the last whorl in the holotype. They do not continue in the umbilical opening. The spiral sculpture is crossed by fine, oblique growth lines.

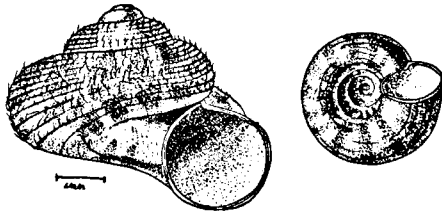


FIGURE 1. *Lagochilus mundum*, n.sp. Shell from front and from base (less enlarged) Holotype. Brastagi. S. van der Spoel del.

Whorls $4\frac{1}{2}$, convex. The two first whorls smooth, subsequent ones spirally ridged as described above. Suture rather deep, periphery rounded. Last whorl slightly descending towards the aperture. Top a little projecting, but not sharp or mamillate. Base rounded. Umbilicus rather wide.

Aperture almost circular, with a little incision in the upper corner near the penultimate whorl. Somewhat oblique. Peristome continuous, thickened and indistinctly double.

Operculum corneous, thin, with 6 whorls and an almost central nucleus.

Dimensions (in mm):

	holotype (no. 799)	paratype (no. 629)
Height	4.0	3.2
Width	5.7	4.75

The second paratype from Hanna Estate is immature and has not been measured. The holotype is figured.

Localities: Brastagi, 1750 m alt., among dead leaves, May 1953 (no. 799) (type locality) holotype; Brastagi, 1750 m alt. (no. 629) 1 paratype; Hanna Estate, near Kampong Gunting Saga, 10 m alt., jungle, August 1953 (no no.) 1 paratype. All collected by Mr J. P. VAN NIEL.

From the other Sumatran species of *Lagochilus* the new *L. mundum* differs in the following points:

L. mundum is smaller and more depressed than *L. garreli*, *L. marangense* or *L. townsendi*, and it has a narrower umbilicus.

The Javanese *L. humile* MOELLENDORFF, the only one which is similar to *L. mundum*, is a little larger, with keeled periphery and a sculpture of spirals of which 4 are stronger than the other ones.

Crossopoma bathyrhaphe (SMITH, 1878)

- 1878 SMITH, Proc. Zool. Soc. London, p. 497, fig. 3 (*Cyclophorus bathyrhaphe* — Borneo)
1898 ALDRICH, Nautilus, 12:1 (*Crossopoma bathyrhaphe* — Marang)
1902 KOBELT, Tierreich, 16:85 (*Crossopoma bathyrhaphe* — Sumatra)
1906 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II:491, Taf. 62, Fig. 4—5 (*Crossopoma bathyrhaphe* — Borneo)
1928 DEGNER, Treubia, 10:365 (*Crossopoma bathyrhaphe* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67:61 (*Crossopoma bathyrhaphe* — Lampong, Langkapura)

Localities: Wood near Sukadana, Lampong Districts (ZMA); Langkapura, Lampong Districts (MBa).

Crossopoma albersi (PFEIFFER, 1847)

- 1847 PFEIFFER, Zeitschr. Malak. 4:151 (*Pterocyclos albersi* — no locality)
1849 PFEIFFER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19:197, Taf. 28, Fig. 1—5 (*Pterocyclos albersi* — no locality)
1900 MARTENS, Nachr. Blatt, 32:6 (*Crossopoma albersi* — Sukaranda am obern Lankat und Sinabung in den Battakerbergen)
1902 KOBELT, Tierreich, 16:161 (*Pterocycclus albersi* — Assam, Khasi Berge?; Birma?)
1928 DEGNER, Treubia, 10:366 (*Pterocycclus albersi* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66:317 (*Crossopoma albersi* — Takengon, Atjeh; Hügelland von Lho Sukon, Atjeh)
1935 PARAVICINI, Arch. Moll. Kunde, 67:62 (*Pterocycclus sumatranus* — Dolok Baros, Karo-Hochebene; Silinda)

Localities: Lho Tjapa, district Pidie, Atjeh, basin of River Alur (RMNH); Gajo Highlands, Laut Tawar (MBa); Kota Tengah, Atjeh, 5 June 1918 (ZMA); Along the Kroeëng Meureubo, district Langsa, Atjeh, May 1925 (ZMA); Sukaranda, Langkat (MBa); Bohorok, Langkat, 14 May and 11 June 1921 (ZMA); Mt Piso Piso, near Lake Toba, 2000 m alt., 26 December 1919 (ZMA); Sibolangit, Deli, 29 April 1919 (ZMA); Mt Sinabung (MBa); Brastagi, 1750 m alt., among dead leaves, May 1952 (NI); Sirung Galing, Karo Highlands, 1450 m alt., 28 December 1919 (ZMA); Dolok Baros, Karo Highlands (MBa); Silinda, Serdang (MBa); Massihi, Assahan (ZMA and MBa); Simpang Toba, Assahan, May 1920 (ZMA); Mandailing, S.E. of Padang Sidempuan, Tapanuli (MBa); Padang, April 1888 (ZMA).

Crossopoma planorbulum (LAMARCK, 1822)

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2:143 (*Cyclostoma planorbula* — Dans le Sénégal?)
1881 BOCK, Proc. Zool. Soc. London, p. 631 (*Cyclophorus planorbulum* — Dense forests at Sidjoendjoeng)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2:211 (*Pterocyclos sumatranus* (erroneous identification) — Padang)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2:214 (*Cyclophorus planorbulum* — Manindjau)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34:18, pl. 1, fig. 5, 5a (*Pterocycclus planorbulum* — Indrapoera)
1902 KOBELT, Tierreich, 16:86 (*Crossopoma planorbulum* — Sumatra)
1906 BULLEN, Proc. Malac. Soc. London, 7:12 (*Cyclophorus planorbulum* — Mt Sago)
1906 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II:490, Taf. 29, Fig. 16—18 (*Crossopoma planorbulum* — no locality)
1908 ROLLE, Nachr. Blatt, 40:68 (*Crossopoma planorbulum* and *Pterocycclus baruensis* — Kotoe (sic!) Baroe, 4000 ft, Singalang)

- 1909 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-III : 736, Taf. 107, Fig. 1—3 (*Pterocyclus baruensis* — Katu (sic!) Baru, bei Padang Singalang in West Sumatra bei 11000' (sic!) Meereshöhe)
- 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschrift Ned. Ind. 82 : 25 (*Cyclophorus planorbulus* — Kampong bij Lampahan, Gajo Landen)
- 1928 DEGNER, Treubia, 10 : 365 (*Crossopoma planorbulus* — Sumatra), p. 366 (*Pterocyclus baruensis* — Sumatra)
- 1934 RENSCH, Trop. Binnengew. 4 : 741 (*Crossopoma planorbulum* — Panjingahan am Singkarah See)
- 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 61 (*Crossopoma bathyraphe* — Assahan, Massihi), (*Crossopoma planorbulus* — Lampong, Langkapoera)
- 1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) 2, Fasc. 19 : 72 (*Pterocyclus barnensis* (sic!) — Panti)
- 1956 ZILCH, Arch. Moll. Kunde, 85 : 171 (*Pterocyclos baruensis* — W. Sumatra, Kota Baru bei Padang Singalang, 4000')

Localities: Environs of Lake Takengon, Atjeh, 11 August 1930 (MBo); Kroeëng Pendawa, near Pleureula, Atjeh, January 1926 (ZMA); Gadjah Meuntah, district of Langsa, Atjeh, 7 October 1920 (ZMA); Dolok Tindjau, near Sibolangit, Deli, 15 February 1931 (MBo); Air Bangis, Padang Lowlands, November 1915 (RMNH); Padang Highlands, 1 June 1915 (RMNH); Manindjau (ZMA); Bukit Marapalam, Padang Highlands, 1100 m alt., February 1937 (ZMA); Batang Palupuh, 1000 m alt., in virgin forest, 1925 (ZMA); Cave near Fort de Kock, July 1919 (ZMA); Pètok, 28 June 1929 (ZMA); Pajakomboh (RMNH); Cave near Pajakomboh, soil debris in secondary forest, December 1955 (Bt); P. Ladang, near Pajakomboh, December 1955 (Bt); Paninggahan, near Singkarah, June 1914 (RMNH); Kota Baru (ZMA and RMNH); Painan, S. of Padang (RMNH); Mt Korintji, 1700 m alt., August 1915 (RMNH); Mt Korintji, 1921 (ZMA); Kaju Aro, Mt Korintji, 1550 m alt., among fallen leaves in tea plantation, August 1953 (ZMA and Dr); Suban Ajam, Benkulen, July 1916 (RMNH); Cave Ulu Tjanko, Djambi (MBa); Lahat, Palembang, 1903 (MBa); Muara Enim, Palembang (MBa); Lampong (MBa).

Crossopoma nieli, n. sp. (figure 2)

Shell nearly flat, with only very little elevated spire. Ground colour yellowish-white with indistinct brown zigzags or flames, especially on the upper side of the whorls. On the lower side these zigzags fade away towards the umbilicus. The two regions are separated by a dark-brown band just at, or just below, the periphery. Behind the peristome the brown markings are lacking. The whole shell is covered by a light-brown perio-

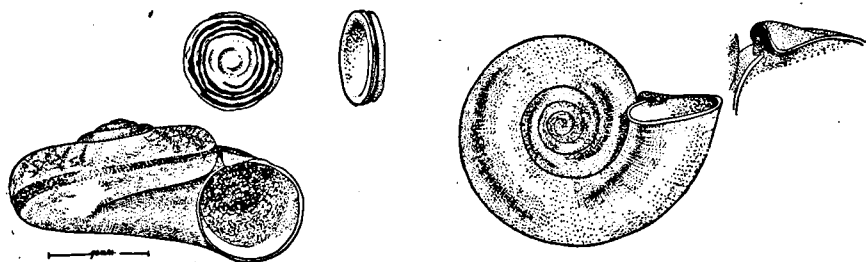


FIGURE 2. *Crossopoma nieli*, n.sp. Operculum, exterior and side view, shell from front and base, detail of top corner of aperture. Holotype. Ambalutu Estate, near Kisaran. S. van der Spoel del.

stracum. Finely striated by the growth lines. Somewhat glossy, not transparent. First two whorls have a fine spiral striation. These spiral striae can continue on the rest of the shell, but are much fainter here than on the nepionic whorls.

Whorls 5—5½, regularly increasing in diameter. Well rounded, suture deep, but not channelled. Periphery rounded. Last whorl a little descending towards the aperture, and free over a distance of about 3 mm. In adult specimens there is a short uplifted fold just behind the peristome, forming an incomplete tube, with open wall at the sutural side. Seen from the aperture it is as if a claw-shaped fold overhangs the parieto-angular corner. Top obtuse, base rounded. Umbilicus very wide, showing all previous whorls.

Aperture round, somewhat oblique. Peristome circular, double, the two margins little developed, hardly thickened and almost not expanded. There is a short incision at the parieto-angular corner, just below the tube-shaped fold described above.

Operculum circular, with 5—6 whorls round a central nucleus. Calcareous, with a cartilagineous rim at the interior side. On the flat exterior surface the whorls have fringed edges. Interior surface concave, but not deep. Diameter of the operculum 9 mm.

Dimensions (in mm)

	holotype		paratypes (from Ambalutu)									
Height	15	15	15	15	14.6	14.6	14.5	14				
Width	28	29.6	28	27.6	29	29	28.7	29				
Height of aperture	9	10	10	9.8	9.8	9.8	9.6	10				
14	14	14	14	13.8	13.7	13.7	13.2	13	13	13	13	13
28.8	28.5	28	26	28	29.6	26	26	27.6	26.7	26.6	26.4	25.5
9.8	9	9	9.6	9	9.5	9.5	10	9.5	9	9.2	9	8.9

paratypes (from Silau Dunia)

16.5	14	14	13	13	12.5	12	12
31	29	28	29	27.7	29	28	26.4
10.5	9.7	9	10	9.2	9.5	9.2	9.2

The holotype has been figured.

The species is named after Mr. J. P. VAN NIEL who made extensive collections in Sumatra.

Localities: Ambalutu Estate, near Kisaran, 50 m alt., among dead leaves in the jungle and in secondary wood (no. 492) (*Locus typicus*) holotype and numerous paratypes. Animal very shy. Body white with small grey spots. Footsole white. Tentacles black. Collected by J. P. VAN NIEL; Silau Dunia Estate, near Tebing Tinggi, 1956 (no. 1343) 10 paratypes (NI); Bandar Siantar, 26 August 1919, 1 paratype (ZMA); Mt Piso Piso, 2000 m alt., 26 December 1919, 3 paratypes (ZMA); Massihi, Assahan, 9 October 1919, 3 paratypes (ZMA).

Although the last whorl is free over a small distance in its terminal part and although the small, incomplete tube suggests affinities to the genus *Rhiostoma*, yet the position of the new species is certainly with *Crossopoma* on account of shape and structure of the operculum.

Compared with the other *Crossopoma* from Sumatra the new species differs from *C. planorbulum* in being smaller and having a somewhat more raised spire, and a peculiar tube at the peristome. From *C. bathyrhaphe* in being smaller and having an unchannelled suture. The incomplete tube at the peristome is less developed (more as a simple fold) in *C. bathyrhaphe*. From *C. albersi* the new species differs in being larger and thicker, with less developed colour pattern. The three species of *Crossopoma* described from satellite islands of Sumatra (Pulu Weh, Nias and Enggano) all lack the tube-shaped structure at the peristome.

Compared with the Malayan species we have only to consider *C. blandi* (BENSON) and *C. subalatum* (SYKES), the third one, *C. regelspergeri* (MORGAN), being a synonym of *C. albersi*.

From *C. blandi* the new Sumatran species differs in having a less developed peristome and a less developed colour pattern. From *C. subalatum* it differs in being much larger and less conical, and having a wider umbilicus.

Theobaldius dautzenbergi (FULTON, 1907)

- 1907 FULTON, Ann. Mag. Nat. Hist. (7) 19 : 55, pl. 10, fig. 8 (*Cyclophorus dautzenbergi* — Nias Island)
1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) 2, Fasc. 19 : 71 (*Theobaldius dautzenbergi* — Blang Pic, Lho Soekon)

Not seen.

Cyclophorus egregius MARTENS, 1900

- 1900 MARTENS, Nachr. Blatt, 32 : 4 (*Cyclophorus egregius* — Am Fusse des Vulkans Sinabung, Battaker Berge)
1902 KOBELT, Tierreich, 16 : 111 (*Cyclophorus egregius* — Battaker Berge)
1928 DEGNER, Treubia, 10 : 365 (*Cyclophorus egregius* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66 : 314 (*Cyclophorus trouiensis egregius* — Lho Sukon, Atjeh)
1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) 2, Fasc. 19 : 71 (*Cyclophorus egregius* — Takengon, Atjeh)

Localities: Takengon, Atjeh (ZMA); Gajo Highlands, April 1927 (ZMA); Mt. Sinabung, Karo Highlands (MBa).

Cyclophorus rafflesi rafflesi (BRODERIP & SOWERBY, 1829)

- 1829 BRODERIP & SOWERBY, Zool. Journ. 5 : 50 (*Cyclotus rafflesi* — Java)
1846 PFEIFFER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19 : 26, Taf. 3, Fig. 5—6 (*Cyclostoma oculus capri* — Java und Sumatra; ? auf der Insel Elephanta bei Bombay)
1867 MARTENS, Ostas. Landschn. p. 132 (*Cyclophorus rafflesii* — ? Sumatra)
1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3 : 1066 (*Cyclophorus oculus capri* — Sumatra)
1902 KOBELT, Tierreich, 16 : 117 (*Cyclophorus rafflesi* — Java; Sumatra ?)
1928 DEGNER, Treubia, 10 : 365 (*Cyclophorus rafflesi* — Sumatra)

Not seen. The large *Cyclophorus* of Java and Sumatra have often been united under the name *C. rafflesi*. Other taxonomists, however, brought the Javanese species to *C. rafflesi* and the Sumatran one to *C. eximius* MOUSSON.

RENSCH (1934) proposed to classify the two forms in one „Rassenkreis“, with a Javanese subspecies *Cyclophorus rafflesi rafflesi* and a Sumatran subspecies *C. rafflesi eximius*, and I follow RENSCH's opinion

in the present report. Whether the true *C. rafflesi rafflesi* does indeed exist in Sumatra seems doubtful.

Cyclophorus rafflesi eximius (MOUSSON, 1848)

- 1848 MOUSSON, Mitth. naturf. Ges. Zürich, 1 : 268 (*Cyclostoma eximium* — Java)
1853 PFEIFFER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19: 246, Taf. 33, Fig. 1—2 (*Cyclostoma eximium* — Khasya-Berge in Ostindien; Java)
1867 MARTENS, Ostas. Landschn. p. 131 (*Cyclophorus eximius* — Nicht selten in der centralen Bergkette von Sumatra; von mir namentlich am Ostabhang bei Kepahiang am oberen Musifluss; Tiku in der Residentschaft Agam, Padangsche Bovenlanden)
1880 SCHEPMAN, Midden Sumatra Exp. p. 10 (*Cyclophorus eximius* — Wood between Silago and Lanki; Wood between Sungei Abu and Muara Labu; Environs of Muara Labu; Mt Korintji; Wood between Lubu gedang and Muara Labu; Wood between Ajer Busuk and Ringkiang Lulus)
1881 BOCK, Proc. Zool. Soc. London, p. 631 (*Cyclophorus eximius* — Mt Sago and Sidjoendjoeng)
1887 SMITH, Ann. Soc. Roy. Malac. Belg. 22 : 215 (*Cyclophorus eximius* — voisinage de Padang)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2 : 215 (*Cyclophorus eximius* — Manindjau)
1898 ALDRICH, Nautilus, 12 : 1 (*Cyclophorus eximius* — Marang)
1902 KOBELT, Tierreich, 16 : 111 (*Cyclophorus eximius* — Sumatra, Java?)
1906 BULLEN, Proc. Malac. Soc. London, 7 : 12 (*Cyclophorus eximius* — Mt Sago)
1928 DEGENER, Treubia, 10 : 365 (*Cyclophorus eximius* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66 : 315 (*Cyclophorus rafflesi eximius* — no locality)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 61 (*Cyclophorus eximus* (sic!) — Solok; Pik von Indrapoera)
1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) 2, Fasc. 19 : 71 (*Cyclophorus eximius* — Kepahiang)

Localities: Sumatra, 1880 (RMNH); Environs of Lake Takengon, Atjeh, 11 August 1930 (MBo); Aek Korsik, Mandailing, SE of Padangsidempuan, Tapanuli (RMNH); Padang Highlands, June 1915 (RMNH); Tanangtalu, Ophir District, June 1915 (RMNH); Tandjunggadang, near Tapanuli frontier, 1200 m alt., April 1913 (RMNH); Padang Pandjang (RMNH); Manindjau (ZMA); Pajakumbuh, 1914 (RMNH); Solok (MBa); Pètok, 28 June 1929 (ZMA); Balun, Muara Labu, Padang Highlands, July 1914 (RMNH); Mt Korintji (ZMA and MBa); Wood between Ajer Busuk and Ringkiang Lulus, May 1877 (ZMA); Wood near Muara Labu, November 1877 (ZMA); Wood between Lubu Gedang and Muara Labu, 29 December 1877 (ZMA); Muara Labu, N slope of Mt Korintji (ZMA); Sungai Kumbang, Korintji, August 1915 (RMNH); Estate of Kaju Aro, Mt Korintji, 1450 m alt., under tea shrubs, 1951 and 1952 (Vm, Dr and Br); Kepahiang, Benkulen (MZh); Suban Ajam, Benkulen, 1200 m alt., July 1916 (RMNH); Saung Tal, Benkulen (MBa); Estate of Kaba Wetan, near Kepahiang, Benkulen, 5 October 1927 (ZMA); Ranau District, Palembang (ZMA); Passemah, Palembang, 1000 m alt., December 1939 (ZMA); Bukit Besar, near Lahat, Palembang (MBa); Muara Enim, Palembang (MBa); Mt Tanggamus, Lampong Districts, July 1934 (ZMA); Mt Tanggamus, Giesting Estate, 31 December 1939 (ZMA); Slope of Mt Tanggamus, 600—700 m alt., above Kota Agung, December 1934 (ZMA).

Cyclophorus rafflesi eximius forma rouyeri BULLEN, 1906

- 1906 BULLEN, Proc. Malac. Soc. London, 7 : 12, pl. 2, fig. 1—2 (*Cyclophorus eximius* var. *rouyeri* — Mount Singalong)

- 1908 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II: 680, Taf. 100, Fig. 1—2 (*Cyclophorus eximius* var. *rouyeri* — Berg Singalong)
 1928 DEGNER, Treubia, 10: 365 (*Cyclophorus eximius* var. *rouyeri* — Sumatra)
 Localities: Sumatra (ZMA); Mt Singgalang (ZMA).

Cyclophorus ouwensianus VAN HEURN & PARAVICINI, 1922

- 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Ind. 82: 25, fig. 2 (*Cyclophorus ouwensianus* — Bij Kampong Lampahan en Takengon, Atjeh)

Localities: Gajo Highlands, Kampong near Lampahan and Takengon (lectotype and paratypoid, MBa); Estate Pajatumpi, N of Takengon, Gajo Highlands, in jungle, 11 October 1928 (ZMA); Deli (ZMA).

According to RENSCH (1934, Arch. Moll. Kunde, 66: 314) *Cyclophorus ouwensianus* is a giant form of *C. egregius*.

Cyclophorus courbeti ANCEY, 1888

- 1888 ANCEY, Naturaliste, 10: 93, fig. 8, (*Cyclophorus courbeti* — Haut-Tonkin, dans la région de Lang Son et de Bac-Ninh)
 1902 KOBELT, Tierreich, 16: 136 (*Cyclophorus courbeti* — Tonkin)
 1908 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-II: 617, Taf. 85, Fig. 1—5 (*Cyclophorus courbeti* — Im oberen Tongking, Langson, Bac-ninh; Ha-Giang)

Localities: Ambalutu Estate, near Kisaran, Asahan District, 50 m alt., in the plantation, in secondary wood and in jungle, among fallen leaves, 1953 and 1954 (NI); Estate Sungei Kopas, near Kisaran, 89 m alt., 1955 (NI).

It is the first record of this species from Sumatra. According to the original description the peristome must be orange. The Sumatran shells, however, are either white or very faint orange along the edge of the aperture.

Cyclophorus taeniatus (PFEIFFER, 1854)

- 1854 PFEIFFER, Proc. Zool. Soc. London, p. 301 (*Cyclostoma taeniatum* — Sumatra)
 1861 REEVE, Conch. Icon. 13, pl. 10, fig. 39 (*Cyclophorus taeniatus* — Sumatra)
 1867 MARTENS, Ostas. Landschn. p. 138 (*Cyclophorus taeniatus* — Sumatra)
 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3: 1067 (*Cyclophorus taeniatus* — Sumatra)
 1902 KOBELT, Tierreich, 16: 134 (*Cyclophorus taeniatus* — Sumatra)
 1928 DEGNER, Treubia, 10: 366 (*Cyclophorus taeniatus* — Sumatra)

Localities: Rajabatak Berge, Purbo Dolok (MBa).

Cyclophorus perdix (BRODERIP & SOWERBY, 1829) subsp.?

- 1829 BRODERIP & SOWERBY, Zool. Journ. 5: 50 (*Cyclostoma perdix* — no locality)
 1846 PFEIFFER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19: 60, Taf. 8, Fig. 7—9 (*Cyclostoma perdix* — Bei Tenasserim in Ostindien)
 1867 MARTENS, Ostas. Landschn. p. 136 (*Cyclophorus perdix* — Bei Palembang; Bei Gunong Megang und Muara Enim)
 1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 216 (*Cyclophorus perdix* — Manindjau)
 1898 ALDRICH, Nautilus, 12: 1 (*Cyclophorus perdix* — Marang)
 1900 MARTENS, Nachr. Blatt, 32: 6 (*Cyclophorus perdix* — Sinabung und Deli)
 1902 KOBELT, Tierreich, 16: 131 (*Cyclophorus perdix* — Java; Sumatra; Tenasserim?)
 1928 DEGNER, Treubia, 10: 365 (*Cyclophorus perdix* — Sumatra)
 1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42: 2 (*Cyclophorus perdix* — Forest near Sampoeran Harimau, Tangga, 350 m alt., N. Habinsaran)

Localities: Sirung Galing, Karo Highlands, 1400 m alt., 20 December 1919 (ZMA); Forest near Sampuran Harimau, Tangga, 350 m alt., N. Habinsaran, 3 August 1928 (ZMA); Sibolangit, Deli, 550 m alt. (ZMA); Brastagi, 1750 m alt., May 1953 (NI); Ambalutu Estate, near Kisaran, 50 m alt., 1952 (NI); Mt Tanggamus, Giesting Estate, Lampong Districts, 600 m alt., 31 December 1939 (ZMA); Muara Enim, Palembang, 1903 (MBa).

The animals collected at the above mentioned localities are all immature. Hence it is not possible to classify them in a subspecies.

The previous records in literature are all uncertain as to the subspecific state of the animals they are dealing with.

Cyclophorus perdix perdix (BRODERIP & SOWERBY, 1829)

1922 VAN HEURN & PARAVICINI, *Natuurk. Tijdschrift Ned. Indië*, 82 : 28, fig. 3 (*Cyclophorus zollingeri* — Lampahan, Atjeh).

Localities: Tapatuan, Atjeh (RMNH); Lho Tjapa, basin of River Alur, District Pidie, Atjeh (RMNH); Pajakombo (RMNH).

Cyclophorus perdix borneensis (METCALFE, 1851)

1851 METCALFE, *Proc. Zool. Soc. London*, p. 71 (*Cyclostoma borneensis* — Borneo)

1853 PFEIFFER, in : MARTINI-CHEMNITZ, *N. Syst. Conch. Cab. Bd. 1, Abt. 19* : 362, Taf. 47, Fig. 1—3 (*Cyclostoma borneense* — Borneo)

1867 MARTENS, *Ostas. Landschn.* p. 136, Taf. 3, Fig. 5—6 (*Cyclophorus borneensis* — ?Sumatra, Padang)

1902 KOBELT, *Tierreich*, 16 : 126 (*Cyclophorus borneensis* — Labuan bei Borneo; Pulo Pinang bei Malakka; Perak; Sumatra)

1928 DEGNER, *Treubia*, 10 : 365 (*Cyclophorus borneensis* — Sumatra)

Not seen. I am afraid that the Sumatran localities for this Bornean subspecies are erroneous.

Cyclophorus perdix tuba (SOWERBY, 1842)

1842 SOWERBY, *Proc. Zool. Soc. London*, p. 83 (*Cyclostoma tuba* — Mt Ophir, Malacca)

1846 PFEIFFER, in : MARTINI-CHEMNITZ, *N. Syst. Conch. Cab. Bd. 1, Abt. 19* : 169, Taf. 23, Fig. 10—11 (*Cyclostoma tuba* — Auf dem Berge Ophir auf der Halbinsel Malacca)

1854 PFEIFFER, *Proc. Zool. Soc. London*, p. 301 (*Cyclostoma sumatrense* — Pedang (sic!) Sumatra)

1867 MARTENS, *Ostas. Landschn.* p. 133, Taf. 3, Fig. 2—4 (*Cyclophorus tuba* — An beiden Seiten der centralen Gebirgskette und deren östlichen Vorbergen, bei Rinduhati und Kepahiang, Talang Pandan und am Serillo bei Lahat)

1880 SCHEPMAN, *Midden Sumatra Exp.* p. 11 (*Cyclophorus tuba* — Bosch tusschen Soengei Aboe en Moeara Laboe)

1881 BOCK, *Proc. Zool. Soc. London*, p. 632 (*Cyclophorus tuba* — Mt Sago; Sijdoendoeng)

1900 MARTENS, *Nachr. Blatt*, 32 : 3 (*Cyclophorus tuba* — Rajahberge; Toba-See)

1902 KOBELT, *Tierreich*, 16 : 134 (*Cyclophorus tuba* — Malakka; Sumatra)

1922 VAN HEURN & PARAVICINI, *Natuurk. Tijdschrift Ned. Indië*, 82 : 28 (*Cyclophorus tuba* — Lampahan, Atjeh)

1928 DEGNER, *Treubia*, 10 : 366 (*Cyclophorus tuba* — Sumatra)

1934a RENSCH, *Arch. Moll. Kunde*, 66 : 316 (*Cyclophorus perdix tuba* — Lho Sukon, Atjeh)

1934b RENSCH, *Trop. Binnengew.* 4 : 741 (*Cyclophorus perdix tuba* — Sumatra, ohne genauen Fundort, wahrscheinlich Ranau See oder Singkarah See)

1935 PARAVICINI, *Arch. Moll. Kunde*, 67 : 62 (*Cyclophorus tuba* — Serdang; Lang-

- kapoera; Bandar; Medan; Kupras, Nordrand der Wampoekloof; Solok), p. 61 (*Cyclophorus borneensis* — Kaban Djahe)
1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) 2, Fasc. 19 : 71 (*Cyclophorus tuba* — Blang Pic, Lho Soekon; Panti)

Localities: Bulu Blang Ara, near Lho Seumaweh, Atjeh, 5 October 1920 (ZMA); Kroeëng Meureubo, Langsa District, Atjeh, May 1925 (ZMA); Kroeëng Pendawa, Pleureula District, Atjeh, January 1926 (ZMA); Environs of Lake Takengon, Atjeh, 11 August 1930 (MBo); Laut Tawar, Gajo Highlands (MBa); Sirung Galing, Karo Highlands, 28 December 1919 (ZMA); Kaban Djahe, Karo Highlands (MBa); Rajabatakberge, Purbo Dolok (MBa); Bohorok, Langkat, 11 June 1921 (ZMA); Serdang near Lau Rakit, 300 m alt. (MBa); Deli, 1918 (ZMA); Medan, Deli (MBa); Kupras, northern wall of Wampu gorge, in limestone mountains (MBa); Bedagei, Deli (ZMA); Sibolangit, Deli, 1 June 1919 (ZMA); Forest Reserve Bandar, 26 August 1919 (ZMA); Bandar Maria, Siantar, 4 May 1919 (ZMA); Bandar, Siantar (ZMA and MBa); Tandjong Merah, Tebing Tinggi, 1917 (ZMA); Kampong Karangajar, near Pematang Siantar, 300—350 m alt., among fallen leaves and decaying wood, 27 November 1955 (NI); Asahan, May 1920 (ZMA); Ambalutu Estate, near Kisaran, 50 m alt., among fallen leaves, January 1953 (NI); Aek Korsik, Mandailing, SE of Padang Sidempuan, Tapanuli (RMNH); Ajerbangis, Padang Lowlands, November 1913 (RMNH); Along footpath near Kampong Koto Tuo, slope of Mt Singgalang, 24 June 1929 (ZMA); Pajakombo (RMNH and Bt); Pètok, 28 June 1929 (ZMA); Solok (MBa); Surian, near Solok, Padang Highlands, 18 November 1911 (RMNH); Kaju Aro Estate, Mt Korintji, under tea shrubs, 1952 (Dr); Sungai Kumbang, Korintji, August 1916 (RMNH); Balun, near Muara Labu, Padang Highlands, July 1914 (RMNH); Indrapura, 1899 (RMNH); Suban Ajam, Benkulen, July 1916 (RMNH); Kepahiang, Benkulen (MZh); Air Njuruk, Mt Dempo, 1400 m alt., Palembang, August 1916 (RMNH); Pager Alam, Lahat (ZMA and RMNH); Muara Enim and Kebon near Lahat, Palembang, 1902 and 1903 (MBa); Langkapura, Lampong Districts (MBa); Sukadana, Lampong Districts (ZMA).

***Cyclophorus perdix tuba* (SOWERBY, 1842) forma minor DAUTZENBERG, 1899**

- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 17, pl. 1, fig. 4 (*Cyclophorus tuba* var. *minor* — Indrapoera)
1928 DEGNER, Treubia, 10 : 366 (*Cyclophorus tuba* var. *minor* — Sumatra)

Not seen.

***Cyclophorus perdix tuba* (SOWERBY, 1842) forma plicifera MARTENS, 1900**

- 1900 MARTENS, Nachr. Blatt, 32 : 5 (*Cyclophorus pliciferus* — Am Fusse des Vulkans Sinabung, Battaker Berge; bei Sukaranda und in den Rajahbergen)
1902 KOBELT, Tierreich, 16 : 132 (*Cyclophorus pliciferus* — Battaker Berge; Rajahberge; Sukaranda)
1905 BULLEN, Proc. Malac. Soc. London, 7 : 13 (*Cyclophorus pliciferus* — Mount Singalong)
1908 ROLLE, Nachr. Blatt, 40 : 69 (*Cyclophorus pliciferus* — G. Singalang, 4000 feet)
1928 DEGNER, Treubia, 10 : 366 (*Cyclophorus pliciferus* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Cyclophorus perdix* — Egarahap, Lampong)

Localities: Sumatra (ZMA and RMNH); Gadjah Meuntah, Langsa District, Atjeh, 7 October 1920 (ZMA); Mt Piso Piso, Karo Highlands, 2000 m alt., 26 December 1919 (ZMA); Pantjur Batu, Karo Highlands, 7 June 1919 (ZMA); Serang Djaja, Langkat, near Atjeh frontier, 4 February 1919 (ZMA); Dolok Tindjau, near Sibolangit, Deli, 700 m alt., 15 February 1931 (MBo); Karo Batak Highlands, slope of Mt Sinabung, (MBa); Deli (MBa); Brastagi, 1750 m alt., among dead leaves, May 1952 (NI); Kampong Karangredjo, near Pematang Siantar, 1953 (NI); Aek Korsik, Mandailing, SE of Padang Sidempuan, Tapanuli (RMNH); West Sumatra (MBa); Pajakombo (RMNH); Tamiai, Mt Korintji, July 1915 (RMNH); Balun, Muara Labu, Padang Highlands, July 1914 (RMNH); Muara Labu, N slope of Mt Korintji (ZMA); Kaba Wetan Estate, near Kepahiang, Benkulu, 5 October 1927 (ZMA); Pagar Alam, Lahat, Palembang (RMNH); Ranau District, Palembang (ZMA); Mt Tanggamus, Lampong Districts, near Wailalaän, 400 m alt., December 1934 (ZMA); Mt Tanggamus, between Kota Agung and 600 m alt., December 1934 (ZMA); Wai Lima, Lampong Districts, November-December 1921 (ZMA and MBo); Egaharap, Lampong Districts (MBa).

Cyclohelix turbo (SOWERBY, 1843)

1843 SOWERBY, Thes. Conch. 1: 116, pl. 25, fig. 102—103 (*Cyclostoma turbo* — Sumatra)

Not seen.

Cyclotus sumatranus (MARTENS, 1864)

1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 116 (*Pterocyclos sumatranus* — Ostabhang der centralen Bergkette bei Kepahiang)

1867 MARTENS, Ostas. Landschn. p. 115, pl. 1, fig. 5 (*Pterocyclos sumatranus* — Bei Kepahiang)

1880 SCHEPMAN, Midden Sumatra Exp. p. 10 (*Pterocyclos sumatranus* — Bosch tuschen Soengei Aboe en Moeara Laboe)

1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3: 1063 (*Pterocyclos sumatranus* — Sumatra)

1902 KOBELT, Tierreich, 16: 170 (*Pterocyclos sumatranus* — Sumatra, Borneo)

1906 BULLEN, Proc. Malac. Soc. London, 7: 129 and fig. (*Pterocyclus aspersus* — Loeboek Bangko)

1909 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-III: 733, Taf. 106, Fig. 5—7 (*Pterocyclos sumatranus* — Sumatra und Borneo).

1928 DEGNER, Treubia, 10: 366 (*Pterocyclos sumatranus* and *P. aspersus* — Sumatra)

Localities: Indragiri (RMNH); Balun, near Muara Labu, Padang Highlands, July 1914 (RMNH); Wood near Muara Labu, November 1879 (ZMA); Muara Labu, N slope of Mt Korintji (ZMA); Kaba Wetan Estate, near Kepahiang, Benkulu, 5 October 1927 (ZMA); Mt Tanggamus, Lampong Districts, near Wailalaän and Kota Agung, 600—700 m alt., December 1934 (ZMA).

Cyclotus discoideus (SOWERBY, 1842)

1842 SOWERBY, Thes. Conch. 1: 111, pl. 25, fig. 87—88 (*Cyclostoma discoideum* — Demerara)

1846 PFEIFFER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19: 144, Taf. 20, Fig. 1—3 (*Cyclostoma discoideum* — Demerara)

1867 MARTENS, Ostas. Landschn. p. 124 (*Cyclotus discoideus* — ?Westküste von Sumatra)

1902 KOBELT, Tierreich, 16: 190 (*Cyclotus discoideus* — Java; Sumatra?)

1928 DEGNER, Treubia, 10: 366 (*Cyclotus discoideus* — Sumatra?)

- 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Cyclotus discoideus* — Langkapoera; Kaban Djahé)

Localities: Mt Tanggamus, Lampong Districts, near Wailalään and Kota Agung, 600—700 m alt., December 1934 (ZMA); Redjosari, Lampong Districts (ZMA); Langkapura, Lampong Districts (MBa); Sukadana, Lampong Districts (ZMA).

Cyclotus discriminendus RENSCH, 1934

- 1934 RENSCH, Arch. Moll. Kunde, 66 : 319 (*Cyclotus discriminendus* — Kota Baroe bei Padang Siketi, West Sumatra)

Locality: Mount Korintji, 1921 (ZMA).

Opisthoporus bialatus (MOELLENDORFF, 1902)

- 1902 MOELLENDORFF, Nachr. Blatt, 34 : 142 (*Cyclotus bialatus* — Kelantan)
1912 KOBELT, Nachr. Blatt, 44 : 8 (*Cyclotus bialatus* — Hab ?)
1912 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-III : 845, non Taf. 128, Fig. 28—30 (*Cyclotus bialatus* — Aufenthalt unbekannt).
1956 ZILCH, Arch. Moll. Kunde, 85 : 190 (*Cyclotus bialatus* — Kelantan)

Localities: Silau Dunia Estate, near Tebing Tinggi, 1956 (N1); Brastagi, 1750 m alt., May 1953, among fallen leaves (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., in jungle, August 1953 (N1); Ambalutu Estate, near Kisaran, 50 m alt., November 1951, among fallen leaves in the wood (N1); Sungei Kopas Estate, near Kisaran, 100 m alt., under decaying wood, 15 September 1955 (N1).

Opisthoporus bialatus is a new record for Sumatra.

Opisthoporus rostellatus (PFEIFFER, 1851)

- 1851 PFEIFFER, Zeitschr. Malak. 8 : 8 (*Cyclostoma rostellatum* — Singapore)
1853 PFEIFFER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19 : 289, Taf. 38, Fig. 30—34 (*Cyclostoma rostellatum* — Singapore)
1867 MARTENS, Ostas. Landschn. p. 113 (*Opisthoporus rostellatus* — Im Flachland der Ostküste bei Mura dua am Musifluss)
1900 MARTENS, Nachr. Blatt, 32 : 6 (*Opisthoporus rostellatus* — Unter-Lankat)
1902 KOBELT, Tierreich, 16 : 217 (*Cyclotus rostellatus* — Singapur; Sumatra; Borneo)
1928 DEGNER, Treubia, 10 : 366 (*Cyclotus rostellatus* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Cyclotus rostellatus* — Langkapoera)

Localities: Lower Langkat (MBa); Silau Dunia Estate, near Tebing Tinggi, 1956 (N1); Hanna Estate, July 1953, near Kampong Gunting Saga, 10 m alt., among fallen leaves in the jungle (N1); West Sumatra (ZMA); Cave of Ulu Tjangko, Djambi (MBa); Langkapura, Lampong Districts (MBa).

Opisthoporus sumatranus MARTENS, 1864

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 116 (*Opisthoporus sumatranus* — Ostabhang der centralen Bergkette bei Kepahiang)
1867 MARTENS, Ostas. Landschn. p. 112, Taf. 1, Fig. 4 (*Opisthoporus sumatranus* — Bei Kepahiang, am östlichen Abhange der centralen Bergkette, im Gebiet des Musistroms)
1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3 : 1061 (*Opisthoporus sumatranus* — Sumatra)
1902 KOBELT, Tierreich, 16 : 217 (*Cyclotus sumatranus* — Kepahiang)
1912 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19-III : 849, Taf. 128, Fig. 4—6 and 27 (*Cyclotus sumatranus* — Bei Kepahiang, am östlichen Abhang der zentralen Bergkette im Gebiet des Musistroms)
1928 DEGNER, Treubia, 10 : 366 (*Cyclotus sumatranus* — Sumatra).

- 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Cyclotus sumatensis* sic! — Serdang bei Lau Rakit)
1956 ZILCH, Arch. Moll. Kunde, 85 : 192 (*Cyclotus sumatranus* — Sumatra, O-Küste)

Localities: Serdang near Lau Rakit, 300 m alt. (MBA); Pager Alam, near Lahat, Palembang, June 1898 (ZMA and RMNH); Mt Tanggamus, Lampong Districts, near Giesting Estate, 600 m alt., 31 December 1939 (ZMA); Pedada Bay, Lampong Districts, soil fauna, January 1922 (ZMA).

According to RENSCH (1934, Trop. Binnengew. 4 : 742) *Opisthoporus sumatranus* is identical with the Javanese species *O. corniculum* (MOUSSON). In spite of this it is my opinion that the two species are distinct.

Schistoloma sectilabrum (GOULD, 1844)

- 1844 GOULD, Journ. Nat. Hist. Boston, 4 : 459, pl. 24, fig. 10 (*Cyclostoma sectilabrum* — Tavoy, British Burmah)
1853 PFEIFFER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 1, Abt. 19 : 377, Taf. 47, Fig. 11—12 (*Cyclostoma sectilabrum* — no locality)
1872 STOLICZKA, Journ. As. Soc. Bengal, 41, Part II : 268, pl. 10, fig. 13 (*Megalomastoma sectilabrum* — Elevations from 400 to about 2400 feet on the Penang Hill)
1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Megalomastoma sectilabrum* — Paio)
1902 KOBELT, Tierreich, 16 : 280 (*Schistoloma sectilabrum* — Birma; Pulo Pinang; Perak)
1928 DEGNER, Treubia, 10 : 367 (*Schistoloma sectilabrum* — Sumatra)

Not seen. I am afraid that the record for Sumatra is an error for *Schistoloma sumatranum* (DOHRN).

Schistoloma sumatranum (DOHRN, 1881)

- 1881 DOHRN, Nachr. Blatt, 13 : 65 (*Coptocheilus sumatranus* — Sumatra)
1902 KOBELT, Tierreich, 16 : 281 (*Schistoloma sumatranum* — Sumatra)
1906 BULLEN, Proc. Malac. Soc. London, 7 : 13 (*Megalostoma sumatranum* — Mount Bongson)
1908 ROLLE, Nachr. Blatt, 40 : 69 (*Coptocheilus sumatranus* — Padang Pandjang)
1928 DEGNER, Treubia, 10 : 367 (*Schistoloma sumatranum* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Schistoloma sumatrana* — Mt Bongson; Boekit Maradja, S.O.K., 200 m ü.M.)

Localities: Sumatra (ZMA); Bukit Maradja, 200 m alt., August 1922 (MBA); Forest Reserve Bandar, near Kerassaän, 1919 (ZMA); Forest Reserve Bandar, near Siantar (ZMA); Kampong Karangredjo, near Pematang Siantar, 400 m alt., December 1954, in jungle (NI); Kampong Karanganjär, near Pematang Siantar, 300 m alt., under bark of a tree, 27 November 1955, the living animal is beautifully coloured red (NI); Kampong Karangredjo, near Pematang Siantar, 350 m alt., 27 November 1955, in grove in Estate of Laras (NI); Ophir District, 1917 (RMNH); Padang, 1955 (Bt); Batang Palupuh, 1200 m alt., November 1925, the living animal is very dark red-brown (ZMA); Mt Bongson (RMNH); Mt Korintji (RMNH).

Pupina artata BENSON, 1856

- 1856 BENSON, Ann. Mag. Nat. Hist. (2) 17 : 230 (*Pupina artata* — Ad Moulmein)
1860 PFEIFFER, Nov. Conch. 2 : 142, pl. 37, fig. 10—12 (*Pupina artata* — Moulmein Birmanorum)
1902 KOBELT, Tierreich, 16 : 306 (*Pupina artata* — Moulmein, Ava, Buket Pondong)

Localities: P. Ladang, near Pajakombo, December 1955 (Bt); Batu Sangkar, near Pajakombo, 13 December 1955 (Bt).

The first named specimen is high 6.9 and broad 4.5 mm, the second 7.0 and 4.5 mm. *Pupina artata* is a new record for Sumatra.

Pupina bilobata MARTENS, 1900

- 1900 MARTENS, Nachr. Blatt, 32 : 7 (*Pupina bilobata* — Sukaranda, Ober-Lankat)
 1902 KOBELT, Tierreich, 16 : 309 (*Pupina bilobata* — Sukaranda in Ober-Lankat)
 1928 DEGNER, Treubia, 10 : 367 (*Pupina bilobata* — Sumatra)

Localities: Sukaranda, Ober Langkat (MBa).

The Basle Museum of Natural History possesses two paratypes which I was allowed to study. According to RENSCH (1934, Arch. Moll. Kunde, 66 : 321) *Pupina bilobata* is identical with *P. superba* PFEIFFER. After the examination of the above mentioned paratypes I am afraid that this view involves a fallacy.

Pupina lobifera MARTENS, 1892

- 1892 MARTENS, Erg. Reise Nied. Ost Indien, 2 : 218, pl. 12, fig. 14—15 (*Pupina lobifera* — Manindjau, Paninggahan)
 1902 KOBELT, Tierreich, 16 : 325 (*Pupina lobifera* — Manindjau, Paninggahan)
 1880 SCHEPMAN, Midden Sumatra Exp. p. 11, pl. 1, fig. 2, pl. 2, fig. 6 (*Pupina superba*, non *P. superba* PFEIFFER, 1855 — Soepajang)
 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Pupina superba* — Mt Bongson)

Localities: Brastagi, 1750 m alt., in decaying wood, May 1953 (N1); Ambalutu Estate, near Kisaran, 50 m alt., in jungle (N1); Mt Bongson (MBa); Supajang, under a tree, 22 April 1877 (ZMA); P. Ladang, near Pajakombo, December 1955 (Bt); Manindjau (ZMA) (holotype); Mura Labu, slope of Mt Korintji (ZMA).

Pupina rookmaakeri RENSCH, 1934

- 1934 RENSCH, Arch. Moll. Kunde, 66 : 320, pl. 14, fig. 4 (*Pupina rookmaakeri* — Lho Sukon, Atjeh)

Localities: Brastagi, 1750 m alt., among fallen leaves, May 1952 (N1).

Pupina rufilabris DOHRN, 1881

- 1881 DOHRN, Nachr. Blatt, 13 : 66 (*Pupina rufilabris* — Singalang)
 1902 KOBELT, Tierreich, 16 : 321 (*Pupina rufilabris* — Singalang)
 1928 DEGNER, Treubia, 10 : 367 (*Pupina rufilabris* — Sumatra)

Localities: Among moss near Petani Waterfall, near Bandar Baru, Mt Sibajak, 2 September 1928 (ZMA); Brastagi, 1750 m alt., in decaying wood, May 1953 (N1).

Among the lot from the Petani Waterfall there are some specimens which present a rufous peristome, but others are white. The shell from Brastagi has a beautiful white peristome. This latter shell is high 11.3 and broad 6.4 mm.

Pupina superba PFEIFFER, 1855

- 1855 PFEIFFER, Proc. Zool. Soc. London, p. 118 (*Pupina superba* — Sumatra)
 1867 MARTENS, Ostas. Landschn. p. 156 (*Pupina superba* — Sumatra)
 1881 BOCK, Proc. Zool. Soc. London, p. 631 (*Pupina superba* — Paio)
 1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3 : 1072 (*Pupina superba* — Sumatra)
 1902 KOBELT, Tierreich, 16 : 322 (*Pupina superba* — Sumatra)
 1906 BULLEN, Proc. Malac. Soc. London, 7 : 13 (*Pupina superba* — Mount Bongson)
 1908 ROLLE, Nachr. Blatt, 40 : 69 (*Pupina superba* — Padang Pandjang)

- 1928 DEGNER, *Treubia*, 10: 367 (*Pupina superba* — Sumatra)
 1938 ADAM & LELOUP, *Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série)* 2, fasc. 19: 72
 (*Pupina superba* — Pantí)

Localities: Sumatra (ZMA, RMNH, and MBa); Mt Bongson (RMNH).

***Pupina turgidula* DOHRN, 1881**

- 1881 DOHRN, *Nachr. Blatt*, 13: 66 (*Pupina turgidula* — Singalang)
 1902 KOBELT, *Tierreich*, 16: 324 (*Pupina turgidula* — Singalang)
 1928 DEGNER, *Treubia*, 10: 367 (*Pupina turgidula* — Sumatra)

Localities: Kaju Aro, in tea gardens, 1450 m alt., among fallen leaves, on slope of Mount Korintji (ZMA, Dr., Vm.).

***Pupina sangkarensis*, n. sp. (figure 3)**

Shell obliquely cylindrical, glassy-white, hyaline, very shining, with fine growth striae.

Whorls 6, those of the spire normally increasing in size, the two last whorls, especially the penultimate, much higher, but not inflated. These two give the shell its cylindrical shape. Whorls little convex. Suture shallow, margined. Top blunt, base rounded, without umbilical opening.

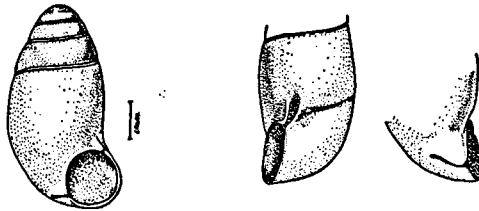


FIGURE 3. *Pupina sangkarensis*, n.sp. Shell from front and from both sides. Holotype. Batu Sangkar, Padang Highlands. S. van der Spoel del.

Aperture almost vertical, placed sideways of the axis of the shell, circular. Peristome thickened, but not expanded. Continuous except for two incisions, one at the parieto-angular corner, and one at the columellar side. The upper incision continues vertically upward as a short narrow canal, bordered by a thickened loop. The columellar incision continues exteriorly as a first horizontal, then slightly upturned, narrow canal, of which the edges are not much thickened. Both at the angular corner and at the columellar side the incision is more or less obscured by a plate or toothlike process, overhanging the canal. Backwards of the columellar incision the base of the shell has a small concave area.

Operculum unknown.

Dimensions (in mm):

	holotype		paratypes	
Height	5.4	5.5	5.4	5.1
Width (aperture included)	3.1	3.3	3.2	3.3
Width (aperture excluded)	2.7	2.8	2.7	2.7
Height of aperture	1.7	1.7	1.7	1.7

Locality: Batu Sangkar, near Pajakombo, Padang Highlands, 13 December 1955 (*Locus typicus*) holotype and 3 paratypes, collected by Dr. W. MEYER (ZMA and Bt).

Compared with the other species of *Pupina* from Sumatra *P. sangkarensis* is smaller and more cylindrical than any of these. The curious oblique shape gives it an unusual appearance, distinguishing it at the same time from the *Pupina*'s of Java and Malaya.

The new species is somewhat similar to *Pupina degneri* LAIDLAW from the island of Simalur, but it differs from this species in the more slender shape, the higher spire and the aperture being placed more sideways of the shell instead of under the spire. Besides the incision in the columellar wall is simple in *P. degneri*, but overhung by a thickened callus in *P. sangkarensis*. This feature is especially evident in a side view of the shell.

Chamalycaeus longituba (MARTENS, 1864)

1864 MARTENS, Mon. Ber. Akad. Berlin, p. 120 (*Alycaeus longituba* — Bei Kepahiang)

1867 MARTENS, Ostas. Landschn. p. 151, pl. 4, fig. 8 (*Alycaeus longituba* — Am Ost-
abhang der mittleren Bergkette bei Kepahiang)

1902 KOBELT, Tierreich, 16: 373 (*Alycaeus longituba* — Kepahiang)

1928 DEGNER, Treubia, 10: 367 (*Alycaeus longituba* — Sumatra)

Localities: Mt Singgalang, 1800 m alt., July 1925 (ZMA)

Chamalycaeus troglodytes (RENSCH, 1934)

1934 RENSCH, Trop. Binnengew. 4: 743, fig. 3 (*Alycaeus troglodytes* — Höhle von
Pauh bei Fort de Kock)

Not seen.

Chamalycaeus crassicollis, n. sp. (figure 4)

Shell low-conical, glassy-white to straw-yellow or very light-brown, the first three whorls smooth and a little transparent. Sculptured with numerous fine axial ribs on the fourth whorl. On the first part of this whorl the ribs are rather distantly placed, on the last part, however, they stand very close together. After this closely ribbed area there is an abrupt transverse

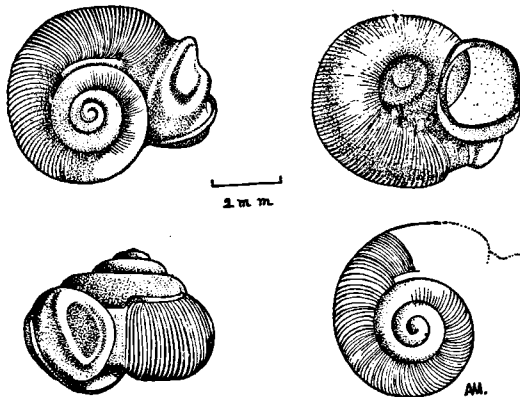


FIGURE 4. *Chamalycaeus crassicollis*, n.sp. Shell from top, base and back; detail of top whorls, more enlarged. Holotype. Sirung Galing, Karo Highlands. A. Middelhoeck del.

constriction in the shell, followed by an inflation. Both the constriction and the inflation are devoid of ribs, but in the inflated part there are two oblique folds or undulations, surrounding an oval or irregularly squarish field which stretches from the base of the whorl to the suture of the preceding whorl behind the peristome. From the end of the ribbed region a narrow sutural tube of about 2 mm length bends backwards.

Whorls 4—4½, well rounded. Suture rather deep. Periphery rounded. Last whorl only slightly descending towards the aperture. Top pointed, but not sharp. Base rounded. Umbilicus open and moderately wide.

Aperture very oblique, almost circular. Peristome double, the interior edge continuous, projecting forward, the exterior interrupted along the penultimate whorl and expanded laterally somewhat wing-like at upper and lower margins.

Operculum thin, horny, circular, with central nucleus and 5 whorls. Outer surface concave, inner convex, with a small central button.

Dimensions (in mm):

	holotype	paratypes (Sirung Galing)			paratype (Brastagi)
Height	4.5	5.0	5.0	4.5	4.4
Width	6.0	6.7	6.7	5.9	5.8

Localities: Sirung Galing, Karo Highlands, 28 December 1919 (type locality) holotype and 3 paratypes, collected by Jonkheer Dr. F. C. VAN HEURN (ZMA); Brastagi, 1750 m alt., May 1953, in decaying wood (no. 793) 1 paratype, collected by J. P. VAN NIEL (NI).

This new *Chamalycaeus* has some relationship to *Ch. longituba* (MARTENS), a species inhabiting Java and Sumatra. *Ch. crassicollis* is, however, larger and higher, and has a differently shaped terminal part of the last whorl. The other species of *Chamalycaeus* from Sumatra, *Ch. troglodytes* (RENSCH), is much smaller and so differently shaped and sculptured that it cannot be confused with *Ch. crassicollis*.

Alycaeus liratus (PRESTON, 1907)

1907 PRESTON, Proc. Malac. Soc. London, 7: 206, 1 fig. (*Pincerna liratus* — Kelantan)

Localities: Kampong Karangredjo, near Pematang Siantar, 400 m alt., in jungle, 27 December 1953 (NI).

It is the first record of this species from Sumatra.

Alycaeus sumatranus MARTENS, 1900 (figure 5)

1900 MARTENS, Nachr. Blatt, 32: 6 (*Alycaeus sumatranus* — Unter-Lankat)

1902 KOBELT, Tierreich, 16: 351 (*Alycaeus sumatranus* — Unter-Langkat)

1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82: 29 (*Alycaeus longituba* — Takengon)

1928 DEGNER, Treubia, 10: 367 (*Alycaeus sumatranus* — Sumatra)

1935 PARAVICINI, Arch. Moll. Kunde, 67: 62 (*Alycaeus longituba* — Serdang bei Lau Rakit)

Localities: Lho Tjapa, River Alur, District Pidie, Atjeh (RMNH); Serdang near Lau Rakit (MBa); Hanna Estate, near Membang Muda, 10 m alt., in jungle, 1953—1955 (NI); Silau Dunia Estate, near Tebing Tinggi, 1956 (NI); Kampong Karangredjo, near Pematang Siantar, 400 m alt., 27 December 1953 (NI); Ambalutu Estate, near Kisaran, 50 m alt., in decaying wood, January 1952 (NI); Sungei Kopas Estate, near Kisaran, 89 m alt., in decaying wood (NI).

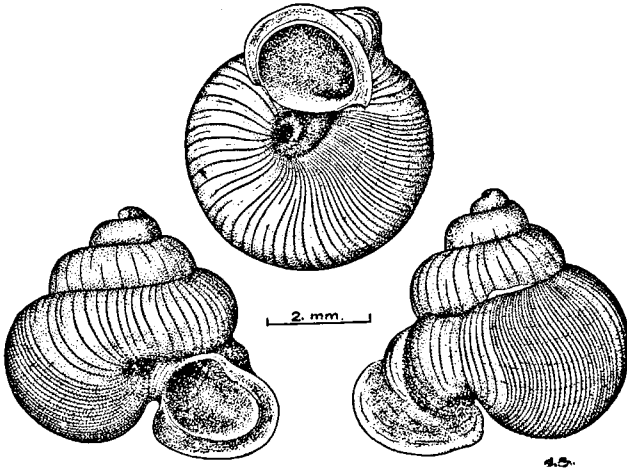


FIGURE 5. *Alycaeus sumatranus* Martens. Shell from base, front and back. Serdang near Lau Rakit. H. G. de Smit del.

Alycaeus praetextus, n. sp. (Pl. I, fig. 1)

Shell with conical spire and large, somewhat inflated, basal whorl. In this last whorl, at about 2—3 mm from the aperture, there is a transverse constriction in the shell. After the constriction the shell widens again towards the aperture. From the constriction backwards a small respiration tube of about $\frac{1}{3}$ mm length lies along the suture. Fresh shells are light citron-yellow, the spire darker than the last whorl; older shells dirty straw-yellow. First $1\frac{1}{2}$ whorls smooth, the following ones striated by numerous fine ribs. This sculpture is crossed by very delicate spiral striae. Fresh shells a little transparent and with dull lustre.

Whorls $5\frac{3}{4}$ — $6\frac{1}{4}$, convex, regularly increasing in diameter. Only the last whorl is somewhat more inflated and bulging out in the shell profile. Suture deep. Periphery rounded. Top mamillar, base rounded. Umbilicus open, but not wide, partly hidden by the reflected peristome. Aperture almost circular, oblique. Peristome continuous, double. The interior edge narrow, cord-like, little projecting, the exterior edge flat, thin and expanded. At the parietal side the exterior edge is interrupted.

Operculum: circular, corneous, exterior concave, interior convex.

Dimensions (in mm):

	holotype					paratypes						
Height	6.0	6.6	6.2	6.0	6.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Width	5.0	4.8	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.6	4.6
Diam. of aperture (peristome included)	2.6	2.5	2.8	2.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	5.8	5.8	5.7	5.7	5.7	5.6	5.6	5.6	5.6	5.5	5.5	5.5
	4.4	4.3	4.7	4.7	4.5	5.0	5.0	4.8	4.5	4.8	4.8	4.6
	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.8	2.5	2.2

Locality: Batu Sangkar, near Pajakombo, Padang Highlands, 13 December 1955 (type locality) holotype and numerous paratypes, collected by Dr. W. MEYER (ZMA and Bt).

This new *Alycaeus* is very similar to some Borneo representatives of the genus, viz. *A. rimatus* BOETTGER, *A. fultoni* MOELLENDORFF, *A. hosei* GODWIN AUSTEN, *A. congener* SMITH and to the Javanese *A. jagori* MARTENS.

Alycaeus praetextus differs from *A. rimatus* in being a little larger and in having a rounded periphery and a less developed exterior edge of the peristome.

From *A. fultoni* the new species differs in being considerably smaller, and in having a less inflated last whorl and a wider umbilicus.

From *A. hosei* it differs in being a little smaller, and in having a wider umbilicus and much more developed peristome, the outer edge forming a broad, expanded fringe. Besides, the terminal part of the last whorl, distally from the constriction, is almost smooth in *A. hosei*, but distinctly ribbed in *A. praetextus*. Finally *A. hosei* has a vertically placed aperture, *A. praetextus* an oblique aperture.

The greatest affinities are with *A. congener*, but this species has a less inflated last whorl and (in the few shells which I could examine) more distantly placed riblets. Moreover the exterior margin of the peristome is much more expanded in *A. praetextus*.

From *A. jagori* the new Sumatran species differs in having a higher spire with a less inflated last whorl. In *A. jagori* height and width of the shell are almost the same, in *A. praetextus* the height exceeds the width. In addition the umbilical opening of *A. jagori* is wider than in *A. praetextus*.

Alycaeus crenilabris (MOELLENDORFF, 1897) subsp. *laevis*, n. subsp.

The four shells of *Alycaeus crenilabris* collected by Mr. J. P. VAN NIEL in Sumatra, differ from the Javanese main form in lacking the crenulations along the interior edge of the peristome. Besides, the terminal part of the last whorl, between the constriction and the aperture, which is distantly ribbed in *A. crenilabris crenilabris* from Java, is almost smooth in the Sumatran form.

Dimensions (in mm):

	holotype		paratypes	
Height	2.9	3.0	2.8	2.5
Width	3.0	3.4	3.0	2.8
Height of aperture	1.4	1.5	1.3	1.5

Localities: Brastagi, 1750 m alt., among dead leaves, May 1953 (locus typicus) holotype (no. 794); Brastagi, 1750 m alt., 1954 (paratype) (no. 1090); Kampong Karangredjo, near Pematang Siantar, 400 m alt., December 1954, in jungle (2 paratypes) (no. 995), all collected by J. P. VAN NIEL.

Alycaeus crenilabris (MOELLENDORFF, 1897) subsp. *latecostatus*, n. subsp.

The two shells of *Alycaeus crenilabris* collected by Mr. F. J. J. LOEFF in Sumatra differ from the Javanese *Alycaeus crenilabris* s. str. in being on the whole more distantly ribbed. Only at about 1 mm from the constriction in the last whorl the ribs are suddenly placed very closely together over a short distance. The result is that on the last whorl previous to the constriction there are 23 widely placed; and 18 narrowly placed ribs. In the Javanese main form there is very little difference in distance of ribs, the last whorl before the constriction bearing a total of 44 ribs.

For the rest the two subspecies are very similar. The umbilical opening is a trifle wider in *A. crenilabris latecostatus* and the inner rim of its peristome is distinctly crenulated.

Dimensions (in mm):

	holotype	paratype
Height	3.1	3.0
Width	3.4	3.3
Height of aperture	1.6	1.5

Localities: Kaju Aro Estate, Mt Korintji, among fallen leaves, 1450 m alt., (type locality, holotype and 1 paratype, leg. F. J. J. LOEFF (ZMA)).

Palaina pumila, n. sp. (Pl. I, fig. 2)

Shell sinistral, small, more or less cylindrical with little projecting apex and rounded last whorl. Creamy-white or pale pink. Ornamented with numerous fine, white, transverse ribs, of which there are 30 on the last whorl in the holotype. On the older whorls the ribs are closely placed, but towards the aperture the interstices between the ribs gradually become larger. These intervals are finely striated in spiral direction. A little shining and transparent.

Whorls $5\frac{1}{2}$, the apical whorl smooth and placed a little obliquely on the rest of the shell. The following two low, but broad, the remaining whorls higher, forming a short cylinder, only the last whorl somewhat narrower. Convex, suture deep. Periphery rounded. Penultimate whorl a little constricted just above the peristome. Last whorl ascending towards the aper-

ture. Top a little projecting, mamillate, base rounded. Umbilicus open, but not wide.

Aperture almost circular, vertical or a little oblique, toothless. Peristome continuous, the parietal part pressed against the preceding whorl. Free margin double, the inner edge thickened and a little expanded, the outer edge thinner, broader, standing off like a collar.

Operculum unknown.

Dimensions (in mm):

	holotype					paratypes					
Height	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Width	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.85	0.85	0.85
Height of aperture	0.5	0.55	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	1.5	1.5	1.45	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3
	0.85	0.8	0.9	0.9	0.9	0.85	0.85	0.8	0.8	0.8	0.8
	0.5	0.5	0.5	0.5	0.5	0.5	0.45	0.5	0.5	0.5	0.45

Localities: Brastagi, 1750 m alt., living among dead leaves, on the ground, May 1953, (type locality) holotype and 29 paratypes, leg. J. P. VAN NIEL; Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (2 paratypes), leg. J. P. VAN NIEL.

This is the first species of *Palaina* found in Sumatra. In the Malay Peninsula no representatives of the genus are known. From Java two species have been recorded *P. gedearia* MOELLENDORFF and *P. nubigena* MOELLENDORFF. These two species are much larger than the new Sumatran species, the former, *P. gedearia*, being, moreover, dextral.

From *P. nubigena* the new species differs in size, in the more cylindrical shape and in the more widely placed ribs. The elegant double peristome of *P. pumila* is not developed in *P. nubigena*.

Opisthostoma paulucciae CROSSE & NEVILL, 1879

1879 CROSSE & NEVILL, Journ. de Conch. 27: 197, 205 and 339, pl. 8, fig. 1 (*Opisthostoma paulucciae* — Buket Pondong, à Pérak, dans l'Indo-Chine)

1952 VAN BENTHEM JUTTING, Bull. Raffles Mus. 24: 14, fig. 4 (*Opisthostoma paulucciae* — Gunong Pondok, Perak)

Localities: Ambalutu Estate, near Kisaran, 50 m alt., among dead leaves, May 1953 (N1).

It is the first record of the genus *Opisthostoma* in Sumatra. The two specimens which Mr VAN NIEL collected are high 0.9 resp. 0.85, wide 1.2 resp. 1.15 mm, and both have an aperture of 0.5 mm diam.

Diplommatina tweediei LAIDLAW, 1949

1949 LAIDLAW, Bull. Raffles Mus. 19: 213, fig. 4-e (*Diplommatina tweediei* — Gua Musang, Kelantan)

Localities: Brastagi, 1750 m alt., living among dead leaves, May 1953 (N1).

New record for Sumatra.

From this locality 10 shells have been measured and gave the following results:

Height	3.2	3.2	3.2	3.1	3.1	3.1	3.0	3.0	3.0	2.9
Width	1.7	1.7	1.7	1.7	1.7	1.65	1.8	1.75	1.7	1.65
Height of aperture	1.3	1.3	1.3	1.3	1.25	1.2	1.2	1.3	1.1	1.2

Diplommatina strophosa, n. sp. (Pl. I, fig. 3)

Shell sinistral, with slender spire and inflated last and penultimate whorls. White to light brownish-pink, shining and transparent. Ornamented with thin vertical ribs, rather distantly placed, about 23 on the last whorl and 27 on the penultimate one. Between the ribs there are very fine spiral striae.

Whorls 6—6¼, the first four regularly increasing in size and not very convex, the two last whorls, especially the penultimate, inflated and bulging out in the shell profile. Above the aperture the last whorl is a little constricted. Top pointed, mamillar. Base rounded. Suture well incised, especially between the later whorls. Umbilicus rimate or closed.

Aperture a little oblique, irregularly rounded. Columellar side nearly straight with a short, knob-like tooth. Peristome continuous, the parietal side pressed against the penultimate whorl, the free margin thickened, reflected and duplicate. The exterior of the two edges ends in a spur at the columellar side, continuing as a thread and curving round the umbilical slit.

Operculum unknown.

Dimensions (in mm)

	holotype	paratypes (of no. 621)									
Height	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.0	3.0	3.0
Width	1.7	1.8	1.8	1.8	1.75	1.7	1.6	1.7	1.7	1.7	1.7
Height of aperture	1.4	1.3	1.25	1.2	1.2	1.3	1.3	1.15	1.3	1.2	1.2

paratypes (of no. 613)										
Height	3.2	3.2	3.2	3.15	3.15	3.1	3.1	2.95		
Width	1.8	1.8	1.7	1.8	1.7	1.8	1.75	1.7		
Height of aperture	1.4	1.3	1.3	1.3	1.35	1.3	1.3	1.25		

Localities : Brastagi, 1750 m alt., among dead leaves, May 1953, (*locus typicus*) (no. 621) (holotype and 18 paratypes) (NI); Brastagi, 1750 m alt., no date (no 613) (8 paratypes) (NI).

Diplommatina strophosa is more slender than *D. tweediei* LAIDLAW. The new species has one more whorl and the two abnormal whorls are not so inflated as in *D. tweediei*. The outer edge of the peristome is lobed in *D. tweediei*, but smooth in *D. strophosa*.

From the following species *D. strophosa* differs in being smaller, with a more pointed spire. The ribbing is wider and more distinct, especially on the two last whorls, than in *D. tardigrada*. Moreover, the spur at the columellar side which is so distinct in *D. strophosa*, is absent in *D. tardigrada*.

Diplommatina tardigrada, n. sp. (Pl. I, fig. 4)

Shell sinistral, with slender spire and inflated penultimate and last whorls. Light orange-brown, especially at the top and in the aperture. A little shining, not transparent. Ornamented with vertical or oblique

ribs, rather distantly placed, but fading away on the fifth and sixth whorls. Between the ribs the surface is spirally striated with very delicate striae.

Whorls $6\frac{1}{2}$, the first 4— $4\frac{1}{2}$ regularly increasing in diameter and not very convex, the two last whorls, especially the penultimate, inflated and bulging out in the shell profile. Above the aperture the last whorl is a little constricted. Top pointed, but not sharp or mamillar, base rounded. Suture well impressed, especially between the inflated whorls. Umbilicus rimate or closed.

Aperture vertical or a little oblique, irregularly rounded. Columellar side nearly straight, with a strong, lamellar, horizontal tooth. Peristome continuous, the parietal side pressed against the penultimate whorl, the free margin thickened and duplicate. Of these two edges the interior one is thickened, but not expanded, the exterior expanded, but thin. There is no spur at the peristome, nor is the peristome margin lobed.

Operculum unknown.

Dimensions (in mm):

	holotype (no. 621)	paratype (no. 621)	paratype (no. 613)	paratype (Dolok Pintu)	
Height	3.7	3.7	3.5	3.7	3.6 damaged
Width	1.8	1.8	1.9	1.9	1.95 2.0
Height of aperture	1.7	1.65	1.6	1.6	1.7 1.5

Localities : Brastagi, 1750 m alt., among dead leaves, May 1953, (type locality) (holotype and paratype) (no. 621); Brastagi, 1750 m alt., no date, 1 paratype (no. 613); all collected by Mr J. P. VAN NIEL; Dolok Pintu, 2000 m alt., in dry beaker of *Nepenthes spectabilis*, 1932, 3 paratypes collected by Mr J. C. VAN DER MEER MOHR (ZMA).

Diplommatina tardigrada differs from both *D. tweediei* and *D. strophosa* in being larger and less distinctly ribbed. It lacks the spur of these species and the exterior peristome edge is not lobed as in *D. tweediei*. The new species has about the same number of whorls as *D. strophosa*, but the spire of the latter is more slender.

Diplommatina liwaensis ALDRICH, 1898

- 1898 ALDRICH, *Nautilus*, 12: 1 and 4, pl. 1, fig. 3—4 (*Diplommatina liwaensis* — Liwa, 4000 feet)
 1902 KOBELT, *Tierreich*, 16: 437 (*Diplommatina liwaensis* — Liwa, 1300 m)
 1928 DEGNER, *Treubia*, 10: 367 (*Diplommatina liwaensis* — Sumatra)

Localities : Ambalutu Estate, near Kisaran, 50 m alt., among dead leaves, 25 May 1953 (N1).

Diplommatina sinulabris MOELLENDORFF, 1902

- 1902 MOELLENDORFF, *Nachr. Blatt*, 34: 143 (*Diplommatina sinulabris* — Kelantan)
 1953 ZILCH, *Arch. Moll. Kunde*, 82: 36, Taf. 13, Fig. 191 (*Diplommatina sinulabris* — Kelantan)

Localities : Hanna Estate, near Kampong Gunting Saga, 10 m alt., among dead leaves in the jungle, 26 July 1953 (N1); Brastagi, 1750 m alt., among dead leaves, May 1953 (N1).

It is the first record of this species in Sumatra.

Diplommatina ventriculus MOELLENDORFF, 1891

- 1891 MOELLENDORFF, Proc. Zool. Soc. London, p. 343, pl. 30, fig. 14 (*Diplommatina ventriculus* — Bukit Pondong)
 1949 LAIDLAW, Bull. Raffles Mus. 19: 204, fig. 2-d (*Diplommatina ventriculus* — Gunong Pondok, Perak; Baling, Kedah; Bukit Panching, Pahang; Batu Caves, Selangor; Bukit Charas, Pahang)

Localities: Brastagi, 1750 alt., among dead leaves (NI); Kampong Karangredjo, near Pematang Siantar, 400 m alt., in jungle, December 1954 (NI); Estate Sungei Kopas, near Kisaran, 100 m alt., in decaying wood, 15 September 1955 (NI); Ambalutu Estate, near Kisaran, 50 m alt., in decaying wood, May 1952 (NI).

The last mentioned lot contains one sinistral shell.

It is the first record of this species in Sumatra.

Diplommatina sp. juv.

Two immature shells (one with five and one with 7 whorls) belonging to the parentage of *Diplommatina nevilli* CROSSE or *D. canaliculata* MOELLENDORFF were collected by Mr VAN NIEL at Brastagi, 1750 m alt., among dead leaves, May 1953. So long as no adult shells have been found it is not possible to classify these imperfect specimens.

Bellamyia grossicosta (MARTENS, 1897)

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 25, pl. 2, fig. 7—8 (*Vivipara grossicosta* — See von Singkarah)
 1907 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 21-II: 140, Taf. 28, Fig. 3 (*Vivipara grossicosta* — See von Singkarah)
 1928 DEGNER, Treubia, 10: 371 (*Vivipara grossicosta* — Sumatra)

Localities: Lake Singkarah, till 50 m deep (ZMA); Lake Singkarah, November 1955 (Bt).

Bellamyia javanica (VON DEM BUSCH, 1844)

- 1844 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1: 114, Taf. 1, Fig. 11—12 (*Paludina javanica* — Java)
 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 21 (*Vivipara javanica* — Palembang)
 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 17 (*Paludina javanica* — Indrapoera)
 1900 MARTENS, Nachr. Blatt, 32: 10 (*Vivipara javanica* — Unter-Lankat und Belawan)
 1908a KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 21-II: 251, Taf. 52, Fig. 1—7 (*Vivipara javanica* — Java bis Neu Guinea)
 1908b KOBELT, Nachr. Blatt, 40: 60 (*Vivipara deliensis* — Deli)
 1908c KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 21-II: 243, Taf. 48, Fig. 7—10 (*Vivipara deliensis* — Deli, Sumatra)
 1921 PRASHAD, Rec. Ind. Mus. 22, p. 481 (*Vivipara javanica* var. *laevior* — Freshwater areas at Medan and Mariendal, Deli; Soengei Krah, Medan; Soengei Minahol), p. 481 (*Vivipara javanica* var. *moussoni* — Medan, Deli) p. 481 (*Vivipara javanica* var. *saleyrica* — Soengei Minahol; ? Padang Boelan, Deli), p. 482 (*Vivipara javanica* var. *borneensis* — Near Medan)
 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82: 31 (*Vivipara javanica* — Laoet Tawar en Peusangrivjer)
 1928 DEGNER, Treubia, 10, p. 371 (*Vivipara deliensis* — Sumatra), p. 372 (*Vivipara javanica*, *V. javanica* var. *borneensis*, *V. javanica* var. *laevior*, *V. javanica* var. *moussoni*, *V. javanica* var. *saleyrica* — Sumatra)
 1934a RENSCH, Arch. Moll. Kunde, 66: 338 (*Vivipara javanica* — Takengon, 1200 m)
 1934b RENSCH, Trop. Binnengew. 5: 219, Taf. 8, Fig. 1—12 (*Vivipara javanica* (incl. *V. sumatrensis*) — See von Singkarah; Schwingwiesen des Ufers des Danau di Atas; Abflussgebiet des Ranau Sees)

- 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Vivipara javanica* — See von Singkarah)
1955 ZILCH, Arch. Moll. Kunde, 84: 59, Taf. 5, Fig. 31 (*Bellamyia deliensis* — Sumatra: Deli)

Localities : Laut Tawar, Gajo Highlands (MBa); Brastagi, valley of the Lau Kling, Karo-Batak Highlands, 26 December 1916 (ZMA); Lower Langkat (MBa); Deli (MZh); Freshwater near Medan, 1916 (ZMA); Sungei Kraih, near Medan, 21 November 1917 (ZMA); Soengei Minahol, near Medan, 28 May 1917 (ZMA); Mangrove near Belawan (ZMA); Fort de Kock, 920 m alt., 1926 (ZMA); Lake Singkarah, 1929 (ZMA); Palembang (MZh); Pager Alam, near Lahat, Palembang (ZMA); Oosthaven, near Telok Betong, 19 September 1937 (ZMA).

***Bellamyia sumatrensis* (DUNKER, 1852)**

- 1852 DUNKER, Zeitschr. Malak. 9: 128 (*Paludina sumatrensis* — Flumen Danau Luar)
1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Paludina hamiltoni* — Padang district and *Paludina ingallsiana* — Boea)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 24, Taf. 10, Fig. 1—2 (*Vivipara sumatrensis* — Solok in einem Weiher und Singkarah; Enim Fluss bei Muara Enim; Gunung Megang; Lahat; Musi-Fluss bei Tebing Tinggi, und Kepahiang; Deli; Palembang an der Mündung des Musi-Flusses)
1900 MARTENS, Nachr. Blatt, 32: 10 (*Vivipara sumatrensis* — Unter-Lankat; Rajah-Berge; Danau Baru, und im heiligen See bei Batu-Bahra)
1906 BULLEN, Proc. Malac. Soc. London, 7: 14 (*Vivipara sumatrensis* — Pajakombo; River at Piladang)
1908 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 21-II: 276, Taf. 56, Fig. 9—12 (*Vivipara sumatrensis* — Sukadana, Lampong)
1908 ROLLE, Nachr. Blatt, 40: 69 (*Vivipara sumatrana* (sic!) — Padang)
1921 PRASHAD, Rec. Ind. Mus. 22, p. 479 (*Vivipara sumatrensis* — Fresh water near Medan and near Bohorok) p. 483, pl. 14, fig. 7—10 (*Vivipara hendrici* — streamlet Bah Endah)
1928 DEGNER, Treubia, 10, p. 371 (*Vivipara hamiltoni* — Sumatra), p. 372 (*V. ingallsiana*, *V. hendrici* und *V. sumatrensis* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 191 (*Viviparus sumatrensis* — Wai Teboe; Wai Semah, nördlich von Kagoenganratoe, Benkulen)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 62 (*Viviparus sumatrensis* — Pajakombo)
1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) 2, Fasc. 19: 73 (*Viviparus javanicus* — Takengon, Atjeh)
1955 ZILCH, Arch. Moll. Kunde, 84: 72 (*Bellamyia sumatrensis* — Sukadana im Gebiete von Lampong)

Localities : Lake Takengon, Atjeh, April 1920 and 11 August 1930 (ZMA); Rajaberge (MBa); Sungei Ular, Pagar Marbau S. of Perbaungan, 2 February 1919 (ZMA); Fresh water near Telang Kuda (ZMA); Fresh water near Medan, 13 May 1917 (ZMA); Lake Perlanaän, 20 September 1931 (ZMA); Sungei Sikambing, near Medan, 25 September 1931 (ZMA); Sungei Kraih, near Medan, 14 February 1921 (ZMA); Brastagi, valley of the Lau Gumba, 25 December 1916 (ZMA); rivulet Bah Endah, NE of Pematang Siantar, 28 May 1917 (ZMA); Hanna Estate, near Kampong Gunting Saga, 10 m alt., living in the mud in drains, June 1953 (NI); Ambalutu Estate, near Kisaran, 50 m alt., living in drains and on sawahs in the mud and on waterplants, October 1952 (NI); Estate Silau Dunia, near Tebing Tinggi, 12 April 1956 (NI); Danau Baru, Indragiri (MBa); Batang Hari, Djambi (ZMA); Palembang (MZh); Pladju, Palembang, in River Musi, behind the swim-

ming pool, 3 July 1948 (Nb); Rasuan, in sawah, 20 November 1949 (Nb); Solok and Singkarah (ZMA); Baso, Padang Highlands, October 1913 (RMNH); Fort de Kock, 920 m alt., November 1913 (RMNH and ZMA); Pajakombo (MBa); Lake Korintji, July 1913 (RMNH); Moor Rakihan, Benkulen, 1901 (MBa); Pager Alam, Lahat, Palembang, July 1898 (RMNH and ZMA); Lahat, Palembang, 1902 (MBa); Sukadana and swamp near Sukadana (ZMA and RMNH).

Pila ampullacea (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X: 771 (*Helix ampullacea* — In Asia, terrestris)
 1851 PHILIPPI, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 20: 59, Taf. 19, Fig. 1—2 (*Ampullaria sumatrensis* — Fluss Danu-Luar in Sumatra; Java?)
 1880 SCHEPMANN, Midden Sumatra Exp. p. 12, pl. 2, fig. 7 (*Ampullaria ampullacea* — overal in de rijstvelden)
 1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Ampullaria ampullacea* — Padang district)
 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 17 (*Ampullaria ampullacea* — Weiher bei Solok)
 1898 ALDRICH, Nautilus, 12: 2 (*Ampullaria ampullacea* — Marang)
 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 17 (*Ampullaria ampullacea* — Indrapoera)
 1900 MARTENS, Nachr. Blatt, 32: 10 (*Ampullaria ampullacea* var. *sumatrensis* — Belawan)
 1906 BULLEN, Proc. Malac. Soc. London, 7: 14 (*Ampullaria sumatrensis* — rice fields near Pajakombo)
 1908 ROLLE, Nachr. Blatt, 40: 69 (*Ampullaria sumatrensis* — Padang)
 1911 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 20-II: 76, Taf. 19, Fig. 1—4, Taf. 21, Fig. 1 (*Pachylabra ampullacea* — Java, Sumatra, Borneo, Celebes, Bali, Bangka, Tana-laut)
 1921 PRASHAD, Rec. Ind. Mus. 22: 478 (*Pachylabra ampullacea* — Freshwater areas near Perbaengan; rice fields near Perbaengan; *P. ampullacea* var. *magnifica* — Talang Koeda; *P. ampullacea* var. *sumatrensis* — Fresh water areas near Medan)
 1928 DREGNER, Treubia, 10: 371 (*Pachylabra ampullacea*, *P. ampullacea* var. *magnifica*, *P. ampullacea* var. *sumatrensis* — Sumatra)
 1931 OOSTINGH, Arch. Moll. Kunde, 63: 191 (*Pila ampullacea* fa *magnifica* — Zwischen Betoeng und Oemboelan Tandjoengan; Flüsschen bei Negeri Katoen, Lampongs)
 1934 RENSCH, Trop. Binnengew. 5: 217 (*Pila ampullacea* — See von Singkarah; Sawahs am See von Singkarah; Ranau See)
 1935 PARAVICINI, Arch. Moll. Kunde, 67: 62 (*Ampullaria ampullacea* — Solok; Bandar)
 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Pila ampullacea* — See von Singkarah)

Localities: Tapatuan, Atjeh, 1912 (RMNH); Fresh water near Medan (ZMA); Bandar, Siantar, 26 August 1919 (ZMA and MBa); Freshwater near Telang Kuda (ZMA); Sisir Gunting, Belawan, Deli, 1919 (ZMA); Beach near Perbaungan, Serdang (ZMA); Tandjong Tiram, Batu Bara district, 1953 (NI); Ambalutu Estate, near Kisaran, 50 m alt., in sawahs and drains, 1954 (NI); Kampong Aer Djoman, 10 km from Kisaran, in sawahs, is collected for food, 1954 (NI); Cocoa nut estate Sungei Radja, near Tandjong Balai, in ditches, July 1950 (Dr); Batang Hari, Djambi (ZMA); Palembang (RMNH, MBa, MZh, ZMA); Ajer Lemping, Palembang (MBa); Pladju, in River Musi behind the Dutch shop and near Kampong Kerang, in sawah, 1948 (Nb); Lubuk Linggau, Musi Oelir, S of Baturadja, Palembang, August 1939 (ZMA); Kalung Tilatang, N of Fort de Kock, Padang Highlands,

April 1913 (RMNH); Bua (MGv); Solok (MBa, ZMA); Fish ponds near Solok (ZMA); Singkarak (ZMA).

***Pila scutata* (Mousson, 1848)**

- 1848 MOUSSON, Mitth. nat. Ges. Zürich, 1: 268 (*Ampullaria scutata* — Java)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 18 (*Ampullaria scutata* — Palembang und Lahat)
1912 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 20-II: 93, Taf. 40, Fig. 1—5, 8, 9 (*Pachylabra conica* — Tenasserim bis Südchina, Cambodja, Java und Borneo)
1921 PRASHAD, Rec. Ind. Mus. 22: 477 (*Pachylabra conica* — Fresh water areas near Poenget and Talang Koeda; From the Soenget Minahol)
1928 DEGNER, Treubia, 10: 371 (*Pachylabra conica* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 191 (*Pila conica* — Wai Saliman, beim Fusspfad nach Koeboe-saliman)
1934 RENSCH, Trop. Binnengew. 5: 218 (*Pila conica* — Ranau See, Oberfläche in Potamogeton)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 62 (*Ampullaria scutata* — Silinda)

Localities: Kroeëng Meureubo, District Langsa, Atjeh, May 1925 (ZMA); Simpang Toba, District Asahan, May 1920 (ZMA); Nature Reserve Dolok Tinggi Radja, Serdang District (ZMA); Deli (MZh); Belawan river, Deli (MBa); Silinda, Serdang (MBa); Fresh water near Medan (ZMA); Pematang, facing landward, 9 June 1918 (ZMA); Sungei Minahol (ZMA); Sungei Sikambang, near Medan, 25 September 1931 (ZMA); Rice fields near Perbaungan, Serdang District (ZMA); Silau Dunia Estate, near Tebing Tinggi, 14 April 1956 (NI); Hanna Estate, near Membang Muda, 10 m alt., in ditch, June 1953 (NI); Tandjong Tiram, Batu Bara District, on decaying leaves in a swamp, 1955 (NI); Ambalutu Estate, near Kisaran, June 1952, on sawahs and in drains, in the mud and on water plants (NI); Kampong Aer Djoman, 10 km from Kisaran, on sawahs, 1954 (NI); Batang Hari, Djambi (ZMA); Palembang (MZh, MGv, ZMA); Pladju, Musi River behind the swimming pool, 1948 (Nb); Sukadana River, Lampongs (ZMA); Oosthaven, near Telok Betong, 19 September 1937 (ZMA); Mt Tanggamus, between 600 and 700 m alt., near Wailalaän and Kota Agung, December 1934 (ZMA); Pager Alam, Lahat, Palembang (ZMA and RMNH).

***Stenothyra blanfordiana* NEVILL, 1880**

- 1880 NEVILL, Journ. As. Soc. Bengal, 49: 160 (*Stenothyra blanfordiana* — Chilka Lake; Port Canning; Madras)
1881 NEVILL, Journ. As. Soc. Bengal, 50: 156, pl. 7, fig. 10 (*Stenothyra blanfordiana* — no localities)

Localities: Tandjong Tiram, in the mud on mud-flats, 25 November 1951 (NI); Tandjong Tiram, in ditches along the road, tidal area, 18 April 1954 (NI).

It is the first record of this species in Sumatra.

***Stenothyra glabrata* (A. ADAMS, 1851)**

- 1851 A. ADAMS, Proc. Zool. Soc. London, p. 226 (*Nematura glabrata* — Penang)

Localities: Tandjong Tiram, in ditches along the road, tidal area, 18 April 1954 (NI); Tandjong Tiram, on wood and in the mud, November

1955 (NI); Labuan Ruku, near Tandjong Tiram, in ditches along the road, June 1955 (NI).

It is the first record of this species from Sumatra.

Stenothyra monilifera BENSON, 1856

1856 BENSON, Ann. Mag. Nat. Hist. (2) 17: 497 (*Stenothyra monilifera* — Ad Mergui Birmanorum)

Localities: Tandjong Tiram, in the mud, on the mud-flats, on the beach among drift material, in ditches along the road, tidal area, on wood, various dates between 1951 and 1955 (NI and SI); Labuan Ruku, near Tandjong Tiram, in ditches along the road, June 1955 (NI); Bandar Chalipah, E of Medan, 1956 (NI).

These are the first records of this species from Sumatra.

Stenothyra polita (A. ADAMS, 1851)

1851 A. ADAMS, Proc. Zool. Soc. London, p. 226 (*Nematúra polita* — locality unknown)

Localities: Tandjong Tiram, on the beach, in drift material, 18 April 1954 (NI); Labuan Ruku, near Tandjong Tiram, in ditches along the road, June 1955 (NI); Bandar Chalipah, E of Medan, 1956 (NI).

These are the first records of this species from Sumatra.

Stenothyra ventricosa (QUOY & GAIMARD, 1834)

1834 QUOY & GAIMARD, Voy. Astrolabe, Zool. 3: 173, pl. 58, fig. 6—8 (*Paludina ventricosa* — Lac de Tondano, Célèbes)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 210, Taf. 9, Fig. 7 (*Stenothyra moussoni* — various localities in Java and Celebes, not from Sumatra)

Localities: Tandjong Tiram, in the mud (SI); Labuan Ruku, near Tandjong Tiram, in ditches along the road, June 1955 (NI).

These are the first records of this species from Sumatra.

Stenothyra weyersi DAUTZENBERG, 1899

1899 DAUTZENBERG, Ann. Soc. Roy. Zool. Belg. 34: 16, fig. 1 (*Stenothyra weyersi* — Indrapoera)

1928 DEGNER, Treubia, 10: 373 (*Stenothyra weyersi* — Sumatra)

Localities: Indrapura (ZMA and RMNH); Affluent of the Indrapura River (ZMA).

Stenothyra cyrtochila, n. sp. (Pl. I, fig. 5)

Shell very small, ovoid, straw-colour, somewhat shining and transparent. Finely striated by the growth lines. In addition there is a spiral sculpture of fine, distant, incised lines. There are about 8—9 on the last whorl. The majority lies above the periphery, only some 2—3 below it, the rest of the basal of the whorl being smooth, with the exception of the umbilical region where there are 3—4 strong, closely-set ridges.

Whorls 4, rapidly increasing in diameter, the last one (before the narrowing terminal part) about $\frac{3}{7}$ of the total height. Very little convex, suture very superficial, periphery rounded. The shell is dorsoventrally somewhat compressed, the penultimate whorl, above the aperture, is rather flattened. Towards the sides the whorls are a little more convex.

without, however, forming a ridge or angulation. Top pointed, but not sharp, base rounded. No umbilical opening.

Aperture circular, placed obliquely. Peristome continuous, somewhat thickened but not reflected. As is usual in the genus *Stenothyra* the last whorl narrows towards the aperture, so that the diameter of the aperture is less than that of the last whorl a little while earlier.

Operculum circular, with central nucleus. It lies quite at the outer margin of the peristome.

Dimensions (in mm):

	holotype	paratypes									
Height	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8
Width	1.5	1.4	1.4	1.4	1.5	1.4	1.3	1.4	1.3	1.3	1.3
Height of aperture	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.6

The holotype has been figured.

Locality: Tandjong Tiram, Sumatra's East Coast, on wood and in the mud, littoral (Locus typicus), November 1955, collected by J. P. VAN NIEL, holotype and 17 paratypes (ZMA).

Compared with the other minute species of *Stenothyra* there are the following differences:

S. mindanavica MOELLENDORFF has a higher spire. It is not so compressed and it lacks the spiral grooves of *S. cyrtochila*.

S. hungerfordiana NEVILL is more slender and higher cylindrical. It has little pits arranged spirally in stead of the grooves of *S. cyrtochila*.

S. minima SOWERBY is less obese and has a more elevated spire. Spiral grooves are missing in *S. minima*.

S. ventricosa QUOY & GAIMARD, besides being larger, is not so compressed. Its spiral grooves are more numerous and a little pitted.

Emmericiopsis lacustris (MARTENS, 1897)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 26, Taf. 9, Fig. 12—15 (*Pachydrobia lacustris* — See von Singkarah)

1928 DEGNER, Treubia, 10: 373 (*Pachydrobia lacustris* — Sumatra)

1934 RENSCH, Trop. Binnengew. 5: 225 (*Emmericiopsis lacustris* — See von Singkarah von Uferblöcken und Holz am Brandungsufer, und von Potamogeton-gesiebe, bis 30 m Tiefe)

1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Emmericiopsis lacustris* — See von Singkarah)

Localities: Lake Singkarah (ZMA); Lake Singkarah, 23 February 1929 (ZMA); Lake Manindjau, November 1955 (ZMA and Bt).

Emmericiopsis lacustris (MARTENS, 1897) forma *subglobosa* (MARTENS, 1897)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 26, Taf. 9, Fig. 13 (*Pachydrobia lacustris* var. *subglobosa*) — See von Singkarah)

1928 DEGNER, Treubia, 10: 373 (*Pachydrobia lacustris* var. *subglobosa* — Sumatra)

Locality: Lake Singkarah, till 50 m deep (ZMA).

Digoniostoma truncatum (EYDOUX & SOULEYET, 1852)

1852 EYDOUX & SOULEYET, Voy. Bonite, Zool. 2: 548, pl. 31, fig. 22—24 (*Paludina truncata* — Diamonds Harbour near Calcutta)

1921 PRASHAD, Rec. Ind. Mus. 22: 484 (*Bithynia truncata* — Fresh water areas at Medan and near Padang Boelan)

- 1928 DEGNER, Treubia, 10: 373 (*Bithynia truncata* — Sumatra)
1934 RENSCH, Trop. Binnengew. 5: 224 (*Bithynia truncata* — See von Singkarah; Ranau See)
1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Bithynia truncata* — See von Singkarah)

Localities: Fresh water near Medan (ZMA); Sungei Sikaming, near Medan, 25 September 1931 (ZMA); Sungei Ular, near Pagar Marbau, 1919 (ZMA); Tandjong Tiram, Batu Bara district, on plants in fresh water swamp, 20 November 1955 (N1); Ranau Lake, 27—30 January 1929 (ZMA).

Fairbankia bombayana BLANFORD, 1868

- 1868 BLANFORD, Ann. Mag. Nat. Hist. (4) 2: 400 (*Fairbankia bombayana* — Bombay)

Localities: Bandar Chalipah, E of Medan, 1956 (N1); Between Labuan Ruku and Tandjong Tiram, in creeks along the road, sublittoral, 18 April 1954 (N1).

These are the first records of this species from Sumatra.

Syncera borneensis (ISSEL, 1874)

- 1874 ISSEL, Ann. Mus. Civ. Stor. Nat. Genova, 6: 451, pl. 7, fig. 13—15 (*Amnicola borneensis* — Bintulu)
1887 BOETTGER, Jahrb. Malak. Ges. 14: 162 (*Assiminea borneensis* — Bintulu)

Locality: Sibolga, Tapanuli, on moist pieces of coral, just above the water edge, 10 April 1955 (N1).

It is the first record of this species from Sumatra.

Syncera brevicula (PFEIFFER, 1854)

- 1854 PFEIFFER, Proc. Zool. Soc. London, p. 306 (*Hydrocena brevicula* — Singapore)
1887 BOETTGER, Jahrb. Malak. Ges. 14: 163 (*Assiminea brevicula* — various localities, not from Sumatra)

Locality: Tandjong Tiram, on wood in the mangrove zone, supralittoral, 20 November 1955 (N1); Belawan, 16 March 1919 (ZMA).

It is the first record of this species from Sumatra.

Syncera brevicula (PFEIFFER, 1854) forma *miniata* (MARTENS, 1866)

- 1866 MARTENS, Ann. Mag. Nat. Hist. (3) 17: 204 (*Assiminea miniata* — Singapore)
1887 BOETTGER, Jahrb. Malak. Ges. 14: 163 (*Assiminea brevicula* var. *miniata* — Andamanen)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 214, Taf. 9, Fig. 21, Taf. 10, Fig. 3 (*Assiminea brevicula* var. *miniata* — various localities, not from Sumatra)

Localities: Telok Nibung near Tandjong Balai, on Nipah palm stems and on the mud, 3 December 1955 (N1); Tandjong Tiram, in the mud of ditches along the road, brackish water, 1 February 1953 (N1); Near Pantai Tjermin, Serdang District, shingle wall against mangrove zone, 5 July 1931 (ZMA).

It is the first record of this species from Sumatra.

Syncera carinata (LEA, 1856)

- 1856 LEA, Proc. Acad. Nat. Sci. Philadelphia, 8: 111 (*Assiminea carinata* — Siam)
1887 BOETTGER, Jahrb. Malak. Ges. 14: 166 (*Assiminea carinata* — various localities, not from Sumatra)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 215, Taf. 9, Fig. 20, Taf. 10, Fig. 6 (*Assimineia carinata* — not from Sumatra)

Localities : Telok Nibung, along the road to Bagan Asahan, on leaf of cocoa nut palm, fresh water, 23 May 1955 (N1); Tandjong Balai, on the banks of the canal flowing out in the Sungei Silau, May 1950 (ZMA and Dr); Pladju, on wall of the River Musi, near rivulet next to the Dutch shop, 17 April 1948 (Nb and ZMA).

It is the first time that this species is recorded for Sumatra.

Syncera javana (THIELE, 1927)

1927 THIELE, Zool. Jahrb. (Syst.) 53 : 133, Taf. 1, Fig. 11 (*Paludinella javana* — Sukabumi)

Localities : Bandar Chalipa, E of Medan, 1956 (N1); Tandjong Tiram, Batu Bara District, 1954—1955, on stem of Nipah palm, in creeks along the road, in the mangrove zone, littoral and supralittoral (N1); Telok Nibung, along the road to Bagan Asahan, in the mud of a mangrove creek, on a cocoa nut leaf in the water, fresh and brackish water, littoral (N1).

It is the first time that this species is recorded from Sumatra.

Syncera microsculpta (NEVILL, 1880)

1880 NEVILL, Journ. As. Soc. Bengal, 49 : 165 (*Assimineia microsculpta* — Port Canning)

1881 NEVILL, Journ. As. Soc. Bengal, 50 : 158, pl. 7, fig. 5 (*Assimineia microsculpta* — no locality)

1887 BOETTGER, Jahrb. Malak. Ges. 14 : 190 (*Assimineia microsculpta* — Port Canning bei Calcutta)

Localities : Tandjong Tiram, 20 November 1955 (N1); Telok Nibung, along the road to Bagan Asahan, on wood along creek in swamp, 3 December 1955 (N1).

It is the first record of this species from Sumatra.

Syncera nitida (PEASE, 1864)

1864 PEASE, Proc. Zool. Soc. London, p. 674 (*Hydrocena nitida* — Huaheine, Pacific Is)

1887 BOETTGER, Jahrb. Malak. Ges. 14 : 192 (*Assimineia nitida* — various localities, not from Sumatra)

Localities : Sibolga, Tapanuli, 1955 (N1); Tandjong Tiram, on pieces of wood in the mangrove zone, supra-littoral, 20 November 1955 (N1).

It is the first record of this species from Sumatra.

Syncera woodmasoniana (NEVILL, 1880)

1880 NEVILL, Journ. As. Soc. Bengal, 49 : 163 (*Assimineia woodmasoniana* — Andamans; Port Canning)

1881 NEVILL, Journ. As. Soc. Bengal, 50, pl. 7, fig. 1 (*Assimineia woodmasoniana* — no locality)

1887 BOETTGER, Jahrb. Malak. Ges. 14 : 211 (*Assimineia woodmasoniana* — Calcutta; Port Canning; Chandipal; Bombay)

Locality : Tandjong Tiram, in the mangrove zone, on wood, supra-littoral, 20 November 1955 (N1).

It is the first record of this species for Sumatra.

Paludinella sumatrana THIELE, 1927

1927 THIELE, Zool. Jahrb. (Syst.) 53 : 133, Taf. 1, Fig. 10 (*Paludinella sumatrana* — Sumatra)

Locality : Sumatra (ZMA).

Paludinella trifilaris, n. sp. (Pl. I, fig. 6)

Shell trochoid, straw-colour, thin, a little transparent. The $1\frac{1}{2}$ embryonic whorls are smooth, the following ones finely, obliquely striated by the growth lines. In the last $1\frac{1}{2}$ —2 whorls the peripheral part of these growth lines is reinforced, rendering them rib-like in this region. There is a fine subsutural spiral thread, a peripheral keel and another spiral thread in the umbilical region. A very delicate spiral striation is visible only under strong magnification.

Whorls $5\frac{1}{2}$, convex, regularly increasing in diameter. Suture moderately deep. Periphery carinate. Top pointed, but not sharp, base rounded. Umbilicus open, moderately wide.

Aperture broad-oval, placed obliquely. Peristome not continuous, the two ends connected by a very thin membrane. Free margin sharp, not thickened or reflected. The columellar margin, however, is a little thickened and reflected, protruding in the centre, then receding again where it joins the parietal wall. It continues in the interior of the umbilical canal as a narrow thread.

Operculum unknown.

Dimensions (in mm):

	holotype	paratypes									
Height	2.8	2.7	2.7	2.6	2.5	2.5	2.5	2.5	2.4	2.4	2.4
Width	2.4	2.3	2.2	2.3	2.2	2.1	2.1	2.0	2.1	2.0	2.0
Height of aperture	1.3	1.3	1.3	1.2	1.1	1.2	1.1	1.1	1.1	1.1	1.1

The holotype has been figured.

Locality: Pedada Bay, Lampong Districts, S. Sumatra (Locus typicus), January 1922, collected by Dr. K. W. DAMMERMAN, holotype and 20 paratypes (ZMA).

The species is placed tentatively in the genus *Paludinella*, as there are no soft parts available.

Compared with *Paludinella sumatrana* THIELE, the new *P. trifilaris* is easily characterized by the three spiral keels, and the peculiar way in which the growth lines are reinforced along the peripheral keel.

Turbacmella dohertyi (ALDRICH, 1898)

1898 ALDRICH, *Nautilus*, 12: 3, pl. 1, fig. 1—2 (*Omphalotropis dohertyi* — Marang)
 1928 DEGNER, *Treubia*, 10: 367 (*Omphalotropis dohertyi* — Sumatra)

Locality: Marang (SMF).

Brotia testudinaria (VON DEM BUSCH, 1842)

1842 VON DEM BUSCH, in: PHILIPPI, *Abb. & Besch.* 1: 3, Taf. 1, Fig. 14 (*Melania testudinaria* — Java)
 1874 BROT, in: MARTINI-CHEMNITZ, *N. Syst. Conch. Cab. Bd. 1, Abt. 24: 49, Taf. 6, Fig. 3* (*Melania testudinaria* — Süd-Java; Indien; Madras)
 1934 RENSCH, *Trop. Binnengew.* 5: 242 (*Brotia testudinaria* — Ranau See, Brangdungsufer)

Locality: Ranau Lake, 20 January 1929 (ZMA).

Brotia costula (RAFINESQUE, 1833)

1833 RAFINESQUE, *Atlantic Journ.* no. 5: 166 (*Melania costula* — River Ganges)

- 1836 BENSON, Journ. As. Soc. Bengal, 5: 746 (*Melania variabilis* — River Gumti at Jonpur and Tolly's nullah near Calcutta)
- 1842 LEA, Proc. Americ. Philos. Soc. 2: 242 (*Melania meukiana* (sic!) — no locality)
- 1848 MOUSSON, Mitth. naturf. Ges. Zürich, 1: 269 (*Melania infracostata* — Java)
- 1850 LEA, Proc. Zool. Soc. London, p. 184 (*Melania episcopalis* — Sluggish river, Malacca)
- 1861 SMIT, Natuurk. Tijdschr. Ned. Indië, 22: 97 (*Melania varicosa* — Meer van Menindjoe)
- 1868 BROT, Matér. Mélaniens, 2: 42, pl. 2, fig. 4 (*Melania zollingeri* — Java)
- 1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24, p. 85, Taf. 10, Fig. 1a—1d (*Melania variabilis* — Burmah; Ganges; Indien; Java; Assam; Calcutta; Hindostan; Tenasserim), p. 87, Taf. 10, Fig. 2b, Taf. 13, Fig. 1a, 1b (*Melania sumatrensis* — Palembang; Java), p. 91, Taf. 11, Fig. 1, 1a, 1b (*Melania menkeana* — Bengalien), p. 97, Taf. 12, Fig. 1, 1a (*Melania episcopalis* — Malacca), p. 98, Taf. 12, Fig. 3, 3a (*Melania infracostata* — Tjiringhin, Java), p. 111, Taf. 14, Fig. 6 (*Melania zollingeri* — Java)
- 1880 SCHEPMAN, Midden Sumatra Exp. p. 13 (*Melania sumatrensis* — Bosch tusschen Soengei Aboe en Moeara Laboe; Bosch tusschen Ajer Boesoek en Ringkiang Loeloes; Bedar Alam), p. 13 (*Melania sumatrensis* var. *mitescens* — Soepajang; Alahan Pandjang), p. 14 (*Melania zollingeri* — Bedar Alam), p. 14, pl. 1, fig. 6 (*Melania subplicata* — Bedar Alam)
- 1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Melania boeana* (nom. nud.) — Boea and Tanar Data), p. 632 (*Melania provisorica* (nom. nud.) — Padang district), p. 632 (*Melania sumatrensis* — Boea)
- 1881 BROT, Journ. de Conch. 29: 154, pl. 6, fig. 1 (*Melania boeana* — Boea), p. 156, pl. 6, fig. 2 (*Melania provisorica* — Boea), p. 159 (*Melania sumatrensis* — Boea)
- 1885 NEVILL, Hand-List Moll. Ind. Mus. 2: 259 (*Melania variabilis* var. *binodulifera* — various localities in India, not in Sumatra), p. 258 (*Melania variabilis* var. *pseudospinosa* — various localities in India, not in Sumatra)
- 1886 BOETTGER, in: BROT, Rec. Zool. Suisse, 4: 90, pl. 6, fig. 9 (*Melania verbecki* — Lac de Singkarah, Gouvernement de Padang)
- 1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3: 1079 (*Melania sumatrensis* — Sumatra)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 34 (*Melania sumatrensis* — Fluss Sumani bei Solok; See von Singkarah, bis 30 m Tiefe; Danau di Bawah), p. 34 (*Melania sumatrensis* var. *boeana* — Danau di Atas), p. 35, Taf. 2, Fig. 11—13 (*Melania sumatrensis* var. *mitescens* — Ajer Tabiet bei Pajakombo; See von Manindjau; Fluss Sumani; Danau di Atas), p. 35 (*Melania sumatrensis* var. *provisoria* — See von Manindjau), p. 36, Taf. 2, Fig. 14, Taf. 4, Fig. 27 (*Melania curvicosta* — See von Manindjau), p. 37, Taf. 2, Fig. 15, Taf. 4, Fig. 26 (*Melania subplicata* — See von Manindjau), p. 38, Taf. 2, Fig. 21 (*Melania papillosa* — See von Singkarah), p. 38, Taf. 2, Fig. 16—18 (*Melania verbecki* — See von Singkarah, bis 30 m Tiefe), p. 38, Taf. 2, Fig. 19—20 (*Melania verbecki* var. *laevis* — See von Singkarah; Ajer Tabiet bei Pajakombo)
- 1897 STRUBELL, Nachr. Blatt, 29: 12 (*Melania Palembangensis* — Südsumatra)
- 1900 MARTENS, Nachr. Blatt, 32, p. 10 (*Melania episcopalis* — Belawan Fluss), p. 10 (*Melania indragirica* — Indragiri Fluss), p. 11 (*Melania stricticosta* — Belawan Fluss)
- 1904 MARTENS, Erg. Deutsch. Tiefsee Exp. Valdivia, 7: 145 (*Melania verbecki* — See von Singkarah)
- 1906 BULLEN, Proc. Malac. Soc. London, 7, p. 14 (*Melania indragirica* — River Indragiri; a variety from the River Kwantan, an affluent of the Indragiri), p. 15 (*Melania curvicosta* — River of Mt Merapi), p. 15, and p. 130, pl. 2, fig. 8 (*Melania curvicosta* var. *prestoniana* — Mount Merapi), p. 15 (*Melania subplicata* — River at Souliki)
- 1908 ROLLE, Nachr. Blatt, 40: 69 (*Melania kobelti* — Padang)
- 1921 PRASHAD, Rec. Ind. Mus. 22: p. 486 (*Acrostoma variabile* var. *sumatrensis* — Soengei Kalau, near Bohorok; streamlet at Timbang Langkat; Bah Endah, Soengei Lapan, Langkat; Soengei Minahol; Soengei Bohorok, Langkat), p. 487 (*Acrostoma variabile* var. *binodulifera* — Soengei Deli near Medan; Soengei Kalau near Bohorok), p. 487 (*Acrostoma variabile* var. *infracostata* — Soengei Kalau near Bohorok; Soengei Deli near Medan), p. 488 (*Acrostoma variabile*

- var. *menkeana* — Soengei Lepan, Langkat), p. 488 (*Acrostoma variabile* var. *pseudospinosa* — Soengei Deli near Medan; Soengei Kalau near Bohorok)
- 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82: 31, fig. 11 (*Melania variabilis* — Laoet Tawar and Peusangrivier, Atjeh)
- 1922 PARAVICINI, Teysmannia, 33: 27, fig. 8 (*Melania variabilis* — Batak- en Gajoelanden)
- 1928 DEGNER, Treubia, 10, p. 374 (*Melania curvicosta*, *M. curvicosta* var. *prestoniana*, *M. indragirica*, *M. papillosa*, *M. stricticosta*, *M. subplicata*, *M. sumatrensis*), p. 375 (*M. variabilis* var. *binodulifera*, var. *boeana*, var. *episcopalis*, var. *infracostata*, var. *menkeana*, var. *mitescens*, var. *pseudospinosa*, var. *provisoria*, *M. verbeeki*, *M. verbeeki* var. *laevis*, *M. zollingeri*), p. 377 (*M. kobelti*), p. 378 (*M. palembangensis*), all from Sumatra.
- 1934a RENSCH, Trop. Binnengew. 5: 239 (*Brotia variabilis* — See von Singkarah; Ranau See; Ajer Putih bei Tjurup; Musi bei Ajer Simpang)
- 1934b RENSCH, Arch. Moll. Kunde, 66: 338 (*Brotia variabilis* — Takengon, 1200 m; Lho Sukon, 50 m)
- 1935 PARAVICINI, Arch. Moll. Kunde, 67: 62 (*Melania curvicosta* — River Merapi; *M. indragirica* — Indragiri, River Kwantan), p. 63 (*Melania subplicata* — See von Manindjau; *M. sumatrensis* — River Kampar Kiri; Balige am Tobasee)
- 1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19: 85, fig. 30 (*Brotia variabilis* — Takengon, Atjeh)
- 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Brotia variabilis* — See von Singkarah)

Localities: Basin of the Kroeëng Pendawa, District of Pleureula, Atjeh, January 1926 (ZMA); Kroeëng Meureubo, Langsa District, Atjeh, May 1925 (ZMA); Lake Takengon, 11 August 1930 (MBo); Laut Tawar, in Peusang River, Gajo Highlands (MBa); Lau Kawar, N of Mt Sinabung, Karo Highlands, July 1925 (ZMA); Sungei Mentjirim, near Kampong Lingga, S of Bindjei, Upper Langkat District, at the border of Deli District, 1 December 1926 (ZMA); Lau Gertang, affluent of the Lau Bingai, Namu Ukur State, S of Bindjei, Upper Langkat District, 20 December 1926 (ZMA); Swift running river at Estate Namu Trassi, S of Bindjei, Upper Langkat District, 24 December 1926 (ZMA); River Timbang Langkat, E. of Bindjei, 20 July 1917 (ZMA); Deli (ZMA); Two Rivers, Upper Deli District, 1919 (ZMA); Medan (ZMA, MBa); Bekri, SW of Medan, Deli (RMNH); Deli River, 15 July 1917 (ZMA); Deli River near Belawan, 1949 (Dr.); Belawan River, Deli (MBa, By); Sungei Kalau, August 1917 (ZMA); Sungei Minahol, May 1917 (ZMA); Sungei Bohorok, August 1917 (ZMA); Sungei Lepan, Langkat, 21 April 1918 (ZMA); Bah Endah, river on Estate Bah Lias, NE of Pematang Siantar, 28 May 1917 (ZMA); Lau Burus, February 1915 (ZMA); Sungei Rambai, Estate of Timbang Langkat, Lower Deli, 31 March 1927 (ZMA); Tandjong Djati, W of Bindjei, in fresh water, 29 March 1917 (ZMA); Estate Silau Dunia, near Tebing Tinggi, 1956 (NI); Bah Bolon, near bridge of Perdagangan, NE of Pematang Siantar, sub-district Simelungun, 14 July 1927 (ZMA); Pematang Siantar (RMNH); Ambalutu Estate, near Kisaran, 50 m alt., in ditches and small rivers, April 1951 (NI); Estate Sungei Kopas, near Kisaran, 100 m alt., in rivulets on sandy mud and decaying vegetation (NI); Asahan (ZMA); Balige, at Lake Toba (MBa); West Sumatra (RMNH and ZMA); Ajerbangis, Padang Highlands, November 1913 (RMNH); Fort de Kock, November 1913 (RMNH); River Merapi (MBa); Pajakombo (RMNH); Ajer Tabiet, near Pajakombo (ZMA); Lake Manindjau (ZMA, RMNH, MBa, Bt); Lake Singkarah (ZMA, Dr, Bt); Sumani

River, near Solok (ZMA); Danau di Bawah (ZMA); Danau di Atas (ZMA, RMNH, Bt); Central Sumatra (ZMA); Bedar Alam, NE of G. Korintji, 1880 (RMNH); Sungei Abu, Muara Labu, N of Mt Korintji, 1877—79 (RMNH); Aer Busuk, Ringkiang Lulus, 1877—79 (RMNH); Supajang and Alahan Pandjang, Padang Highlands (ZMA, RMNH); Lake Korintji, July 1915 (RMNH); Moor Rakihan, District Bintuhan, Bengkulu, 1901 (MBa); Kampar Kiri River (MBa); Indragiri River (MBa, By, RMNH); Batang Hari (MBa); Cave Ulu Tjanko, Djambi (MBa); Pagar Alam, Lahat, Palembang (RMNH, ZMA); Rivulet near Muara Enim, Palembang, 1903 (MBa); Palembang (RMNH), MZh, MBa, ZMA); Batang Hari, Lampongs (ZMA); Sukadana and Sukadana River, Lampong Districts (RMNH, ZMA); Langkapura, Lampong Districts (MBa).

Faunus ater (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X: 746 (*Strombus ater* — in *Asiae paludibus*)
1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24: 410, Taf. 44, Fig. 3 (*Faunus ater* — various localities, not from Sumatra)
1898 ALDRICH, Nautilus, 12: 2 (*Faunus ater* — Marang)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 15, pl. 2, fig. 10 (*Faunus ater* — Indrapoera)
1928 DEGNER, Treubia, 10: 381 (*Faunus ater* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 190 (*Faunus ater* — Strand bei der Wai Laganmündung, Bengkoelen; Küste der Tampang-Bai; Küste zwischen Tirembaroe und Tirem; Strand der Telok Karangberak, Lampongs)
1933 PARAVICINI, Arch. Moll. Kunde, 67: 63 (*Faunus ater* — Langkapoera)

Localities: Deli (ZMA); Sibolga, Tapanuli (RMNH); Sibolga, Tapanuli, fresh water pool at some distance from the beach (NI); Pajakombo (RMNH); Padang, 1913 (RMNH); Painan, near Padang, in river mouth, 1921 (ZMA); Indrapura (RMNH); Langkapura, Lampongs (MBa).

Paludomus olivaceus REEVE, 1847

- 1847 REEVE, Conch. Icon. 4, pl. 1, no. 5 (*Paludomus olivaceus* — Point Palmas, Island of Sumatra)
1880 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 25: 16, Taf. 2, Fig. 11 (*Philopotamis olivaceus* — Point Palmas, Sumatra)
1928 DEGNER, Treubia, 10: 381 (*Paludomus olivaceus* — Sumatra)

Not seen. The record of this species for Sumatra seems a little doubtful, as Point Palmas is a locality unknown to Sumatra.

Balanocochlis glans (VON DEM BUSCH, 1842)

- 1842 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1: 3, Taf. 1, Fig. 8 and 9 (*Melania glans* — Java)
1859 REEVE, Conch. Icon. 12, pl. 34, fig. 232 (*Melania glans* — Java, Sumatra, Philippine Islands)
1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24, p. 14, Taf. 1, Fig. 3 (*Melania glans*), p. 15 (*Melania inermis*) (Java, Philippinen, Waigiou).

Locality: Along the banks of the Muara Padang, May 1951 (Vm).

Thiara amarula (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X: 774 (*Helix amarula* — In *Asiae fluviiis*)

- 1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 294, Taf. 30, Fig. 1—1c, 4 (*Melania cybele* — Sumatra; Fidji; Philippinen)
1888 TENISON WOODS, Proc. Linn. Soc. N.S.W. (2) 3 : 1084 (*Melania cybele* — Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 10, pl. 2, fig. 2 (*Melania cybele* — Indrapoera)
1928 DEGNER, Treubia, 10 : 379 (*Melania cybele* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 189 (*Thiara cybele* — Oemboelan an der Wai Semang, Bengkoelen)

Locality : Padang (RMNH)

Thiara rudis (LEA, 1850)

- 1850 LEA, Proc. Zool. Soc. London, p. 186 (*Melania rudis* — Amboina)
1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 305, Taf. 32, Fig. 1—1c (*Melania rudis* — various localities, not from Sumatra)
1898 ALDRICH, Nautilus, 12 : 2 (*Melania rudis* — Marang)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 12, pl. 2, fig. 5—5b (*Melania rudis* — Indrapoera)
1928 DEGNER, Treubia, 10 : 380 (*Melania rudis* — Sumatra)

Locality : Indrapura River (RMNH).

Thiara winteri (VON DEM BUSCH, 1842)

- 1842 VON DEM BUSCH, in : PHILIPPI, Abb. & Beschr. 1 : 1, Taf. 1, Fig. 1—2 (*Melania winteri* — Java)
1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 301, Taf. 31, Fig. 5, 5a (*Melania winteri* — Java)
1898 ALDRICH, Nautilus, 12 : 2 (*Melania winteri* — Marang)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 11, pl. 2, fig. 4 (*Melania winteri* — Indrapoera)
1928 DEGNER, Treubia, 10 : 380 (*Melania winteri* — Sumatra)
1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19 : 89 (*Melania winteri* — Sumatra)

Locality : Indrapura River (RMNH)

Thiara herklotzi (PETIT, 1853)

- 1853 PETIT, Journ. de Conch. 4 : 254, pl. 7, fig. 10 (*Melania herklotzi* — Eaux douces de Java)
1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 303, Taf. 31, Fig. 8—8c (*Melania herklotzi* — Java)
1898 ALDRICH, Nautilus, 12 : 2 (*Melania herklotzi* and *M. mitra* — Marang)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 12, pl. 2, fig. 6—6b (*Melania herklotzi* — Indrapoera)
1928 DEGNER, Treubia, 10 : 379—380 (*Melania herklotzi* — Sumatra)

Localities : Pajakombo (RMNH); Indrapura River (RMNH).

Thiara scabra (MÜLLER, 1774)

- 1774 MÜLLER, Hist. Verm. 2 : 136 (*Buccinum scabrum* — In paludosis littoris Coromandel Tranquebari Danorum maxime vulgare)
1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2 : 166 (*Melania spinulosa* — Ile de Timor)
1845 VON DEM BUSCH, in : PHILIPPI, Abb. & Beschr. 1 : 4, Taf. 1, Fig. 7 (*Melanium* (sic!) *granum* — Java)
1849 MOUSSON, Land & Süßw. Moll. Java, p. 76, Taf. 11, Fig. 11 (*Melania spinulosa* fa *nodose-costata* — Tirir See, O. Java)
1850 LEA, Proc. Zool. Soc. London, p. 194 (*Melania acanthica* — Manilla, and the isle of Negros)
1858 DOHRN, Proc. Zool. Soc. London, p. 135 (*Melania datura* — Ceylon)
1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24, p. 266, Taf. 27, Fig. 14—14e, 15—15a (*Melania scabra* — various localities, not from Suma-

- tra), p. 267, Taf. 27, Fig. 14, 14a (*Melania scabra* var. *spinulosa* — no locality), p. 270, Taf. 27, fig. 12—12d (*Melanium granum* — Java), p. 276, Taf. 28, Fig. 4—4b (*Melania datura* — Ceylon), p. 278, Taf. 28, Fig. 10—10c (*Melania acanthica* — Manilla, Negros; Salomon's Inseln; Molukken)
- 1880 SCHEPMAN, Midden Sumatra Exp. p. 15, pl. 3, fig. 10 (*Melania scabra* — Rijstvelden nabij Soepajang), p. 15 (*Melania scabra* var. *inermis* — Rijstvelden bij Soepajang), p. 15, pl. 1, fig. 5, pl. 3, fig. 9 (*Melania snellemanni* — Moeara Laboe)
- 1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Melania datura* — Boea), p. 632 (*Melania bockii* nom. nud. — Boea)
- 1881 BROT, Journ. de Conch. 29: 157, pl. 6, fig. 3 (*Melania bockii* — Pajjo)
- 1884 MORLET, Journ. de Conch. 32: 330, pl. 7, fig. 2 (*Melania savinieri* — Rivière de Tanabang, Batavia)
- 1896 SCHEPMAN, Notes Leyden Mus. 18: 139, pl. 2, fig. 7 (*Melania pagoda* var. *costulata* — Adonara; Flores; Koepang; Timor)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 61, Taf. 4, Fig. 21—22 (*Melania pulchella* — See von Singkarah), p. 62, Taf. 4, Fig. 6 (*Melania scabra* var. *spinulosa* — See von Singkarah, bis 30 m tief), p. 63, Taf. 4, Fig. 7 (*Melania scabra* var. *nodosocostata* — See von Manindjau; Ajer Tabiet bei Pajakombo; See von Singkarah; Danau di Atas; Padang), p. 64, Taf. 4, Fig. 8 (*Melania scabra* var. *angulifera* — Flüsschen bei Kaju Tanam), p. 64, Taf. 4, Fig. 9—12 (*Melania scabra* var. *mutica* — See von Manindjau; Ajer Tabiet bei Pajakombo), p. 65 (*Melania granum* — See von Manindjau), p. 69, Taf. 4, Fig. 13—16 (*Melania bocki* — Seen von Manindjau, Singkarah; Danau di Bawah; Danau di Atas; Sawah bei Singkarah), p. 74, Taf. 4, Fig. 17—20 (*Melania pinguicula* — Danau di Bawah; Ajer Tabiet bei Pajakombo; See von Singkarah)
- 1898 ALDRICH, Nautilus, 12: 2 (*Melania scabra* — Marang)
- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34, p. 10, pl. 2, fig. 3—3b (*Melania acanthica* — Indrapoera), p. 13, pl. 2, fig. 7—7c (*Melania bocki* — Indrapoera)
- 1900 MARTENS, Nachr. Blatt, 32, p. 12 (*Melania scabra* var. *spinulosa* — Belawan Fluss), p. 12 (*Melania scabra* var. *nodosocostata* — Belawan-Fluss), p. 12 (*Melania bocki* — Sinabung)
- 1906 BULLEN, Proc. Malac. Soc. London, 7, p. 14 (*Melania scabra* — Brook at Piladang), p. 14 (*Melania datura* — Brook at Pajakombo), p. 15 (*Melania pagoda* var. *costulata* — River of Pajakombo), p. 15 (*Melania savinieri* — River of Pajakombo)
- 1921 PRASHAD, Rec. Ind. Mus. 22, p. 493 (*Melanoides scabra* var. *angulifera* — Soengei Kalau near Bohorok), p. 493 (*Melanoides scabra* var. *nodosocostata* — Pool in the valley of the Lau Kling, near Brastagi; Soengei Bohorok)
- 1928 DEGNER, Treubia, 10, p. 377 (*Melania sykesi* and *M. pulchella*), p. 378 (*Melania acanthica*, *M. datura*, *M. granum*), p. 379 (*Melania pagoda* var. *costulata*, *M. scabra*, *M. scabra* var. *angulifera*, *M. scabra* var. *inermis*, *M. scabra* var. *mutica*, *M. scabra* var. *nodosocostata*, *M. scabra* var. *spinulosa*, *M. bocki*), p. 380 (*Melania snellemanni*), p. 381 (*Melania pinguicula*) (all from Sumatra)
- 1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42: 3 (*Melania scabra* — Quiet, sandy spots in Aek Ponot, near Tangga, N. Habinsaran)
- 1931 OOSTINGH, Arch. Moll. Kunde, 63: 190 (*Melanoides scabra* fa *typica* — Poelau Taboean, Strand an der Ostküste, Semangko-Bai, Lampongs)
- 1934a RENSCH, Arch. Moll. Kunde, 66: 338 (*Melania scabra* — Takengon)
- 1934b RENSCH, Trop. Binnengew. 5: 233 (*Melania zollingeri* — See von Singkarah; Ranau See), p. 234 (*Melania scabra* — See von Singkarah; Bach bei Padang; Danau di Atas; Kali Djernih; Warme Quellen Subang Ajam am Kali Djernih bei Tjurup)
- 1935 PARAVICINI, Arch. Moll. Kunde, 67: 63 (*Melania satura* (sic!) — Pajakombo), (*Melania scabra* — Piladang), (*Melania pagoda* and *M. pagoda* var. *costulata* — Pajakombo)
- 1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19: 89 (*Melania scabra* — Sumatra)
- 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Melania scabra* and *M. zollingeri* — See von Singkarah)

Localities: Sumatra (ZMA and RMNH); Basin of River Alur, near

Lho Tjapa, district Pidie, Atjeh (RMNH); Takengon, Atjeh, April 1920 (ZMA); Laut Tawar, Gajo Highlands (MBa); Medan, 10 September 1920 (ZMA); Affluent of Wampu River, near Kampong Salajang, Upper Langkat, 17 March 1927 (ZMA); Lau Tengis, Estate of Kuala Mentjirim, Upper Langkat, 27 July 1926 (ZMA); Sawahs along the Lau Adji, near Brastagi, Karo Highlands, 10 May 1927 (ZMA); Sungei Kalau, 10 August 1917 (ZMA); Sungei Bohorok, 8 August 1917 (ZMA); Pool in the Lau Kling, W of Brastagi, 26 December 1916 (ZMA); Bank of the Sungei Padang, in Kampong Sungeipariok, near Bandar Chalipah, 15 November 1926 (ZMA); Effluent of Lake Toba in the Asahan River, 28 October 1920 (ZMA); Lake Toba (RMNH); Pematang Siantar (RMNH, MBa, Dr); Tandjong Tiram, Batu Bara District, in mud and on vegetation in the swamp, 28 October 1955 (NI); Ambalutu Estate, near Kisaran, 50 m alt., in brook in the mud, 1952—1953 (NI); Sungei Kopas Estate, near Kisaran, 100 m alt., in brook, 10 December 1955 (NI); Telok Nibung, on cocoa nut leaf, fallen in the water, 3 December 1955 (NI); West-Sumatra (ZMA); Lake Manindjau (ZMA); Fort de Kock, 920 m alt., in sawahs, 1926 (ZMA); Fort de Kock, in clear running water, among Potamogeton malayanus, 1926 (ZMA); Pajakombo and Pajakombo River (MBa); Suliki River, near Pajakombo (MBa); Piladang River and Piladang (MBa); Ajer Tabiet, near Pajakombo (ZMA); River near Kaju Tanam (ZMA); Singkarah, and sawah near Singkarah (ZMA); Lake Singkarah (ZMA, MBo); Padang (ZMA); Danau di Bawah (ZMA); Danau di Atas (ZMA) and RMNH); Bedar Alam (RMNH); Supajang (RMNH); Muara Labu, N of Mt Korintji (RMNH, ZMA); Indrapura River (RMNH); Ranau Lake, 1929 (ZMA); Palembang (MZh);Maringai River, Lampongs (ZMA).

Thiara cancellata RÖDING, 1798

- 1798 RÖDING, Mus. Bolten. p. 109 (*Thiara cancellata* — no locality)
1859 REEVE, Conch. Icon. 12, pl. 27, fig. 186 (*Melania setosa* — Sumatra, Point Palmas)
1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 297, Taf. 30, Fig. 5, 5a, 6, Taf. 31, Fig. 1, 1a (*Melania setosa* — Waigiou; Neu Guinea; Point Palmas, Sumatra; I. Samar, Philippinen; Bali; Celebes)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 66 (*Melania setosa* — Cap Palmas in Sumatra)
1898 ALDRICH, Nautilus, 12 : 2 (*Melania setosa* — Marang)
1928 DEGNER, Treubia, 10 : 380 (*Melania setosa* — Sumatra)

Not seen.

Thiara setigera (BROT, 1870)

- 1870 BROT, Americ. Journ. Conch. 6 : 300 (*Melania setigera* — Guimaras, Negros, Philippines)
1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 298, Taf. 30, Fig. 7 (*Melania setigera* — Philippinen: Guimaras, Negros)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 189 (*Thiara setigera* — Oemboelan an der Wai Semang, Benkoelen)

Not seen.

Melanoides granifera (LAMARCK, 1822)

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2 : 167 (*Melania granifera* — Ile de Timor)

- 1836 BENSON, Journ. As. Soc. Bengal, 5 : 782 (*Melania lirata* — River Hooghly, near Calcutta)
- 1842 VON DEM BUSCH, in : PHILIPPI, Abb. & Beschr. 1 : 2, Taf. 1, Fig. 13 (*Melania semigranosa* — Java)
- 1874 BROT, in : MARTINI & CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24, p. 321, Taf. 33, Fig. 13, 13a (*Melania granifera* — Timor; Atapupu, Timor), p. 321, Taf. 33, Fig. 15 (*Melania spectabilis* — no locality), p. 328, Taf. 33, Fig. 6—6c (*Melania lirata* — Java; Bengalen; Tenasserim; Ganges)
- 1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Melania lirata* var. *granosa* — Padang district), p. 632 (*Melania semigranosa* — Boea and Tanar Datar)
- 1881 BROT, Journ. de Conch. 29 : 158 (*Melania lirata* incl. var. *semigranosa* and var. *flavida* — Boea)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 69 (*Melania spectabilis* — Flüsschen bei Kaju Tanam; Tabeh di Aripan), p. 71 (*Melania lineata* — See von Singkarah, bis zu 30 m Tiefe), p. 72 (*Melania lineata* var. *semigranosa* — See von Singkarah; Fluss bei Padang), p. 72 (*Melania flavida* — Danau di Atas und Danau di Bawah; Ajer Tabiet bei Pajakombo; Fluss bei Padang), p. 73, Taf. 4, Fig. 32 (*Melania dissimulans* — Deli)
- 1898 ALDRICH, Nautilus, 12 : 1 (*Melania lirata* — Marang)
- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34, p. 13 (*Melania lineata* — Indrapoera), p. 14, pl. 2, fig. 9—9c (*Melania semigranosa* var. *obsoleta* — Indrapoera)
- 1900 MARTENS, Nachr. Blatt, 32 : 12 (*Melania lineata* var. *semigranosa* — Belawan Fluss)
- 1906 BULLEN, Proc. Malac. Soc. London, 7 : 15 (*Melania lirata* — River of Mt Bongson)
- 1921 PRASHAD, Rec. Ind. Mus. 22 : 493 (*Melanoides semigranosa* — Soengei Lapan, Soengei Kalau and Medan)
- 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82, p. 32, fig. 12 (*Melania lineata* — Laoet Tawar en Peusangrivier, Atjeh), p. 32, fig. 13 (*Melania semigranosa* — Laoet Tawar en Peusangrivier)
- 1928 DEGNER, Treubia, 10, p. 380 (*Melania dissimulans*, *M. granifera* and *M. lirata*), p. 31 (*Melania lirata* var. *semigranosa* and *M. spectabilis*) (all from Sumatra)
- 1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42 : 3 (*Melania lineata* — Sandy spots in Asahan River near Tangga, N. Habinsaran)
- 1934a RENSCH, Arch. Moll. Kunde, 66 : 338 (*Melania granifera lineata* — Takengon)
- 1934b RENSCH, Trop. Binnengew. 5 : 230 (*Melania granifera lineata* — See von Singkarah; Danau di Atas; Tobasee; Ranau See)
- 1938 ADAM & LOLOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19 : 90, pl. 5, fig. 7, textfig. 32 (*Melania granifera lineata* — Takengon; Lho Seumaweh, Atjeh)
- 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19 : 569 (*Melania granifera lineata* — See von Singkarah)

Localities : Sumatra (MGv); Laut Tawar, near Takengon (ZMA, MBa, MBo, Bt); Deli (ZMA); Medan (ZMA); Belawan River, Deli (MBa); Sungei Lapan, Langkat, 21 April 1918 (ZMA); Sungei Kalau, 10 August 1917 (ZMA); Asahan River, on sandy spots near Tangga, N. Habinsaran, 2 August 1928 (ZMA); Sibolga, Tapanuli, May 1953 (NI); Fort de Kock, 920 m alt., in sawahs (ZMA, RMNH); River near Kaju Tanam (ZMA); Lake Singkarah, in shallow water along the bank, 29 April 1952 (Dr.); Padang, in river (ZMA); Danau di Bawah (ZMA); Danau di Atas (ZMA and RMNH); River Indrapura (RMNH).

Melanoides torulosa (BRUGUIÈRE, 1789)

- 1789 BRUGUIÈRE, Encycl. Méth. Vers, 1 : 332 (*Bulimus torulosus* — Madagascar)
- 1838 DESHAYES, Hist. Nat. Anim. s. Vert. Ed II, 8 : 434 (*Melania crenulata* — no locality)
- 1853 VON DEM BUSCH, Zeitschr. Malak. 10 : 177 (*Melania mucronata* — no locality)
- 1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24, p. 114, Taf.

14. Fig. 9—9f (*Melania crenulata* — various localities, not from Sumatra), p. 118 (*Melania mucronata* — no locality)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 14, pl. 2, fig. 11—11e (*Melania mucronata* — Indrapoera)
1928 DEGNER, Treubia, 10 : 377 (*Melania mucronata* — Sumatra)

Localities : Sumatra (ZMA); Kroeëng Wojla, near Gampong Arongan, N of Meulaboh, W coast of Atjeh, 30 August 1927 (ZMA); Pajakombo (RMNH); Along the banks of the Muara Padang, May 1951 (Vm); Sungei Tabing, near Padang, April 1952 (Dr); Ajerbangis Padang Lowlands, November 1913 (RMNH); River Indrapura (RMNH).

Melanoides punctata (LAMARCK, 1822)

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2 : 165 (*Melania punctata* — no locality), (*Melania laevigata* — Rivières de Timor)
1850 LEA, Proc. Zool. Soc. London, p. 181 (*Melania sobria* — Siquijor)
1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24, p. 168, Taf. 20, Fig. 4, 4a (*Melania punctata* — Philippinen: Guimaras, Negros, Siquijor), p. 171, Taf. 20, Fig. 9, 9a (*Melania laevigata* — Timor), p. 178, Taf. 21, Fig. 5—5b (*Melania sobria* — various localities, not from Sumatra)
1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Melania laevigata* — Boea and Tanar Datar)
1898 ALDRICH, Nautilus, 12 : 2 (*Melania sobria* — Marang)
1928 DEGNER, Treubia, 10, p. 376 (*Melania laevigata*), p. 377 (*Melania sobria*) (both from Sumatra)

Localities : Tandjong Djatti, 29 March 1917 (ZMA); Mouth of Padang River, 1952 (Dr); Oosthaven, near Telok Betong, 19 September 1937 (ZMA).

Melanoides plicaria (BORN, 1780)

- 1780 BORN, Test. Mus. Caes. Vind. p. 389, pl. 16, fig. 14 (*Helix plicaria* — no locality)
1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 134, Taf. 16, Fig. 6—6a (*Melania perplicata* — no locality)
1898 ALDRICH, Nautilus, 12 : 2 (*Melania perplicata* — Marang)
1928 DEGNER, Treubia, 10 : 377 (*Melania perplicata* and *M. plicaria* — Sumatra)

Localities : Tjalang, W coast of Atjeh (ZMA); Mouth of Padang River, 1952 (Dr); Mouth of Muara Padang, April 1948 (Dr); Sungei Tabing, near Padang, April 1952 (Dr.); Pajakombo (RMNH).

Melanoides tuberculata (MÜLLER, 1774)

- 1774 MÜLLER, Hist. Verm. 2 : 191 (*Nerita tuberculata* — In littore Coromandel)
1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2 : 167 (*Melania truncatula* — Rivières de l'île de Timor)
1834 FÉRUSAC, in QUOY & GAIMARD, Voy. Astrolabe, Zool. 3 : 141, pl. 56, fig. 1—4 (*Melania virgulata* — Ile de France)
1848 MOUSSON, Mitth. naturf. Ges. Zürich, 1 : 269 (*Melania unifasciata* — Java)
1849 MOUSSON, Land & Süsww. Moll. Java, p. 73, Taf. 11, Fig. 7 (*Melania tuberculata* var. *plicifera* — Tjiringin und Pardana)
1859 REEVE, Conch. Icon. 12, pl. 17, fig. 120 (*Melania crepidinata* — Java ?)
1870 BROT, Catal. Rec. Melan. no. 200 (*Melania javanica* — Java)
1874 ISSEL, Ann. Mus. Civ. Stor. Nat. Genova, 6 : 463 (*Melania tuberculata* var. *malayana* — Territorio di Sarawak)
1874 BROT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24, p. 190, Taf. 21, Fig. 15 (*Melania distinguenda* — Borneo), p. 238, Taf. 25, Fig. 13, 13a (*Melania crepidinata* — Java; Borneo), p. 246, Taf. 26, Fig. 7 (*Melania javanica* —

- Java), p. 247, Taf. 26, Fig. 11—11h (*Melania tuberculata* — various localities, not from Sumatra), p. 253, Taf. 26, Fig. 5, 5a (*Melania malayana* — Sarawak, L'angiou-Datou, Borneo)
- 1880 SCHEPMAN, Midden Sumatra Exp. p. 16, pl. 3, fig. 11 (*Melania tuberculata* — Moeara Laboe; rijstveldten bij Soepajang, Silago, Boven Rawas)
- 1881 BOCK, Proc. Zool. Soc. London, p. 632 (*Melania malayana* — Boea and Tanar Datar)
- 1881 BROT, Journ. de Conch. 29 : 158 (*Melania malayana* — Boea)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 43, Taf. 3, Fig. 7 (*Melania bisinuata* — Danau di Atas), p. 43 (*Melania javanica* — various localities, not from Sumatra), p. 47, Taf. 3, Fig. 3 (*Melania uniformis* var. *crispulata* — various localities, not from Sumatra), p. 48, Taf. 3, Fig. 4—5 (*Melania unifasciata* var. *aquisulcata* — various localities, not from Sumatra), p. 48, Taf. 3, Fig. 6 (*Melania unifasciata* var. *plicatula* — various localities, not from Sumatra), p. 56 (*Melania crepidinata* — Flüsschen bei Singkarah), p. 56 (*Melania tuberculata* var. *plicifera* — Flüsschen bei Kaju Tanam; Danau di Bawah), p. 57 (*Melania tuberculata* var. *virgulata* — Ajer tegenang bei Fort de Kock; Padang Pandjang; Flüsschen bei Kaju Tanam; See von Singkarah; Sawah bei Singkarah; Tabe di Aripian; Weiher bei Solok; Danau di Bawah; Danau di Atas; Padang Fluss; Lahat; Trussan und Kepahiang im Gebiet des Musi Stroms), p. 58, Taf. 4, Fig. 1 (*Melania tuberculata* var. *seminuda* — See von Manindjau; Ajer tengenang; Kaju Tanam; Tabe di Aripian; Danau di Bawah; Danau di Atas; Deli; Singalang), p. 59, Taf. 4, Fig. 2—3 (*Melania tuberculata* var. *angularis* — Kaju Tanam; Solok; Danau di Atas), p. 59, Taf. 4, Fig. 4 (*Melania tuberculata* var. *truncatula* — various localities, not from Sumatra)
- 1898 ALDRICH, Nautilus, 12 : 2 (*Melania tuberculata* and *M. javanica* — Marang)
- 1900 MARTENS, Nachr. Blatt, 32 : 12 (*Melania tuberculata* var. *seminuda* and *M. tuberculata* var. *virgulata* — Belawan Fluss)
- 1906 BULLEN, Proc. Malac. Soc. London, 7, p. 15 (*Melania javanica* — River Kwantan, affluent of the Indragiri), p. 14 (*Melania distinguenda* — River of Pajakombo), p. 15 (*Melania unifasciata* — River at Souliki), p. 130 (*Melania tuberculata* — River at Souliki; *Melania unifasciata* — Mt Merapi and River at Souliki)
- 1921 PRASHAD, Rec. Ind. Mus. 22, p. 490 (*Melanoides uniformis* var. *aquisulcata* — Streamlet along the road to Anak Laut, Sabang), p. 490 (*Melanoides unifasciata* var. *crispulata* — Soengei Minahol), p. 490 (*Melanoides uniformis* var. *plicatula* — Streamlet along the road to Anak Laut, Sabang), p. 490, pl. 14, fig. 11—12 (*Melanoides sluiteri* — In the Kroeëng Seunara, Sabang; Streamlet from the prise d'eau of Sabang; Freshwater areas near Boelan and Padang Boelan), p. 492 (*Melanoides tuberculata* var. *angularis* — Near Medan; Streamlet on Medan Estate; Soengei Bohorok and Anak Laut, Sabang), p. 492 (*Melanoides tuberculata* var. *seminuda* — Medan; Toentoengan; Timbang Langkat; Soengei Landak; Soengei Bohorok; Streamlet at Sabang), p. 492 (*Melanoides tuberculata* var. *truncatula* — Padang Boelan; Poengei, Medan, Timbang Langkat; Soengei Bohorok; Soengei Minahol)
- 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82 : 32 (*Melania tuberculata* — Laoet Tawar en Peusangrivier)
- 1928 DEGNER, Treubia, 10, p. 376 (*Melania bisinuata*, *M. distinguenda*, *M. javanica*), p. 377 (*Melania sluiteri*, *M. uniformis* var. *aquisulcata*, *M. uniformis* var. *crispulata*, *M. uniformis* var. *plicatula*, *M. crepidinata*, *M. malayana*), p. 378 (*Melania tuberculata*, *M. tuberculata* var. *angularis*, *M. tuberculata* var. *plicifera*, *M. tuberculata* var. *seminuda*, *M. tuberculata* var. *truncatula*, *M. tuberculata* var. *virgulata*, *M. unifasciata*) (all from Sumatra)
- 1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42 : 3 (*Melania tuberculata* var. *seminuda* — Quiet, sandy spots in Aek Ponot, near Tangga; Streamlet along rice fields near Soenan, 700 m alt., N. Habinsaran)
- 1931 OOSTINGH, Arch. Moll. Kunde, 63 : 190 (*Melanoides tuberculata* fa *seminuda* — Poelau Taboean, Semangko Bai, Lampongs, Strand an der Ostküste)
- 1934 RENSCH, Trop. Binnengew. 5 : 228 (*Melania tuberculata truncatula* — Sawahs, Sickerquelle und Bach (960 m) bei Balige am Toba-See; Tümpel an den heissen Quellen bei Tarutung (südl. des Toba Sees); See von Singkarah und Ufersumpf; Warme Quellen bei Kaidjai (bis 39° C) südl. von Singkarah; Ranau-See und Ausfluss desselben; Urwaldbach Wai Negri am Ranausee; Ajer Putih, Urwald-

- fluss, Wasserfall und Quelle im Quellgebiet des Musi; Warme Quellen (32—34° C) bei Tjurup)
- 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 63 (*Melania javanica* — Indragiri; River Kwantan), (*Melania distinguenda* — River Pajakombo), (*Melania tuberculata* — Balige am Tobasee), (*Melania unifasciata* — Souliki), (*Melania sykesi* (non *sykesi* Bullen) — River Piladang; River Souliki)
- 1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19 : 96, pl. 5, fig. 11 (*Melania tuberculata truncatula* — Takengon, Atjeh)
- 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19 : 569 (*Melania tuberculata* — See von Singkarak)

Localities : Basin of Alur River, near Lho Tjapa, Pidie district, Atjeh (RMNH); Laut Tawar, in Peusang river, Gajo Highlands (MBa); Sungei Lapan, Langkat, 21 April 1918 (ZMA); Sawah N of the Lau Simanginangin, S of Gunung Mariah, Serdang, 2 August 1927 (ZMA); Belawan River (MBa); Medan and Medan Estate (ZMA); Fresh water near Medan, 13 May 1917 (ZMA); Sungei Sikambang, SW of Medan, 25 September 1931 (ZMA); Sungei Krah, near Medan, 14 February 1921 (ZMA); Fresh water at Mariëndal, Deli, 4 May 1917 (ZMA); Fresh water at Tuntungan, Deli, 7 July 1917 (ZMA); Lau Rakit, Upper Deli, in hot spring, 28 August 1921 (ZMA); Sawahs between Kota Tengah Tengah and the Lau Tengah, near Brastagi road, Upper Deli, 15 October 1926 (ZMA); From ditches near Deli Experiment Station, 28 August 1916 (ZMA); Quickly running brook on Estate Gedong Djohore, Deli Experiment Station, 28 June 1926 (ZMA); Brastagi, near bathing place in the Lau Gumba, 25 December 1916 (ZMA); Pool near Kampong Djarungmuda, near Brastagi, Karo Highlands, 15 May 1927 (ZMA); Sungei Ular, Pagar Marbau, Serdang, 2 February 1919 (ZMA); Sungei Minahol, 28 May 1917 (ZMA); Valley of the Lau Kling, W of Brastagi, 26 December 1916 (ZMA); River near Timbang Langkat, W of Bindjei, 18 July 1917 (ZMA); Fresh water on Padang Bulan Estate, near Medan, 2 January 1917 (ZMA); Sungei Landak, 10 August 1917 (ZMA); Sungei Kalau, 10 August 1917 (ZMA); Sungei Bohorok, Langkat, SW of Bindjei, 8—10 August 1917 (ZMA); Lake Toba (RMNH, MBa); Balige, along Lake Toba (MBa); Effluent of Lake Toba in Asahan River, 28 October 1930 (ZMA); On quiet sandy spots in the Aek Ponot, near Tangga, N Habinsaran, 4 August 1928 (ZMA); In brook along sawahs near Kampong Suanan, N Habinsaran, 700 m alt., 5 August 1928 (ZMA); Estate Silau Dunia, near Tebing Tinggi, 1956 (NI); Swamp along the road between Indrapura and Limaupurut, District Tandjung, 12 June 1927 (ZMA); Pematang Siantar (RMNH, MBa); Tandjong Tiram, Batu Bara district, in the mud of a swamp, 28 October 1955 (NI); Ambalutu Estate, near Kisaran, 50 m alt., in brook and ditches, 1952 and 1953 (NI); Telok Nibung, near Tandjong Balai, on a cocoa nut leaf, fallen in the water, 3 December 1955 (NI); River Kwantan, Indragiri (MBa); Palembang (ZMA); Maringai River, Lampong Districts (ZMA); Batang Hari, Lampong Districts (ZMA); Oosthaven, near Telok Betong, Lampong Districts, 19 September 1937 (ZMA); Si Borong Borong, Tapanuli (ZMA); Sibolga, Tapanuli, in the mud and on the beach (NI); Pulu Pontjan Ketjil in the Bay of Sibolga, 28 June 1954 (NI); West Sumatra (RMNH); Suliki (MBa); Lake Manindjau (ZMA); Matur, Padang Highlands, October 1913 (RMNH); Anai Gap, 500 m alt., 1926

(ZMA); Fort de Kock, 920 m alt. (ZMA, RMNH); Ajer Tegenang, near Fort de Kock (ZMA); Pajakombo (RMNH, MBa); Kaju Tanam (ZMA); Lake Singkarah (ZMA); River and sawahs near Singkarah (ZMA); Padang (ZMA); Tabeh di Aripan (ZMA); Solok (ZMA); Danau di Bawah (ZMA); Danau di Atas (ZMA and RMNH); Muara Labu, N of Mt Korintji, (ZMA); Supajang (ZMA); Pager Alam, near Lahat, June 1898 (RMNH); Lake Ranau, March 1954 (Bt).

Melanoides blatta (LEA, 1850)

- 1850 LEA, Proc. Zool. Soc. London, p. 184 (*Melania blatta* — Rapid river and small streams Luzon, Philippines)
1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 123, Taf. 15, Fig. 4, 4a (*Melania blatta* — Philippinen, Ibu, Prov. Zambales, Luzon)

Localities : Sumatra (RMNH); Ajerbangis, Padang Lowlands, November 1913 (RMNH); Pajakombo (RMNH).

New records for Sumatra.

Melanoides rustica (MOUSSON, 1857)

- 1857 MOUSSON, Journ. de Conch. 6 : 160 (*Melania rustica* — Banjuwangi)
1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 138, Taf. 17, Fig. 2—2b (*Melania rustica* — Oestlicher Teil von Java)
1898 ALDRICH, Nautilus, 12 : 2 (*Melania rustica*? — Marang)
1928 DEGNER, Treubia, 10 : 377 (*Melania rustica* — Sumatra)

Not seen.

Melanoides arctecava (MOUSSON, 1857)

- 1857 MOUSSON, Journ. de Conch. 6 : 161 (*Melania arcte-cava* — Bajulmati, Java)
1874 BROT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 24 : 165, Taf. 20, Fig. 1, 1a, 1b (*Melania arctè-cava* — Badjumatil (sic!))
1898 ALDRICH, Nautilus, 12 : 1 (*Melania artecava* (sic!) — Marang)
1928 DEGNER, Treubia, 10 : 376 (*Melania arctecava* — Sumatra)

Not seen.

Cerithidea alata (PHILIPPI, 1849)

- 1849 PHILIPPI, Abb. & Beschr. 3 : 17, Taf. 1, Fig. 11 (*Cerithium alatum* — Mergui, in ditione quondam Birmanorum)
1940 VAN REGTEREN ALTENA, Zool. Meded. Mus. Leiden, 22 : 218, pl. 20, fig. 20—22 (*Cerithidea alata* — Belawan; Poeloe Weh; Bangka and various other localities)

Localities : Mangrove at Belawan, Deli (ZMA, RMNH); Tandjong Tiram, Batu Bara District, in mud of a mangrove creek (NI).

Cerithidea charbonnieri (PETIT, 1851)

- 1851 PETIT, Journ. de Conch. 2 : 264, pl. 7, fig. 7 (*Cerithium charbonnieri* — Borneo; Rivière de Moeara Kompick, ile de Palembang)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 190 (*Potamides charbonnieri* — Gebiet von Palembang)
1898 KOBELT, in MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 47, Taf. 10, Fig. 2—3 (*Cerithium charbonnieri* — Borneo, Java, Sumatra, in Flussmündungen)
1928 DEGNER, Treubia, 10 : 382 (*Potamides charbonnieri* — Sumatra)

Localities : Padang (RMNH); Palembang (MZh).

Cerithidea cingulata (GMELIN, 1790)

- 1790 GMELIN, Syst. Nat. Ed. XIII : 3561 (*Murex cingulatus* — Tranquebariae)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 183 (*Potamides cingulatus* — Bei Benkulen)

- 1921 PRASHAD, Rec. Ind. Mus. 22 : 494 (*Potamides cingulatus* — Mangrove swamps at Belawan (Deli) and Perbaengan (Serdang); Mouth of the Soengei Batang Kwis (Serdang); Rice-field at Perbaengan)
- 1928 DEGNER, Treubia, 10 : 382 (*Potamides cingulatus* — Sumatra)
- 1934 RENSCH, Arch. Moll. Kunde, 66 : 338 (*Tympanotonus cingulatus* — Brackwasser bei Lho Seumaweh)
- 1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19 : 98 (*Cerithidea cingulata* — Lho Seumaweh)
- 1940 VAN REGTEREN ALTENA, Zool. Meded. Mus. Leiden, 22 : 212, pl. 20, fig. 1—11 (*Cerithidea cingulata* — Belawan, Deli; Perbaengan, Serdang, from mangrove; Shore at Batang Kwis, near Soengei Toean; Pantai Tjermin)

Localities : Deli (MBa); Belawan, Deli (ZMA, RMNH); Beach near Batang Kwis, Soengei Toean (ZMA); Beach near Pantai Tjermin, S of Belawan, 30 April 1937 (ZMA); Mangrove near Perbaungan, Serdang (ZMA); Tandjong Tiram, living on the mud flats, November 1951 (NI); Between Labuan Ruku and Tandjong Tiram, in ditches along the road, 10 January 1955 (NI).

Cerithidea cornea (A. ADAMS, 1855)

- 1855 A. ADAMS, in : SOWERBY, Thes. Conch. 2 : 887, pl. 186, fig. 275 (*Cerithium corneum* — Borneo, mouths of rivers)
- 1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 50, Taf. 10, Fig. 6—7 (*Cerithium corneum* — Flussmündungen auf Borneo)
- 1898 ALDRICH, Nautilus, 12 : 2 (*Cerithidea cornea* — Marang)
- 1928 DEGNER, Treubia, 10 : 382 (*Potamides corneus* — Sumatra)

Not seen.

Cerithidea djadjariensis (K. MARTIN, 1899)

- 1899 K. MARTIN, Samml. Geol. Reichsmus. Leiden (N.S.) 1 : 216, Taf. 33, Fig. 502, 502a (*Potamides djadjariensis* — Tji Djadjar, bij Parungdjadja in Madjalengka)
- 1940 VAN REGTEREN ALTENA, Zool. Meded. Mus. Leiden, 22 : 215, pl. 20, fig. 12—19 (*Cerithidea djadjariensis* — Belawan)

Localities : Belawan (RMNH); Pangkalan Dadar, near Bandar Chalipa, 1956 (NI); Tandjong Tiram, September 1953 (NI); Tandjong Tiram, Batu Bara District, in mud of a mangrove creek (NI).

Cerithidea microptera (KIENER, 1842)

- 1842 KIENER, Icon. Coq. Viv. Cerithium, p. 93, pl. 30, fig. 3 (*Cerithium microptera* — Océan Indien)
- 1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 74, Taf. 14, Fig. 5—6 (*Cerithium microptera* — An den Philippinen)
- 1921 PRASHAD, Rec. Ind. Mus. 22 : 495 (*Potamides microptera* — East coast of Sumatra)
- 1928 DEGNER, Treubia, 10 : 382 (*Potamides microptera* — Sumatra)

Not seen.

Cerithidea obtusa (LAMARCK, 1822)

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 7 : 71 (*Cerithium obtusum* — Mers de Timor)
- 1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 42, Taf. 9, Fig. 3—5 (*Cerithium obtusum* — Am vorderen indischen Ocean in brakischen Mangrovesümpfen; Singapore; Borneo; Madagascar; Timor)
- 1921 PRASHAD, Rec. Ind. Mus. 22 : 495 (*Potamides obtusum* — Mangrove swamps Belawan, Deli; Mouth of the Soengei Batang Kwis, Serdang)

- 1930 PFLUGFELDER, Zool. Anz. 89 : 276—283, Fig. 1—7 (*Potamides obtusus* — Perbaengan)
1941 VAN DER MEER MOHR, Trop. Natuur, 30 : 53 (*Cerithidea obtusa* — Pantai Tjermin)

Localities : Deli (ZMA); Mangrove, Belawan, 1918 (ZMA); Mouth of Sungei Batang Kwis, 9 June 1918 (ZMA); Beach at Pantai Tjermin, 30 April 1937 (ZMA); Sempang Linggi (MBa); Tandjong Tiram, 1952—1955 (NI); Palembang (MZh); Sukadana, Lampongs (ZMA).

Cerithidea ornata (A. ADAMS, 1855)

- 1855 A. ADAMS, in SOWERBY, Thes. Conch. 2 : 887, pl. 186, fig. 277—278 (*Cerithium ornatum* — Borneo, mouths of rivers)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 189 (*Potamides ornatus* — NW Küste von Sumatra)
1928 DEGNER, Treubia, 10 : 382 (*Potamides ornatus* — Sumatra)

Not seen. The record for NW Sumatra was based by MARTENS on a reference of SCHEPMAN. If, however, we look up SCHEPMAN's publication the locality mentioned was not NW Sumatra, but NW Sumba. This erroneous location was repeated by DEGNER.

Cerithidea quadrata SOWERBY, 1866

- 1866 SOWERBY, in : REEVE, Conch. Icon. 15, pl. 1, fig. 5 (*Cerithidea quadrata* — Malacca)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 45, Taf. 9, Fig. 8 (*Cerithium quadratum* — Im mittleren indischen Ozean; Singapore)
1921 PRASHAD, Rec. Ind. Mus. 22 : 495 (*Potamides quadratum* — Mangrove swamps at Belawan, Deli)
1928 DEGNER, Treubia, 10 : 382 (*Potamides quadratus* — Sumatra)

Localities : Mangrove at Belawan, Deli (ZMA); Panahattan, Balige, 2 May 1919 (ZMA); Sibolga, Tapanuli, in brackish pool, on cocoanut leaf, 10 April 1955 (NI).

Cerithidea weyersi DAUTZENBERG, 1899

- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 8, pl. 2, fig. 1—1b (*Cerithidea weyersi* — Indrapoera)
1928 DEGNER, Treubia, 10 : 382 (*Potamides weyersi* — Sumatra)

Localities : Sumatra (ZMA); Pangkalan Dadar, near Bandar Chalipah, on Nipah stumps, 13 April 1956 (NI); Tandjong Tiram, beach along the mud flats, October 1954 (NI); Tandjong Tiram, Batu Bara District, in mud of a mangrove creek, 10 January 1955 (NI); Sibolga, Tapanuli, on the beach, inhabited by a hermitcrab, May 1954 (NI); Indrapura (RMNH, ZMA).

Telescopium mauritsi BUTOT, 1954

- 1954 BUTOT, Basteria, 18 : 7, pl. 1, fig. 3 and 4, pl. 2, fig. 2, 3 upper row, textfig. 1 (*Telescopium mauritsi* — Legon Tengah, Pulo Panaitan)

Locality : Tandjong Tiram, Batu Bara District (NI).
New record for Sumatra.

Telescopium telescopium (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X : 760 (*Trochus telescopium* — no locality)

- 1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 57, Taf. 12, Fig. 1 (*Cerithium telescopium* — Im indischen Ocean im Brackwasser an Flussmündungen; Im Gangesdelta; An den Maskarenen; An Neuholland)
- 1921 PRASHAD, Rec. Ind. Mus. 22 : 493 (*Potamides telescopium* — Mangrove swamps at Belawan, Deli, and Perbaengan, Serdang)
- 1928 DEGNER, Treubia, 10 : 381 (*Potamides telescopium* — Sumatra)
- 1931 OOSTINGH, Arch. Moll. Kunde, 63 : 195 (*Telescopium telescopium* — Zwischen Betoeng und Oemboelan Tandjoengan; Mittlere Halbinsel der Lampongs)
- 1934 RENSCH, Arch. Moll. Kunde, 66 : 339 (*Telescopium telescopium* — Brackwasser bei Lho Seumaweh)
- 1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19 : 99 (*Telescopium telescopium* — Lho Seumaweh)

Localities : Kotaradja, Atjeh, 5 May 1935 (ZMA); Deli (ZMA); Medan (ZMA); Belawan (RMNH); Mangrove near Belawan, Deli (ZMA); Sisir Gunting, near Belawan (ZMA); Rantau Pandjang, Deli (ZMA); Pantai Tjermin, Serdang, 10 August 1919 (ZMA); Mangrove at Perbaungan, Serdang (ZMA); Tandjong Tiram, Batu Bara District, in the mud on the mud flats, November 1951 and December 1955 (N1); Palembang (MZh, RMNH); Telok Betong, Lampongs, 18 January 1915 (ZMA); Sukadana, Lampongs (ZMA).

Terebralia palustris (LINNÉ, 1767)

- 1767 LINNÉ, Syst. Nat. Ed. XII : 1213 (*Strombus palustris* — In Indiae paludibus)
- 1874 TAPPARONE CANEFRI, Mem. R. Acc. Sci. Torino (2) 28 : 41 (*Pyrazus palustris* — Sumatra)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 176, Taf. 9, Fig. 24—25 (*Potamides palustris* — Sumatra)
- 1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 35, Taf. 8, Fig. 1—2, Taf. 9, Fig. 1—2 (*Cerithium palustre* — Ziemlich allenthalben im Umkreis des indischen Oceans, in den Mangrovewäldern, soweit das Brackwasser reicht)
- 1928 DEGNER, Treubia, 10 : 381 (*Potamides palustris* — Sumatra)
- 1931 OOSTINGH, Arch. Moll. Kunde, 63 : 194 (*Terebralia palustris* — Zwischen Betoeng und Oemboelan Tandjoengan; Lampongs)
- 1934 RENSCH, Arch. Moll. Kunde, 66 : 338 (*Terebralia palustris* — Brackwasser bei Lho Seumaweh)
- 1938 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19 : 100 (*Terebralia palustris* — Lho Seumaweh)

Localities : Sibolga, Tapanuli, pool behind the beach with almost fresh water, May 1953 (N1); Brandewijnsbay, near Padang (ZMA); Coast of Benkulen (RMNH).

Terebralia sulcata (BORN, 1778)

- 1778 BORN, Index Mus. Caes. Vindob. p. 324 (*Murex sulcatus* — no locality)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 178, Taf. 9, Fig. 27 (*Potamides sulcatus* — Brandewijnsbai an der Westküste)
- 1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 26 : 40, Taf. 8, Fig. 7—8 (*Cerithium sulcatum* — Im indischen Ozean, im Brackwasser)
- 1928 DEGNER, Treubia, 10 : 381 (*Potamides sulcatum* — Sumatra)

Locality : Tandjong Tiram, 1952—1956 (N1).

Clea bocki BROU, 1881

- 1881 BROU, Journ. de Conch. 29 : 159, pl. 6, fig. 5 (*Clea bockii* — Paijo)
- 1895 SMITH, Proc. Malac. Soc. London, 1 : 253 (*Clea bocki* — Paijo)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 306 (*Clea bocki* — Sumatra)

- 1921 PRASHAD, Rec. Ind. Mus. 22 : 497 (*Clea bocki* — Mangrove swamps at Belawan, Deli)
1928 DEGNER, Treubia, 10 : 383 (*Clea bocki* — Sumatra)

Locality : Sungei Landai, near Tiga Pulu Mountains, Djambi, November 1938 (RMNH).

Anentome helena (VON DEM BUSCH, 1847)

- 1847 VON DEM BUSCH, in PHILIPPI, Abb. & Beschr. 2 : 170, Taf. 4, Fig. 4 (*Melania helena* — Java)
1853 PETIT, Journ. de Conch. 4 : 255, pl. 7, fig. 11 (*Melania theminckiana* — Java)
1900 MARTENS, Nachr. Blatt, 32 : 12 (*Canidia temminkiana* — Toba-See)
1921 PRASHAD, Rec. Ind. Mus. 22 : 496 (*Canidia helena* and *C. theminckiana* — Fresh water near Medan)
1928 DEGNER, Treubia, 10, p. 382 (*Canidia helena* — Sumatra), p. 383 (*Canidia theminckiana* — Sumatra)
1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42 : 3 (*Canidia helena* — Among shore vegetation in Aek Asahan, near government resthouse at Porsea, 900 m alt., N. Habinsaran)
1934 RENSCH, Trop. Binnengew. 5 : 244, Fig. 14 (*Canidia helena* — Tobasee)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 63 (*Canidia helena* — Balige am Tobasee)
1954 VAN NIEL, Penggemar Alam, 34 : 107 (*Anentome helena* — Sumatra's East Coast)
1954 BUTOT, Penggemar Alam, 34 : 108—115, fig. 1—2 (*Anentome helena* — Toba Meer; Medan; Porsea bij het Toba Meer; Membang Muda, Hanna Estate, snelstromende beek; Balige)

Localities : Balige, along Lake Toba (MBa); Lake Toba near Tongging (MBa, By); Aek Asahan, near Porsea, shore vegetation near government resthouse, 900 m alt., N Habinsaran (ZMA); Lake of Perlanaän, between Tebing Tinggi and Kisaran, 20 September 1931 (ZMA); Hanna Estate, near Membang Muda, 10 m alt., in quickly running brook, July 1953 (NI); Ambalutu Estate, near Kisaran, October 1952 (NI); Lake near Kampong Djupara, Lampongs (ZMA); Sukadana, Lampongs (ZMA).

Laemodonta monilifera (H. & A. ADAMS, 1853)

- 1853 H. & A. ADAMS, Proc. Zool. Soc. London, p. 120 (*Plecotrema moniliferum* — Hab. ?)
1895 SYKES, Proc. Malac. Soc. London, 1 : 243 (*Plecotrema moniliferum* — Borneo)
1956 HUBENDICK, Proc. Malac. Soc. London, 32 : 116, pl. 23, fig. 3 (*Plecotrema monilifera* — Red Sea; Mombasa; Mangareva; Suez; Karachi; S. Japan; Réunion; New Caledonia; Rapa)

Locality : Beach at Sibolga, Tapanuli, 1954 (NI).
New record for Sumatra.

Laemodonta punctigera (H. & A. ADAMS, 1853)

- 1853 H. & A. ADAMS, Proc. Zool. Soc. London, p. 120 (*Plecotrema punctigerum* — Borneo; *Plecotrema imperforatum* — Philippines, Negros)
1895 SYKES, Proc. Malac. Soc. London, 1 : 245 (*Plecotrema punctigerum* — Borneo; Vizagapatam; Singapore; Siam; Vaico; Cochinchina; Macau; Swatow; *Plecotrema imperforatum* — Mindanao; I. of Negros; Irawady Delta)
1956 HUBENDICK, Proc. Malac. Soc. London, 32 : 120, pl. 23, fig. 5 (*Plecotrema punctigera* — Bandra, N of Bombay; Vizagapatam; Irawady Delta; coasts of the South China Sea from Singapore to Swatow; Philippine Archipelago)

Localities : Tandjong Tiram, drift zone, various dates between 1952

and 1954 (NI); Tandjong Tiram, on decaying vegetation along mangrove creek, 11 December 1955 (NI).

New records for Sumatra.

Laemodonta siamensis (MORELET, 1875)

1875 MORELET, Sér. Conch. 4 : 273, pl. 13, fig. 6 (*Plecotrema siamensis* — Siam)

1895 SYKES, Proc. Malac. Soc. London, 1 : 245 (*Plecotrema siamense* — Siam)

1956 HUBENDICK, Proc. Malac. Soc. London, 32 : 121, pl. 23, fig. 6 (*Plecotrema siamensis* — Borneo; Celebes; Philippines; Korea)

Locality : Beach at Sibolga, Tapanuli, 1954 (NI). New record for Sumatra.

Carychium javanum elatum, subsp. nov. (figure 6)

The new subspecies differs from the Javanese *Carychium javanum javanum* MOELLENDORFF in being higher, especially in the top whorls. All characteristics of the Javanese form are more developed : the striation is stronger, the peristome is broader and more calcified, the parietal tooth is stronger, and there occurs a weak infrapalatal tooth. This infrapalatal tooth lies somewhat deeper in the throat than the palatal tooth.



FIGURE 6. *Carychium javanum elatum*, n.subsp. Front view of shell. Holotype of subsp. S. van der Spoel del.

Dimensions (in mm):

	holotype	paratypes									
Height	2.5	2.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Width	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	.9
Height of aperture	.9	.8	.8	.8	.8	.8	.8	.8	.7	.9	.8
		2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	
		.9	1.0	1.0	1.0	1.0	1.0	.9	.9	1.0	
		.8	.9	.8	.8	.8	.8	.8	.8	.8	

The holotype has been figured.

Locality : Brastagi, 1750 m alt., living on the ground among dead leaves, May 1953 (type locality), holotype and numerous paratypes, collected by J. P. VAN NIEL.

Auriculastra elongata (KÜSTER, 1845)

1845 KÜSTER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16 : 53, Taf. 8, Fig. 6—8 (*Auricula elongata* — Sandwich Inseln)

1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 96, Taf. 15, Fig. 17—18 (*Auriculastra elongata* — Indischer Ozean, von Mauritius bis Sandwich Inseln)

Locality : Batu Bara, near Tandjong Tiram, along high water mark,

under leaves, 1955 (NI).

New record for Sumatra.

Auriculastra oparica (H. & A. ADAMS, 1854)

1854 H. & A. ADAMS, Proc. Zool. Soc. London, p. 9 (*Ellobium oparicum* — In insula Opara, Ins. Societatis)

1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II: 91, Taf. 13, Fig. 15 (*Auricula oparica* — Opara, Gesellschaftsinseln)

Localities: Tandjong Tiram, October 1954 (NI); Oosthaven, near Telok Betong, Lampong Districts, 19 September 1937 (ZMA).

New records for Sumatra.

Auriculastra saccata (PFEIFFER, 1854)

1854 PFEIFFER, Proc. Zool. Soc. London, p. 121 (*Auricula saccata* — Manilla)

1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II: 97, Taf. 15, Fig. 12—13 (*Auriculastra saccata* — Philippinen, Cebu)

Locality: Oosthaven, near Telok Betong, Lampong Districts, 19 September 1937 (ZMA).

New record for Sumatra.

Auriculastra semiplicata (H. & A. ADAMS, 1854)

1854 H. & A. ADAMS, Proc. Zool. Soc. London, p. 8 (*Ellobium semiplicatum* — Singapore)

1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II: 90, Taf. 13, Fig. 11—12 (*Auricula semiplicata* — Singapore)

Locality: Tandjong Tiram, drift zone and beach along the mud flats, 1953—1954 (NI).

New record for Sumatra.

Auriculastra subula (QUOY & GAIMARD, 1832)

1832 QUOY & GAIMARD, Voy. Astrolabe, Zool. 2: 171, pl. 13, fig. 39—40 (*Auricula subula* — Port Carteret, Nouvelle Irlande)

1845 KÜSTER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16: 53, Taf. 8, Fig. 9—10 (*Auricula subula* — Hafen Carteret an Neu Irland)

1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II: 95, Taf. 15, Fig. 19—20 (*Auriculastra subula* — Philippinen, Celebes, Neu-Irland, Neu Caledonien)

Localities: Belawan, Deli, 9 February 1919 (ZMA); Bander Chalipa, 1956 (NI).

New records for Sumatra.

Melampus fasciatus (DESHAYES, 1830)

1830 DESHAYES, Encycl. Méth. Vers, 2: 90 (*Auricula fasciata* — no locality)

1844 KÜSTER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16: 33, Taf. 5, Fig. 9—11 (*Auricula fasciata* — Neu Irland; Neu Guinea; Insel Ruten)

1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II: 235, Taf. 29, Fig. 14—18 (*Melampus fasciatus* — Indopazifischer Ozean)

1898 ALDRICH, Nautilus, 12: 2 (*Melampus fasciatus* — Marang)

1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 8 (*Melampus fasciatus* — Indra-poera)

1928 DEGNER, Treubia, 10: 369 (*Melampus fasciatus* — Sumatra)

1931 OOSTINGH, Arch. Moll. Kunde, 63: 222 (*Melampus fasciatus* — Küste zwischen Tirembaroe und Tirem; Lang Eiland)

Localities : Sibolga, Tapanuli, December 1918 (ZMA); Sibolga, Tapanuli, living on rocks, harbour jetties, palmstems, above the tide mark, May 1953 and April 1955 (N1); Among the rocks near the Apenberg, Padang, April 1952 (Dr); Bungus Bay, S of Emmahaven (Dr).

Melampus luteus (QUOY & GAIMARD, 1832)

- 1832 QUOY & GAIMARD, Voy. Astrolabe, Zool. 2 : 163, pl. 13, fig. 25—27 (*Auricula lutea* — Vanikoro et Guam)
1844 KÜSTER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16 : 39, Taf. 6, Fig. 1—3 (*Auricula lutea* — Insel Nanoun-ha, nahe der Insel Guam)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 222 (*Melampus luteus* — Strand bei der Wai Lagan-Mündung; Poeloe Taboean; Lang Eiland)
Not seen.

Melampus pulchellus (PETIT, 1842)

- 1842 PETIT, Proc. Zool. Soc. London, p. 202 (*Auricula pulchella* — St Nicolas, isle of Zebu)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 221, Taf. 26, Fig. 8—9 (*Melampus pulchellus* — Philippinen: Manila, Cebu; Singapur)

Locality : Tandjong Tiram, in the mangrove zone, on decaying vegetation, along the high water mark, various dates in 1953, 1954 and 1955 (N1).

New record for Sumatra.

Melampus siamensis MARTENS, 1865

- 1865 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 54 (*Melampus siamensis* — Siam, unweit Petschaburi)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 197, Taf. 22, Fig. 18, Taf. 23, Fig. 25—26 (*Melampus siamensis* — Am vorderen Indischen Ozean, von Hinterindien bis zum Rothen Meer)

Locality : Tandjong Tiram, high water mark, April 1954 (N1)

New record for Sumatra.

Melampus sincaporensis PFEIFFER, 1855

- 1855 PFEIFFER, Malak. Blätt. 2 : 8 (*Melampus sincaporensis* — Sincapore)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 196, Taf. 22, Fig. 15—16 (*Melampus sincaporensis* — Bei Sincapore und an den Philippinen)

Localities : Bandar Chalipa, 1956 (N1); Tandjong Tiram, 1953 and 1955 (N1); Batu Bara, near Tandjong Tiram, on Nipah stems and other low vegetation, 1955 (N1); Padang (RMNH).

New records for Sumatra.

Cassidula auris-felis (BRUGUIÈRE, 1789)

- 1789 BRUGUIÈRE, Encycl. Méth. Vers. 1 : 343, pl. 460, fig. 5 (*Bulimus auris-felis* — Mers des Grandes Indes; Mers du Sud)
1844 KÜSTER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16 : 16, Taf. 3, Fig. 3 (*Auricula felis* — no locality)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 141, Taf. 8, Fig. 12—14 (*Cassidula auris-felis* — Benkulen)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 181, Taf. 21, Fig. 16—18 (*Cassidula auris-felis* — no locality)

- 1921 PRASHAD, Rec. Ind. Mus. 22 : 467 (*Cassidula auris-felis* — Mangrove swamps at Belawan, Deli; Mouth of Soengei Batang Kwis, Serdang; Perbaengan, Serdang)
1928 DEGNER, Treubia, 10 : 368 (*Cassidula auris-felis* — Sumatra)

Localities : Mangrove swamps near Belawan, 25 August 1918 (ZMA); Panahattan, Baliqe, along Lake Toba (ZMA); On mud flat near the jetty of Belawan, October 1949 (Dr, Vm); Mouth of Sungei Batang Kwis, Serdang (ZMA); Mangrove zone at Perbaungan, Serdang (ZMA); Tandjong Tiram, on the beach, September 1952 (NI); Batu Bara, near Tandjong Tiram, on Nipah leaf, about 1 m above water level, 1955 (NI).

Cassidula faba (MENKE, 1853)

- 1853 MENKE, Zeitschr. Malak. 10 : 124 (*Auricula faba* — Insula Java)
1853 PFEIFFER, Zeitschr. Malak. 10 : 125 (*Auricula sowerbyana* — In insulis Sandwich)
1854 H. & A. ADAMS, Proc. Zool. Soc. London, p. 32 (*Cassidula decussata* — Moreton Bay)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 176, Taf. 21, Fig. 8 (*Cassidula faba* — An Java)

Localities : Belawan, Deli, 20 March 1919 (ZMA); Tandjong Tiram, along high water mark, April 1954 (NI).

New records for Sumatra.

Cassidula mustelina (DESHAYES, 1830)

- 1830 DESHAYES, Encycl. Méth. Vers, 2 : 92 (*Auricula mustelina* — no locality)
1844 KÜSTER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16 : 28, Taf. 4, Fig. 3—4 (*Auricula mustelina* — Neuseeland)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 144, Taf. 8, Fig. 15 (*Cassidula mustelina* — Sumatra)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 172, Taf. 21, Fig. 4 (*Cassidula mustelina* — no locality)
1928 DEGNER, Treubia, 10 : 368 (*Cassidula mustelina* — Sumatra)

Locality : Tandjong Tiram, beach along the mud flats, October 1954 (NI).

Cassidula triparietalis MARTENS, 1897

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 145, Taf. 8, Fig. 16 (*Cassidula triparietalis* — various islands in Malay Archipelago, not from Sumatra)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 170, Taf. 21 Fig. 1 (*Cassidula triparietalis* — Ceram; Flores; Batjan; Bali)

Locality : Pulu Pontjan Ketjil in the Bay of Sibolga, Tapanuli, on the beach, 1954 (NI). New record for Sumatra.

Pythia castanea (LESSON, 1831)

- 1831 LESSON, Voy. Coq. Zool. 2 : 336, pl. 10, fig. 7 (*Scarabus castaneus* — Waigiou)
1844 KÜSTER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16 : 61, Taf. 9, Fig. 1—2 (*Scarabus castaneus* — Waigiou; Sumatra)
1928 DEGNER, Treubia, 10 : 368 (*Pythia castanea* — Sumatra)

Locality : Sumatra (Br).

Pythia imperforata (ADAMS, 1850)

- 1850 ADAMS, Proc. Zool. Soc. London, p. 151 (*Scarabus imperforatus* — Borneo)

- 1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II: 158, Taf. 20, Fig. 1 (*Pythia imperforata* — Borneo)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 7, pl. 1, fig. 6, 6a, 6b (*Pythia imperforata* — Indrapoera)
1928 DEGNER, Treubia, 10: 368 (*Pythia imperforata* — Sumatra)

Locality: Sumatra (ZMA).

Pythia pantherina (ADAMS, 1850)

- 1850 ADAMS, Proc. Zool. Soc. London, p. 152 (*Scarabus pantherinus* — Siquejor, woods under stones)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 136 (*Pythia pantherina* — Bei Benkulen; Bei Tiku in der Ass. Res. Agam, an Kalkfelsen)
1928 DEGNER, Treubia, 10: 368 (*Pythia pantherina* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 221 (*Pythia pantherina* — Strand bei der Wai Paja-Mündung; Küste bei der Wai Lagan-Mündung; Strand bei der Bai Balimbing Saleman; Mittlere Halbinsel der Lampoengs)

Localities: Sumatra (ZMA); Tjalang, W coast of Atjeh (ZMA); Kota Radja, Atjeh, 5 May 1935 (ZMA); Deli (MZh); Belawan, Deli (ZMA); Sisir Gunting, near Belawan, 1929 (ZMA); Sibolga, Tapanuli, December 1918 (ZMA); Sibolga, Tapanuli, May 1953 (NI); Bungus Bay, S of Emmahaven, on the beach, 31 December 1950 (Dr); Telok Betong, Lampong Districts, 1881 (RMNH); Oosthaven, near Telok Betong, 19 September 1937 (ZMA); Lampong Bay (RMNH).

Pythia plicata (FÉRUSSAC, 1821)

- 1821 FÉRUSSAC, Hist. Nat. génér. et part. Moll. Tabl. Auricules, p. 105 (*Scarabus plicatus* — Le Bengale)
1844 KÜSTER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16: 9, Taf. 1, Fig. 1—3 (*Scarabus plicatus* — Bengalen)
1921 PRASHAD, Rec. Ind. Mus. 22: 467 (*Pythia plicata* and *P. undata* (non *undata* LESSON) — Mangrove swamps at Belawan, Deli)
1928 DEGNER, Treubia, 10: 368 (*Pythia plicata* — Sumatra)

Localities: Mangrove swamps near Belawan, Deli (ZMA); Pangkalan Dadar, near Bandar Chalipah, April 1956 (NI); Tandjong Tiram, at high water mark, February 1953 (NI).

Pythia scarabaeus (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X: 768 (*Helix scarabaeus* — In Asiae montibus)
1844 KÜSTER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16: 8, Taf. 1, Fig. 1, 2, 5 (*Scarabus imbrium* — In Ostindien, auf Wasserpflanzen)
1898 ALDRICH, Nautilus, 12: 2 (*Pythia scarabaeus* — Marang)
1928 DEGNER, Treubia, 10: 368 (*Pythia scarabaeus* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 220 (*Pythia scarabaeus* — Strand zwischen Wai Samang und Balimbing; Grasfläche oberhalb des Strandes westlich von der Wai Belambang-Mündung; Küste bei Kaoergading; Strand der Telok Karangberak; Poelau Taboean, Westküste und Ostküste; Zwischen Betoeng und Oemboelan Tandjoengan; Mittlere Halbinsel der Lampoengs; Lang Eiland, Ostküste)

Locality: Tandjong Karang, Lampong Districts (ZMA).

Pythia trigona (TROSCHER, 1838)

- 1838 TROSCHER, Arch. Naturgesch. 4: 207 (*Scarabus trigonus* — Pululoz bei Bintang)
1844 KÜSTER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16: 10, Taf. 1, Fig. 6 (*Scarabus trigonus* — Pululoz bei Bintang)

- 1921 PRASHAD, Rec. Ind. Mus. 22 : 466 (*Pythia trigona* — Mangrove swamps at Belawan, Deli; Pematang in the Estate of Batang Kwis, Serdang; Near mouth of Soengei Batang Kwis, Serdang)
1928 DEGNER, Treubia, 10 : 368 (*Pythia trigona* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Pythia trigona* — Belawan, Deli; Sisir Gunting bei Belawan, Deli)

Localities : Deli (MZh); Mangrove at Belawan, Deli (ZMA; MBa); Sisir Gunting, near Belawan, Deli (ZMA; MBa); Pematang in mangrove zone near Batang Kwis, Serdang (ZMA); Pangkalan Dadar, near Bandar Chalipah, April 1956 (NI); Tandjong Tiram, February 1953 (NI); Tandjong Tiram, under decaying vegetation, supralittoral, along creek, November 1955 (NI; Bt); Batu Bara, near Tandjong Tiram, along high water mark, under leaves, 1955 (NI).

Pythia undata (LESSON, 1831)

- 1831 LESSON, Voy. Coq. Zool. 2 : 336, pl. 10, fig. 6 (*Scarabus undatus* — Waigiou)
1844 KÜSTER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16 : 65, Taf. 9, Fig. 8—9 (*Scarabus undatus* — Waigiou)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 139 (*Pythia undata* — Palembang)
1928 DEGNER, Treubia, 10 : 368 (*Pythia undata* — Sumatra)

Locality : Palembang (MZh).

Ellobium auris-judae (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X : 728 (*Bulla auris-judae* — no locality)
1844 KÜSTER, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16 : 15, Taf. 3, Fig. 1—2 (*Auricula judae* — Ostindien)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 154, Taf. 8, Fig. 6—11 (*Auricula judae* — Bei Palembang)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 83, Taf. 11, Fig. 3—8, Taf. 12, Fig. 1—2 (*Auricula aurisjudae* — Bengalischer Meeresbusen bis Queensland)
1921 PRASHAD, Rec. Ind. Mus. 22 : 467 (*Auricula judae* — Mangrove swamps at Belawan, Deli; Perbaengan, Serdang, on the sea shore)
1928 DEGNER, Treubia, 10 : 368 (*Auricula judae* — Sumatra)

Localities : Belawan, Deli (ZMA); Mud flats near mouth of the Deli River, near Belawan, 1948, 1950 (Dr; Vm); Mangrove swamps near Belawan, Deli (ZMA); Sisir Gunting, near Belawan, 1919 (ZMA); Beach near Perbaungan, Serdang (ZMA); Pangkalan Dadar, near Bandar Chalipah, 15 April 1956 (NI); Beach near Tandjong Tiram, Batu Bara District, 1954 (NI); Tandjong Tiram, Batu Bara District, in the mangrove zone among decaying Nipah stems, 8 May 1955 (NI); Pantai Tjermin, 30 April 1937 (ZMA); Telok Nibung, in the direction of Bagan Asahan, among vegetation and plant debris, 3 December 1955 (NI); Palembang (MZh); Sibolga, Tapanuli, on the beach, May 1954 (NI).

Ellobium auris-malchi (MÜLLER, 1774)

- 1774 MÜLLER, Hist. Verm. 2 : 112 (*Helix auris-malchi* — no locality)
1851 METCALFE, Proc. Zool. Soc. London, p. 72 (*Auricula subnodosa* — Borneo)
1898 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II : 78, Taf. 10, Fig. 1—2 (*Auricula subnodosa* — Borneo; ? Java und Singapore)

Localities : Tandjong Tiram, along high water mark, November 1951 (NI); Between Labuan Ruku and Tandjong Tiram, on moist soil, above

high water mark, 6 May 1955 (N1); Telok Nibung, a few km in the direction of Bagan Asahan, among vegetation and plant debris, 3 December 1955 (N1); Telok Nibung, bank of the River Asahan, 19 January 1950 (Dr).

New records for Sumatra.

Ellobium auris-midae (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. X: 728 (*Bulla auris-midae* — no locality)
1844 KÜSTER, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16: 12, 68, Taf. 2, Fig. 1—3 (*Auricula midae* — In Ostindien; Neu-Guinea)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 150 (*Auricula midae* — Palembang)
1921 PRASHAD, Rec. Ind. Mus. 22: 467 (*Auricula midae* — Mangrove swamps at Belawan, Deli and Perbaengan, Serdang)
1928 DEGNER, Treubia, 10: 369 (*Auricula midae* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66: 337 (*Ellobium auris-midae* — Brackwasser bei Lho Seumaweh)
1939 ADAM & LOLOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 20: 6 (*Ellobium auris-midae* — Lho Seumaweh, Atjeh)

Localities: Deli (ZMA); From prehistoric shell mounds, on tobacco estate Saentis, Deli, February 1930 (ZMA); Belawan, Deli, in brackish water in the mangrove zone (ZMA); Sisir Gunting, near Belawan, Deli, 1919 (ZMA); Mangrove near Perbaungan, Serdang, 16 March 1918 (ZMA); Beach near Perbaungan, Serdang (ZMA); River mouth near Tandjong Tiram, Batu Bara District, April 1950 (Br); Tandjong Tiram, Batu Bara District, sea level, on the mud flats, 1954 (N1); Palembang (MZh).

Ellobium limnaeiforme (ANNANDALE, 1921)

- 1921 ANNANDALE, in: PRASHAD, Rec. Ind. Mus. 22: 468, pl. 14, fig. 1—2 (*Auricula limnaeiformis* — Perbaengan, Serdang)
1928 DEGNER, Treubia, 10: 369 (*Auricula limnaeiformis* — Sumatra)

Locality: Sisir Gunting, near Belawan, 1919 (ZMA).

Ellobium nevillei (MORELET, 1882)

- 1882 MORELET, Journ. de Conch. 30: 100, pl. 4, fig. 5 (*Auricula nevillei* — Mauritius)
1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 16-II: 94, Taf. 15, Fig. 7—18 (*Auricula nevillei* — Mayotte, Comoren)

Locality: Tandjong Tiram, high water mark, February 1953 and April 1954 (N1).

New record for Sumatra.

Ellobium percha (ANNANDALE, 1921)

- 1921 ANNANDALE, in: PRASHAD, Rec. Ind. Mus. 22: 468, pl. 14, fig. 3—4 (*Auricula percha* — Mangrove swamp Batang Kwis)
1928 DEGNER, Treubia, 10: 369 (*Auricula percha* — Sumatra)

Not seen.

Ellobium scheepmakeri (PETIT, 1850)

- 1850 PETIT, Journ. de Conch. 1: 405 (*Auricula scheepmakeri* — Sumatra)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 154 (*Auricula scheepmakeri* — Angeblich von Sumatra)
1928 DEGNER, Treubia, 10: 369 (*Auricula scheepmakeri* — Sumatra)

- 1939 VAN BENTHEM JUTTING, *Basteria*, 4: 29, pl. 2 (*Ellobium scheepmakeri* — no locality)

Locality: Sumatra (ZMA).

Ellobium tornatelliforme (PETIT, 1842)

- 1842 PETIT, Proc. Zool. Soc. London, p. 201 (*Auricula tornatelliformis* — Tanhay, Isle of Negros, Philippines)
 1853 PETIT, Journ. de Conch. 4: 412, pl. 12, fig. 5—6 (*Auricula tornatelliformis* — Iles Philippines)
 1898 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt .16-II: 92, Taf. 15, Fig. 1—4 (*Auricula tornatelliformis* — Negros, Philippines)

Locality: Tandjong Tiram, beach along the mud flats, February 1953, October 1954 (NI).

New record for Sumatra.

Salinator burmana (BLANFORD, 1867)

- 1867 BLANFORD, Journ. As. Soc. Bengal, 36 Part 2: 66, pl. 13, fig. 7—10 (*Amphibola burmana* — Delta of the Irawaddy)
 1956 VAN BENTHEM JUTTING, *Treubia*, 23: 453, fig. 116 (*Salinator burmana* — various localities in Java, not from Sumatra)

Locality: Tandjong Tiram, Batu Bara District, living in the mud on the mud flats, September 1952 (NI; SI).

New record for Sumatra.

Salinator fragilis (LAMARCK, 1822)

- 1822 LAMARCK, Hist. Nat. Anim. s. Vert. 6, Part 2: 179 (*Ampullaria fragilis* — no locality)
 1956 VAN BENTHEM JUTTING, *Treubia*, 23: 451, fig. 114, 115 (*Salinator fragilis* — various localities in Java, not from Sumatra)

Localities: Belawan, Deli, February 1929 (RMNH); Tandjong Tiram, Batu Bara District, living in the mud on the mud flats (NI).

New records for Sumatra.

Lymnaea brevispira (MARTENS, 1897)

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 2, Taf. 1, Fig. 1—2, Taf. 12, Fig. 1, 3 (*Limnaea brevispira* — See von Manindjau)
 1906 BULLEN, Proc. Malac. Soc. London, 7: 14 (*Limnaea brevispira* — Mt Bongson)
 1922 VAN HEURN & PARAVICINI, *Natuurk. Tijdschr. Ned. Indië*, 82: 30, fig. 7 (*Lymnaea brevispira* — Laut Tawar en Peusang rivier, Atjeh)
 1928 DEGNER, *Treubia*, 10: 369 (*Limnaea brevispira* — Sumatra)
 1929 VAN BENTHEM JUTTING, *Misc. Zool. Sum.* 42: 1 (*Limnaea brevispira* — Wet rocks and moss near Sampoeran Harimau, Tangga; Wet rocks and moss near Ponot falls, Tangga, N. Habinsaran)
 1931 DUPUIS, *Bull. Mus. Roy. Hist. Nat. Belg.* Vol. 7, Part 9: 7, fig. (*Myxas straeleni* — Lac de Takengon, Atjeh, 1200 m alt.)
 1934a RENSCH, *Arch. Moll. Kunde*, 66: 337 (*Limnaea brevispira* — Takengon, 1200 m)
 1934b RENSCH, *Trop. Binnengew.* 5: 206 (*Limnaea brevispira* — Ranau See, Brandungsufer)
 1939 ADAM & LELOUP, *Mém. Mus. Roy. Hist. Nat. Belg.* (Hors Série) Vol. 2, Fasc. 20: 10, pl. 1, fig. 7, pl. 2, fig. 4 (*Lymnaea brevispira* — Takengon, Atjeh)
 1946 VAN BENTHEM JUTTING, *Journ. of Conch.* 22: 221 (*Lymnaea brevispira* — Lake Manindjau; Outflow of Lake Toba into Asahan River; Sampoeran Harimau, N Habinsaran, on wet rock and between moss; Near Ponot Falls, Tangga, N Habinsaran, on wet rock and between moss; Mount Bongson; Laut Tawar and Peusang River)

- 1951 HUBENDICK, Kgl. Svenska Vetensk. Akad. Handl. Vol. 3, No. 1 : 78 and 165, fig. 185 and 355 (*Limnaea brevispira* — Tangga, North Habinsaran; Takengon, Atjeh)

Localities : Laut Tawar, Gajo Highlands (MBA); Peusangan, Atjeh, 7 March 1954 (Bt); Lake Toba, 1920 and 1935 (RMNH); Outflow of Lake Toba into Asahan River, 28 October 1920 (ZMA); On wet rocks and between moss near Sampuran Harimau, N Habinsaran, 3 August 1928 (ZMA); On wet rocks and between moss near Ponot falls, Tangga, N Habinsaran, 4 August 1928 (ZMA); Lake Manindjau (ZMA).

Limnaea rubiginosa (MICHELIN, 1831)

- 1831 MICHELIN, Mag. de Zool. 1, Part 1, Moll. no. 22, pl. 22 (*Limnaeus rubiginosus* — Indes Orientales)
- 1849 MOUSSON, Land & Stüssw. Moll. Java, p. 42, Taf. 5, Fig. 1 (*Limnaeus succineus* var. *javanica* — Tjiringhin)
- 1867 MARTENS, Malak. Blätt. 15 : 223 (*Limnaeus javanicus* var. *intumescens* — Surabaya; Pasuruan; Rogodjampi)
- 1880 SCHEPMAN, Midden Sumatra Exp. p. 9, pl. 2, fig. 5 (*Limnaea javanica* — Moeara Laboe; rijstvelden bij Soepajang; Loeboe gedang)
- 1881 MARTENS, Conch. Mitth. 1, p. 88, Taf. 16, Fig. 2—4 (*Limnaea javanica* var. *intumescens* — Surabaya; Passuruan; Kupang), p. 88, Taf. 16, Fig. 5 (*Limnaea javanica* var. *ventrosa* — Surabaya), p. 88, Taf. 16, Fig. 6—7 (*Limnaea javanica* var. *subteres* — Palembang; Lahat), p. 88, Taf. 16, Fig. 8 (*Limnaea javanica* var. *angustior* — Batavia; Tjisirupan; Makassar), p. 89, Taf. 16, Fig. 9—10 (*Limnaea javanica* var. *porrecta* — Koepang, Timor)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 3, Taf. 1, Fig. 3—4 (*Limnaea javanica* var. *costulata* — Tjipanans), p. 3, Taf. 1, Fig. 5 (*Limnaea javanica* var. *intumescens* — Ajer Tengenang bei Fort de Kock), p. 4, Taf. 1, Fig. 6 (*Limnaea javanica* var. *turgidula* — Ajer Tabiet bei Pajakombo), p. 4, Taf. 1, Fig. 7 (*Limnaea javanica* var. *angustior* — various localities, not from Sumatra), p. 4 (*Limnaea javanica* var. *subteres* — Sawah bei Singkarah), p. 5 (*Limnaea javanica* var. *porrecta* — Kaju Tanam)
- 1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 8 (*Limnaea javanica* — Indra-poera)
- 1900 MARTENS, Nachr. Blatt, 32 : 10 (*Limnaea javanica* var. *angustior* and *L. javanica* var. *intumescens* — Unter-Lankat)
- 1904 MARTENS, Wiss. Erg. D. Tiefsee Exp. Vol. 7, Part 1 : 145 (*Limnaea javanica* var. *angustior* — See von Singkarah, Padang)
- 1906 BULLEN, Proc. Malac. Soc. London, 7, p. 14, pl. 2, fig. 5—6 (*Limnaea bongsonensis* — Mount Bongson), p. 14 (*Limnaea excavata* — Mount Sago)
- 1921 PRASHAD, Rec. Ind. Mus. 22, p. 470 (*Limnaea javanica* var. *angustior* — Ponds on estate of Makassar; Streamlet next Timbang Langkat), p. 470 (*Limnaea javanica* var. *intumescens* — Mariëndal, Deli; Poengei, Langkat; Soengei Bohorok; Lau Kling Valley; Lau Goemba Valley, Karo-Batak High Plain; Anak Laut, Sabang), p. 470 (*Limnaea javanica* var. *subteres* — Valley of the Lau Kling, Karo Batak High Plain; Soengei Landak, Upper Langkat), p. 471 (*Limnaea javanica* var. *costulata* — Streamlet near Timbang Langkat; Near Medan), p. 471 (*Limnaea javanica* var. *porrecta* — Fresh water area near Tandjong Djatti, Langkat), p. 471 (*Limnaea javanica* var. *turgidula* — Valley of the Lau Goemba, Karo Batak High Plain; Soengei Landak, Upper Langkat)
- 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82 : 29, fig. 6 (*Limnaea javanica* — Laut Tawar en de Peusangrivier, Atjeh), p. 30 (*Limnaea javanica* var. *turgidula* — Laut Tawar en de Peusangrivier)
- 1928 DEGNER, Treubia, 10, p. 369 (*Limnaea bongsonensis*, *L. excavata*, *L. javanica*, *L. javanica* var. *angustior*, *L. javanica* var. *costulata* — Sumatra), p. 370 (*Limnaea javanica* var. *intumescens*, *L. javanica* var. *porrecta*, *L. javanica* var. *subteres*, *L. javanica* var. *turgidula* — Sumatra)
- 1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42 : 1 (*Limnaea javanica* var. *angustior* — Rice fields at Simakoek, 900 m alt.; Streamlet along rice fields at Soenan, 700 m alt.; Aek Pardoeaan, near government resthouse Pardoeaan, 850 m

- alt.; Streamlet near Kota Boeloe, 750 m alt., N Habinsaran), p. 2 (*Limnaea javanica* var. *costulata* — Streamlet near Kota Boeloe, N Habinsaran), p. 2 (*Limnaea javanica* var. *intumescens* — Streamlet along rice fields near Soenan, 700 m alt.; Drinking pool for buffaloes near Siriaria, 1400 m alt., N Habinsaran), p. 2 (*Limnaea javanica* var. *ventrosa* — Among shore vegetation in Aek Asahan behind government resthouse, Porsea, 900 m alt., N Habinsaran)
- 1934 RENSCH, Trop. Binnengew. 5 : 204 (*Limnaea succinea* — Quellen, Bäche, Sawahs und überspülte Wiesen am Tobameer, 960—1200 m; See von Singkarah und benachbarte Sawahs und Quellen; Danau di Atas, 1520 m, und benachbarte Sawahs und Quellen; Flacher Tümpel auf der Passhöhe am Danau di Atas; Ranausee und benachbarte Sawahs und Quellgebiet des Musi)
- 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Limnaea javanica* — Balige am Tobasee; Haranggaul am Tobasee; Serdang bei Lau Rakit)
- 1939 ADAM & LÉLOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série), Vol. 2, Fasc. 20 : 11, pl. 2, fig. 5 (*Limnaea javanica* — Takengon, Atjeh)
- 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19 : 569 (*Limnaea succinea* — See von Singkarah)
- 1951 HUBENDICK, Kgl. Svenska Vetensk. Akad. Handl. Vol. 3, No. 1 : 154 (*Limnaea auricularia* race *rubiginosa*, incl. *javanica*, *bongsonensis*, *succinea*, *excavata* — Mount Bongson; West Sumatra; Bencoonet, South end of Sumatra)

Localities : Sumatra (ZMA); Laut Tawar, Gajo Highlands (MBa); Lake Toba, near Balige (MBa); Haranggaul, Lake Toba (MBa); Panahattan, near Balige, 10 May 1919 (ZMA); Drinking pool for buffaloes near Siriaria, N. Habinsaran, 1400 m alt., 7 August 1928 (ZMA); Aek Asahan, near Porsea, behind government resthouse, among vegetation along the riverbank, N Habinsaran, 900 m alt., 8 August 1928 (ZMA); Sawahs near Simakuk, N Habinsaram, 900 m alt., 30 July 1928 (ZMA); Aek Parduaan, near government resthouse, N Habinsaran, 850 M alt., 5 August 1928 (ZMA); In rivulet along sawahs near Kampong Suanan, N Habinsaran, 700 alt., 5 August 1928 (ZMA); In rivulet near Kampong Kota Bulu, N Habinsaran, 5 August 1928 (ZMA); Deli River, near Belawan, June 1949 (RMNH; Dr); Fresh water near Medan (ZMA); Medan Estate, in ditch, 11 August 1918 (ZMA); Sungei Kraih, near Medan, 14 February 1921 (ZMA); Sungei Sikambang, near Medan, 25 September 1931 (ZMA); Fresh water at Telang Kuda, 27 September 1917 (ZMA); Tandjong Djatti, near Timbang Langkat, W of Bindjei (ZMA); Freshwater near Pungei, near Bindjei, Langkat (ZMA); River Timbang Langkat, W of Bindjei, 18 July 1917 (ZMA); Fresh water near Mariëndal, Deli (ZMA); Pagar Marbau, Serdang (ZMA); Sungei Ular, near Pagar Marbau, Serdang, 2 February 1919 (ZMA); Brastagi, Karo-Batak Highlands, in sawahs along the Lau Kling, near Kampong Kling, 26 December 1916 (ZMA); Brastagi, barred lake in the Lau Kling near Kampong Kling, 26 December 1916 (ZMA); Brastagi, in small pool, 1750 m alt. (NI); Brastagi, near bathing place in the Lau Gumba, 25 December 1916 (ZMA); Serdang near Lau Rakit, 300 m alt. (MBa); Little lake along the road to Perbaungan, between Frankfort Estate and bridge, near km 39, 23 August 1918 (ZMA); Ambalutu Estate, near Kisaran, 50 m alt., in sawahs, November 1952 (NI); Sungei Bohorok, 9 August 1917 (ZMA); Sungei Landak, affluent of the S. Bohorok, 10 August 1917 (ZMA); Palembang (MZh; RMNH); Pladju, Palembang, in River Musi, near the Dutch shop, and in swamp on the Territory of the B.P.M., April 1948 (ZMA; Nb); Pager Alam, Lahat, Palembang, 1898 (RMNH); Matur, Padang Highlands, October 1913 (RMNH); Fort de Kock, sawahs, 1913 and 1926 (RMNH,

ZMA); Ajer Tegenang, near Fort de Kock (ZMA); Anai gorge, 500 m alt., 1926 (ZMA); Kaju Tanam (ZMA); Pajakombo (RMNH); Ajer Tabiet, near Pajakombo (ZMA); Sawah near Singkarah (ZMA); Ditch along the road near Silungkung, 27 April 1952 (Dr, Vm); Muara Labu, N of Mt Korintji, in fresh water (ZMA); Lubu Gedang, N of Mt Korintji (ZMA); Lake Korintji, 10 June 1952 (Dr).

Gyraulus convexiusculus (HUTTON, 1849)

- 1834 HUTTON, Journ. As. Soc. Bengal, 3: 91 and 93 (*Planorbis compressus non compressus* MICHAUD, 1831 — Ganges)
1849 HUTTON, Journ. As. Soc. Bengal, Vol. 18, Part 2: 657 (*Planorbis convexiusculus* — India)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 12 (*Planorbis proclivis* — Tabeh di Aripan, östlich von Singkarah), p. 13, Taf. 1, Fig. 17—22, Taf. 12, Fig. 7, 10 (*Planorbis compressus* — Palembang)
1906 BULLEN, Proc. Malac. Soc. London, 7: 129, 1 fig. (*Planorbis sagoensis* — Mount Sago)
1921 PRASHAD, Rec. Ind. Mus. 22: 473 (*Gyraulus convexiusculus* — Freshwater areas at Padang Boelan; Anak Laut, Sabang)
1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82: 31, fig. 9 (*Planorbis compressus* — Sawahs langs de Peusangrivier)
1928 DEGNER, Treubia, 10: 370 (*Gyraulus convexiusculus*, *G. sagoensis* — Sumatra)
1934 RENSCH, Trop. Binnengew. 5: 209 (*Gyraulus convexiusculus* — Sawahs am See Singkarah; Brandungsufer, Zufluss- und Abflussgebiet, benachbarte Sawahs am Ranau-See)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 62 (*Gyraulus sumatranus* — Serdang bei Lau Rakit)
1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Gyraulus convexiusculus* — See von Singkarah)

Localities: Padang Bulan Estate, near Medan, Deli, in quiet ditch, 2 January 1917 (ZMA); Serdang, near Lau Rakit, 300 m alt. (MBa); Estate Silau Dunia, near Tebing Tinggi, 1956 (NI); Tandjong Tiram, Batu Bara District, on decaying vegetation in a little swamp, October 1955 (NI); Ambalutu Estate, near Kisaran, June 1952 (NI); Tandjong Balai, November 1952 (NI); Fort de Kock, in sawahs, 920 m alt., 1924—1926 (ZMA); Anai gorge, 500 m alt., 1926 (ZMA); Tabeh di Aripan (ZMA); Ajer Tabiet (ZMA); Lake Singkarah, 26 February 1929 (MBo).

Gyraulus feuerborni RENSCH, 1934

- 1934 RENSCH, Trop. Binnengew. 5: 213, Fig. 5, Taf. 8, Fig. 22 (*Gyraulus feuerborni* — See von Singkarah)
1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Gyraulus feuerborni* — See von Singkarah)

Localities: Lake Singkarah, 23 February 1929 (ZMA); Lake Korintji, 10 June 1952 (ZMA, Dr).

Gyraulus proclivis (MARTENS, 1897)

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 12, Taf. 1, Fig. 11—16 (*Planorbis proclivis* — Pajakombo; Ajer Tabiet; Danau di Atas, not Tabeh di Aripan — see under *Gyraulus convexiusculus*)
1906 BULLEN, Proc. Malac. Soc. London, 7: 14 (*Planorbis proclivis* — Mount Singalong)
1928 DEGNER, Treubia, 10: 370 (*Gyraulus proclivis* — Sumatra)

Localities : Danau di Atas; Ajer Tabiet (both ZMA).

In spite of RENSCH's assertion that *Gyraulus proclivis* and *G. sumatranus* are identical, I keep the two species separate, because shape and texture of the two are entirely different.

***Gyraulus sumatranus* (MARTENS, 1897)**

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 12, Taf. 1, Fig. 8—10, Taf. 12, Fig. 6, 9 (*Planorbis sumatranus* — Danau di Bawah)
1928 DEGNER, Treubia, 10 : 370 (*Gyraulus sumatranus* — Sumatra)
1934 RENSCH, Trop. Binnengew. 5 : 212, Fig. 4 (*Gyraulus sumatranus*, incl. *proclivis* — Bach am Subang-Pass; Zuflussgebiet des Danau di Atas, an Steinen; Wasserfall Kapala Tjurup im Quellgebiet des Musi zwischen Moos und Steinen)

Localities : Danau di Bawah (ZMA); Lake Korintji, 10 June 1952 (ZMA, Dr, Vm).

***Hippeutis thienemanni* RENSCH, 1934**

- 1934 RENSCH, Trop. Binnengew. 5 : 214, Fig. 6, Taf. 8, Fig. 18, 21 (*Hippeutis thienemanni* — Sumpfige Gräben am oberen Musi bei Ajer Simpang)

Localities : Ambalutu Estate, near Kisaran, June 1952 (N1); Tandjong Tiram, on decaying vegetation in a swamp, 28 October 1955 (N1); Ditches near the Upper Musi River, near Ajer Simpang, 6 May 1929 (ZMA); Pladju, Palembang, swamp in territory of B.P.M., 1948 (ZMA, Nb).

***Helicorbis caenosus* (BENSON, 1850)**

- 1850 BENSON, Ann. Mag. Nat. Hist. (2) 5 : 349 (*Planorbis caenosus* — In stagno prope urbem Moradabad, agris Rohillanis)
1921 PRASHAD, Rec. Ind. Mus. 22 : 474 (*Segmentina calathus* non *S. calathus* BENSON — Near Medan)
1928 DEGNER, Treubia, 10 : 370 (*Segmentina calathus* non *S. calathus* BENSON — Sumatra)
1956 VAN BENTHEM JUTTING, Treubia, 23 : 470, fig. 134 (*Helicorbis caenosus* — India Burma, Sumatra, Java)

Locality : Near Medan (ZMA).

***Polypylis kennardi* (BULLEN, 1906)**

- 1906 BULLEN, Proc. Malac. Soc. London, 7 : 130, 1 fig. (*Segmentina kennardi* — Mount Singalong)
1928 DEGNER, Treubia, 10 : 370 (*Segmentina kennardi* — Sumatra)
1934 RENSCH, Trop. Binnengew. 5 : 215 (*Segmentina kennardi* — Sawahs am See von Singkarah)
1956 VAN BENTHEM JUTTING, Treubia, 23 : 468, fig. 125, 132, 133 (*Polypylis kennardi* — Sumatra, Java, Sumba)

Localities : Ambalutu Estate, near Kisaran, April 1953 (N1); Tandjong Balai, November 1952 (N1); Pladju, Palembang, swamp in B.P.M. territory, 11 April 1948 (ZMA, Nb).

***Physastra doopi* PRASHAD, 1921**

- 1921 PRASHAD, Rec. Ind. Mus. 22 : 476, pl. 14, fig. 5—6 (*Physastra doopi* — Valley of the Lau Kling, Karo-Batak High Plain)
1928 DEGNER, Treubia, 10 : 371 (*Physastra doopi* — Sumatra)
1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42 : 2 (*Physastra doopi* — Rice fields at Simakoek, 900 m alt.; Streamlet along rice fields near Soeanan, 700 m alt.; Streamlet near Kota Boeloe; Drinking pool for buffaloes near Siriaria, 1400 m alt., N Habinsaran)

Localities : Valley of the Lau Kling (ZMA); Sawahs at Simakuk, 900 m alt., 30 July 1928, N Habinsaran; Streamlet along sawahs near Kampong Suanan, 700 m alt., 5 August 1928, N Habinsaran (ZMA); Streamlet near Kampong Kota Bulu, 5 August 1928, N Habinsaran; Drinking pool for buffaloes near Siriaria, 1400 m alt., 7 August 1928, N Habinsaran (ZMA); Kaju Aro Estate, Mt Korintji, in quickly running rivulet, and in ditch at Bento, May 1952 (ZMA, Dr.)

Physastra esau RENSCH, 1934

1934 RENSCH, Trop. Binnengew. 5 : 208, Fig. 2, Taf. 8, Fig. 19 (*Physastra esau* — Quelltümpel bei Balige, zwischen Pflanzen; Sumpfiger Graben am oberen Musti bei Ajer Simpang)

Locality : Fort de Kock, in clear, running water, among Potamogeton malayanus, 920 m alt., 1926 (ZMA).

Physastra stagnalis (MARTENS, 1897)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 11, Taf. 1, Fig. 32—34 (*Isidora stagnalis* — See von Manindjau)

1928 DEGNER, Treubia, 10 : 371 (*Physastra stagnalis* — Sumatra)

Locality : Lake Manindjau (ZMA).

Physastra sumatrana (MARTENS, 1897)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 8, Taf. 1, Fig. 26—29 (*Isidora sumatrana* — Ajer Tegenang bei Fort de Kock)

1900 MARTENS, Nachr. Blatt, 32 : 10 (*Isidora sumatrana* — Sinabung)

1906 BULLEN, Proc. Malac. Soc. London, 7, p. 14 (*Isidora sumatrana* — Souliki), p. 129 (*Isidora sumatrana* — Mount Ophir)

1908 ROLLE, Nachr. Blatt, 40 : 69 (*Physa sumatrana* — Padang)

1928 DEGNER, Treubia, 10 : 371 (*Physastra sumatrana* — Sumatra)

1929 VAN BENTHEM JUTTING, Misc. Zool. Sum. 42 : 2 (*Physastra sumatrana* — Rice field at Simakok, 900 m alt.; Drinking pool for buffaloes near Siriaria, 1400 m alt., N Habinsaran)

1934 RENSCH, Trop. Binnengew. 5 : 206, Fig. 1, Taf. 8, Fig. 13—17 (*Physastra sumatrana* — Toba-Gebiet: aus Sawahs, Quelltümpel, Sickerquelle und Bach bei Balige (960—1350 m); Stautümpel auf der Halbinsel Samosir (1100 m) am Tobasee; Danau di Atas (1520 m), Schwingwiesen des Ufers; Badkammer des Rasthauses bei Tjurup)

1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Physastra sumatrana* — Balige am Tobasee; Haranggaul am Tobasee; Mt Sago)

Localities : Lake Toba (ZMA, RMNH, MBa, Dr); Haranggaul along Lake Toba (MBa); Balige, Lake Toba (MBa); Sawahs near Balige 1000 m alt., 30 March 1929 (ZMA); Mt Sinabung (MBa); Sawahs near Simakuk, 900 m alt., 30 July 1928, N Habinsaran (ZMA); Drinking pool for buffaloes near Siriaria, 1400 m alt., 7 August 1928, N. Habinsaran (ZMA); Matur, Padang Highlands, October 1913 (RMNH); Fort de Kock, 920 m alt., 1925, 1926 (ZMA); Ajer Tegenang, near Fort de Kock (ZMA); Pajakombo (RMNH); Anai gorge, 500 m alt., 1926 (ZMA); River on Mt Sago, near Fort de Kock (MBa).

Indoplanorbis exustus (DESHAYES, 1832)

1832 DESHAYES, Voy. Bélanger Ind. Orient. Zool. p. 417, pl. 1, fig. 11—13 (*Planorbis exustus* — Lieux marécageux de la côte de Malabar)

1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 12 (*Planorbis exustus* — Deli)

- 1900 MARTENS, Nachr. Blatt, 32 : 10 (*Planorbis indicus* — Unter-Langkat)
 1921 PRASHAD, Rec. Ind. Mus. 22 : 472 (*Indoplanorbis exustus* — Medan; Medan Estate; Padang Boelan; Mariëndal; Rice fields at Perbaengan, Serdang; Serdang Estate; Batang Kwis; Fresh water lake near Perbaengan; Anak Laut, Sabang; Streamlet near Timbang Langkat)
 1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82 : 30, fig. 8 (*Planorbis exustus* — Laut Tawar en Peusangrivier, Atjeh)
 1928 DEGNER, Treubia, 10 : 370 (*Indoplanorbis exustus* — Sumatra)
 1931 DUPUIS, Bull. Mus. Roy. Hist. Nat. Belg. Vol. 7, Part 17 : 4, fig. (*Planorbis pelseeneeri* — Takengon, Atjeh, 1200 m; Aloer Poerbo, Atjeh)
 1934 RENSCH, Arch. Moll. Kunde, 66 : 337 (*Indoplanorbis exustus* — Takengon, 1200 m)
 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 62 (*Indoplanorbis exustus* — Serdang bei Lau Rakit; Medan)
 1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 20 : 13, pl. 1, fig. 8, pl. 2, fig. 6 (*Planorbis exustus* — Takengon, Atjeh)
 1956 VAN BENTHEM JUTTING, Treubia, 23 : 471, fig. 126, 135 (*Indoplanorbis exustus* — Sumatra, Java, Celebes)

Localities : Laut Tawar, Gajo Highlands (MBa, ZMA); Takengon, Atjeh, April 1920 (ZMA); Deli, Batak-mountains (RMNH); Dolok Baros, between Sibolangit and Brastagi (MGv); Swamps in Lower Langkat (MBa); Medan (MBa); Fresh water near Medan, Deli (ZMA); Medan Estate, in ditch, 11 August 1918 (ZMA); Sungei Deli, near Medan, 22 July 1917 (ZMA); Mariëndal, Deli, 4 May 1917 (ZMA); Sungei Merah, near Medan, 14 February 1921 (ZMA); Sungei Sikaming, near Medan, 25 September 1931 (ZMA); Pungei, Langkat, near Bindjei, 28 March 1917 (ZMA); Sisir Gunting, near Belawan, 1919 (ZMA); River Timbang Langkat, W of Bindjei, 18 July 1917 (ZMA); Sungei Ular, near Pagar Marbau, 2 February 1919 (ZMA); Pagar Marbau, 1955 (ZMA); Serdang near Lau Rakit, 300 m alt. (ZMA, MBa); Padang Bulan Estate near Medan, 19 March 1917 (ZMA); Rice field near Perbaungan, Serdang, 16 March 1917 (ZMA); River Bah Endeh, near Bah Lias, NE of Pematang Siantar (ZMA); Estate Silau Dunia, near Tebing Tinggi, 1956 (NI); Tandjong Tiram, Batu Bara District, on decaying vegetation in a swamp, 28 October 1955 (NI); Hanna Estate, near Membang Muda, 10 m alt., in muddy ditch, July 1953 (NI); Ambalutu Estate, near Kisaran, 50 m alt., in sawahs and ditches, April 1952 (NI); Telok Nibung, on cocoonut leaf fallen into the water, 3 December 1955 (NI); Central Sumatra (MBa); Lake Korintji, 10 June 1952 (Dr).

Indoplanorbis exustus occurs chiefly in the northern and north-eastern part of Sumatra, including the island of Weh, at the northern tip. It does not reach farther south than Lake Korintji. The species has been introduced recently in Java and Celebes (VAN BENTHEM JUTTING, 1956).

Ferrissia javana (MARTENS, 1897)

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 15, Taf. 1, Fig. 35—37 (*Ancylus javanus* — Buitenzorg)
 1956 VAN BENTHEM JUTTING, Treubia, 23 : 476, fig. 118, 119, 123, 124 (*Ferrissia javana* — Sumatra, Java, Celebes)

Localities : Estate Silau Dunia, near Tebing Tinggi, 1956 (NI); Ambalutu Estate, near Kisaran, 50 m alt., on water plants and branches, November 1952 (NI); Tandjong Tiram, on vegetation along the bank of a swamp, 28 October 1955 (NI); Fort de Kock, among Hydrilla, 920 m alt., 1924 (ZMA).

Atopos rugosus COLLINGE, 1902

- 1902 COLLINGE, Journ. Malac. 9: 90, pl. 5, fig. 46—48 (*Atopos rugosus* — Hills near Biserat, State of Jalor)
1925 HOFFMANN, Vidensk. Medd. Dansk naturh. Foren. 81: 27 (*Atopos rugosus* — Malayische Halbinsel)

Locality: Estate Sungei Kopas, near Kisaran, 100 m alt., under a stone at the skirt of the forest, 23 November 1955 (NI).

New record for Sumatra.

Atopos schildii BABOR, 1900

- 1900 BABOR, Ann. K.K. nat. hist. Hofmus. 15: 100 (*Atopos schildii* — Padang)
1925 HOFFMANN, Vidensk. Medd. Dansk naturh. Foren. 81: 30 (*Atopos schildii* — Padang)

Not seen.

Laevicaulis alte (FÉRUSSAC, 1823)

- 1823 FÉRUSSAC, Hist. Nat. génér. et partic. Moll. p. 96x, pl. 8A, fig. 8, pl. 8B, fig. 6 (*Vaginulus alte* — Environs de Pondichéry)
1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124: 26—31, fig. 1 (*Meisenheimeria alte* — various localities, not from Sumatra)
1952 VAN BENTHEM JUTTING, Treubia, 21: 330, fig. 15 (*Laevicaulis alte* — various localities, not from Sumatra)

Locality: Estate Ambalutu, near Kisaran, under dead leaves and decaying wood, 28 November 1952 (NI).

New record for Sumatra.

Sarasinula plebeia (FISCHER, 1868)

- 1868 FISCHER, Journ. de Conch. 16: 145 (*Vaginulus plebeius* — Nova Caledonia)
1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124: 25 (*Sarasinula plebeja* — various localities, not from Sumatra)
1934 HOFFMANN, Trop. Binnengew. 5: 259 (*Imerinia plebeja* — Am Toba-See)

Locality: Fort de Kock, Padang Highlands, 920 m alt., 1926 (ZMA).

Filicaulis bleekeri (KEFERSTEIN, 1865)

- 1865 KEFERSTEIN, Zeitschr. wiss. Zool. 15: 118, Taf. 9, Fig. 1—7 (*Veronicella bleekeri* — Java)
1867 MARTENS, Ostas. Landschn. p. 176, Taf. 5, Fig. 2, 4 (*Vaginulus hasselti* — Kepahiang)
1880 SCHEPMAN, Midden Sumatra Exp. p. 5, pl. 2, fig. 1 (*Vaginulus hasselti* — Solok; Silago; Lebong)
1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124: 31, fig. 2 (*Vaginula bleekeri* — various localities, not from Sumatra)
1928 DEGNER, Treubia, 10: 364 (*Vaginula bleekeri* — Sumatra)
1928 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 52: 3—4, pl. 1, fig. 1 (*Vaginula bleekeri* — Deli)
1930 KUYPER, Meded. Deli Proefstat. (2) 65: 33 (*Vaginula bleekeri* — Tandjong Morawa)
1931 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 73: 27 (*Vaginula bleekeri* — Ondern. Gedong Djohore; ondern. Timbang Langkat, Deli)
1933 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 83: 31 (*Vaginula bleekeri* — Ondern. Kwala Begoemit; ondern. Amplas, Deli)
1935 VAN DER MEER MOHR, Bull. Deli Proefstat. 35: 8 (*Vaginula bleekeri* — Deli)

Localities: Deli, 1920 (ZMA); Highlands of Deli, July 1913 (ZMA);

Estate Klambir Lima, near Medan, Deli, February 1910, destructive for young tobacco plants (ZMA); Hanna Estate, near Membang Muda, 10 m alt., up and under *Pueraria javanica*, November 1954 (NI); Ambalutu Estate, near Kisaran, 28 November 1952 (NI); Sungei Kopas Estate, near Kisaran, 100 m alt., under stones and in earth, 21 November 1955 (NI); Fort de Kock, 920 m alt., 1925 (ZMA); Solok (ZMA).

***Semperula birmanica* (THEOBALD, 1864)**

- 1864 THEOBALD, Journ. As. Soc. Bengal, 33: 243 (*Vaginulus birmanicus*) — Rangoon
1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124: 36, fig. 5—6 (*Semperula birmanica* — Padang)

Localities: Medan (MBa); Glenherrie (MBa).

***Semperula idae* (SEMPER, 1885)**

- 1885 SEMPER, Reisen Arch. Philipp. Teil 2, Bd 3: 321, Taf. 27, Fig. 27 (*Vaginula idae* — Borneo)
1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124: 33, fig. 3—4 (*Semperula idae* — various localities, not from Sumatra)
1928 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 52: 3 (*Semperula idae* — Ondern. Pagger Marbau, Deli)

Not seen.

***Semperula maculata* (TEMPLETON, 1858)**

- 1858 TEMPLETON, Ann. Mag. Nat. Hist. (3) 1: 49, pl. IIB, fig. 1—5 (*Vaginula maculata* — Colombo)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 246 (*Vaginulus sumatrensis* and *Vaginulus weberi* — Singkarak; Padang)
1893 SIMROTH, Sitz. Ber. naturf. Ges. Leipzig, 17/18, p. 69 (*Vaginula* n. sp. — Singkarak und Padang), p. 85 (*Vaginula sumatrensis* — no locality), p. 85 (*Vaginula weberi* — no locality)
1922 PARAVICINI, Teysmannia, 33: 27 (*Vaginula sumatrensis* — Deli)
1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124: 38, fig. 7 (*Semperula maculata* — Singkarak; Padang; Indragiri; Bindjei Estate)
1928 DEGNER, Treubia, 10: 364 (*Semperula maculata* — Sumatra)
1934 HOFFMANN, Trop. Binnengew. 5: 255 (*Semperula maculata* — Am See von Singkarak)

Localities: Hanna Estate, near Membang Muda, June 1953 (NI); Ambalutu Estate, near Kisaran, under dead leaves and decaying wood, 28 November 1952 (NI); Estate Sungei Kopas, near Kisaran, 100 m alt., under decaying wood along the edge of the wood, 24 November 1955 (NI); Kampong Karangajar, near Pematang Siantar, 300—350 m alt., under decaying wood, 27 November 1955 (NI); Central Sumatra (ZMA); Fort de Kock (MBa).

***Semperula schneideri* (SIMROTH, 1895)**

- 1895 SIMROTH, Sitz. Ber. naturf. Ges. Leipzig, 19: 7 (*Vaginula schneideri* — Sumatra)
1901 COCKERELL, Proc. U.S. Nat. Mus. 23: 836 (*Veronicella schneideri* — Sumatra)
1925 GRIMPE & HOFFMANN, Zeitschr. wiss. Zool. 124: 47 (*Semperula siamensis* var. *schneideri* — Tandjong Kuba, Indrapoera; Sukaranda, Serapit, Oberlangkat; S.O. Sumatra)
1927 HOFFMANN, Ark. Zool. 19A, Nr. 25: 36 (*Semperula siamensis* var. *schneideri* — Singkarak See)
1941 HOFFMANN, Zool. Anz. 136: 236 (*Valiguna schneideri* — Sumatra)

Locality : Sumatra (MBa).

Semperula wallacei (ISSEL, 1874)

- 1874 ISSEL, Ann. Mus. Civ. Stor. Nat. Genova, 6 : 385, pl. 4, fig. 1—3 (*Vaginula wallacei* — Territorio di Sarawak)
1952 VAN BENTHEM JUTTING, Treubia, 21 : 334, fig. 17 (*Semperula wallacei* — S. China, Malaya, Borneo, Sumatra, Java, Celebes)

Locality : Medan (ZMA, MBa).

Vaginulus johni LINDHOLM, 1922

- 1922 LINDHOLM, Ann. Mus. Zool. Acad. Sci. Russ. Petrograd, 23 : 282 (*Vaginulus johni* — Siak, Sumatra's E. coast)
1928 DEGNER, Treubia, 10 : 364 (*Vaginulus johni* — Sumatra)

Not seen. The taxonomic position of this species is very doubtful.

Vaginulus sumatranus LINDHOLM, 1922

- 1922 LINDHOLM, Ann. Mus. Zool. Acad. Sci. Russ. Petrograd 23 : 281 (*Vaginulus sumatranus* — Tapung kiri, Pantai Kermen, Sumatra's E. coast)
1928 DEGNER, Treubia, 10 : 364 (*Vaginulus sumatranus* — Sumatra)

Not seen. The taxonomic position of this species is very doubtful.

Succinea obesa MARTENS, 1867

- 1867 MARTENS, Ostas. Landschn. p. 387, Taf. 22, Fig. 21 (*Succinea obesa* — Java)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 7 (*Succinea obesa* — Sumatra)
1928 DEGNER, Treubia, 10 : 364 (*Succinea obesa* — Sumatra)
1934 RENSCH, Trop. Binnengew. 4 : 757 (*Succinea obesa* — Danau di Atas)
1952 VAN BENTHEM JUTTING, Treubia, 21 : 340, fig. 20 (*Succinea obesa* — Sumatra, Java, Madura)

Localities : Tandjong Tiram, 20 November 1955, sea level, on low vegetation along the swamp, just above the water edge (N1); Fort de Kock, 920 m alt., 1925 (ZMA).

Elasmias manilense (DOHRN, 1863)

- 1863 DOHRN, Nachr. Blatt, 10 : 160 (*Tornatellina manilensis* — Philippinen)
1952 VAN BENTHEM JUTTING, Treubia, 21 : 346, fig. 25 (*Elasmias manilense* — Philippines, Maldive Ids, Natuna Ids, Java)

Locality : Medan, on *Hibiscus rosa-sinensis*, November 1929 (ZMA).
New record for Sumatra.

Elasmias sundanum (MOELLENDORFF, 1897)

- 1897 MOELLENDORFF, Nachr. Blatt, 29 : 90 (*Tornatellina sundana* — Java)
1952 VAN BENTHEM JUTTING, Treubia, 21 : 348, fig. 28 (*Elasmias sundanum* — Java)

Locality : Fort de Kock, 920 m alt., 1925, numerous on the under side of the leaves of Scitamineae (ZMA).

New record for Sumatra.

Pyramidula gracilitesta, n.sp. (Pl. I, fig. 7)

Shell very small, low-conical on a broad base. Glassy-white to very light-brown. First $1\frac{1}{2}$ whorls spirally striated, the following ones with

the same fine spiral striae and additional coarser radial ribs, on which the periostracum stands off wing-like. On the base of the whorls the spiral sculpture is clear, but the ribs are much weaker.

Whorls $3\frac{3}{4}$, convex, regularly increasing in diameter. Suture rather deep. Periphery rounded in adult shells, somewhat angular (but never sharp) in juvenile shells. Top blunt, base rounded. Umbilicus moderately wide.

Aperture oblique, rounded. Peristome sharp, not continuous, the two ends connected by a very thin membrane against the penultimate whorl. Columellar side slightly reflected in the umbilical region.

Dimensions (in mm):

	holotype			paratypes			
Height	0.8	0.8	0.8	0.7	0.7	0.7	0.6
Width	1.2	1.2	1.1	1.2	1.1	1.0	1.0
Height of aperture	0.4	0.4	0.4	0.4	0.4	0.3	0.3

The holotype has been figured.

Locality: Hanna Estate, near Kampong Guntung Saga, Sumatra's East Coast, 10 m alt., among fallen leaves (*Locus typicus*), August 1953, collected by J. P. VAN NIEL, holotype and 8 paratypes (ZMA).

The new species is related to *Pyramidula javana* MOELLENDORFF, from Java, but *P. gracilitesta* is higher conical and its sculpture is more delicate. The radial ribs which are equally strong on both sides of the whorls in *P. javana*, are weaker on the basal side than on the top side of the whorls in *P. gracilitesta*.

Nesopupa moreleti (BROWN, 1870)

- 1870 BROWN, Journ. de Conch. 18 : 393 (*Pupa moreleti* — In insula Labuan)
- 1920 PILSBRY, Man. of Conch. (2) 25 : 339, pl. 32, fig. 1, 2, 3, 6 (*Nesopupa moreleti* — Labuan Island, on the north coast of Borneo; Philippines)

Locality: Sibolga, Tapanuli, in a decaying cocoa-nut shell on the beach, 1955 (NI).

New record for Sumatra.

Gastrocopta euryomphala PILSBRY, 1934

- 1934 PILSBRY, Man. of Conch. (2) 28 : 120, pl. 22, fig. 3—6 (*Gastrocopta euryomphala* — Bintuan, Busuanga, P.I.)
- 1952 VAN BENTHEM JUTTING, Treubia, 21 : 356, fig. 36 (*Gastrocopta euryomphala* — Philippine Is., Noordwachter, Klein Kombuis, Edam, Middelburg)

Locality: Tandjong Tiram, along high water mark, February 1953 (NI).

New record for Sumatra.

Gastrocopta pediculus ovatula (MOELLENDORFF, 1890)

- 1890 MOELLENDORFF, Ber. Senckenb. naturf. Ges. p. 253 (*Leucochilus pediculus* var. *ovatula* — Guadelupe, Cebu)
- 1952 VAN BENTHEM JUTTING, Treubia, 21 : 355, fig. 33 and 35 (*Gastrocopta pediculus ovatula* — various islands, but not from Sumatra)

Locality: Tandjong Tiram, along high water mark, February 1953 (NI).

New record for Sumatra.

Paraboydsidia boettgeri (MOELLENDORFF, 1897)

1897 MOELLENDORFF, Nachr. Blatt, 29: 70 (*Boysidia boettgeri* — Java)

1952 VAN BENTHEM JUTTING, Treubia, 21: 358, fig. 37 (*Paraboydsidia boettgeri* — Java)

Locality: Brastagi, 1750 m alt., among dead leaves, May 1953 (NI).
New record for Sumatra.

***Ena montivaga*, n.sp.** (figure 7)

Shell high-conical, light-corneous, finely, obliquely striated by the growth lines. This structure is crossed by still more delicate spiral lines, but the surface is not granular as in various other oriental members of the genus. With soft, silky lustre; little or not transparent. Epidermis, if present, corneous-yellow, but often deciduous.

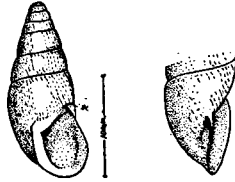


FIGURE 7. *Ena montivaga*, n.sp. Shell from front and last whorl from side. Holotype Mt Piso Piso, Karo Highlands. S. van der Spoel del.

Whorls 7—8, regularly increasing in diameter, little convex. Last whorl a little ascending towards the aperture. Suture distinct, but not deep. Periphery rounded. Top obtuse. Umbilicus open, but narrow, partly concealed by the reflected peristome.

Aperture oval, somewhat oblique. Peristome white, not continuous, the two ends in some shells connected by a thin membrane against the parietal wall. In adult shells the peristome is expanded and partly reflected, but not, or hardly, thickened.

Dimensions (in mm):

	holotype		paratypes	
Height	18.5	19.5	18.5	17.0
Width	8.0	8.5	7.5	7.0
Height of aperture	7.5	7.5	7.2	6.5

The holotype has been figured.

Locality: Mt Piso Piso, Karo Highlands, 2000 m alt., 26 December 1919 (type locality), holotype and 6 paratypes, collected by Jhr. F. C. VAN HEURN (ZMA).

This is the first record of an *Ena* from Sumatra. Compared with Javanese species it is larger and more slender than *E. thrausta*. It has less convex whorls and shallower suture than *E. glandula*, and lacks the granular surface structure of this species. From *E. tenuilirata* and *E. prillwitzii* it differs in being more slender and in lacking the granular structure. *Ena tenggerica*, on the other hand, has a much more slender spire and is darker brown than the new species.

Pupisoma orcula (BENSON, 1850)

- 1850 BENSON, Ann. Mag. Nat. Hist. (2) 6 : 251 (*Helix orcula* — In agro Bengalensi et Baharico, nec non versus occidentem usque at ripas fluvii Goomty)
1929 MENZEL & TENGWALL, Arch. Rubber, 13 : 241 (*Pupisoma pulvisculum* — Ondern. Bergen, Lampongsche Districten)
1950 KALSHOVEN, Plagen Cultuurgew. Indon. 1 : 49 (*Pupisoma ? pulvisculum* — Lampongs)
1952 VAN BENTHEM JUTTING, Treubia, 21 : 363, fig. 40 (*Pupisoma orcula* — Old and New World Tropics, S. Africa, Java, Lampong Districts)

Localities: Sumatra (MBA); Hanna Estate, near Membang Muda, 10 m alt., on leaves of epiphytic orchids and in a decaying mangga-tree (N1); Estate Sungei Kopas, near Kisaran, 89 m alt., 1955 (N1); Tandjong Tiram, Batu Bara District, along high water mark, 1 February 1953 (N1).

Phaedusa corticina (PFEIFFER, 1842)

- 1842 PFEIFFER, Symb. Hist. Helic. 2 : 60 (*Clausilia corticina* — Java)
1906 BULLEN, Proc. Malac. Soc. London, 7 : 13 (*Clausilia corticina* — Pajakombo)
1928 DEGNER, Treubia, 10 : 363 (*Phaedusa corticina* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 61 (*Phaedusa corticina* — Solok)
1953 LOOSJES, Beaufortia, 31 : 17, fig. 1, photograph 1 and 2 (*Phaedusa corticina corticina* — Ranau District and Langkapura in Palembang Highlands; Mount Kerintji, Solok, Kamang Mountains near Fort de Kock, Cave near Fort de Kock, Kalung, Pajakombo and Mount Sago, in Padang Highlands; Setinjak, S.E. of Tapanuli)

Localities : Sisir Gunting, near Belawan (ZMA); Karangredjo, near Pematang Siantar, 350—400 m alt., at the edge of the wood, 1953 (N1); Kampong Karanganjar, near Pematang Siantar, on trees up to 8 m height, 27 November 1955 (N1); Ranau District, Palembang (ZMA); Cave near Fort de Kock, July 1919 (ZMA).

Pseudononia obesa (MARTENS, 1867)

- 1867 MARTENS, Ostas. Landschn. p. 380 (*Clausilia obesa* — Locality unknown)
1893 SYKES, Proc. Malac. Soc. London, 1 : 29, textfig. (*Clausilia melvilli* — A few miles north of Point Lampong, S. Sumatra)
1928 DEGNER, Treubia, 10 : 363 (*Phaedusa melvilli* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 61 (*Phaedusa deliniana* nom. nud. — Langkapoera)
1953 LOOSJES, Beaufortia, 31 : 67, fig. 16 (*Pseudononia obesa obesa* — A few miles N. of Point Lampong; Southern slope of Mount Tanggamus; Along motorroad between Rantautidjang and Padjaseruk, west of the line Telok-betong-Sukadana, in the Lampong Districts; Mount Raja near Lake Ranau; Langkapura, in Palembang Highlands; District of Deli)

Locality : Brastaqi, 1750 m alt., in decaying wood, 1954 (N1).

Pseudononia aenigmatica (SYKES, 1893)

- 1893 SYKES, Proc. Malac. Soc. London, 1 : 28, textfig. (*Clausilia aenigmatica* — Sawahs, Hoodjoong)
1898 ALDRICH, Nautilus, 12 : 1 (*Clausilia aenigmatica* — Marang)
1928 DEGNER, Treubia, 10 : 363 (*Phaedusa aenigmatica* — Sumatra)
1953 LOOSJES, Beaufortia, 31 : 73, fig. 18 (*Pseudononia aenigmatica* — Pager Alam, near Lahat; Ranau District, Palembang Highlands)

Localities: Pager Alam, near Lahat, Palembang (ZMA); Ranau District, Palembang (ZMA).

Pseudonenia gracilentia LOOSJES, 1953

- 1892 MARTENS, Erg. Reise Nied. Ost Indien, 2 : 244, Taf. 14, Fig. 15—18 (*Clausilia obesa* var. *gracilior* — Manindjau)
 1893 WIEGMANN, Erg. Reise Nied. Ost Indien, 3 : 224, Taf. 16, Fig. 11—17 (*Clausilia obesa* var. *gracilior* — Manindjau)
 1928 DEGNER, Treubia, 10 : 363 (*Phaedusa obesa* var. *gracilior* — Sumatra)
 1953 LOOSJES, Beaufortia, 31 : 75, fig. 19 (*Pseudonenia gracilentia* — Manindjau, Padang Highlands; Mt Singgalang, Padang Highlands)

Localities: Manindjau (ZMA); Mt Singgalang, 1800 m alt., 1925 (ZMA).

Pseudonenia sumatrana (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 270 (*Clausilia sumatrana* part. — Kepahiang)
 1867 MARTENS, Ostas. Landschn. p. 379, fig. 1 on p. 378 (*Clausilia sumatrana* var. a — Auf steinigem Bodem längs der neuen Strasse von Tibingtingi nach Benkulen, kurz vor Kepahiang)
 1881 BOCK, Proc. Zool. Soc. London, p. 631 (*Clausilia sumatrana* part. — Coffee plantations at Paio)
 1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3 : 1055 (*Clausilia sumatrana* part. — Sumatra)
 1892 MARTENS, Erg. Reise Nied. Ost Indien, 2 : 255 (*Clausilia sumatrensis* (sic!) part — Sumatra)
 1906 BULLEN, Proc. Malac. Soc. London, 7 : 127 (*Clausilia sumatrana* — Loeboek Bangko)
 1908 ROLLE, Nachr. Blatt, 40 : 68 (*Clausilia sumatrana* — Kotoe Baroe, Singalang)
 1928 DEGNER, Treubia, 10 : 363 (*Phaedusa sumatrana* part. — Sumatra)
 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 61 (*Clausilia sumatrana* — Kamanggebirge bei Fort de Kock; Mount Sago; Pik von Indrapoera; Kota Baroe am Vulkan Singahan, 1300 m. ü.M.)
 1953 LOOSJES, Beaufortia, 31 : 81, fig. 22 (*Pseudonenia sumatrana* — Padangselie; Padang Pandjang; Kota Baru, western slope of Mount Singgalang, 1300 m; Fort de Kock, 920 m; Pajakombo; Mount Sago; Lubuk Bangku)

Localities: Fort de Kock, 920 m alt., 1925 (ZMA); Pajakombo (ZMA); Pager Alam, near Lahat, Palembang, 1898 (ZMA).

Pseudonenia abbreviata (MARTENS, 1867)

- 1867 MARTENS, Ostas. Landschn. p. 379, Taf. 22, Fig. 17 (*Clausilia sumatrana* var. b. called *abbreviata* on p. 447 — Auf steinigem Boden längs der neuen Strasse von Tibingtingi nach Benkulen, kurz vor Kepahiang)
 1868 PREIFFER, Mon. Hel. 6 : 410 (*Clausilia sumatrana* var. *brevior* — Sumatra)
 1881 BOCK, Proc. Zool. Soc. London, p. 631 (*Clausilia sumatrana* part. — Coffee plantations at Paio)
 1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3 : 1055 (*Clausilia sumatrana* part. — Sumatra)
 1892 MARTENS, Erg. Reise Nied. Ost Indien, 2 : 255 (*Clausilia sumatrensis* (sic!) part. — Sumatra)
 1906 BULLEN, Proc. Malac. Soc. London, 7 : 127, textfig. (*Clausilia robustior* — Mt Sago, Loeboek Bangko)
 1928 DEGNER, Treubia, 10 : 363 (*Phaedusa sumatrana* part., *Ph. robustior* — Sumatra)
 1953 LOOSJES, Beaufortia, 31 : 91, fig. 25 (*Pseudonenia abbreviata* — Near Kepahiang; Environs of the sources of River Musi; River Musi; Mount Kerintji, Kaju Aro plantation, under tea-plants by the side of the road on the ground, 1500 m)
 1954 ZILCH, Arch. Moll. Kunde, 83 : 28 (*Pseudonenia abbreviata* — Auf steinigem Boden längs der neuen Strasse von Tibingtingi nach Benkulen, kurz vor Kepahiang)

Localities: Kaju Aro Estate, Mt Korintji, 1450 m alt., at various dates

1952—1953, under tea shrubs on the ground, among dead leaves (ZMA, Br, Dr, Ls, Vm); Tamiai, Mt Korintji, July 1915 (RMNH).

Pseudonenia loosjesi ZILCH, 1954

- 1893 BOETTGER, in: SYKES, Proc. Malac. Soc. London, 1: 29, textfig. (*Clausilia sumatrana* var. *vicaria* — Kepahiang)
1906 BULLEN, Proc. Malac. Soc. London, 7: 13 and 128 (*Clausilia sumatrana* var. *vicaria* — Mount Sago and Mount Singalong)
1928 DEGNER, Treubia, 10: 363 (*Phaedusa sumatrana* var. *vicaria* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Phaedusa vicaria* — Pajakombo)
1953 LOOSJES, Beaufortia, 31: 94, fig. 26 (*Pseudonenia vicaria* — Kepahiang; Mount Singalang and Pajakombo, Padang Highlands)
1954 ZILCH, Arch. Moll. Kunde, 83: 29, Taf. 3, Fig. 45 (*Pseudonenia loosjesi* — Sumatra)

Localities: Sumatra (MBa); Pajakombo, 1914 (ZMA, RMNH)

Pseudonenia brachyptycta LOOSJES, 1953

- 1953 LOOSJES, Beaufortia, 31: 97, fig. 27 (*Pseudonenia brachyptycta* — Redjang, N.E. of Kepahiang; Sources of River Musi)
1954 ZILCH, Arch. Moll. Kunde, 83: 29 (*Pseudonenia brachyptycta* — Redjang, nō. Kepahiang; Quellgebiet der Musi)

Not seen.

Acrophaedusa thrausta LOOSJES, 1953

- 1953 LOOSJES, Beaufortia, 31: 154, fig. 44 (*Acrophaedusa thrausta* — Base of Mount Kerintji, Kaju Aro plantation, on decaying tree-trunk, 1500 m alt.)

Locality: Kaju Aro Estate, Mt Korintji, 1450 m alt., at various dates 1952—1953, under tea shrubs on the ground, among dead leaves (ZMA, Br, Dr, Ls, Vm).

Acrophaedusa junghuhni (PHILIPPI, 1847)

- 1847 PHILIPPI, in: KÜSTER, MART.-CHEMN., N. Syst. Conch. Cab. Bd 1, Abt. 14: 23, Taf. 2, Fig. 5—7 (*Clausilia junghuhni* — Gebirgen d. Insel Java)
1953 LOOSJES, Beaufortia, 31: 161, fig. 47, 48 and photograph 4 (*Acrophaedusa junghuhni* — Padang Highlands, northern slope of Mount Kerintji; Muara Labu; Mount Piso Piso, north-west of Lake Toba, in jungle, 1950 m)

Localities: Muara Labu, N. slope of Mt Korintji (ZMA); Estate Kaju Aro, Mt Korintji, 1550 m alt., on the ground under tea shrubs, among stones and decaying wood (Ls).

Acrophaedusa alticola (MARTENS, 1892)

- 1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 245 (*Clausilia alticola* — G. Singalang bei Fort de Kock)
1928 DEGNER, Treubia, 10: 363 (*Phaedusa alticola* — Sumatra)
1953 LOOSJES, Beaufortia, 31: 171, fig. 50 (*Acrophaedusa alticola* — Mount Singalang near Fort de Kock)

Locality: Mt Singalang, 1888 (ZMA); Mt Singalang, 1800 m alt., July 1925 (ZMA).

Hemiphaedusa excurrens (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 527 (*Clausilia excurrens* — Bei Kepahiang).

- 1867 MARTENS, Ostas. Landschn. p. 384, Taf. 22, Fig. 16, fig. 3 on p. 378 (*Clausilia excurrens* — Bei Kepahiang)
1888 TENISON WOODS, Proc. Linn. Soc. N. S. Wales (2) 3: 1056 (*Clausilia excurrens* — Kepahiang)
1928 DEGNER, Treubia, 10: 363 (*Phaedusa excurrens* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Phaedusa excurrens* — Pajakombo)
1953 LOOSJES, Beaufortia, 31: 182, fig. 55 (*Hemiphaedusa excurrens* — Near Kepahiang; Pajakombo; Pager Alam, Lahat; Source of River Musi)

Locality: Pager Alam, near Lahat, Palembang (ZMA).

Glessula sumatrana (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 527 (*Cionella sumatrana* — Kepahiang)
1867 MARTENS, Ostas. Landschn. p. 372, Taf. 22, Fig. 5 (*Cionella sumatrana* — Kepahiang)
1888 TENISON WOODS, Proc. Linn. Soc. N. S. Wales (2) 3: 1053 (*Glessula sumatrana* — Sumatra)
1908 ROLLE, Nachr. Blatt, 40: 68 (*Glessula sumatrana* — Padang Pandjang)
1909 PILSBRY, Man. of Conch. (2) 20: 102, pl. 14, fig. 4—5 (*Glessula sumatrana* — In the mountainous interior at Kepahiang; Padang Pandjang)
1928 DEGNER, Treubia, 10: 363 (*Glessula sumatrana* — Sumatra)
1952 VAN BENTHEM JUTTING, Treubia, 21: 374, fig. 51 (*Glessula sumatrana* — Sumatra, Java)

Localities: Brastagi, 11 October 1925, in the jungle, between the folded leaves of Zingiberaceae (ZMA); Brastagi, among dead leaves and under stones in the ground, 16 May 1952 (NI); Pajakombo (RMNH); Kepahiang (MZh); Pager Alam, Lahat, Palembang, 1898 (RMNH).

Subulina octona (BRUGUIÈRE, 1789)

- 1789 BRUGUIÈRE, Encycl. Méth. Vers, 1: 325 (*Bulimus octonus* — Dans les îles des Antilles; île de la Guadeloupe; île de Saint Domingue)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 244 (*Stenogyra octona* — Padang)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 6, pl. 1, fig. 3, 3a, 3b (*Stenogyra octona* — Indrapoera)
1900 MARTENS, Nachr. Blatt, 32: 10 (*Subulina octona* — Deli)
1906 BULLEN, Proc. Malac. Soc. London, 7: 13 (*Subulina octona* — Pajakombo, banana plantations)
1906 PILSBRY, Man. of Conch. (2) 18: 72, pl. 12, fig. 8—9 (*Subulina octona* — Batu Sangkar, Sumatra, and various localities outside Sumatra)
1922 LINDHOLM, Ann. Mus. Zool. Acad. Petrograd, 23: 280 (*Subulina octona* — Siak, Sumatra's East coast)
1928 DEGNER, Treubia, 10: 362 (*Subulina octona* — Sumatra)
1931 VAN DER MEER MOHR, Trop. Natuur, 20: 119—120, fig. (*Subulina octona* — Medan)
1931 VAN DER MEER MOHR, Misc. Zool. Sum. 52: 1—3, fig. (*Subulina octona* — Medan)
1934 RENSCH, Trop. Binnengew. 4: 755 (*Subulina octona* — Am Singkarak See)
1935 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 91: 23 (*Subulina octona* — Ondern. Tandjong Bringin, Deli)
1935 VAN DER MEER MOHR, Bull. Deli Proefstat. 35: 9 (*Subulina octona* — Deli)
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc 20: 14, pl. 2, fig. 7 (*Subulina octona* — Tandjong Slamet, Langkat)

Localities: Deli (ZMA); Medan, 1917 (RMNH); Ant trails near Medan, February 1931 (MBo); Estate Tandjong Bringin between Bindjei and Tandjong Pura, destructive to young tobacco plants, March 1934 (ZMA); Hanna Estate, near Membang Muda, along the verge of the road and among decaying wood, June-September 1953 (NI); Ambalutu

Estate, near Kisaran, November 1952 (NI); Sungei Kopas, near Kisaran, 89 m alt., one animal attacked and eaten by *Huttonella bicolor*, December 1955 (NI); Tandjong Tiram, Batu Bara District, under decaying cocoa-nut shells and leaves, November 1955 (NI); Palembang, bank of the River Musi, July 1948 (ZMA); Muara Beliti, Palembang, on a wall, 12 March 1949 (Nb); Pladju, Palembang, along rivulet near the Dutch shop, 17 April 1948 (ZMA, Nb); Ajer hitam, kampong near Palembang, under the bark of a tree, 17 May 1948 (ZMA); West coast of Sumatra (MBa); Sibolga, Tapanuli, along high water mark on the beach, 1954 (NI); Malumba, Tapanuli, against the base of a Hevea tree, 29 October 1920 (ZMA); Fort de Kock, 920 m alt., 1923 (ZMA); Pajakombo (RMNH); Padang (ZMA); Benkulen (RMNH).

Lamellaxis clavulinus (POTIEZ & MICHAUD, 1838)

- 1838 POTIEZ & MICHAUD, Gal. Moll. Douai, 1: 136, pl. 14, fig. 9, 10 (*Bulimus clavulinus* — Ile de Bourbon)
1906 PILSBRY, Man. of Conch. (2) 18: 135, pl. 23, fig. 17, 21, 22 (*Opeas clavulinum* — Bourbon Id.; Mauritius; Seychelles)

Localities: Brastagi, among leaves, stones and earth, 16 May 1952 (NI); Hanna Estate, near Membang Muda, in decaying wood, June 1953 (NI); Estate Silau Dunia, near Tebing Tinggi, 1956 (NI); Kampong Karanganjar, near Pematang Siantar, 300—350 m alt., near kampong houses (NI); Kampong Karangredjo, near Pematang Siantar, 1953 (NI); Ambalutu Estate, near Kisaran, 1952—1953 (NI); Muara Beliti, Palembang, on a wall, 12 March 1949 (ZMA, Nb); Sibolga, Tapanuli, 1954 (NI); Fort de Kock, 920 m alt., under fallen logs, stones, in detritus, 1924—1926 (ZMA); P. Ladang, near Pajakombo, December 1955 (Bt); Batu Sangkar, near Pajakombo, 13 December 1955 (Bt); Anai gorge, Padang Highlands, 500 m alt., 1926 (ZMA); Cave of Durian, Padang Highlands, August 1924 (ZMA).

New records for Sumatra.

The specimens which RENSCH recorded (1934, Trop. Binnengew. 4: 756) as *Opeas javanicum* from "Höhle von Pauh bei Fort de Kock" and "See von Singkarah" probably belong also to *Lamellaxis clavulinus*.

Lamellaxis gracilis (HUTTON, 1834)

- 1834 HUTTON, Journ. As. Soc. Bengal, 3: 84—85 and 93 (*Bulimus gracilis* — Beneath a flowerpot at Mirzapoor, and other localities)
1867 MARTENS, Ostas. Landschn. p. 375, Taf. 22, Fig. 13, Taf. 19, Fig. 5 (*Stenogyra gracilis* — Bei Palembang)
1880 SCHEPMAN, Midden Sumatra Exp. p. 9, pl. 2, fig. 4 (*Stenogyra gracilis* — Silago)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 243 (*Stenogyra gracilis* — Singkarah)
1906 PILSBRY, Man. of Conch. (2) 18: 125, pl. 18, fig. 3—6 (*Opeas gracile* — various localities, not from Sumatra)
1928 DEGNER, Treubia, 10: 362 (*Opeas gracile* — Sumatra)
1928 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 52: 3—4, pl. 1, fig. 2 (*Opeas gracile* — Deli)
1934 RENSCH, Trop. Binnengew. 4: 756 (*Opeas gracile* — Höhle von Pauh, bei Fort de Kock)
1935 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 91: 23 (*Opeas gracile* — Ondern. Tandjong Bringin, Deli)
1935 VAN DER MEER MOHR, Bull. Deli Proefstat. 35: 8 (*Opeas gracile* — Deli)

- 1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Opeas gracile* — Pajakombo; Langkapura)
1936 VAN DER MEER MOHR, Trop. Natuur, 25: 63 (*Opeas gracile* — Grot van Laurakit)
1938 VAN DER LAAN, Meded. Deli Proefstat. (2) 98: 15 (*Opeas gracile* — Pematang Djamboe op ondern. Batang Kwis)

Localities : Caves of Lau Rakit, E. of Sibolangit, 17 and 20 September 1933 (ZMA); Hanna Estate, near Membang Muda, among decaying wood, June 1953 (NI); Tandjong Tiram, February 1953 (NI); Kampong Karangredjo, near Pematang Siantar, 1953 (NI); Ambalutu Estate, near Kisaran, between roots of alang-alang, under decaying wood, various dates 1952 (NI); Pajakombo (MBa); Fort de Kock, 920 m alt., 1926 (ZMA); Silago (ZMA); Singkarak (ZMA); Padang, 2 m alt., 1926 (ZMA); Kaju Aro Estate, Mt Korintji, under tea shrubs, 7 May 1952 (Vm); Pladju, Palembang, B.P.M. territory, among dead wood, on a wall, along rivulet near Dutch shop, various dates 1948 (ZMA, Nb); Muara Beliti, Palembang, on a wall, 12 March 1949 (Nb); Langkapura, Lampong Districts (MBa); Pedada Bay, Lampong Districts, soil fauna, January 1922 (ZMA).

Lamellaxis gracilis forma panayensis (PFEIFFER, 1846)

- 1846 PFEIFFER, Proc. Zool. Soc. London, p. 33 (*Bulimus panayensis* — Dingle, Id. of Panay)
1880 SCHEPMAN, Midden Sumatra Exp. p. 9 (*Stenogyra panayensis* — Silago)
1906 PILSBRY, Man. of Conch. (2) 18, p. 31, pl. 18, fig. 1—2 (*Opeas gracile* var. *panayense* — Philippines)
1928 DEGNER, Treubia, 10: 363 (*Opeas gracile* var. *panayense* — Sumatra)

Localities : Ambalutu Estate, near Kisaran, April 1952 (NI); Silago (ZMA, RMNH).

Opeas aff. breve PFEIFFER

- 1906 BULLEN, Proc. Malac. Soc. London, 7: 126 (*Opeas* sp. aff. *breve* — Loeboek Bangko)
1928 DEGNER, Treubia, 10: 362 (*Opeas* aff. *breve* — Sumatra)

This is a very uncertain record. No explanation can be given of the taxonomic position unless BULLEN's material can be re-investigated.

Prosopaeas achatinaceum (PFEIFFER, 1846)

- 1846 PFEIFFER, Symb. 3: 82 (*Bulimus achatinaceus* — Java)
1867 MARTENS, Ostas. Landschn. p. 375, Taf. 22, Fig. 9 (*Stenogyra achatinacea* — Bei Palembang, an den Gräbern der Sultane)
1906 PILSBRY, Man. of Conch. (2) 18: 21, pl. 5, fig. 40—41 (*Prosopaeas achatinaceum* — Palembang, at the tombs of the Sultans)
1928 DEGNER, Treubia, 10: 362 (*Prosopaeas achatinaceum* — Sumatra)
1934 RENSCH, Trop. Binnengew. 4: 756 (*Prosopaeas achatinaceum* — See von Singkarak)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Prosopaeas javanicum* — Pajakombo)
1936 VAN DER MEER MOHR, Trop. Natuur, 25: 63 (*Prosopaeas achatinaceum* — Grot van Laurakit)

Localities : Caves of Lau Rakit, E of Sibolangit, 17 and 20 September 1933 (ZMA); Kampong Karanganyar, near Pematang Siantar, near kamponghouses and under various objects, 300—350 m alt., 27 November

1955 (Nl); Fort de Kock, 920 m alt., 1926 (ZMA); Pajakombo (MBa); Singkarah (ZMA); Kaju Aro Estate, Mt Korintji, under tea shrubs, 1450 m alt., September 1952 (Vm); Muara Beliti, Palembang, on a wall, 12 March 1949 (ZMA, Nb); Sukadana, Lampong Districts, 1882 (RMNH).

Prosopeas acutissimum (MOUSSON, 1857)

- 1857 MOUSSON, Journ. de Conch. 6: 159 (*Bulimus acutissimus* — In vicinis hortus Buitenzorgensis)
1897 MOELLENDORFF, Nachr. Blatt, 29: 72 (*Prosopeas holosericum* and *P. hastatum* — Java)
1900 MARTENS, Nachr. Blatt, 32: 9 (*Prosopeas holosericum* — Soekaranda)
1906 PILSBRY, Man. of Conch. (2) 18, p. 22, pl. 3, fig. 85—88 (*Prosopeas acutissimum* — Buitenzorg, near the Botanical Gardens; Gunung Salak), p. 23, pl. 3, fig. 89—91 (*Prosopeas acutissimum* var. *hastatum* — Java), p. 24, pl. 3, fig. 93—94 (*Prosopeas holosericum* — Sumatra at Sukaranda)
1906 BULLEN, Proc. Malac. Soc. London, 7: 13 (*Stenogyra hastata* — Mount Merapi)
1928 DEGNER, Treubia, 10: 362 (*Prosopeas acutissimum* var. *hastatum* and *P. holosericum* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Prosopeas acutissimum* var. *hastatum* — Padang Pandjang; Fort de Kock)
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 20: 15, pl. 2, fig. 14 (*Prosopeas holosericum* — Lho Nga, Atjeh)

Localities: Mt Piso Piso, Karo Highlands, 2000 m alt., 26 December 1919 (ZMA); Brastagi, 1750 m alt., May 1952 and 1953 (Nl); Sisir Gunting, near Belawan, Deli (ZMA); Kampong Karangredjo, near Pematang Siantar, 1953 (Nl); Ambalutu Estate, near Kisaran, 1953 (Nl); Fort de Kock (MBa, ZMA); P. Ladang, near Pajakombo, December 1955 (ZMA, Bt); Batu Sangkar, near Pajakombo, 13 December 1955 (Bt); Padang Pandjang (MBa); Anai Gap, 500 m alt., 1926 (ZMA); Pagar Alam, Lahat, Palembang (RMNH).

Prosopeas laxispirum (MARTENS, 1867)

- 1867 MARTENS, Ostas. Landschn. p. 373, Taf. 22, Fig. 14 (*Stenogyra laxispira* — Im Gebirge des Innern bei Kepahiang)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1052 (*Stenogyra laxispira* — Sumatra)
1906 PILSBRY, Man. of Conch. (2) 18: 26, pl. 3, fig. 92 (*Prosopeas laxispirum* — Mountains of the interior at Kepahiang)
1928 DEGNER, Treubia, 10: 362 (*Prosopeas laxispirum* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66: 336 (*Prosopeas laxispirum* — Hügelland von Lho Sukon, Atjeh)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Prosopeas laxispirum* — Langkapoera; Serdang bei Lau Rakit; Pik von Indrapoera)
1936 VAN DER MEER MOHR, Trop. Natuur, 25: 63 (*Prosopeas paioense* non *paioense* Bock — Grot van Sipegeh, bij Balige, Tapanoeli)

Localities: Mt Piso Piso, Karo Highlands, 2000 m alt., 26 December 1919 (ZMA); Belawan, Deli (ZMA); Serdang near Lau Rakit (MBa, MGv); Sipegeh Cave, near Balige, 5 September 1933 (ZMA); Kampong Karangredjo, near Pematang Siantar, 1953 (Nl); P. Ladang, near Pajakombo, December 1955 (ZMA, Bt); Mount Korintji, 600 m alt. (MBa); Kaju Aro Estate, Mount Korintji, under tea shrubs, 1450—1650 m alt., 1952—1955 (ZMA, Dr); Langkapura, Lampong Districts (MBa).

Prosopeas paioense (BOCK, 1881)

- 1881 BOCK, Proc. Zool. Soc. London, p. 630, pl. 55, fig. 5 (*Bulimus paioensis* — Paio)
1906 PILSBRY, Man. of Conch. (2) 18: 25, pl. 5, fig. 42—43 (*Prosopeas paioense* — Paio, in the Padang district, 1500 feet above the sea)
1928 DEGNER, Treubia, 10: 362 (*Prosopeas paioense* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Prosopeas paioense* — Mount Sago)

Localities: Brastagi, 1750 m alt., May 1953 (NI); Mount Sago (MBa); Batu Sangkar, near Pajakombo, 13 December 1955 (ZMA, Bt); Paio (MGv).

Prosopeas troglodytes LINDHOLM, 1922

- 1922 LINDHOLM, Ann. Mus. Zool. Acad. Petrograd, 23: 281 (*Prosepeas troglodytes* — Batu Caves near Kuala Lumpur)
1928 DEGNER, Treubia, 10: 362 (*Prosopeas troglodytes* — Sumatra)

As RENSCH already pointed out (1934, Arch. Moll. Kunde, 66, p. 337) the record of *Prosopeas troglodytes* by DEGNER (l.c.) for Sumatra is erroneous, because the species is only known from Malaya.

Prosopeas laoticum (MOELLENDORFF m.s.) PARAVICINI nom. nud.

- 1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Prosopeas laoticum* — Suang (sic!) Prabang)

This locality Suang Prabang is a printer's error for Luang Prabang. It is not in Sumatra, but in Laos, Indo China. The specimen in the Basle Museum of Natural History (PARAVICINI Collection) was purchased from ROLLE and is marked co-type.

As Dr. A. ZILCH (Frankfurt) kindly informed me, a description of *Prosopeas laoticum* was never published, not by MOELLENDORFF, or any other author.

The specimen in the Basle Museum (high 24, wide 6 mm) is identical with *Prosopeas henrici* (ANCEY, 1894) (Ann. Mus. Hist. Nat. Marseille (2) 1: 134, pl. 9, fig. E — *Stenogyra henrici* — Luang Prabang).

These facts may suffice to explain that the Basle specimen is *Prosopeas henrici* (not *laoticum*) from Luang Prabang, Laos (not Sumatra). Hence the species must be deleted from the fauna list of Sumatra.

Achatina fulica BOWDICH, 1822

- 1822 BOWDICH, Elements of Conch. 1, pl. 13, fig. 3 (*Achatina fulica* — no locality)
1935 VAN DER MEER MOHR, Natur & Volk, 65: 66 (*Achatina fulica* — Hevea Plantage bei Tandjong Poera)
1937 HEUBEL, Bergcultures, 11: 1667—1669 (*Achatina fulica* — Medan; Palembang; Tandjong Karang, op ondernemingen Kedaton en Langkapoera)
1938 HEUBEL, Bergcultures, 12: 400—401 (*Achatina fulica* — Kota boemi; Langkapoera, Lampongs)
1940 FEY, Bergcultures, 14: 1112—1114 (*Achatina fulica* — Rubberonderneming Kedaton, near Tandjong Karang, eating latex in great quantities)
1940 VAN DER MEER MOHR, Trop. Natuur, 29: 145—148 (*Achatina fulica* — Deli, various stations)
1941 VAN DER MEER MOHR, Trop. Natuur, 30: 173 (*Achatina fulica* — Rubberondernemingen Langsar en Aloer Gading, bij Langsar, Atjeh; Rubberonderneming Balai Gadjah bij Tandjong Poera, Langkat)
1948 VAN DER MEER MOHR, Chronica Naturae, 104: 178—179 (*Achatina fulica* — many stations in Deli, Atjeh and Tapanoeli)
1949 VAN DER MEER MOHR, Treubia, 20: 1—10 (*Achatina fulica* — Kampong Baroe, Deli)

- 1949 VAN DER MEER MOHR, *Chronica Naturae*, 105 : 290 (*Achatina fulica* — Serdang)
 1954 VAN ALPHEN DE VEER, *Penggemar Alam*, 34 : 36 (*Achatina fulica* — boscomplex Tjibungur, Lampongs, destructive to *Tectona* and *Albizzia*)

Localities : Estate Ambalutu, near Kisaran, 50 m alt., 1954, living near the houses, along the roads, on refuse dumps, in the plantations, but never in the virgin forest or in secondary wood (N1); Tandjong Tiram, under decaying cocoa nut leaves on the ground, 20 November 1955 (N1); P. Ladang, near Pajakombo, December 1955 (Bt); Pladju, Palembang, in car parc and on refuse dump (Nb); Palembang, 1937 (ZMA); Lampong Districts, April 1938 (ZMA).

***Charopa perlata*, n.sp. (Pl. I, fig. 8)**

Shell very small, white, very low-conical, shining and transparent. From the very beginning ornamented by delicate spiral lines and somewhat coarser, close-set, radial ribs. This combined sculpture causes the radial ribs to appear like elegant, minute pearlstrings.

Whorls 6, regularly increasing in size. The basal side of the whorls is more convex than the top side, causing the periphery to lie a little above the middle of the whorl and to appear a little "shouldered". In young and semi-adult shells this shouldering is more conspicuous than in full-grown shells. Suture rather deep, falsely margined by the curve of the previous whorls shining through. Top obtuse, base rounded, somewhat inflated. Umbilicus very narrow.

Aperture narrow, moonsickle-shaped, a little oblique. Peristome not continuous, not thickened. Upper margin straight, lower margin first receding, then protruding, a little reflected in the umbilical region.

Dimensions (in mm):

	holotype				paratypes						
Height	1.2	1.2	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
Width	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.7	1.6	1.6	1.6
Height of apert.	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6

The holotype has been figured.

Locality : Hanna Estate, near Kampong Gunting Saga, Sumatra's East Coast, 10 m alt. (*Locus typicus*), August 1953, collected by J. P. VAN NIEL, holotype and 22 paratypes (ZMA).

Together with the following species *Charopa perlata* is the first representative of the genus *Charopa* in Sumatra.

From the next species *Ch. perlata* differs in the more inflated base and narrower umbilicus, in the greater distance between the radial ribs and in the more pearlstring-like ornamentation of these ribs.

Charopa microdiscus VAN BENTHEM JUTTING, recorded until now from Java, Celebes and Sumba, is much smaller, almost disc-shaped with hardly projecting apex and very wide umbilicus.

***Charopa caloglypta*, n.sp. (Pl. I, fig. 9)**

Shell very small, white, very low-conical, shining and transparent. From the very beginning finely striated in spiral and radial directions. The radial ribs are weaker and placed more closely than in *Charopa perlata* n.sp.

Whorls nearly 5 in the holotype, regularly increasing in size. The basal side of each whorl is more convex than the top side. Hence there is a little "shouldering" of the whorls, but not so much as in *Ch. perlata*. Suture rather deep, not margined. Top obtuse, base rounded. Umbilicus open, rather wide, but not so wide as in *Ch. microdiscus*.

Aperture rather narrow (but broader than in *Ch. perlata*), broad moon-sickle-shaped, little or not oblique. Peristome not continuous, not thickened, evenly rounded, the columellar side vertical and a little reflected in the umbilical region.

Dimensions (in mm):

	holotype			paratypes			
		Hanna		Brastagi	Ambalutu		
Height	1.1	0.9	1.0	0.8	1.0	0.9	0.8
Width	1.8	1.5	1.7	1.4	1.6	1.5	1.4
Height of apert.	0.6	0.5	0.6	0.4	0.5	0.5	0.4

The holotype has been figured.

Localities: Hanna Estate, near Kampong Gunting Saga, Sumatra's East Coast, 10 m alt. (*Locus typicus*), August 1953, collected by J. P. VAN NIEL, holotype and 4 paratypes (ZMA).

Brastagi, Sumatra's East Coast, 1750 m alt., among leaves on the ground, May 1953, collected by J. P. VAN NIEL, 1 paratype (ZMA).

Ambalutu Estate, near Kisaran, Sumatra's East Coast, 50 m alt., in plant debris, May 1952, collected by J. P. VAN NIEL, 5 paratypes (ZMA).

Compared with *Charopa perlata* the new species is smaller, has a less inflated base and a wider umbilicus.

From *Ch. microdiscus* the new species differs in being larger, higher conical and having a much narrower umbilicus.

Endodonta cavernula (SMIT, 1859)

- 1859 SMIT, *Natuurk. Tijdschr. Ned. Indië*, 20: 324 (*Helix cavernula* nom. nud. — Sumatra's Westkust)
 1867 MARTENS, *Ostas. Landschn.* p. 261 (*Helix cavernula* SMIT or *Helix cavernula* HOMBRON & JACQUINOT? — Westküste von Sumatra)
 1928 DEGNER, *Treubia*, 10: 359 (?!*Endodonta cavernula* — Sumatra)

A species of very uncertain taxonomic position. I have not seen it.

Philalanka marangensis (ALDRICH, 1898)

- 1898 ALDRICH, *Nautilus*, 12: 2, pl. 1, fig. 6 (*Sitala carinifera* var. *marangensis* — Marang)
 1928 DEGNER, *Treubia*, 10: 358 (*Sitala carinifera* var. *marangensis* — Sumatra)

Localities: Brastagi, 1750 m alt., among fallen leaves, May 1953 (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., among fallen leaves in the jungle, August 1953 (N1); Kampong Karangredjo, near Pematang Siantar, 350—400 m alt., among fallen leaves, 27 December 1953 (N1); Kampong Karanganmar, near Pematang Siantar, on decaying wood, vegetation, among fallen leaves, on tree trunks, 300—350 m alt., 27 November 1955 (N1); Ambalutu Estate, near Kisaran, soil fauna in the jungle, 25 May 1953 (N1).

Philalanka thienemanni RENSCH, 1932

- 1932 RENSCH, Zool. Jahrb. (Syst.) 63: 105, Taf. 3, Fig. 33 (*Philalanka thienemanni* — Java, Flores)
1952 VAN BENTHEM JUTTING, Treubia, 21: 404, fig. 61 and 67 (*Philalanka thienemanni* — Java)

Localities: Brastagi, 1750 m alt., among fallen leaves, May 1953 (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1). New records for Sumatra.

Vitrinopsis fruhstorferi (MOELLENDORFF, 1897)

- 1897 MOELLENDORFF, Nachr. Blatt, 29: 58 (*Helicarion fruhstorferi* — Java)
1952 VAN BENTHEM JUTTING, Treubia, 21: 421, fig. 78—80 (*Vitrinopsis fruhstorferi* — Java, Sebesi, Bali, Lombok, Sumbawa, Flores)

Localities: Kampong Karangajar, near Pematang Siantar, in decaying wood, 300—350 m alt., 27 November 1955 (N1); Ambalutu Estate, near Kisaran, under decaying wood, dead leaves and in grooves in the bark of trees, after rain on Hevea stems (N1).

New records for Sumatra.

Meghimatium striatum VAN HASSELT, 1823

- 1823 VAN HASSELT, Alg. Konst & Letterbode, 2: 232 (*Meghimatium striatum* — Java)
1950 VAN BENTHEM JUTTING, Treubia, 21: 425, fig. 81—83 (*Meghimatium striatum* — Sirung Galing, Karo Highlands, and various localities in Java)

Localities: Sirung Galing, Karo Highlands, 1400 m alt., 28 December 1919 (ZMA); Brastagi, 1750 m alt. (N1).

Liardetia acutiuscula (MOELLENDORFF, 1897)

- 1897 MOELLENDORFF, Nachr. Blatt, 29: 59 (*Kaliella acutiuscula* — Java)
1950 VAN BENTHEM JUTTING, Treubia, 20: 394, fig. 10—11 (*Liardetia acutiuscula* — various localities in Java)

Locality: Top of the Dolok Pintu, N. of Mt Sibajak, 2100 m alt., 7 September 1932 (ZMA).

It is a new record for Sumatra.

Liardetia micula (MOUSSON, 1857)

- 1857 MOUSSON, Journ. de Conch. 6: 158 (*Zonites micula* — Bali)
1897 MOELLENDORFF, Nachr. Blatt, 29: 60 (*Kaliella ambliia* — Java)
1950 VAN BENTHEM JUTTING, Treubia, 20: 409, fig. 27 (*Liardetia ambliia* — Muara Beliti, on a low wall, and various localities in Java)
1950 VAN BENTHEM JUTTING, Basteria, 14: 63 (*Liardetia micula* — no locality)

Localities: Fort de Kock, 920 m alt., 1925 (ZMA); Muara Beliti, Palembang, on a low wall, 12 March 1949 (ZMA, Nb).

Liardetia angigyra angigyra (MOELLENDORFF, 1897)

- 1897 MOELLENDORFF, Nachr. Blatt, 29: 60 (*Kaliella angigyra* — Java)
1934 RENSCH, Trop. Binnengew. 4: 748 (*Kiliella angigyra angigyra* — Am Wasserfall Kepala Tjurup im Gebiet des oberen Musi)
1950 VAN BENTHEM JUTTING, Treubia, 20: 398, fig. 14, 15 (*Liardetia angigyra angigyra* — Java)

Localities : Hanna Estate, near Kampong Gunting Saga, 10 m alt. (N1); Kampong Karangajar, near Pematang Siantar, 300—350 m alt., on decaying wood, vegetation, among fallen leaves, on tree trunks, 27 November 1955 (N1); Estate Sungei Kopas, near Kisaran, 89 m alt., up and under decaying wood, on moss, in grooves of the bark of trees (N1); Estate Kaju Aro, Mount Korintji, under tea shrubs, 1952 (Vm).

***Liardetia angigyra* subsp.**

Locality : Top of the Dolok Pintoe, 2100 m alt., in dried beaker of *Nepenthes spectabilis*, 7 September 1932 (ZMA).

The specimens differ a little from *Liardetia angigyra angigyra*. They may represent a new subspecies. Their base is narrower and their umbilicus wider.

***Liardetia convexoconica* (MOELLENDORFF, 1897)**

1897 MOELLENDORFF, Nachr. Blatt, 29 : 60 (*Kaliella convexoconica* — Java)

1950 VAN BENTHEM JUTTING, Treubia, 20 : 396, fig. 12—13 (*Liardetia convexoconica* — Java, Krakatau, Sebesi)

Localities : Brastagi, 1750 m alt., among fallen leaves, May 1953 (N1); Hanna Estate, near Membang Muda, 10 m alt., up and under the bark of a Hevea tree, November 1954 (N1); Kampong Karangredjo, near Pematang Siantar, 350—400 m alt., among fallen leaves, 27 December 1953 (N1); Ambalutu Estate, near Kisaran, 50 m alt., among fallen leaves, under decaying wood, in grooves of the bark of trees, after rain often on the stems of Hevea trees, swallowing latex, October 1951 (N1); Kaju Aro Estate, Mount Korintji, 1450 m alt., among fallen leaves (ZMA).

New records for Sumatra.

***Liardetia dendrophila* VAN BENTHEM JUTTING, 1950**

1950 VAN BENTHEM JUTTING, Treubia, 20 : 407, fig. 24 (*Liardetia dendrophila* — Java)

Localities : Brastagi, 1750 m alt., among fallen leaves, May 1953 (N1); Hanna Estate, near Kampong Gunting Saga, among fallen leaves in the jungle, August 1953 (N1); Ambalutu Estate, near Kisaran, among fallen leaves, 25 May 1953 (N1).

New records for Sumatra.

***Liardetia doliolum* (PFEIFFER, 1846)**

1846 PFEIFFER, Proc. Zool. Soc. London, p. 41 (*Helix doliolum* — Sibonga on Cebu, P.I.)

1934 RENSCH, Trop. Binnengew. 4 : 749 (*Kaliella doliolum* — Am Manindjau-See bei Fort de Kock; Zufluss des Danau di Atas)

1950 VAN BENTHEM JUTTING, Treubia, 20 : 410, fig. 9, 28 (*Liardetia doliolum* — various islands in the Malay Archipelago)

Localities : Estate Sungei Kopas, near Kisaran, 89 m alt., 1955 (N1); Tandjong Tiram, along high water mark, 1 February 1953 (N1); Palembang, in the fortification, April 1950 (ZMA. Nb).

***Liardetia indifferens* (BOETTGER, 1891)**

1891 BOETTGER, Ber. Senckenb. naturf. Ges. p. 256, Taf. 3, Fig. 4, 4a, 4b (*Kaliella indifferens* — Ambon, Saparua)

1950 VAN BENTHEM JUTTING, Treubia, 20 : 408, fig. 25, 26 (*Liardetia indifferens* — Java, Bali, Sumba, Timor, Kalao, Ambon, Saparua)

Localities : Medan, on *Hibiscus rosa-sinensis*, November 1929 (ZMA); Hanna Estate, near Membang Muda, 10 m alt., between the bark of a decaying manggatree, 1954 (NI); Estate Sungei Kopas, near Kisaran, 89 m alt., up and under decaying wood, on moss, in grooves of the bark of trees (NI).

New records for Sumatra.

Liardetia fraterna, n.sp. (Pl. I, fig. 10)

Shell small, low-conical, light-brown, a little transparent and with soft, silky lustre. From the very beginning striated with spiral and radial striae. The radial striae gradually increase in strength so as to form ribs, placed rather distantly on the last two whorls. On the base of the whorls these ribs are weaker or absent.

Whorls $4\frac{1}{2}$, regularly increasing in size, convex, with well marked suture. Periphery rounded in adult shells, a little angular in immature ones. Top whorl relatively large. Apex blunt, base rounded. Umbilicus very narrow.

Aperture broad sickle-shaped, little oblique. Peristome not continuous, the two ends connected by a thin membrane against the previous whorl. The peristome is regularly rounded, not thickened and only very little reflected in the umbilical region.

Dimensions (in mm):

	holotype		paratypes (Ambalutu)						
Height	1.1	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0
Width	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5	1.5
Height of apert.	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
			paratypes (Hanna)						
			1.2	1.1	1.0				
			1.7	1.7	1.5				
			0.7	0.6	0.5				

The holotype has been figured.

Localities : Ambalutu Estate, near Kisaran, Sumatra's East Coast, 50 m alt., in plant debris (*Locus typicus*), May 1952, collected by J. P. VAN NIEL, holotype and 14 paratypes (ZMA).

Hanna Estate, near Kampong Gunting Saga, Sumatra's East Coast, 10 m alt., August 1953, collected by J. P. VAN NIEL, 4 paratypes (ZMA).

Kampong Karangredjo, near Pematang Siantar, Sumatra's East Coast, among dead leaves, 1953, collected by J. P. VAN NIEL, 1 paratype (ZMA).

This species has only tentatively been brought to *Liardetia*. There are no soft parts to confirm this classification.

Of the Javanese and Sumatran species of *Liardetia* only three species *L. micula* (MOUSSON), *L. doliolum* (PFEIFFER) and *L. indifferens* (BOETTGER) bear some likeness to *L. fraterna*. From all three species the new *Liardetia* differs in the smaller size and the coarser sculpture, and from the two last mentioned species in the flatter spire.

Liardetia javana (BOETTGER, 1890)

1890 BOETTGER, Ber. Senckenb. naturf. Ges. p. 142, Taf. 5, Fig. 4, 4a, 4b (*Kaliella javana* — Gunung Malabar)

1950 VAN BENTHEM JUTTING, *Treubia*, 20: 401, fig. 20 (*Liardetia javana* — various localities in Java)

Localities : Brastagi, 1750 m alt., among fallen leaves, May 1953 (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1).

New records for Sumatra.

Coneuplecta bandongensis (BOETTGER, 1890)

1890 BOETTGER, *Ber. Senckenb. naturf. Ges.* p. 141, Taf. 5, Fig. 3, 3a, 3b (*Sitala bandongensis* — Gunung Malabar)

1950 VAN BENTHEM JUTTING, *Treubia*, 20: 388, fig. 5 (*Coneuplecta bandongensis* — Java, N. Borneo, Bali, Sumbawa, Celebes, Amboina, Haruku, Banda)

Localities : Brastagi, 1750 m alt., among fallen leaves, May 1953 (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1); Kampong Karangredjo, near Pematang Siantar, 350—400 m alt., among fallen leaves, 27 December 1953 (N1); Ambalutu Estate, near Kisaran, 50 m alt., under decaying wood, fallen leaves, in grooves of the bark of trees, after rain on the stems of Hevea, 1952 (N1); Pedada Bay, Lampong Districts, January 1922 (ZMA).

New records for Sumatra.

Coneuplecta sitaliformis (MOELLENDORFF, 1897)

1897 MOELLENDORFF, *Nachr. Blatt*, 29: 59 (*Kaliella sitaliformis* — Java)

1950 VAN BENTHEM JUTTING, *Treubia*, 20: 391, fig. 7—8 (*Coneuplecta sitaliformis* — Java, Celebes)

Localities : Brastagi, 1750 m alt. (N1); Simar Blatuk, near Prapat, 1700 m alt., in beaker of *Nepenthes tobaica*, 11 September 1932 (ZMA); Hanna Estate, near Membang Muda, 10 m alt., up and under the bark of mangga and Hevea trees, 1953—1954 (N1); Fort de Kock, 920 m alt., 1924 (ZMA).

New records for Sumatra.

Lamprocystis infans (PFEIFFER, 1854)

1854 PFEIFFER, *Proc. Zool. Soc. London*, p. 290 (*Helix infans* — Borneo, Labuan)

1880 SCHEPMAN, *Midden Sumatra Exp.* p. 7 (*Nanina infans* — Soepajang)

1928 DEGNER, *Treubia*, 10: 358 (*Microcystina infans* — Sumatra)

1950 VAN BENTHEM JUTTING, *Treubia*, 20: 412, fig. 31 (*Lamprocystis infans* — Borneo, Java, Sumatra, Bali)

Localities : Sibolangit, 550 m alt. (ZMA); Brastagi, 1750 m alt., May 1953 (N1); Top of the Dolok Pintu, N of Mt Sibajak, 2100 m alt., in dried beakers of *Nepenthes spectabilis*, 7 September 1932 (ZMA); Dolok Baros, between Sibolangit and Brastagi, 1800 m alt., in beakers of *Nepenthes spectabilis*, March 1930 (ZMA); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1); Tandjong Tiram, sea level, under decaying cocoa-nut leaves, 20 November 1955 (N1); Muara Labu, N. slope of Mt Korintji (ZMA); Estate Kaju Aro, Mt Korintji, under tea shrubs, 7 May 1952 (Vm).

Mr. VAN NIEL remarked of the living animals: "The animal has the curious habit of cleaning its shell by licking it. The animals are very active".

Trochomorpha bicolor MARTENS, 1864

- 1864 MARTENS, Monatsber. Akad. wiss. Berlin, p. 267 (*Trochomorpha bicolor* — Mittleres Sumatra)
1867 MARTENS, Osts. Landschn. p. 252, Taf. 13, Fig. 2 (*Trochomorpha bicolor* — Zwischen Palembang und Benkulen, Barisan-Kette, Kepahiang, Rinduhati)
1880 SCHEPMAN, Midden Sumatra Exp. p. 8 (*Trochomorpha bicolor* — Boven Rawas)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1029 (*Trochomorpha bicolor* — Sumatra)
1928 DEGNER, Treubia, 10: 359 (*Trochomorpha bicolor* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Trochomorpha planorbis* non *T. planorbis* LESSON — Serdang bei Lau Rakit; Pik von Indrapoera)

Localities: Battak Mountains (MZh); Serdang, near Lau Rakit, 300 m alt. (MBa); Hanna Estate, near Membang Muda, 10 m alt., on decaying wood after heavy rainfall, July 1955 (NI); Bandar Maria, Siantar, 4 May 1919 (ZMA); Kampong Karangredjo, near Pematang Siantar, 1953 (NI); Kampong Karanganjjar, near Pematang Siantar, 300—350 m alt., living in trees, mostly at the underside of leaves which were overgrown with epiphyllic organisms, 27 November 1955 (NI); Ambalutu Estate, near Kisaran, under decaying wood, chiefly after rain, January 1952 (NI); Estate Sungei Kopas, near Kisaran, 89 m alt., along the edge of a young wood (NI); Ajerbangis, Padang Lowlands, November 1913 (RMNH); Fort de Kock, 920 m alt., 1925 (ZMA); Upper Rawas River, affluent of River Musi (ZMA); Muara Labu, N. slope of Mt Korintji (ZMA); Mount Korintji, 600 m alt. (MBa); Kepahiang (MZh); Pager Alam, Lahat, Palembang, 1898 (RMNH); Muara Beliti, Palembang, among wood, near a bridge, 24 March 1949 (Nb).

Trochomorpha castra (BENSON, 1852)

- 1852 BENSON, Ann. Mag. Nat. Hist. (2) 10: 349 (*Helix castra* — Darjiling)
1873 STOLICZKA, Journ. As. Soc. Bengal, 42: 21, pl. 1, fig. 14—16, pl. 2, fig. 7—9 (*Trochomorpha castra* — Penang Hill, Pegu, Arakan, Assam, Sikkim, Calcutta)

Localities: Serdang (RMNH); Estate Silau Dunia, near Tebing Tinggi, 12 April 1956 (NI); Kampong Karanganjjar, near Pematang Siantar, 300—350 m alt., on trees and leaves, 27 November 1955 (NI).

New records for Sumatra.

Trochomorpha dohertyi ALDRICH, 1898

- 1898 ALDRICH, Nautilus, 12: 2, pl. 1, fig. 7—8 (*Trochomorpha dohertyi* — Marang)
1906 BULLEN, Proc. Malac. Soc. London, 7: 13 (*Trochomorpha dohertyi* — Mount Sago)
1908 ROLLE, Nachr. Blatt, 40: 64 (*Trochomorpha javanica* var. *dohertyi* — Padang Pandjang)
1928 DEGNER, Treubia, 10: 359 (*Trochomorpha dohertyi* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Trochomorpha planorbis* non *T. planorbis* LESSON — Pik von Indrapoera; Mount Sago)

Localities: Kampong Karanganjjar, near Pematang Siantar, 300—350 m alt., in trees, on living leaves in the forest, till 8 m high, 27 November 1955 (NI); West Sumatra (MGv); Mount Sago (MBa); Mount Korintji, 600 m alt. (MBa); Mount Tanggamus, Giesting Estate, Lampong Districts, 700 m alt., 31 December 1939 (ZMA); Wai Lima, Lampong Districts, 11 December 1921 (ZMA).

Trochomorpha planorbis (LESSON, 1830)

- 1830 LESSON, Voy. Coq. Zool. 2 : 312, pl. 13, fig. 4 (*Helix planorbis* — Nouvelle Guinée)
1861 SMIT, Natuurk. Tijdschr. Ned. Indië, 22 : 97 (*Helix planorbis* — Telepoe, 3500 voet)
1867 MARTENS, Oostas. Landschn. p. 249, Taf. 13, Fig. 4, 7, 8 (*Trochomorpha planorbis* — Padangsche Bovenlanden bei Telepu, Ass. Res. Agam; Java; Neu Guinea)
1880 SCHEPMAN, Midden Sumatra Exp. p. 7, pl. 2, fig. 3 (*Trochomorpha planorbis* — Soepajang)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2 : 232 (*Trochomorpha planorbis* — Paninggahan bei Singkarah)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 5 (*Helix planorbis* — Indra-poera)
1928 DEGNER, Treubia, 10 : 359 (*Trochomorpha planorbis* — Sumatra)

Localities : Serdang (RMNH); Dolok Baros, between Sibolangit and Brastagi (MBA); Kampong Karangredjo, near Pematang Siantar, 400 m alt., in the jungle, December 1954 (NI).

Pseudoplecta bijuga (STOLICZKA, 1873)

- 1873 STOLICZKA, Journ. As. Soc. Bengal, 42 : 14, pl. 2, fig. 16—18 (*Rotula bijuga* — Penang)
1932 LAIDLAW, Proc. Malac. Soc. London, 20 : 91—93, fig. 7—8 (*Pseudoplecta bijuga* — Cameron Highlands; Lankawi Is.; Selangor)
1934 RENSCH, Arch. Moll. Kunde, 66 : 330 (*Pseudoplecta bijuga* — Pakantan)

Localities : West-Sumatra (ZMA, MGv); Brastagi, 1750 m alt., among dead leaves (NI); Tandjunggadang, near Tapanuli frontier, 1000 m alt., 1925 (ZMA).

Geotrochus conus (PHILIPPI, 1841)

- 1841 PHILIPPI, in: PFEIFFER, Symb. Helic. 1 : 39 (*Helix conus* — Java)
1842 PHILIPPI, Abb. & Besch. 1 : 11, Taf. 1, Fig. 6 (*Helix conus* — Java)
1859 SMIT, Natuurk. Tijdschr. Ned. Indië, 20 : 324 (*Helix conus* — Sumatra's West-kust)
1867 MARTENS, Oostas. Landschn. p. 253 (*Trochomorpha conus* — ? Sumatra, Agam)
1928 DEGNER, Treubia, 10 : 359 (*Trochomorpha conus* — Sumatra)

I have not seen the species. MARTENS very much doubted whether SMIT's observation was right. I am inclined to follow MARTENS who tentatively regarded the West Sumatran shell as *Trochomorpha bicolor* MARTENS.

Geotrochus verticillatus, n.sp. (figure 8)

Shell low-conical to trochiform, not so sharply cone shaped as *G. conus* (PHILIPPI) from Java, but sharper than *G. multicarinatus* (BOETTGER) from that island. The top-angle is 90°, i.e. a little wider than in *G. conus* where it amounts only to 70—75°.

The sides are straight or slightly concave, the base is a little more convex than in *G. conus*. Periphery sharply keeled. Colour light-brown, either plain or with a lighter margin along the suture. The contrast between the two zones is not so well marked as in *G. conus*.

First two whorls smooth, the following ones spirally lirated with 9—11 (in the holotype 10) aequidistant lirae. These lirae are stronger than in

G. conus fa *lirata* (VAN BENTHEM JUTTING), but of similar quality to those in *G. multicarinatus*. The oblique growth lines are much weaker. Base smooth and shining.

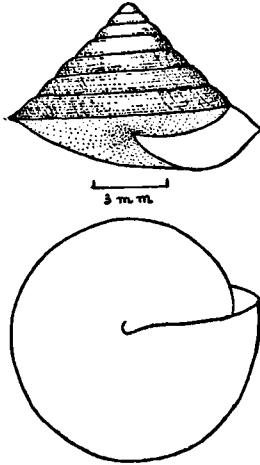


FIGURE 8. *Geotrochus verticillatus*, n.sp. Front view and base of shell. Holotype. Lahat, Palembang. Author del. (instead of 3 mm read 5 mm).

Whorls 7— $7\frac{3}{4}$ (in the holotype $7\frac{3}{4}$), regularly increasing in size, very little convex (a little more convex than in *G. conus*, but not so much as in *G. multicarinatus*). Suture shallow. Last whorl not descending towards the aperture. Umbilicus closed.

Aperture oblique, rhombiform, with rounded basal angle. Peristome not continuous, sharp along the free margin, somewhat thickened at the columellar side towards the umbilical region.

Dimensions (in mm):

	holotype	paratypes	
Height	10.5	10.7	10.6
Max. width	16.0	16.0	15.5
Height of aperture	4.0	4.0	4.0

Locality: Lahat, Palembang, Sumatra (type locality), holotype and 2 paratypes (ZMA). The holotype has been figured.

The two nearest relatives are *Geotrochus conus* and *G. multicarinatus*. From the first species *G. verticillatus* differs in being broader conical (greater top angle), with somewhat more convex whorls and stronger spiral sculpture.

From *G. multicarinatus* the new species differs in being more exactly conical, with a higher spire and straight sides.

Geotrochus conicoides (METCALFE, 1851)

1851 METCALFE, Proc. Zool. Soc. London, p. 71 (*Helix conicoides* — Borneo)

1874 ISSEL, Ann. Mus. Civ. Stor. Nat. Genova, 6: 404 (*Trochomorpha conicoides* — Borneo, Labuan, Sarawak)

Locality: Estate Giesting, Mount Tanggamus, Lampong Districts, 700 m alt., 31 December 1939 (ZMA).

New record for Sumatra.

Geotrochus lychnia (BENSON, 1852)

1852 BENSON, Ann. Mag. Nat. Hist. (2) 10 : 349 (*Helix lychnia* — Insula Sincapore)
1867 MARTENS, Oostas. Landschn. p. 255 (*Helix lychnia* — Singapore; Bukit Timar; Malakka)

Locality : Ambalutu Estate, near Kisaran, 50 m alt., in secondary wood (N1).

New record for Sumatra.

In 1850 PFEIFFER described (Zeitschr. Malak. 7 : 81) a large sinistral land shell *Helix gigas* from "Insula Sumatra". He also mentioned this species in Mon. Helic. 3 : 52, 1853, putting it this time as a synonym of *Rhysota brookei* ADAMS & REEVE, 1848 and correcting the locality to "Montibus insulae Borneo" where the species is indeed indigenous. Hence it must be eliminated from the fauna of Sumatra.

It was well figured by PFEIFFER in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 12 : 350, Taf. 135, Fig. 1—2, 1854.

Microcystina circumlineata (MOELLENDORFF, 1897)

1897 MOELLENDORFF, Nachr. Blatt, 29 : 62 (*Lamprocystis circumlineata* — Java)
1950 VAN BENTHEM JUTTING, Treubia, 20 : 453, fig. 73 (*Microcystina circumlineata* — various localities in Java)

Localities: Dolok Pintoe, N. of Mt Sibajak, 2100 m alt., in dried beaker of *Nepenthes spectabilis*, 7 September 1932 (ZMA); Brastagi, 1750 m alt., among fallen leaves, May 1953 (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1); Ambalutu Estate, near Kisaran, soil fauna in virgin forest, 25 May 1953 (N1); Anai Gap, 500 m alt., 1926 (ZMA).

New records for Sumatra.

Microcystina exigua (MOELLENDORFF, 1897)

1897 MOELLENDORFF, Nachr. Blatt, 29 : 63 (*Lamprocystis exigua* — Java)
1932 RENSCH, Zool. Jahrb. (Syst.) 63 : 47, fig. 11 (*Microcystina exigua* — Java, Lombok, Flores)
1950 VAN BENTHEM JUTTING, Treubia, 20 : 447, fig. 66 (*Microcystina exigua* — various localities in Java; Lombok; Flores)

Localities : Brastagi, 1750 m alt., under stones, May 1953 (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1); Ambalutu Estate, near Kisaran, under bark of trees and dead leaves, in the plantation and in secondary wood, May 1952 (N1).

New records for Sumatra.

Microcystina gratilla VAN BENTHEM JUTTING, 1950

1950 VAN BENTHEM JUTTING, Treubia, 20 : 448, fig. 68, 69 (*Microcystina gratilla* — various localities in Java; Bali; Flores)

Localities : Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1); Pedada Bay, Lampong Districts, soil fauna, January 1922 (ZMA).

New records for Sumatra.

Microcystina nana (MOELLENDORFF, 1897)1897 MOELLENDORFF, Nachr. Blatt, 29: 63 (*Lamprocystis nana* — Java)1950 VAN BENTHEM JUTTING, Treubia, 20: 447, fig. 67 (*Microcystina nana* — various localities in Java; Karimon Djawa; Bali; Flores)

Locality: Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1).

New record for Sumatra.

Microcystina vitreiformis (MOELLENDORFF, 1897)1897 MOELLENDORFF, Nachr. Blatt, 29: 63 (*Lamprocystis vitreiformis* — Java)1950 VAN BENTHEM JUTTING, Treubia, 20: 450, fig. 70 (*Microcystina vitreiformis* — various localities in Java; Bali)

Locality: Pedada Bay, Lampong Districts, 22—24 Jaunari 1922 (ZMA).

New record for Sumatra.

Microcystina consobrina, n.sp. (Pl. I, fig. 11)

Shell small, low-conical, yellowish-brown, shining and transparent, finely striated according to the growth lines. There is still a more delicate spiral striation, but this is so faint that it is only discernable on the base of the whorls where the radial striae are weaker. The spiral striae are continuous lines, not series of little pits as in the next species.

Whorls $4\frac{1}{4}$, regularly increasing in diameter. Top whorls projecting, a little mamillar. All whorls convex, with well impressed suture. This is falsely marginate on account of the previous whorls shining through. It is mostly lined by a narrow red thread. Top elevated, but not sharp. Umbilicus narrow.

Aperture oblique, broad sickle-shaped, a little drawn out at the point where upper and basal margins meet. Peristome sharp, not continuous, the two ends connected by a thin membrane against the previous whorl. Columellar side a little reflected, with a minute tongue-shaped protuberance in the umbilical region, partly hiding the umbilical opening.

Dimensions (in mm):

	holotype	paratypes (Brastagi)					paratypes (Hanna)				
Height	1.4	1.4	1.3	1.3	1.2	1.5	1.4	1.4	1.4	1.4	1.3
Width	2.2	2.1	2.3	2.1	1.9	2.4	2.4	2.4	2.4	2.3	2.4
Height of apert.	0.9	0.9	0.9	0.9	0.8	1.0	1.0	1.0	0.9	0.9	0.9

The holotype has been figured.

Localities: Brastagi, Sumatra's East Coast, 1700 m alt., among fallen leaves (*Locus typicus*), May 1953, collected by J. P. VAN NIEL, holotype and 4 paratypes (ZMA).

Hanna Estate, near Kampong Gunting Saga, Sumatra's East Coast, 10 m alt., August 1953, collected by J. P. VAN NIEL, 26 paratypes (ZMA).

The new species is higher conical than either *Microcystina exigua* (MOELLENDORFF), *M. nana* (MOELLENDORFF) or *M. gratilla* VAN BENTHEM JUTTING. Its radial sculpture is much finer than in one of these.

From *M. circumlineata* (MOELLENDORFF) and *M. fruhstorferi* (MOEL-

LENDORFF) it differs in the smaller size, and from the first-named species more particularly in the different surface sculpture.

The difference with the next species will be discussed after the description of that species.

Microcystina muscorum, n.sp. (Pl. I, fig. 12)

Shell small, low-conical, reddish-brown, shining and transparent. From the very beginning the whorls are striated, on both upper and basal sides, by spiral and radial lines of about equal strength. The spiral striae are undulating and appear as rows of minute pits.

Whorls $4\frac{1}{4}$ — $4\frac{1}{2}$, top whorl not mamillar as in *Microcystina consobrina* n.sp. All whorls slightly convex (less convex than in preceding species) with distinct suture. This suture is falsely marginate on account of the previous whorl shining through. It is mostly lined with a narrow red thread. Top blunt, base rounded. Umbilicus narrow.

Aperture oblique, broad sickle-shaped, evenly rounded. Peristome sharp, not continuous, the two ends connected by a thin membrane against the previous whorl. Columellar side a little reflected, and with a minute tongue-shaped projection in the umbilical region, partly hiding the umbilical opening.

Dimensions (in mm):

	holotype	paratypes (Hevea tree)				paratypes (Mango tree)				
Height	1.4	1.2	1.2	1.0	1.2	1.1	1.1	1.0	1.0	1.0
Width	2.3	2.0	2.0	1.7	2.0	2.0	1.9	1.9	1.8	1.8
Height of aperture	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.7	0.7

The holotype has been figured.

Localities: Hanna Estate, near Membang Muda, Sumatra's East Coast, 10 m alt., on moss on the bark of a Hevea tree (*Locus typicus*), November 1954, collected by J. P. van NIEL, holotype and 3 paratypes (ZMA).

Hanna Estate, near Membang Muda, Sumatra's East Coast, in grooves in the bark, among moss covering a Mango tree, 1954, collected by J. P. VAN NIEL, 10 paratypes (ZMA).

Microcystina muscorum is higher conical than *M. exigua* (MOELLENDORFF), *M. nana* (MOELLENDORFF) or *M. gratilla* VAN BENTHEM JUTTING, and has better developed spiral sculpture than any of these.

From *M. circumlineata* (MOELLENDORFF) and *M. fruhstorferi* (MOELLENDORFF) it differs in the smaller size. From *M. circumlineata* which is also spirally striated, it differs in the flatter shape, both above and below the periphery.

The differences with the preceding species are tabulated below:

<i>consobrina</i>	<i>muscorum</i>
yellowish-brown	reddish-brown
radial striae distinct on upper surface, weaker on lower surface	radial striae equally strong on upper and lower surfaces
spiral striae as continuous lines, only visible on lower surface	spiral striae undulating, or as rows of minute pits, equally strong on both sides

apex mamillar	apex not mamillar
aperture drawn out at meeting	margin of aperture evenly rounded
point of upper and lower margins	ed

Pareuplecta prairieana ROLLE, 1908

- 1908 ROLLE, Nachr. Blatt, 40: 64, 1 textfig. (*Pareuplecta prairieana* — Singalang)
1928 DEGNER, Treubia, 10: 358 (*Pareuplecta prairieana* — Sumatra)

Locality: Kaju Aro Estate, Mt Korintji, 17 June 1954 (ZMA).

The taxonomic position is doubtful. I give the nomenclature as introduced by ROLLE, although THIELE (1931, Handb. Syst. Weicht. Kunde, 1: 627) classified *Pareuplecta* under *Otesia*.

It is not impossible that the immature Zonitoid land mollusc described by ROBSON (1925, Journ. Fed. Mal. St. Mus. 8: 168—174) from Mount Korintji is a young *Pareuplecta prairieana*.

Macrochlamys anceyi DEGNER, 1928

- 1928 DEGNER, Treubia, 10: 327, pl. 10, fig. 3a—c (*Macrochlamys anceyi* — West Sumatra)

Locality: Pajakombo (RMNH)

Macrochlamys amboinensis (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 266 (*Hyalina amboinensis* — Buru, Amboina, Banda Neira)
1867 MARTENS, Ostas. Landschn. p. 244, Taf. 12, Fig. 11 (*Hyalina amboinensis* — Ambon, Buru, Banda Neira)
1886 TRYON, Man. of Conch. (2) 2: 170, pl. 52, fig. 6—8 (*Hyalina amboinensis* — Ins. Buru, Amboina, Banda-Nera)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Macrochlamys aurea non aurea* MARTENS 1864 — Pik von Indrapoera; Serdang bei Lau Rakit)
1952 VAN BENTHEM JUTTING, Treubia, 21: 322, fig. 6—7 (*Tanychlamys amboinensis* — various localities in Java; Amboina; Buru; Banda Neira)

Localities: Serdang near Lau Rakit (MBa); Ant trails near Medan, February 1931 (ZMA); Kampong Karangajar, near Pematang Siantar, up and under decaying wood, 27 November 1955 (NI); Mount Indrapura, 600 m alt. (MBa).

Macrochlamys aurea (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 266 (*Nanina aurea* — Kepahiang)
1867 MARTENS, Ostas. Landschn. p. 243, Taf. 12, Fig. 2 (*Nanina aurea* — Bei Kepahiang)
1886 TRYON, Man. of Conch. (2) 2: 89, pl. 29, fig. 33—34 (*Nanina aurea* — Near Kepahiang)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1018 (*Nanina aurea* — Kepahiang)
1928 DEGNER, Treubia, 10: 358 (*Macrochlamys aurea* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Macrochlamys aurea* — Serdang bei Lau Rakit)
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 20: 18, pl. 2, fig. 11, textfig. 4 (*Macrochlamys aurea* — Lho Nga, Atjeh)

Localities: Sumatra (MZh); Serdang bei Lau Rakit (MBa); Ambalutu Estate, near Kisaran, under fallen leaves, 28 November 1951 (NI); Estate Sungei Kopas, near Kisaran, 100 m alt., under stones and on low

vegetation, 22 October 1955 (N1); Kampong Karangredjo, near Pematang Siantar, 400 m alt., in jungle, December 1954 (N1); Kampong Karangranjar, near Pematang Siantar, 300—350 m alt., 27 November 1955 (N1).

Macrochlamys fulva ROLLE, 1908

- 1908 ROLLE, Nachr. Blatt, 40: 64 (*Macrochlamys fulvus* — Singalang)
1928 DEGNER, Treubia, 10: 358 (*Macrochlamys fulva* — Sumatra)

Localities: Brastagi, 1750 m alt., among dead leaves, May 1952 (N1); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (N1); Ambalutu Estate, near Kisaran, after rainfall on trunks of Hevea and on low vegetation, 28 November 1951 (N1).

Macrochlamys malaccana (PFEIFFER, 1854)

- 1854 PFEIFFER, Proc. Zool. Soc. London, p. 147 (*Helix malaccana* — Prov. of Quedo, Straits of Malakka)
1854 REEVE, Conch. Icon. 7, pl. 195, fig. 1373 (*Helix malaccanus* — Prov. of Queda, Malacca)
1881 BOCK, Proc. Zool. Soc. London, p. 628 (*Nanina malaccana* — Paio)
1900 MARTENS, Nachr. Blatt, 32: 8 (*Macrochlamys malaccana* — Soekaranda)
1906 BULLEN, Proc. Malac. Soc. London, 7: 126 (*Everettia malaccana* — Mt Sago)
1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82: 29 (*Macrochlamys consul non consul* PFEIFFER, 1854 — Lampahan)
1928 DEGNER, Treubia, 10: 358 (*Macrochlamys consul*, *M. malaccana* — Sumatra)

Localities: Lampahan, Gajo Highlands (MBa); Brastagi, 1750 m alt., May 1952 (N1); Paijo (MGv); Padang Pandjang (SMF).

Macrochlamys convoluta (DESHAYES, 1851)

- 1851 DESHAYES, in: FÉRUSAC, Hist. Nat. génér. part. Moll. 1: 401, pl. 87, fig. 2 (*Helix convoluta* — Sumatra)
1867 MARTENS, Ostas. Landschn. p. 243 (*Nanina convoluta* — Sumatra)
1886 TRYON, Man. of Conch. (2) 2: 88, pl. 29, fig. 21—23 (*Nanina convoluta* — Sumatra)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1018 (*Nanina convoluta* — Sumatra)
1928 DEGNER, Treubia, 10: 358 (*Macrochlamys convoluta* — Sumatra)

I have not seen the species. It seems to be of doubtful taxonomic value.

?Macrochlamys rufofusca (MARTENS, 1900)

- 1900 MARTENS, Nachr. Blatt, 32: 8 (*Macrochlamys convallata* var. *rufofusca* — Soekaranda)
1928 DEGNER, Treubia, 10: 358 (*Taphrospira convallata* var. *rufofusca* — Sumatra)
1933 RENSCH, Zool. Anz. 102: 201 (?*Macrochlamys rufofusca* — Sukaranda)

Not seen. According to RENSCH, the shells from Sukaranda (Upper Langkat) are no *Taphrospira* at all. So far the genus *Taphrospira* has not been recorded from Sumatra, but only from the outlying islands of Sumatra: Pulu Weh, Simalur.

Hemiplecta humphreysiana (LEA, 1840)

- 1840 LEA, Proc. Americ. Phil. Soc. 1: 175 (*Helix humphreysiana* — Singapore)
1841 LEA, Trans. Americ. Phil. Soc. 7: 483, pl. 12, fig. 16 (*Helix humphreysiana* — Singapore)

- 1842 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1 : 9, Taf. 1, Fig. 1 (*Helix gemina* — Java)
- 1850 ADAMS & REEVE, Voy. Samarang, Moll. p. 62, pl. 16, fig. 8 (*Helix densa* — Sumatra)
- 1860 ALBERS, Heliceen, 2nd Edition, p. 53 (*Hemiplecta atrofusca* — Borneo)
- 1867 MARTENS, Ostas. Landschn. p. 230, Taf. 10, Fig. 1, 1b (*Nanina densa* and *N. densa* var. *atrofusca* — various localities, not from Sumatra), p. 233, Taf. 10, Fig. 2, 2b, 4 (*Nanina humphreysiana* — Pulo Batu)
- 1880 SCHEPMAN, Midden Sumatra Exp. p. 7 (*Nanina densa* — Silago)
- 1881 BOCK, Proc. Zool. Soc. London, p. 628 (*Nanina densa* — Mt Sago; Sidjoendjoeng)
- 1898 ALDRICH, Nautilus, 12 : 1 (*Nanina gemina* — Marang)
- 1900 MARTENS, Nachr. Blatt, 32 : 7 (*Nanina humphreysiana* — Radja-Berge, Toba-See; *Nanina densa* var. *atrofusca* — Sinabung, Battaker Berge)
- 1906 BULLEN, Proc. Malac. Soc. London, 7 : 126 (*Hemiplecta densa* — Mt Sago; Mt Talang; Bangkinan)
- 1908 ROLLE, Nachr. Blatt, 40 : 64 (*Rhysota humphreysiana* var. *complanata* — Padang Pandjang)
- 1928 DEGNER, Treubia, 10 : 357 (*Hemiplecta densa*, *H. densa* var. *atrofusca*, *H. gemina*, *H. humphreysiana* — all Sumatra)
- 1931 OOSTINGH, Arch. Moll. Kunde, 63 : 220 (*Hemiplecta humphreysiana* fa *complanata*, *H. humphreysiana* fa *bifasciata* — Mittlere Halbinsel der Lamoengs; Bai Balimbing Saleman)
- 1934 RENSCH, Arch. Moll. Kunde, 66 : 325 (*Hemiplecta humphreysiana humphreysiana* — Lho Sukon, Atjeh)
- 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 60 (*Hemiplecta humphreysiana* — Kaban Djahe, Karo-Hochebene; Langkapoera)
- 1939 ADAM & LÉLOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 20 : 19 (*Hemiplecta humphreysiana humphreysiana* — Tandjong Slammat, Langkat; Blang Pic, Lho Sukon, Atjeh)

Localities : Sumatra (MGv); Environs of Lake Takengon, Atjeh, 11 August 1930 (ZMA); Along the Kroeëng Meureubo, Langsa District, May 1925 (ZMA); Basin of River Pendawa, District Pleureula, January 1926 (ZMA); Bulu Blang Ara, near Lho Seumaweh, Atjeh, 5 October 1920 (ZMA); Bekri, Deli, April 1892 (ZMA, RMNH); Kupras, N wall of Wampu gorge, 600 m alt., 1922 (MBa); Serang Djaja, near Tandjong Pura, Langkat, 4 February 1919 (ZMA); Mt Piso Piso, 2000 m alt., 26 December 1919 (ZMA); Batak mountains, Upper Serdang (MBa); Kaban Djahe, Karo Highlands (MBa); Estate Bandar Maria, Serdang, 4 May 1919 (ZMA); Estate Adolina Ulu, Serdang, 17 December 1920 (ZMA); Forest Reserve Bandar, 24 August 1919 (ZMA); Tandjong Merah, near Tebing Tinggi, Serdang, 1917 (ZMA); Kampong Karangredjo, near Pematang Siantar, 400 m alt., 1953 (NI); Kampong Karanganjar, near Pematang Siantar, in trees, 27 November 1955 (NI); Estate Maria Bandar, near Siantar, 4 May 1919 (ZMA); Simpang Toba, Asahan, May 1920 (ZMA); Massihi, Asahan, 9 October 1919 (ZMA); Perlanaän, Asahan, February 1919 (ZMA); Ambalutu Estate, near Kisaran, 50 m alt., living along the edge of the forest, never in the thickness of the forest, 1954 (NI); Estate Sungei Kopas, near Kisaran, 89 m alt., along the edge of young forest (NI); Hanna Estate, near Membang Muda, 10 m alt., along the edge of the secondary wood, August 1953 (NI); Aek Korsik, near Mandailing, S E of Padang Sidempuan, Tapanuli (R MNH); West Sumatra (MGv); Ajer Bangis, Padang Lowlands, November 1913 (RMNH); Kaju Aro Estate, Mt Korintji, under tea shrubs, 1450 m alt., 26 May 1951 (Br); Wood near Silago (ZMA); Estate Kaba Wetan, near Kepahiang, Benkulen, 5 October 1927

(ZMA); Palembang (MZh); Mt Tanggamus, near Wailalään and Kota Agung, 600—700 m alt., Lampong Districts, December 1934 (ZMA); Langkapura, Lampong Districts (MBa); Wood near Sukadana, Lampong Districts (ZMA); Wai Lima, Lampong Districts, November-December 1921 (ZMA).

Mr. VAN NIEL once found a cluster of 28 eggs of this species on the ground, among fallen leaves. The eggs were not agglutinating, neither to each other, nor to the leaves.

Hemiplecta goliath, n.sp. (Pl. II, fig. 1)

Shell dextral, very large, low-conical, dilute reddish-brown with yellowish-brown periostracum. With a narrow light zone at, or just above, the peripheral angle and an equally narrow, but dark-brown zone just below it. This dark-brown zone shines through in the interior of the aperture. Surface spirally striated and wrinkled with numerous small, irregular wrinkles. Not transparent and without lustre.

Whorls 6, regularly increasing in size, the last one large and spacious. The whorls of the spire are little convex, hence the suture is shallow. Only the last whorl is somewhat more convex. Last whorl not descending towards the aperture. Periphery angular. Top pointed, but not sharp. Base rounded. Umbilicus open, at its entrance about 1/10 of the total diameter.

Aperture broadly lunar, somewhat oblique. Peristome not continuous, not or hardly thickened, not reflected. The two extremities of the peristome converge slightly; they are connected by a very thin, filmy callus against the penultimate whorl. Columellar side a little reflected exteriorly at the junction with the umbilical region.

Dimensions (in mm):

	holotype	paratype
Height	52.4	48.0
Width	83.7	78.6
Height of aperture	29.4	28.0

The holotype has been figured.

Locality: Renggat, province of Indragiri, Central Sumatra (Type locality), holotype and 1 paratype, collected by J. P. KLEIWEG DE ZWAAN in 1906 (ZMA).

This gigantic *Hemiplecta* differs from all other species of the genus in the Malay Archipelago in the first place by its size. Apart from the dimensions it differs from *H. humphreysiana* (LEA) in the angular periphery, the flatter whorls and the rugulose surface sculpture. *H. büttikoferi* SCHEPMAN from Borneo is much smaller, lower conical, with sharper peripheral keel and narrower umbilicus. The large Philippine *Rhysota maxima* (PFEIFFER), *Rh. uranus* (PFEIFFER) and *Rh. ovum* (VALENCIENNES) all have more convex whorls, a sharper keel and a narrower umbilicus.

The animal of *Hemiplecta goliath* is coloured bluish-black on the dorsal and lateral surfaces. The foot sole is yellowish, undivided. The posterior mucous gland is distinct, but not overhung by a "horn".

Hemiplecta oblique-undulata, n.sp. (Pl. II, fig. 2)

Shell large, low-conical, with small spire and inflated last whorl.

Ground colour reddish-brown above the periphery, whitish, or light greenish-brown below it. Along the periphery with a reddish-brown band. Parallel to this band a whitish or light-greenish zone between the peripheral band and the reddish-brown upper zone. The entire shell is covered by a greenish-brown epidermis. The $1\frac{1}{2}$ top whorls finely striated by the growth lines, after that more coarsely striated and wrinkled in oblique direction. On the base of the whorls, towards the umbilicus, this oblique sculpture becomes weaker. Not shining, a little transparent.

Whorls 6, in the beginning slowly increasing in size. The last $1\frac{1}{2}$ to 2 whorls very convex and spacious. Suture shallow in the first whorls, deeper between the later ones. Periphery rounded. Top elevated, but not sharp, base rounded. Umbilicus open, but not wide.

Aperture oblique, wide, broad-oval, with the long sides nearly parallel. Peristome not continuous, a little thickened, not reflected, the two ends connected by a thin membrane against the previous whorl.

Dimensions (in mm):

	holotype		paratypes (from the type locality)					
Height	36.0		35.0		top damaged			
Width	63.0		62.8		57.4			
Height of aperture	23.6		25.0		23.5			
	paratypes Mt Korintji			paratypes Sungai Kumbang				
	38.0	35.0	34.0	39.0	38.0	38.0	35.0	34.6
	63.0	54.0	59.5	66.5	68.0	63.0	65.3	63.6
	25.0	26.0	21.0	27.0	22.0	23.0	26.0	20.5
	paratype Suban Ajam							
	39.0							
	56.0							
	23.0							

The last mentioned shell is a little abnormal; it is too high for its width.

The holotype has been figured.

Localities : Kaju Aro Estate, Mount Korintji, under tea shrubs, May 1952 (type locality) holotype and 2 paratypes, collected by J. DRIJVER (ZMA and Dr); Mount Korintji, 1921, 3 paratypes, collected by F. S. PRATT (ZMA); Sungai Kumbang, Mount Korintji, July-August 1915 and August 1916, 5 paratypes, collected by E. JACOBSON (RMNH); Suban Ajam, Benkulen, 1200 m alt., July 1916, 1 paratype, collected by E. JACOBSON (RMNH).

The nearest relative is *Hemiplecta platytaenia* MOELLENDORFF from Annam, but this species is higher conical, with finer surface sculpture. The colour is more yellowish-brown, not red-brown, the base is more inflated and the upper margin of the peristome is less curved, but falls down more rapidly.

Hemiplecta humphreysiana and *H. goliath* are less inflated with less conspicuous surface sculpture. The colour and position of the peripheral band are also different.

Elaphroconcha patens (MARTENS) from Java has a similar surface sculpture of oblique undulations, but in the last named species they are much finer. Besides the embryonic whorls of *E. patens* are quite different of those of *Hemiplecta*.

Hemiplecta obliquata (REEVE, 1852)

- 1852 REEVE, Conch. Icon. 7, pl. 74, fig. 384 (*Helix obliquata* — Borneo)
1867 MARTENS, Ostas. Landschn. p. 235 (*Nanina obliquata* — Palembang; Westküste Barisan Gebirge zwischen Kepahiang und Benkulen), p. 237 (*Nanina virens* — Palembang)
1881 MARTENS, Conch. Mitth. 1, p. 1, Taf. 1, Fig. 1—3 (*Nanina obliquata* — Sumatra), p. 2, Taf. 1, Fig. 4—6 (*Nanina virens* — Insulam Sungian sive "Dwars in den weg" freti Sunda nec non insulam Sumatra)
1887 SMITH, Ann. Mag. Nat. Hist. (5) 20: 131 (*Nanina hoodjongensis* — Hoedjoeng, about 120 miles from the S extremity of Sumatra)
1887 SMITH, Ann. Soc. Roy. Malac. Belg. 22: 218, pl. 9, fig. 7 (*Ariophanta hoodjongensis* — Hoodjong ou Hoedjong à environ 120 miles de l'extrémité méridionale de Sumatra)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3, p. 1017 (*Nanina obliquata* — Sumatra), p. 1022 (*Nanina virens* — Sumatra)
1905 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 12-V: 1007, Taf. 261, Fig. 1 (*Nanina hoodjongensis* — Hoodjong oder Hoedjong)
1928 DEGNER, Treubia, 10: 357 (*Hemiplecta hoodjongensis*, *H. obliquata*, *H. virens* — Sumatra)

Localities: Sumatra (ZMA, MGv, MZh); Palembang (MZh)

Elaphroconcha bataviana (VON DEM BUSCH, 1842)

- 1842 VON DEM BUSCH, in: PHILIPPI, Abb. & Beschr. 1: 10, Taf. 1, Fig. 3 (*Helix bataviana* — Java)
1856 PFEIFFER, Proc. Zool. Soc. London, p. 327 (*Helix arguta* — Tengga Hills, Java)
1867 MARTENS, Ostas. Landschn. p. 219 (*Nanina arguta* — Palembang)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1013 (*Nanina castanea* — Sumatra)
1905 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 12-V: 981, Taf. 254, Fig. 8—11 (*Nanina arguta* — Sumatra, Java)
1928 DEGNER, Treubia, 10: 357 (*Hemiplecta arguta* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Hemiplecta arguta* — Langkapoera)

Localities: Sumatra (ZMA); Palembang (MZh); Langkapura, Lampong Districts (MBa); Wai Lima, Lampong Districts, November-December 1921 (ZMA); Mt Tanggamus, Lampong Districts, 600—700 m alt., near Giesting Estate and near Kota Agung, December 1939 (ZMA).

Elaphroconcha javacensis (FÉRUSAC, 1821)

- 1821 FÉRUSAC, Hist. Nat. génér. part. Moll. Tabl. Limaçons, p. 46 (*Helix javacensis* — Java)
1842 LE GUILLOU, Rev. Zool. (Soc. Cuv.) 5: 137 (*Helix umbilicaria* — Sumatra)
1867 MARTENS, Ostas. Landschn. p. 214 (*Nanina umbilicaria* — Sumatra, Java, Banka)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1017 (*Nanina umbilicaria* and *N. desgrazii* — Sumatra)
1928 DEGNER, Treubia, 10: 357 (*Hemiplecta umbilicaria* — Sumatra)

Locality: Palembang (MZh).

Elaphroconcha martini (PFEIFFER, 1854)

- 1854 PFEIFFER, Proc. Zool. Soc. London, p. 149 (*Helix martini* — Padang)
1854 REEVE, Conch. Icon. Vol., 7, pl. 193, fig. 1356 (*Helix martini* — Padang sic!)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1023 (*Nanina martini* — Padang)

Localities: Indarung, near Padang, 16 February 1950 (RMNH); Kepahiang (MZh); Estate Kaba Wetan, near Kepahiang, Benkulen,

5 October 1927 (ZMA); Palembang, Muara Enim and Kebon near Lahat (MBa).

The specimens which RENSCH (1934) and ADAM & LELOUP (1939) classified as *Dyakia martini* are all sinistral shells and, therefore, are representatives of the genus *Dyakia*. On the other hand *Elaphroconcha martini* was described by PFEIFFER (l.c.) as a dextral species. Consequently the shells referred to by RENSCH and ADAM & LELOUP, although being members of *Dyakia*, belong to another species (see under *Dyakia mackensiana*).

***Elaphroconcha minangkabau*, n.sp. (Pl. II, fig. 3)**

Shell very fragile, dextral, low-conical, yellowish-brown to reddish-brown, sometimes with a slightly greenish tint. With a narrow light zone just above the periphery and a darker brown zone beneath it. This brown zone continues on the base of the shell, but fades away towards the umbilicus. Embryonic whorls radially striated by closely-set riblets, the rest of the shell finely striated by oblique growth lines. This sculpture is crossed by equally fine spiral striae, rendering the surface minutely granular. On the base of the whorls the sculpture is weaker than above the periphery. Fresh shells are transparent and have a silky lustre.

Whorls 6—6½, regularly increasing in size, the last whorl about 2 × as broad as the preceding one. The whorls of the spire are little convex, with shallow suture. The last whorl is more convex, hence the suture is somewhat deeper. Periphery rounded in full-grown shells, angular in semi-adult, and sharply keeled in young specimens. Top obtuse, base rounded. Umbilicus open, but not wide.

Aperture very oblique, broadly lunar. Peristome not continuous, not or hardly thickened, not reflected. The two extremities of the peristome converge slightly; they are connected by a very thin filmy callus against the penultimate whorl. Basal side of the peristome a little sinuous. Columellar side a little reflected exteriorly at the junction with the umbilical region.

Dimensions (in mm):

	holotype	paratypes from the type locality							
Height	26.6	27.0	27.0	23.5	22.2	21.5	20.0	19.8	
Width	46.0	48.2	47.0	38.0	40.7	39.5	32.0	32.5	
Height of aperture	18.5	21.0	17.5	17.0	17.0	16.4	13.7	14.0	
		19.5	18.5	17.0	14.0				
		34.3	34.5	33.2	27.0				
		15.0	15.0	14.4	12.5				

The holotype has been figured.

Localities : Kaju Aro Estate, Mount Korintji, Sumatra's West Coast, under tea shrubs (*Locus typicus*) holotype and numerous paratypes, collected by J. DRIJVER (ZMA; Dr and Vm); Kaju Aro Estate, Mount Korintji, under tea shrubs, 1952 and 1953, 7 paratypes, collected by F. J. J. LOEFF (ZMA and Vm); Mount Korintji, 1921, 2 paratypes, collected by F. S. PRATT (ZMA); Sungai Kumbang, Mount Korintji, July-August 1915, 1 paratype, collected by E. JACOBSON (RMNH).

The nearest relative is *Elaphroconcha bataviana* (VON DEM BUSCH), but the new species differs from it in the more fragile shell sculpture, the

lower spire and the flatter base. The coloured zone just below the periphery is darker in *Elaphroconcha bataviana* and this species is always stained chestnut-brown in the umbilical region.

Elaphroconcha planior RENSCH from Sumbawa Island is also very similar. This species has, however, more convex whorls with deeper suture. Its embryonic whorls are more distantly ribbed and its last whorl is not so much inflated as in *E. minangkabau*.

"Hemiplecta" marangensis (ALDRICH, 1898)

- 1898 ALDRICH, *Nautilus*, 12: 2, pl. 1, fig. 9—10 (*Nanina marangensis* — Marang)
1928 DEGNER, *Treubia*, 10: 357 (*Hemiplecta marangensis* — Sumatra)

Not seen. The classification in *Hemiplecta* seems dubious.

"Hemiplecta" amphidroma (MARTENS, 1864)

- 1864 MARTENS, *Monatsber. Akad. Wiss. Berlin*, p. 265 (*Nanina amphidroma* — Hügelland längs der Flüsse Musi und Lamatang)
1867 MARTENS, *Ostas. Landschn.* p. 221, Taf. 6, Fig. 3, 3b, Taf. 11, Fig. 2, 5 (*Nanina amphidroma* — various localities in Sumatra)
1928 DEGNER, *Treubia*, 10: 357 (*Dyakia amphidroma* — Sumatra)

Not seen. The shells which MARTENS (1864, 1867) described as *Nanina amphidroma* are in my opinion a composite species, the dextral specimens falling under *Elaphroconcha martini* (PFEIFFER), the sinistral ones under *Dyakia mackensiana* (SOULEYET) (see below).

Dyakia granaria (BOCK, 1881)

- 1881 BOCK, *Proc. Zool. Soc. London*, p. 628, pl. 55, fig. 1 (*Helix granaria* — Mt Sago)
1900 MARTENS, *Nachr. Blatt*, 32: 8 (*Nanina* vielleicht *granaria* — Sinabung)
1905 SYKES, *Proc. Malac. Soc. London*, 6: 227 (*Dyakia granaria* — West Sumatra)
1905 KOBELT, in: MARTINI-CHEMNITZ, *N. Syst. Conch. Cab. Bd 1, Abt. 12-V*: 1009, Taf. 261, Fig. 11 (*Nanina granaria* — Berg Sago)
1906 BULLEN, *Proc. Malac. Soc. London*, 7: 126 (*Ariophanta granaria* — Mt Sago; Mt Ophir)
1908 ROLLE, *Nachr. Blatt*, 40: 64 (*Ariophanta granaria* — Padang Pandjang)
1922 VAN HEURN & PARAVICINI, *Natuurk. Tijdschr. Ned. Indië*, 82: 29, fig. 5 (*Hemiplecta amphidroma* — Lampahan)
1928 DEGNER, *Treubia*, 10: 356 (*Dyakia granaria* — Sumatra)

Localities: Lampahan, Gajo Highlands (MBa); Brastagi, 1750 m alt., May 1952 (NI); Fort de Kock, 920 m alt., 1926 (ZMA); Pajakombo (RMNH); Batang Palupuh, Padang Highlands, 1000 m alt., November 1925 (ZMA).

Dyakia euconus SYKES, 1905

- 1905 SYKES, *Proc. Malac. Soc. London*, 6: 228, fig. 1 (*Dyakia euconus* — West Sumatra)
1928 DEGNER, *Treubia*, 10: 356 (*Dyakia euconus* — Sumatra)

Localities: Forest Reserve Bandar, near Kerassaän (ZMA); Bandar Maria, Siantar, 4 May 1919 (ZMA); Ambalutu Estate, near Kisaran, 50 m alt., on *Hevea brasiliensis*, January 1952 (NI); Pajakombo (RMNH).

Dyakia smithiana GUDE, 1903

- 1903 GUDE, Journ. Malac. 10 : 47, pl. 3, fig. 1a, 1b (*Dyakia smithiana* — Sumatra)
1906 BULLEN, Proc. Malac. Soc. London, 7 : 126 (*Ariophanta smithiana* — Mt Sago)
1928 DEGNER, Treubia, 10 : 356 (*Dyakia smithiana* — Sumatra)

Localities: West Sumatra (ZMA); Fort de Kock, December 1922 (RMNH); Pajakombo (RMNH).

Dyakia mackensiana (SOULEYET, 1841)

- 1841 SOULEYET, Rev. Zool. (Soc. Cuv.) 4 : 347 (*Helix mackensiana* — Presqu'île malaise)
1852 SOULEYET, Voy. Bonite, Zool. 2 : 504, pl. 28, fig. 27—29 (*Helix mackensiana* — Presqu'île de Malacca)
1881 BOCK, Proc. Zool. Soc. London, p. 629, pl. 55, fig. 2 (*Helix maarseveeni* — Sidjoendjoeng)
1900 MARTENS, Nachr. Blatt, 32 : 8 (*Nanina maarseveeni* — Sinabung, Deli)
1905 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 12-V: 1009, Taf. 261, Fig. 12 (*Nanina maarseveeni* — Sidjoendjoeng)
1906 BULLEN, Proc. Malac. Soc. London, 7 : 126 (*Ariophanta maarseveeni* — Mt Sago)
1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82 : 29 (*Hemiplecta amphidroma* — Lampahan, Atjeh)
1928 DEGNER, Treubia, 10 : 356 (*Dyakia maarseveeni* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66 : 327 (*Dyakia martini* — Hügelland von Lho Sukon, Atjeh)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 60 (*Dyakia janus* — Serdang bei Lau Rakit)
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc 20 : 22 (*Dyakia martini* — Blang Pic, Lho Soekon, Atjeh)

Localities: Environs of Lake Takengon, 11 August 1930 (ZMA); Bulu Blang Ara, near Lho Seumaweh, E coast of Atjeh, 5 October 1920 (ZMA); Paja Tjitjim, near Lho Sukon, Atjeh, 18 November 1920 (ZMA); Lho Sukon, Atjeh, March 1929 (SMF); Basin of Kroeëng Pendawa, district Pleureula, Atjeh, January 1926 (ZMA); Coast of Pendawa, Atjeh (RMNH); Along the Kroeëng Meureubo, district Langsa, Atjeh, May 1925 (ZMA); Gadjah Meuntah, district Langsa, Atjeh, 7 October 1920 (ZMA); Damar Siput, Atjeh, January 1919 (ZMA); Lower Langkat (SMF); Serdang, near Lau Rakit (MBa); Sisir Gunting, near Belawan, Deli, 1919 (ZMA); Silau Dunia Estate, near Tebing Tinggi, in cleared jungle, 12 April 1956 (NI); Bandar Maria, Siantar, 4 May 1919 (ZMA); Bandar Siantar, 9 August 1919 (ZMA); Estate Sungei Kopas, near Kisaran, 89 m alt., near the verge of young wood (NI); Kampong Karangredjo, near Pematang Siantar, 1953 (NI); Kampong Karangjar, near Pematang Siantar, 300—500 m alt., in a small grove, 27 November 1955 (NI); Ambalutu Estate, near Kisaran, 50 m alt., February 1952, "Living under dead leaves, only active after rain. In secondary wood, jungle and plantation. Animal very nervous, bay-brown with small black spots. Over the head two black lines. Foot sole greyish-white". (NI); Hanna Estate, near Membang Muda, 10 m alt., virgin forest, among dead leaves, July 1952 (NI); Bilah, 5 April 1921 (ZMA); Siak, March 1919 (ZMA); West Sumatra (MBA); Ajer Banggis, Padang Lowlands, November 1913 (RMNH); Sungai Kumbang Mt Korintji, August 1916 (ZMA); Estate Kaba Wetan, near Kepahiang, Benkulen, 5 October 1927 (ZMA).

Under *Nanina amphidroma* MARTENS (1867, Ostay. Landschn. p. 221) muddled up dextral and sinistral shells which he considered to belong to one and the same species. I am afraid I cannot follow him in this opinion.

The first name of the variants which MARTENS included in his *Nanina amphidroma* and which he figured (as a sinistral shell) in his plate 11, fig. 2, was *Helix martini* PFEIFFER. As this species was originally described as a dextral shell, it cannot be classified as a sinistral variant of *Nanina amphidroma*.

In the second place the name *Nanina amphidroma* MARTENS, being partly (the dextral shells) a synonym of *N. martini* PFEIFFER, cannot be employed for the sinistral shells which MARTENS lumped with *Nanina amphidroma*.

Consequently I denoted in my present report the dextral shells as *Elaphroconcha martini* (PFEIFFER). For the sinistral ones the name *Dyalkia mackensiana* (SOULEYET) is available.

Dyalkia weyersi (SMITH, 1887)

- 1887 SMITH, Ann. Soc. Roy. Malac. Belg. 22 : 219, pl. 9, fig. 8—10 (*Ariophanta weyersi* — Bodjo, Batu Archipel)
1898 ALDRICH, Nautilus, 12 : 1 (*Ariophanta weyersi* — Marang)
1905 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 12-V : 1008, Taf. 261, Fig. 2—4 (*Nanina weyersi* — Bodjo, Batoe Arch.)
1928 DEGNER, Treubia, 10 : 357 (*Dyalkia weyersi* — Sumatra)

Not seen. The species is evidently closely related to the preceding one.

Dyalkia perstriata SYKES, 1905

- 1905 SYKES, Proc. Malac. Soc. London, 6 : 227, fig. 2 (*Dyalkia perstriata* — West Sumatra)
1928 DEGNER, Treubia, 10 : 356 (*Dyalkia perstriata* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 60 (*Hemiplecta amphidroma* — Pik von Indrapoera), (*Dyalkia rumphii* — Solok)

Locality : Mt Korintji (= Indrapura Peak) (MBa); Solok (MBa).

Dyalkia sumatrensis (MARTENS, 1867)

- 1867 MARTENS, Ostay. Landschn. p. 237 (*Nanina sumatrensis* — Palembang)
1870 PFEIFFER, Nov. Conch. 4 : 26, Taf. 115, Fig. 1—2 (*Nanina sumatrensis* — Palembang)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3 : 1023 (*Nanina sumatrensis* — Sumatra)
1905 KOBELT, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 12-V : 992, Taf. 257, Fig. 4—5 (*Nanina sumatrensis* — Palembang)
1908 ROLLE, Nachr. Blatt, 40 : 64 (*Ariophanta sumatrana* (sic!) — Ostabhang des Singalang)
1928 DEGNER, Treubia, 10 : 356 (*Dyalkia sumatrensis* — Sumatra)

Localities : Estate Kaju Aro, Mt Korintji, under tea shrubs on the ground, 1952—1953 (ZMA, Dr, Br, Vm); Muara Labu, N slope of Mt Korintji (ZMA); Pager Alam, near Lahat, 1898 (RMNH).

Dyalkia rumphii (VON DEM BUSCH, 1842)

- 1842 VON DEM BUSCH, in : PHILIPPI, Abb. & Beschr. 1 : 9, Taf. 1, Fig. 2 (*Helix rumphii* — Java)
1867 MARTENS, Ostay. Landschn. p. 220 (*Nanina rumphii* — Java)

- 1887 SMITH, Ann. Mag. Nat. Hist. (5) 20: 132 (*Nanina rumphii* var. — Sidjoendjoeng)
 1928 DEGNER, Treubia, 10: 356 (*Dyakia rumphii* — Sumatra)

Locality: Mt Tanggamus, Lampong Districts, 600—700 m alt., December 1934 (ZMA).

Dyakia clypeus (MOUSSON, 1857)

- 1857 MOUSSON, Journ. de Conch. 6: 156 (*Nanina clypeus* — In monte Smiron Javanensi)
 1950 VAN BENTHEM JUTTING, Treubia, 20: 424, fig. 40, 41 (*Dyakia clypeus* — various localities in Java)

Locality: Pajakombo (RMNH).

Dyakia foveata (PFEIFFER, 1853)

- 1853 PFEIFFER, Proc. Zool. Soc. London, p. 126 (*Helix foveata* — India)
 1854 REEVE, Conch. Icon. 7, pl. 184, fig. 1272 (*Helix foveata* — India)
 1881 BOCK, Proc. Zool. Soc. London, p. 628 (*Nanina foveata* — Sidjoendjoeng)
 1928 DEGNER, Treubia, 10: 356 (*Dyakia foveata* — Sumatra)

Not seen. The Indian species *Dyakia foveata* (PFEIFFER) has some superficial resemblance to *D. clypeus* (MOUSSON). Therefore it is not impossible that BOCK (l.c.) took the two specimens from Sidjoendjoeng for *D. foveata* in stead of *D. clypeus*. Unless the original material can be compared no definite solution is possible.

Helicarion bocki SMITH, 1887

- 1887 SMITH, Ann. Mag. Nat. Hist. (5) 20: 131 (*Helicarion bocki* — Sumatra)
 1887 SMITH, Ann. Soc. Roy. Malac. Belg. 22: 216, pl. 9, fig. 1—3 (*Helicarion bocki* — Paio)
 1905 KOBELT, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 1, Abt. 12-V: 1010, Taf. 261, Fig. 5—7 (*Helicarion bocki* — Paio)
 1906 BULLEN, Proc. Malac. Soc. London, 7, p. 13, pl. 2, fig. 3—4 (*Xesta cornicen* — Mt Talang) p. 126 (*Xesta glutinosa non glutinosa* METCALFE 1851 — Mt Sago)
 1928 DEGNER, Treubia, 10, p. 356 (*Helicarion bocki* — Sumatra), p. 358 (*Xesta cornicen*, ~~X~~ *glutinosa* — Sumatra)
 1934 RENSCH, Arch. Moll. Kunde, 66: 329 (*Otesia bocki* — Sumatra)

Localities: Stabat, Lower Langkat (SMF); Ambalutu Estate, near Kisaran, 50 m alt., in jungle and in secondary wood, among dead leaves. January 1953 (NI); Hanna Estate, near Membang Muda, 10 m alt., in the jungle, August 1953 (NI); West Sumatra (MGv); Ajer Bangis, Padang Lowlands, November 1913 (RMNH); Pajakombo (RMNH); Kaju Aro, Mt Korintji, 26 May 1951 (Dr); Sources of River Musi (SMF); Muara Enim, Palembang (MBa); South Sumatra (ZMA).

Helicarion albellus MARTENS, 1867

- 1867 MARTENS, Oostas. Landschn. p. 186 (*Helicarion albellus* — Wonosari, Tengger, Java)
 1934 RENSCH, Trop. Binnengew. 4: 753 (*Helicarion adolphi* — Kalkquellen von Panjinhagan am Singkarah-See)
 1950 VAN BENTHEM JUTTING, Treubia, 20: 417, fig. 34, 35 (*Helicarion albellus* — Java, Sumatra, Bali, Lombok, S. Celebes, Nusa Kambangan)

Localities: Wai Lima, Lampong Districts, November 1921 (ZMA); Giesting Estate, Lampong Districts, Mt Tanggamus, 700 m alt., 31 December 1939 (ZMA).

Helicarion sumatrensis SCHEPMAN, 1880

- 1880 SCHEPMAN, Midden Sumatra Exp. p. 6, pl. 1, fig. 1, pl. 2, fig. 2 (*Helicarion sumatrensis* — Bedar Alam, Moera Laboe)
1881 BOCK, Proc. Zool. Soc. London, p. 630 (*Helicarion sumatrensis* — Paio)
1928 DEGNER, Treubia, 10 : 356 (*Helicarion sumatrensis* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67 : 60 (*Helicarion adolfi* — Serdang bei Lau Rakit)

Localities : Dolok Baros, between Sibolangit and Brastagi, 1800 m alt., in beakers of *Nepenthes spectabilis*, March 1930 (ZMA); Brastagi, 1750 m alt., May 1953 (NI); Serdang near Lau Rakit, 300 m alt. (MBa); Kampong Karanganjar, near Pematang Siantar, 300—350 m alt., 27 November 1955 (NI); Estate Sungei Kopas, near Kisaran, 100 m alt., on low vegetation, after rain, 17 November 1955 (NI); Ambalutu Estate, near Kisaran, 28 November 1952 (NI); Hanna Estate, near Kampong Gunting Saga, 10 m alt., August 1953 (NI); Fort de Kock, 920 m alt., 1925 (ZMA); Anai gorge, 500 m alt., 1926 (ZMA); Padang, 1955 (Bt); Bedar Alam (ZMA); Muara Labu, N of Mt Korintji, 1880 (RMNH); Kaju Aro Estate, Mt Korintji, 1450 m alt., among fallen leaves, 1953 (ZMA).

The conchological differences between *Helicarion sumatrensis* and *H. albellus* are slight: the spire of *H. sumatrensis* is higher, the whorls are more convex and the last whorl is narrower than in *H. albellus*.

Helicarion perfragilis MOELLENDORFF, 1897

- 1897 MOELLENDORFF, Nachr. Blatt, 29 : 58 (*Helicarion perfragilis* — Java)
1950 VAN BENTHEM JUTTING, Treubia, 20 : 419, fig. 36 (*Helicarion perfragilis* — Java)

Localities : Sibolangit, 550 m alt. (ZMA); Fort de Kock, 920 m alt., 1925 (ZMA); Pedada Bay, Lampong Districts, 22 January 1922 (ZMA).

New records for Sumatra.

Helicarion hyaleus (BOCK, 1881)

- 1881 BOCK, Proc. Zool. Soc. London, p. 631, pl. 55, fig. 6 (*Vitrina hyalea* — Ajer Angat, near Korinthji)
1928 DEGNER, Treubia, 10 : 356 (*Helicarion hyaleus* — Sumatra)

Not seen.

Helicarion lineolatus MARTENS, 1867

- 1867 MARTENS, Ostay. Landschn. p. 184, Taf. 12, Fig. 4 (*Helicarion lineolatus* — Kepahiang)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3 : 1011 (*Helicarion lineolatus* — Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 5 (*Helicarion lineolatus* — Indrapoera)
1928 DEGNER, Treubia, 10 : 356 (*Helicarion lineolatus* — Sumatra)

Not seen.

Microparmarion hildegardi HOFFMANN, 1934

- 1934 HOFFMANN, Trop. Binnengew. 5 : 262, fig. 3—5 (*Microparmarion hildegardi* — Wasserfall des Ajer Putih bei Tjurup, an Baumstamm)
1940 HOFFMANN, Zool. Jahrb. (Syst.) 74 : 75, fig. 35, 36 (*Microparmarion hildegardi* — G. Singgalang, 1800 m)

Locality : Mt Singgalang, 1800 m alt., 1925 (ZMA).

Microparmarion strubelli SIMROTH, 1893

- 1893 SIMROTH, Erg. Reise Nied. Ost Indien, 3 : 108, Taf. 7, Fig. 5, 11, Taf. 8, Fig. 12, 15 (*Microparmarion strubelli* — Arga Sarie, Bandung; Umgegend von Buitenzorg)
1940 HOFFMANN, Zool. Jahrb. (Syst.) 74 : 65, fig. 30—33 (*Microparmarion strubelli* — various localities in Java, not from Sumatra)

Localities : Ambalutu Estate, near Kisaran, under decaying wood, on trunks of *Hevea brasiliensis* after rain, December 1952 (N1); Estate Sungei Kopas, near Kisaran, under decaying wood, 100 m alt., 17 November 1955 (N1).

New records for Sumatra.

Microparmarion strubelli var. makrokaulus HOFFMANN, 1940

- 1940 HOFFMANN, Zool. Jahrb. (Syst.) 74 : 72, fig. 34 (*Microparmarion strubelli* var. *makrokaulus* — Gipfel des Dolok Pintoe, Brastagei, 2100 m)

Locality : Top of the Dolok Pintu, Brastagi, 11 October 1921 (ZMA).

Parmarion pupillaris HUMBERT, 1864

- 1864 HUMBERT, Mém. Soc. Genève, 17 : 109, pl., fig. 1 (*Parmarion pupillaris* — Litjin, Banjoewangi)
1922 PARAVICINI, Teysmannia, 33 : 26, fig. 3 (*Parmarion reticulatus* — Deli)
1928 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 52 : 3—5, pl. 1, fig. 3 (*Parmarion reticulatus* — Deli)
1935 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 91 : 23 (*Parmarion pupillaris* — Ondern. Tandjong Bringin, Deli)
1935 VAN DER MEER MOHR, Bull. Deli Proefstat. no. 35 : 9 (*Parmarion pupillaris* — Deli)
1936 VAN DER MEER MOHR, Meded. Deli Proefstat. (2) 93 : 19 (*Parmarion pupillaris* — Ondern. Tandjong Bringin, Deli)
1940 HOFFMANN, Zool. Jahrb. (Syst.) 74 : 8, fig. 1—7, Taf. 1, Fig. 1—4 (*Parmarion pupillaris* — various localities in Java, not from Sumatra)
1951 VAN DER MEER MOHR, Basteria, 15 : 32 (*Parmarion pupillaris* — Tandjong Morawa).

Localities : Near Lake Perlanaän, S E of Tebing Tinggi, 20 September 1931 (ZMA); Hanna Estate, near Kampong Gunting Saga, 10 m alt., June 1953, "living under detached bark of trees. After rain frequently on the tapping cuts, drinking latex" (N1); Giesting Estate, Mt Tanggamus, Lampong Districts, 600—700 m alt., December 1939 (ZMA).

Parmarion martensi SIMROTH, 1893

- 1893 SIMROTH, Erg. Reise Nied. Ost Indien, 3 : 107, Taf. 7, Fig. 8, Taf. 8, Fig. 20—22 (*Parmarion martensi* — Cambodja)
1940 HOFFMANN, Zool. Jahrb. (Syst.) 74 : 32, fig. 14—16, Taf. 1, Fig. 5 (*Parmarion martensi* — Medan, Padang Boelanweg; Bohorok, Langkat; Koeala Begoemit, Langkat; Serdang bei Lau Rakit; Gloegoer; Glenherrie)

Localities : Medan, Padang Bulanroad, May 1917 (ZMA); On banana stem near native shop of Bohorok, Langkat, August 1917 (ZMA); Kuala Begumit, Langkat district, February 1910 (ZMA); Serdang near Lau Rakit (MBa); Glenherrie Estate (MBa).

Parmarion elongatus (DOHRN, 1881)

- 1881 DOHRN, Nachr. Blatt. 13 : 66 (*Parmella elongata* — Singalang)

- 1928 DEGNER, Treubia, 10: 356 (*Parmarion elongatus* — Sumatra)
1940 HOFFMANN, Zool. Jahrb. (Syst.) 74: 5 (*Parmarion elongatus* — Sumatra)

Not seen. The species is of doubtful taxonomic position.

Obbina marginata MÜLLER f. *minor* MOELLENDORFF, mentioned by PARAVICINI (1926, Arch. Moll Kunde, 59: 188) from Southern Sumatra is a very doubtful record. The three specimens in the Basle Museum of Natural History, labelled Poela Bara, Massidi (where is this?) are undoubtedly *Obbina marginata* (MÜLLER). MOELLENDORFF never published a forma *minor* of *O. marginata*. As PARAVICINI already remarked *O. marginata* is a Philippine species. Hence its presumed occurrence in Sumatra must be a lamentable error.

Planispira gabata atjehensis RENSCH, 1934

- 1934 RENSCH, Arch. Moll. Kunde, 66: 331, Taf. 14, Fig. 3a, 3b (*Planispira gabata atjehensis* — Hügelland von Lho Sukon, Atjeh, 50 m)

Not seen.

Planispira gabata smithi (BOCK, 1881)

- 1881 BOCK, Proc. Zool. Soc. London, p. 629, pl. 55, fig. 13 (*Helix smithi* — Paio)
1888 TRYON, Man. of Conch. (2) 4: 57, pl. 11, fig. 62, 63 (*Helix smithi* — Paio)
1928 DEGNER, Treubia, 10: 359 (*Planispira smithi* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66: 331 (*Planispira gabata smithi* — Paio)

Localities: Paja Tjitjim, near Lho Sukon, Atjeh, 18 November 1920 (ZMA); Gadjah Meuntah, Langsa District, Atjeh, 7 October 1920 (ZMA).

Although the specimens which I studied were collected in Atjeh, yet they do not belong to the subspecies which RENSCH (l.c.) described as *Planispira gabata atjehensis*, but to the form with flat top and open umbilicus *Pl. gabata smithi*.

Planispira quadrivolis (MARTENS, 1865)

- 1865 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 53 (*Helix quadrivolis* — Westliches Borneo, bei Mandhor)
1867 MARTENS, Ostas. Landschn. p. 288, Taf. 14, Fig. 6 (*Helix quadrivolis* — Zwischen Palembang und Benkulen, bei Kepahiang und Rinduhati)
1890 PILSBRY, Man. of Conch. (2) 6: 299, pl. 45, fig. 41—43 (*Helix quadrivolis* — Western Borneo near Mandhor; At Kepahiang and Rinduhati, Middle Sumatra)
1906 GUDE, Proc. Malac. Soc. London, 7: 109, pl. 13, fig. 8, a—c (*Chloritis rufofasciata* — West Sumatra)
1928 DEGNER, Treubia, 10: 359 (*Planispira quadrivolis*, *Trichochloritis rufofasciata* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66: 332 (*Planispira quadrivolis* — Sumatra, Borneo)

Not seen.

Ganesella acris (BENSON, 1859)

- 1859 BENSON, Ann. Mag. Nat. Hist. (3) 3: 387 (*Helix acris* — Teria Ghat, Khasi Hills, Assam)
1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 523 (*Helix conulus* — Kepahiang)
1867 MARTENS, Ostas. Landschn. p. 269, Taf. 13, Fig. 15 (*Helix conulus* — Bei Kepahiang)

- 1880 SCHEPMAN, Midden Sumatra Exp. p. 8 (*Helix conulus* — Silago)
1881 BOCK, Proc. Zool. Soc. London, p. 630, pl. 55, fig. 4 (*Helix rufo-tilosa* — Forest at Paio, 1500 feet above the sea)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1028 (*Trochomorpha conulus* — Kepahiang)
1891 PILSBRY, Man. of Conch. (2) 7: 84, pl. 3, fig. 55 (*Helix rufofilosa* — Paio, in the forests, 1500 feet above the sea)
1906 BULLEN, Proc. Malac. Soc. London, 7: 126 (*Ganesella conulus* — Mt Bongson)
1908 ROLLE, Nachr. Blatt, 40: 66, textfig. (*Ganesella boettgeri* — Padang Pandjang)
1928 DEGNER, Treubia, 10: 360 (*Ganesella conulus*, *G. rufofilosa*, *G. boettgeri* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66: 330 (*Ganesella acris* — Hinterindien, Borneo, Sumatra, Java)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Ganesella conulus* — Serdang bei Lau Rakit)

Localities: Sumatra (RMNH); Sisir Gunting, near Belawan, 1919 (ZMA); Serdang, near Lau Rakit, 300 m alt. (MBA); Sirung Galing, Karo Highlands, 28 December 1919 (ZMA); Estate Silau Dunia, near Tebing Tinggi, 1956 (NI); Kampong Karangajar, near Pematang Siantar, 300—350 m alt., 27 November 1955 (NI); Kampong Karangredjo, near Pematang Siantar, 400 m alt., in the jungle, December 1954 (NI); West Sumatra (RMNH); Estate Kaju Aro, Mt Korintji, under tea shrubs, 1952 (Dr).

According to RENSCH (l.c.) the three species of *Ganesella* described from Sumatra, *G. conulus*, *G. rufofilosa* and *G. boettgeri*, ought to be united with *G. acris* from Teria Ghat, Khasi Hills, Assam. Although I have not seen typical *G. acris* I am inclined to follow his opinion. TRYON (1887, Man. of Conch. (2) 3: 75) even included *Helix gysseriana* PFEIFFER (1865, Malak. Blätt. 12: 122) originally described from the Moluccas, but I must leave it to further research whether this opinion can be maintained.

Landouria costulata (MARTENS, 1892)

- 1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 232 (*Trochomorpha costulata* — Kaju Tanam)
1928 DEGNER, Treubia, 10: 259 (*Trochomorpha costulata* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66: 332, Taf. 14, Fig. 2a, 2b (*Landouria polito-costata* — Pakantan)

Localities: Brastagi, among dead leaves, 1750 m alt., 16 May 1952 (NI); Kaju Tanam (ZMA); Pakanten, 650 m alt., 1912 (SMF).

Landouria sumatrana (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 523 (*Helix sumatrana* — Am Berg Serillo und bei Kepahiang)
1867 MARTENS, Ostas. Landschn. p. 266, Taf. 13, Fig. 13 (*Helix sumatrana* — Kepahiang; Serillo)
1880 SCHEPMAN, Midden Sumatra Exp., p. 8 (*Helix sumatrana* — Silago)
1881 BOCK, Proc. Zool. Soc. London, p. 628 (*Helix sumatrana* — Ajer Mantjoer)
1888 TRYON, Man. of Conch. (2) 4: 56, pl. 12, fig. 68—70 (*Helix sumatrana* — Sumatra)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 235 (*Helix sumatrana* — Singkarah)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 5, pl. 1, fig. 1—1c (*Helix sumatrana* — Indrapoera)
1906 BULLEN, Proc. Malac. Soc. London, 7: 13 (*Eulota sumatrana* — Mt Bongson)

- 1908 ROLLE, Nachr. Blatt, 40: 66 (*Plectotropis winteriana* var. *sumatrana* — Singalang)
1928 DEGNER, Treubia, 10: 361 (*Rectotropis sumatrana* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 61 (*Plectotropis sumatrana* — Serdang bei Lau Rakit; Mt Bonsoe; Langkapoera; Fort de Kock)

Localities: Serdang, near Lau Rakit, 300 m alt. (MBa); Fort de Kock, 920 m alt. (ZMA, MBa); Mt Bongsoe (MBa); Singkarah (ZMA); Silago (ZMA); Lahat, Palembang (ZMA); Estate Kaju Aro, Mt Korintji, on the ground under tea shrubs, 1400—1600 m alt., some dextral and some sinistral specimens (ZMA, Dr, Vm); Langkapura, Lampong Districts (MBa); Mt Tanggamus, Lampong Districts, 600—700 m alt., December 1934 (ZMA).

Landouria winteriana (PFEIFFER, 1842)

- 1842 PFEIFFER, Symbolae, 2: 41 (*Helix winteriana* — Java)
1867 MARTENS, Ostas. Landschn. p. 264, Taf. 13, Fig. 11 (*Helix winteriana* — Palembang, Tebing Tinggi)
1888 TRYON, Man. of Conch. (2) 4: 54, pl. 11, fig. 53—55 (*Helix huttoni* var. *winteriana* — Java, Borneo, Sumatra, Timor, Siam)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 234 (*Helix winteriana* — Arau)
1928 DEGNER, Treubia, 10: 361 (*Rectotropis winteriana* — Sumatra)

Localities: Brastagi, 1750 m alt., among leaves, 16 February 1952 (NI); West Sumatra (MBa); Pajakombo (RMNH); Arau (ZMA); Pager Alam, Lahat, Palembang, 1898 (RMNH); Pladju, Palembang, churchyard, 21 April 1948 (Nb); Sukadana, Lampong Districts (ZMA); Wai Lima, Lampong Districts, 11 December 1921 (ZMA).

Landouria ciliocincta (MOELLENDORFF, 1897)

- 1897 MOELLENDORFF, Nachr. Blatt, 29: 67 (*Plectotropis ciliocincta* — Java)
1950 VAN BENTHEM JUTTING, Treubia, 20: 466, fig. 83 (*Landouria ciliocincta* — Java, Nusa Kambangan)

Localities: Mt Sibajak, near Brastagi, 9 October 1925 (ZMA); Mt Singgalang, 1800 m alt., June 1925 (ZMA).

New records for Sumatra.

Chloritis tabularis GUDE, 1903

- 1903 GUDE, Journ. Malac. 10: 48, pl. 3, fig. 5a—5c (*Chloritis tabularis* — Sumatra)
1906 BULLEN, Proc. Malac. Soc. London, 7: 126 (*Chloritis tabularis* — Mt Ophir)
1928 DEGNER, Treubia, 10: 360 (*Trichochloritis tabularis* — Sumatra)
1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Trichochloritis crassula* — Serdang bei Lau Rakit)

Localities: Stabat, Lower Langkat (SMF); Sisir Gunting, near Belawan, 1919 (ZMA); Serdang, near Lau Rakit, 300 m alt. (MBa); Mt Sibajak, near Brastagi, 9 October 1925 (ZMA); Sibolangit, 1 June 1919 (ZMA); Simpang Toba, Asahan, May 1920 (ZMA); Bandar, Siantar, 26 August 1919 (ZMA); Kampong Karangredjo, near Pematang Siantar, 1953 (NI); Estate Sungei Kopas, near Kisaran, 89 m alt., near the edge of a young wood (NI); Ambalutu Estate, near Kisaran, 50 m alt., under decaying wood, among dead leaves, January 1952 (NI); Hanna Estate, near Membang Muda, living in the jungle, July 1953 (NI).

Chloritis sykesi GUDE, 1906

- 1906 GUDE, Proc. Malac. Soc. London, 7: 110, pl. 13, fig. 10—10c (*Chloritis sykesi* — West Sumatra)
1928 DEGNER, Treubia, 10: 360 (*Trichochloritis sykesi* — Sumatra)

Locality: Pager Alam, Lahat, Palembang, 1898 (RMNH).

Chloritis crassula (PHILIPPI, 1844)

- 1844 PHILIPPI, Abb. & Beschr. 1: 152, Taf. 5, Fig. 3 (*Helix crassula* — Java)
1867 MARTENS, Ostas. Landschn. p. 276 (*Helix crassula* — Kepahiang; Rinduhati)
1887 TRYON, Man. of Conch. (2) 3: 211, pl. 48, fig. 90—92 (*Helix crassula* — Java, Sumatra)
1928 DEGNER, Treubia, 10: 359 (*Trichochloritis crassula* — Sumatra)

Not seen. Since MARTENS recorded *Chloritis crassula* from Sumatra three other species of *Chloritis* were published from this island. They are all more or less related to *Chl. crassula*. It remains to be seen whether the shells from Kepahiang and Rinduhati are true *Chl. crassula* or one of the later described species.

Chloritis tomentosa (PFEIFFER, 1854)

- 1854 PFEIFFER, Proc. Zool. Soc. London, p. 289 (*Helix tomentosa* — Sarawak)
1881 BOCK, Proc. Zool. Soc. London, p. 628 (*Helix tomentosa* — Sidjoendjoeng)
1887 TRYON, Man. of Conch. (2) 3: 212, pl. 49, fig. 96 (*Helix tomentosa* — Sarawak, Borneo)
1928 DEGNER, Treubia, 10: 360 (*Trichochloritis tomentosa* — Sumatra)

Not seen.

Chloritis pandjangensis ROLLE, 1908

- 1908 ROLLE, Nachr. Blatt, 40: 66 (*Chloritis pandjangensis* — Padang Pandjang)
1928 DEGNER, Treubia, 10: 359 (*Trichochloritis pandjangensis* — Sumatra)

Not seen.

Papuina beatrix ANGAS ?

- 1926 PARAVICINI, Arch. Moll. Kunde, 58: 188 (*Papuina beatrix* — Laoet Tawar; Karohochebene)

I studied three shells from the Karo Highlands, now belonging to the Basle Museum of Natural History. They are certainly not identical with *Papuina beatrix*, but in spite of various efforts to elucidate their true nature, I am unable to say how they must be classified.

Amphidromus inversus (MÜLLER, 1774)

- 1774 MÜLLER, Hist. Verm. terr. 2: 93 (*Helix inversus* — no locality)
1867 MARTENS, Ostas. Landschn. p. 337 (*Bulimus inversus* — Westküste in der Assistentenresidentschaft Agam)
1900 PILSBRY, Man. of Conch. (2) 13: 167, pl. 56, fig. 91—92 (*Amphidromus inversus* — Agam and various localities beyond Sumatra)
1928 DEGNER, Treubia, 10: 360 (*Amphidromus inversus* — Sumatra)

Localities: Ranau district, Palembang (ZMA); Sukadana, Lampong Districts (ZMA); Estate Negeriya, near Tandjong Karang, Lampong Districts, 1 June 1938 (ZMA).

Amphidromus palaceus (MOUSSON, 1848)

- 1848 MOUSSON, Mitth. naturf. Ges. Zürich, 1: 266 (*Bulimus palaceus* — Java)
1849 MOUSSON, Land & Süßw. Moll. Java, p. 28, 108, Taf. 3, Fig. 1 (*Bulimus palaceus* — Pardana und Tjikoya unter Kaffeebäumen)
1898 ALDRICH, Nautilus, 12: 1 (*Amphidromus palaceus* — Marang)
1928 DEGNER, Treubia, 10: 360 (*Amphidromus palaceus* — Sumatra)

Localities: Ogan Ulu, S Palembang, 1902 (MBa); Mt. Tanggamus, Lampong Districts, Estate Giesting and near Wailalään and Kota Agung, Lampong Districts, 1934 and 1939 (ZMA).

Amphidromus perversus (LINNÉ, 1758)

- 1758 LINNÉ, Syst. Nat. Ed. 10: 772 (*Helix perversus* — no locality)
1900 PILSBRY, Man. of Conch. (2) 13: 147, pl. 51, fig. 47—52 (*Amphidromus perversus* — S. Celebes, Java, Borneo)
1932 RENSCH, Zool. Jahrb. (Syst.) 63: 101 (*Amphidromus perversus* — various islands, including Sumatra)

Localities: Tandjong Durian, near Tebing Tinggi (ZMA); Bandar, Siantar, 9 August 1919 (ZMA); Massihi, Asahan, 9 October 1919 (ZMA); Forest Reserve Bandar, near Kerassaän, 1919 (ZMA); Simpang Toba, Asahan (ZMA); Ambalutu Estate, near Kisaran, 50 m alt., on *Hevea brasiliensis*, December 1951 (NI); Estate Kaba Wetan, near Kepahiang, Benkulen, 5 October 1927 (ZMA).

Amphidromus semifrenatus MARTENS, 1900

- 1900 MARTENS, Nachr. Blatt, 32: 8 (*Amphidromus semifrenatus* — Deli; Soekaranda, Ober-Langkat)
1900 PILSBRY, Man. of Conch. (2) 13: 219 (*Amphidromus semifrenatus* — Deli; Soekaranda; Upper Langkat)
1913 VERNHOUT, Notes Leyden Mus. 35: 154, fig. 1—3 (*Amphidromus semifrenatus* — Tapatoean, Atjeh, and Poeloe Weh)
1928 DEGNER, Treubia, 10: 361 (*Amphidromus semifrenatus* — Sumatra)

Localities: Atjeh (ZMA); Gadjah Meuntah, Langsa District, Atjeh, 7 October 1920 (ZMA); Soekaranda, Upper Langkat (MBa); Bandar Baru, Deli, 2 August 1919 (ZMA).

Amphidromus sumatranus sumatranus (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 526 (*Bulimus sumatranus* — Kepahiang)
1867 MARTENS, Ostas. Landschn. p. 366, Taf. 21, Fig. 6 (*Bulimus sumatranus* — Kepahiang)
1880 SCHEPMAN, Midden Sumatra Exp. p. 8 (*Bulimus sumatranus* — Silago).
1881 BOCK, Proc. Zool. Soc. London, p. 630 (*Bulimus adamsi* — Sidjoendjoeng, Paio)
1888 TENISON WOODS, Proc. Linn. Soc. N.S. Wales (2) 3: 1049 (*Bulimus sumatranus* — Sumatra)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2: 241 (*Amphidromus adamsi* — Singkarah)
1896 FULTON, Ann. Mag. Nat. Hist. (6) 17: 88 (*Amphidromus sumatranus* — Sumatra)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34: 6, pl. 1, fig. 2, 2a (*Amphidromus sumatranus* — Indrapoera)
1900 PILSBRY, Man. of Conch. (2) 13: 218, pl. 66, fig. 35—37 (*Amphidromus sumatranus* — Central mountain region near Kepahiang; Indrapoera; Silago)
1928 DEGNER, Treubia, 10, p. 360 (*Amphidromus adamsi* — Sumatra), p. 361 (*Amphidromus sumatranus* — Sumatra)

- 1934 RENSCH, Arch. Moll. Kunde, 66 : 333, Taf. 14, Fig. 5, 6 (*Amphidromus sumatranus atjehensis* — Lho Sukon, Atjeh)
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 20 : 33, pl. 1, fig. 3a—d (*Amphidromus sumatranus* — Lho Soekon, Atjeh)

Localities : Deli (MZh); Hanna Estate, near Membang Muda, 10 m alt., on *Hevea brasiliensis*, June 1953 (NI, SI); Bilah, 5 April 1921 (ZMA); West Sumatra (MGv); Singkarah (ZMA); Muara Labu, N slope of Mt Korintji, 1927 (ZMA); Ogan Ulu, S Palembang (MBa).

In my opinion the shell from Singkarah is a somewhat slender and fragile form of *Amphidromus sumatranus*, with numerous (about 15) greyish, cloudy, vertical streaks on the last whorl. MARTENS (l.c. p. 242) alluded already to this relationship, but in concluding he classified the Singkarah shell as *A. adamsi*. It is similar to a set of 4 shells from Muara Labu, mentioned above.

Amphidromus sumatranus singalagensis ROLLE, 1908

- 1908 ROLLE, Nachr. Blatt, 40 : 67 (*Amphidromus singalagensis* — Singalang)
1928 DEGNER, Treubia, 10 : 361 (*Amphidromus singalagensis* — Sumatra)
1953 ZILCH, Arch. Moll. Kunde, 82 : 133, Taf. 23, Fig. 20 (*Amphidromus sumatranus singalagensis* — O-Abhang des Singalang)

Locality : Mt Singalang, near Padang Pandjang (ZMA).

Amphidromus porcellanus (MOUSSON, 1848)

- 1848 MOUSSON, Mitth. naturf. Ges. Zürich, 1 : 266 (*Bulimus porcellanus* — Java)
1849 MOUSSON, Land & Süsw. Moll. Java, p. 33, 110, Taf. 3, Fig. 4 (*Bulimus porcellanus* — Java)
1892 MARTENS, Erg. Reise Nied. Ost Indien, 2 : 241 (*Amphidromus porcellanus* — Deli; Buitenzorg)
1900 PILSBRY, Man. of Conch. (2) 13 : 201, pl. 64, fig. 5—7 (*Amphidromus porcellanus* — Deli; Java)
1928 DEGNER, Treubia, 10 : 361 (*Amphidromus porcellanus* — Sumatra)

Not seen. The occurrence of *Amphidromus porcellanus* in Deli seems very dubious. I am inclined to suppose that MARTENS had before him a specimen of a colour variant of *A. sumatranus* as described by ADAM & LELOUP (1939, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 20 : 33—35, pl. 1, fig. 3d). The Buitenzorg record of *A. porcellanus* by MARTENS is undoubtedly correct.

Amphidromus bülowi FRUHSTORFER, 1905

- 1905 FRUHSTORFER, Nachr. Blatt, 37 : 83, Taf. 1, Fig. 2 (*Amphidromus bülowi* — West-Sumatra)
1908 ROLLE, Nachr. Blatt, 40 : 67 (*Amphidromus bülowi* — Padang Sikeh, 4—5000 Fuss, G. Singalang)
1928 DEGNER, Treubia, 10 : 360 (*Amphidromus bülowi* — Sumatra)

Not seen.

Amphidromus suspectus (MARTENS, 1864)

- 1864 MARTENS, Monatsber. Akad. Wiss. Berlin, p. 526 (*Bulimus suspectus* — Koe-pang, Timor)
1867 MARTENS, Ostas. Landschn. p. 362, Taf. 21, Fig. 8 (*Bulimus suspectus* — not from Sumatra)
1906 BULLEN, Proc. Malac. Soc. London, 7 : 126 (*Amphidromus suspectus* — Mt Ophir)
1928 DEGNER, Treubia, 10 : 361 (*Amphidromus suspectus* — Sumatra)

Not seen. I strongly suspect the identification of BULLEN, because *Amphidromus suspectus* is an inhabitant of the Lesser Sunda Islands, not likely to occur in Sumatra.

Pseudopartula dohertyi (ALDRICH, 1892)

- 1892 ALDRICH, *Nautilus*, 6: 90, pl. 2, fig. 1—2 (*Nanina dohertyi* — Marang, on the SW coast of Sumatra)
1898 ALDRICH, *Nautilus*, 12: 1 (*Ariophanta dohertyi* — Marang)
1901 PILSBRY, *Man. of Conch.* (2) 14: 11, pl. 2, fig. 34—35 (*Amphidromus dohertyi* — Marang)
1928 DEGNER, *Treubia*, 10: 361 (*Amphidromus dohertyi* — Sumatra)

Not seen.

Pseudopartula galericulum gedeanae PILSBRY, 1897

- 1897 PILSBRY, *Nautilus*, 10: 110 (*Pseudopartula galericulum* var. *gedeanae* — no locality)
1901 PILSBRY, *Man. of Conch.* (2) 14: 11, pl. 2, fig. 29 (*Amphidromus galericulum* var. *gedeanus* — Sumatra)
1950 VAN BENTHEM JUTTING, *Treubia*, 20: 499, fig. 103 (*Pseudopartula galericulum gedeanae* — Mt Tanggamus, Lampong Districts, 600—700 m alt.)

Locality: Mt Tanggamus, 600—700 m alt., Lampong Districts, December 1934 (ZMA).

Bradybaena similis (FÉRUSAC, 1821)

- 1821 FÉRUSAC, *Tabl. Syst. Limaçons*, p. 47 (*Helix similis* — Timor)
1867 MARTENS, *Ostas. Landschn.* p. 271 (*Helix similis* var. *subs similis* — various localities, not from Sumatra)
1908 ROLLE, *Nachr. Blatt.* 40: 65 (*Eulota similis* var. *subs similis* — Singalang)
1928 DEGNER, *Treubia*, 10: 360 (*Eulota similis* var. *subs similis* — Sumatra)
1931 VAN DER MEER MOHR, *Trop. Natuur*, 20: 119—120, 1 textfig. (*Eulota similis* — Medan)
1935 PARAVICINI, *Arch. Moll. Kunde*, 67: 60 (*Bradybaena* (sic!) *similis* — Serdang bei Lau Rakit; Sandomas; Lampong)
1950 VAN BENTHEM JUTTING, *Treubia*, 20: 501, fig. 104, 105 (*Bradybaena similis* — various localities in Java and other Malaysian islands)

Localities: Ant trails near Medan, February 1931 (MBo); Sisir Gunting, near Belawan, 1919 (ZMA); Serdang near Lau Rakit, 300 m alt. (MBa); Sandomas (MBa); Pematang Siantar, 400 m alt., on flower beds, December 1954 (NI); Brastagi, 1750 m alt. May 1952 (NI); Sibolga, Tapanuli, on the beach, 1954 (NI); Fort de Kock, 920 m alt., numerous on many species of plants, 1924 and 1930 (ZMA and MBo); Estate Kaju Aro, Mt Korintji, 1450 m alt., 1952 (Dr); Palembang (RMNH); Lampongs (MBa).

Discartemon vandermeermohri, n.sp. (figure 9)

Shell very low-conical, glassy-white, with numerous transverse ribs. Somewhat shining and transparent. Whorls $5\frac{1}{2}$, regularly increasing in size, the first $2\frac{1}{4}$ whorls smooth. After this with narrowly placed, slightly undulating, transverse ribs. There are 130 ribs on the last whorl in the holotype. They are distinct on the upper side of the whorl, but fade away below the periphery. Only in the entrance of the umbilicus the ribs become more distinct again.

Whorls somewhat convex, suture distinct, but not deep. At a short distance before the aperture the last whorl is widened and a little inflated in the peripheral region, then constricted, widening again towards the aperture. No spiral striation. Top obtuse, base rounded. Umbilicus moderately wide.

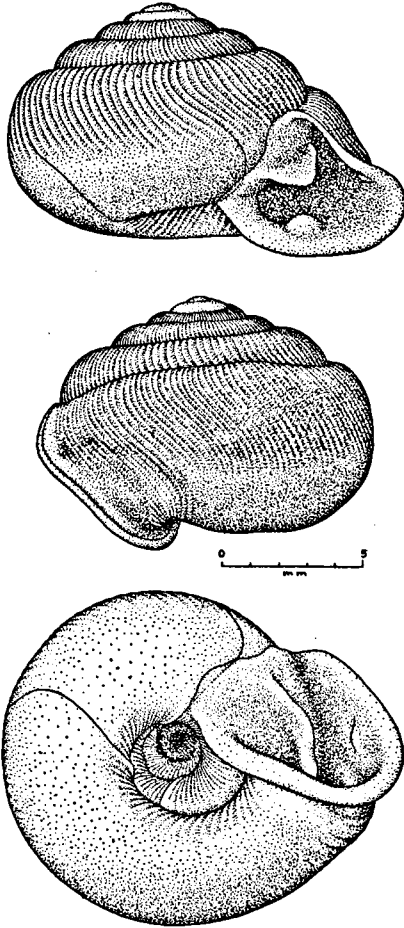


FIGURE 9. *Discartemon vandermeermohri*, n.sp. Shell from front, back and base. Holotype. Batu Sok, Pulu Weh. K. M. Foong del.

Aperture very oblique, irregularly triangular, obstructed by a thick, undulating parietal lamella, entering the aperture about 2 mm, and a strong tooth at upper and basal side. Peristome not continuous; thickened and reflected, the two ends connected by a thin membrane against the penultimate whorl. The upper free peristome margin is undulating and ends with a little sinus against the penultimate whorl. Basal tooth long, not well-defined, but appearing as a local swelling of the peristome edge. The palatal tooth, on the contrary, is a distinct oval knob.

Dimensions (in mm):	holotype paratypes (P. Weh)			paratype (Atjeh)
	holotype	paratypes (P. Weh)	paratype (Atjeh)	
Height	5.7	5.5	5.2	4.5
Width	9.0	9.0	9.0	9.0
Diam. of apert. (from top of sinus to basal margin)	3.8	3.5	3.7	3.5

Localities: Secondary wood near Batu Sok, Pulu Weh, 180 m alt. (type locality), 4 November 1949, collected by J. C. VAN DER MEER MOHR, holotype and 2 paratypes (ZMA); Lho Tjapa, basin of River Alur, District Pidie, Atjeh, 1 paratype, don. A. L. BRANDHORST (RM NH).

Together with the next species *Discartemon vandermeermohri* forms the first record of this genus for Sumatra. For comparison with previously described species I had to take the Malayan species of *Discartemon* into account (VAN BENTHEM JUTTING, Bull. Raffles Mus. 25, 1954). The differences are summarised below:

D. collingei (SYKES) has a higher, more irregular spire, a more inflated last whorl and a less open umbilicus.

D. roebelini (MOELLENDORFF) has an angular periphery, is less inflated and possesses more teeth in the aperture.

D. stenostomus VAN BENTHEM JUTTING is smaller, less inflated, with a more spout-shaped aperture, bearing more teeth, and bordered by a more developed peristome.

D. platymorphus VAN BENTHEM JUTTING is much flatter, less inflated, with a vague angulation at the periphery, and a more spout-shaped aperture.

D. plussensis (DE MORGAN) is much smaller, with a more spout-shaped aperture, lacking a basal tooth.

D. leptoglyphus VAN BENTHEM JUTTING is much smaller and flatter, not inflated, with distinct ribs on upper and lower side of the whorls. Aperture spout-shaped, without basal tooth.

D. hypocrites VAN BENTHEM JUTTING is much smaller, flatter and not inflated. The aperture bears two basal teeth.

D. nummus (LAIDLAW) is much smaller and flatter, with an obsolete angulation along the periphery, a wider umbilicus and weaker ribs.

D. sykesi (COLLINGE) is much larger and flatter, with wider umbilicus and only one tooth (the parietal lamella) in the aperture.

Discartemon sangkarensis, n.sp. (figure 10)

Shell low, globosely-conical, glassy-white, with numerous transverse ribs. Somewhat shining and transparent. Whorls 6, regularly increasing in width. First $2\frac{1}{4}$ whorls smooth, following ones with fine, closely placed, slightly undulating, transverse ribs. There are 120 ribs on the last whorl in the holotype. The ribs are distinct on the upper side of the whorls, but fade away on the basal side, being distinct again in the umbilical entrance. Whorls somewhat convex, suture distinct. At a short distance before the aperture the last whorl is widened and a little inflated in the peripheral region, then constricted, widening again towards the aperture. In the holotype and in a few paratypes a faint indication of fine

spiral striae is visible. Top obtuse, base rounded and inflated. Umbilicus moderately wide.

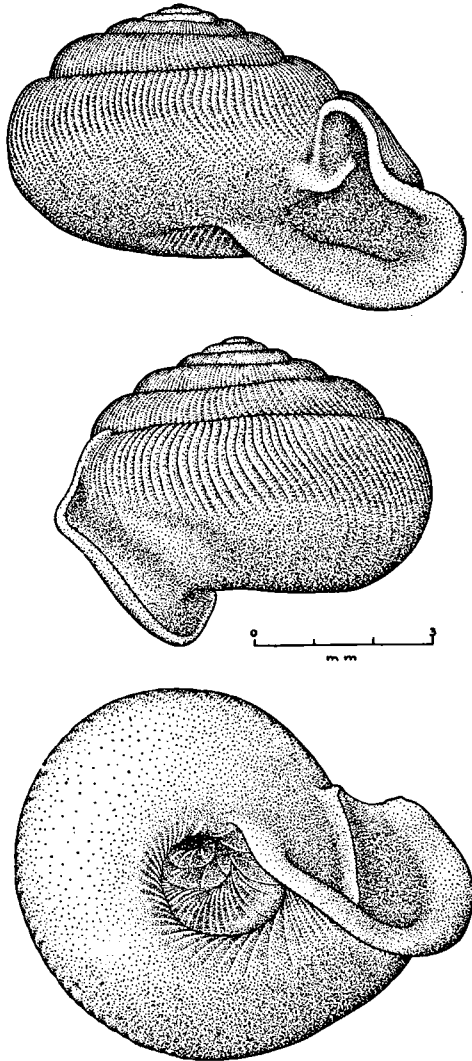


FIGURE 10. *Discartemon sangkarensis*, n.sp. Shell from front, back and base. Paratype. Batu Sangkar, Padang Highlands. K. M. Foong del.

Aperture very oblique, irregularly triangular, obstructed by a thick, undulating, parietal lamella, entering the aperture about 2 mm. Upper and lower sides of the aperture do not strictly bear teeth, but are a little sinuous and swollen, in this way falsely suggesting teeth. Peristome not continuous, thickened and reflected. The upper margin is undulating and ends with a nearly vertical, well-defined sinus against the penultimate

whorl, even reaching the exterior point of attachment of the parietal tooth. At this spot a triangular callus is formed. Basal edge a little swollen in the middle, without, however, forming a normal tooth.

Dimensions (in mm):

	holotype		paratypes (Batu Sangkar)							
Height	5.0	5.0	4.6	4.6	4.6	4.5	4.2	4.2	4.0	
Width	7.8	7.6	7.3	7.0	6.5	7.3	7.0	6.5	7.0	
Diam. of apert. (from top of sinus to basal margin)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	

paratypes (P. Ladang)

4.8	4.7	4.6	4.5	4.2	4.2	4.0	4.0	Paratype no. 9 is
7.0	6.5	6.5	6.6	7.0	6.5	7.0	6.5	immature and has
3.0	3.2	3.0	3.0	3.0	3.0	3.0	2.8	not been measured

Localities: Batu Sangkar, near Pajakombo, Padang Highlands (type locality), 13 December 1955, collected by Dr W. MEYER, holotype and 8 paratypes. The holotype and 4 paratypes in ZMA 4 other paratypes in BUTOT collection. P. Ladang, near Pajakombo, Padang Highlands, December 1955, collected by Dr. W. MEYER, 9 paratypes (ZMA and Bt).

The fifth paratype has been figured.

Together with the preceding species *Discartemon sangkarensis* forms the first record of the genus for Sumatra. A comparison with the Malayan species and with *D. vandermeermohri* gave the following results:

From *D. platymorphus* VAN BENTHEM JUTTING, *D. leptoglyphus* VAN BENTHEM JUTTING, *D. hypocrites* VAN BENTHEM JUTTING, *D. nummus* (LAIDLAW) and *D. sykesi* (COLLINGE) the new species differs in the more elevated spire, and from the last two in the narrower umbilicus. From *D. roebelini* (MOELLENDORFF), *D. platymorphus* and *D. nummus* by lacking the peripheral angulation, and from *D. roebelini*, *D. stenostomus* VAN BENTHEM JUTTING, *D. collingei* (SYKES), *D. hypocrites* and *D. vandermeermohri* in having only two teeth in the aperture.

In general shape *D. plussensis* (DE MORGAN), *D. collingei* and *D. vandermeermohri* present the closest affinities. *D. sangkarensis* is more regular with fewer teeth than *D. collingei*, it is smaller than *D. vandermeermohri*, and it possesses a higher spire, a narrower umbilicus and a less spout-shaped aperture than *D. plussensis*.

Sinoennea sumatrensis, n.sp. (figure 11)

Shell almost cylindrical, glassy-transparent, shining. Two top whorls smooth, subsequent ones vertically ribbed by fine, transverse ribs. In the holotype there are 21 of such ribs on the last whorl. There is no spiral striation.

Whorls 6, the three first gradually increasing in diameter, the nos 4 and 5 of about equal width, the last one tapering towards the aperture. Profile of each whorl convex, suture well-impressed. Top little pointed, almost blunt, base rounded. Umbilicus open, but not wide.

Aperture almost vertical, quadrangular with rounded angles. Peristome continuous, adnate, broadened and reflected. With a strong, undulating parieto-angular lamella in the upper corner. Palatal side with two teeth,

the upper one at the edge of the peristome, the lower one somewhat more in the throat. Columellar side with one horizontal tooth, not quite

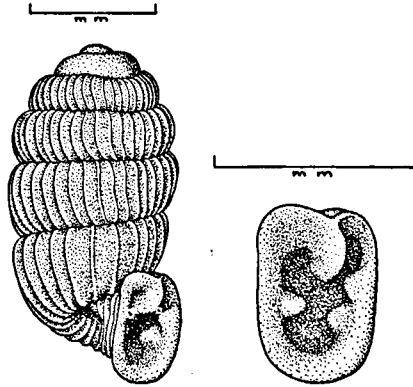


FIGURE 11. *Sinoennea sumatrensis*, n.sp. Front view of shell; aperture more enlarged Paratype. Karang Redjo, near Pematang Siantar. K. M. Foong del.

reaching the peristome edge. There is no swelling in the distal part of the last whorl behind the peristome.

Dimensions (in mm):

	holotype Karangredjo October 1953	paratypes Karangredjo October 1953		paratype Karangredjo 20 March 1955
Height	2.5	2.7	2.6	2.6
Width	1.4	1.4	1.4	1.4
Height of apert.	0.9	0.9	0.9	0.9

paratypes Karanganjar 27 November 1955				
	2.7	2.6	2.5	2.5
	1.4	1.4	1.4	1.4
	1.0	1.0	0.9	0.9

Localities : Kampong Karangredjo, near Pematang Siantar, 300—350 m alt., among leaves on the ground in cut down virgin forest (type locality), October 1953, collected by J. P. VAN NIEL, holotype and 2 paratypes. Kampong Karangredjo, near Pematang Siantar, 400 m alt., among fallen leaves, 20 March 1955, collected by J. P. VAN NIEL, 1 paratype. Kampong Karanganjar, near Pematang Siantar, 300—350 m alt., 27 November 1955, collected by J. P. VAN NIEL, 5 paratypes (all ZMA).

The first paratype has been figured.

This is the first record of a *Sinoennea* from Sumatra. For comparison I had to take the species of the Malay Peninsula into account (VAN BENTHEM JUTTING, Bull. Raffles Mus. in press).

When comparing the cylindrical species of *Sinoennea* from Malaya *S. ridleyi* (PEILE) can be left out of account because of its large size,

the absence of ribs on the later whorls and the different arrangement of teeth in the aperture.

S. baculum VAN BENTHEM JUTTING is much more slender and the ribs are often worn away.

S. sumatrensis has the greatest affinities to *S. butleri* (PEILE), but the latter species is higher-cylindrical with more ribs on the last whorl, a narrower umbilicus and a distinct swelling in the distal part of the last whorl in the umbilical region.

S. lenggongensis TOMLIN is still higher-cylindrical, with many more ribs on the last whorl and a somewhat oblique position of the long axis of the aperture.

S. subcylindrica (MOELLENDORFF) is also higher-cylindrical with more numerous ribs. The columellar tooth of *subcylindrica* is situated deep in the throat, and placed nearly vertically, whereas in *D. sumatrensis* it is horizontal, almost reaching the edge of the columellar margin.

S. attenuata VAN BENTHEM JUTTING is higher-cylindrical with weaker ribs. As in *S. subcylindrica* the position of the columellar tooth is different, and it has a distinct swelling in the distal part of the last whorl behind the peristome.

S. dactylus VAN BENTHEM JUTTING is smaller than *S. sumatrensis*. Its palatal teeth are implanted on a common base. The columellar tooth lies deep in the throat, and the distance between the parieto-angular lamella and the upper palatal tooth is very narrow.

S. tiarella VAN BENTHEM JUTTING is much higher cylindrical. It has a rather wide aperture with free peristome and a swelling at the distal part of the last whorl just behind the peristome. The columellar tooth lies deep in the throat and is placed almost vertically.

Huttonella bicolor (HUTTON, 1834)

1834 HUTTON, Journ. As. Soc. Bengal, 3: 86, 93 (*Pupa bicolor* — Mirzapur, India)

1885 TRYON, Man. of Conch. (2) 1: 104, pl. 19, fig. 14, 17, 18, pl. 20, fig. 24 (*Ennea bicolor* — various localities, not from Sumatra)

1935 PARAVICINI, Arch. Moll. Kunde, 67: 60 (*Ptychotrema bicolor* — Medan)

Localities: Medan (MBA); Kampong Karangredjo, near Pematang Siantar, 400 m alt., in the ground under a banana-tree, December 1954 (NI); Estate Sungei Kopas, near Kisaran, 100 m alt., 21 November 1955 (NI); Tandjong Tiram, along the high water edge, 1 February 1953 (NI); Hanna Estate, near Kampong Gunting Saga, under stones, July 1954 and on a burnt spot in young wood, August 1955 (NI).

In the Estate Sungei Kopas Mr. VAN NIEL found *Subulina octona* attacked and eaten by *Huttonella bicolor*.

Pseudodon vondenbuschianus (LEA, 1840)

1840 LEA, Proc. Americ. Philos. Soc. 1: 288 (*Margaritana vondenbuschiana* — Java)

1867 MARTENS, Malak. Blätt. 14: 13 (*Alasmodonta vondembuschiana* — Fluss Lamatang)

1900 MARTENS, Nachr. Blatt, 32: 13 (*Pseudodon vondembuschianus* — Belawan-Fluss; Wampa- oder Lankat-Fluss; Rajah-Vorberge)

1919 PRASHAD, Rec. Ind. Mus. 16: 407 (*Monodontina vondembuschiana* var. *chaperi* — Sumatra)

1920 HAAS, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II: 326, Taf. 44, Fig. 4—5 (*Pseudodon vondembuschianus* — various localities including Sumatra)

- 1921 PRASHAD, Rec. Ind. Mus. 22 : 503 (*Monodontina vondembuschiana* var. *chaperi* — Soengei Kalau, near Bohorok; Soengei Deli, near Medan; Bohorok)
1923 HAAS, Abh. Senckenb. 38 : 144 (*Pseudodon chaperi* — Sumatra)
1928 DEGNER, Treubia, 10 : 388 (*Monodontina vondembuschiana*, and *M. vondembuschiana* var. *chaperi* — Sumatra)

Localities : Deli (ZMA); Sungei Kalau, near Bohorok, 8 August 1916 (ZMA); Batang Hari, Lampong Districts (ZMA); Sukadana River, Lampong Districts (ZMA); Kungku and Semangus Getan, Palembang (ZMA).

Rectidens gracilis (STRUBELL, 1897)

- 1897 STRUBELL, Nachr. Blatt, 29, p. 8 (*Microcondylaea gracilis* — Südsumatra), p. 10 (*Unio palembangensis* — Südsumatra)
1900 MARTENS, Nachr. Blatt, 32 : 14 (*Unio palembangensis* — Wampa- oder Lankat-Fluss; *U. palembangensis* var. *pahumbaënsis* — no locality)
1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II : 230, Taf. 27, Fig. 6—7, Taf. 28, Fig. 1—2 (*Rectidens gracilis*, inclusive of *U. palembangensis* and *U. palembangensis* var. *pahumbaënsis* — Sukadana-Fluss; Pahumba, N. Sumatra)
1928 DEGNER, Treubia, 10 : 387 (*Rectidens gracilis* — Sumatra)

Localities : S Sumatra (SMF); Pahumba (SMF); Sukadana River, Lampong Districts (ZMA and SMF); Lake near Kampong Djupara, Lampong Districts (ZMA); Batang Hari, Lampong Districts (ZMA).

Rectidens sumatrensis (DUNKER, 1852)

- 1852 DUNKER, Zeitschr. Malak. 9 : 52 (*Unio sumatrensis* — Danau Luar)
1860 PFEIFFER, Novit. Conch. 2 : 152, Taf. 39, Fig. 10—12 (*Unio sumatrensis* — Danau Luar)
1900 MARTENS, Nachr. Blatt, 32 : 14 (*Unio pressirostris* — Danau Baru, Indragiri)
1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II, p. 226, Taf. 27, Fig. 1—3 (*Rectidens pressirostris* — Danau Baru, Indragiri), p. 232, Taf. 28, Fig. 3—6 (*Rectidens sumatrensis* — Danau Luar)
1928 DEGNER, Treubia, 10 : 387 (*Rectidens sumatrensis*, *R. pressirostris* — Sumatra)

Localities : Ambalutu Estate, near Kisaran, 50 m alt., in the mud of a rivulet, October 1951 and March 1953 (NI); Estate Silau Dunia, near Tebing Tinggi, 25 April 1956 (NI); Danau Baru, Indragiri (By and ZMA).

Contradens semmelinki laticeps (MARTENS, 1900)

- 1900 MARTENS, Nachr. Blatt, 32 : 15 (*Unio laticeps* — Danau Baru, Indragiri)
1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II : 192, Taf. 20, Fig. 8, Taf. 21, Fig. 1 (*Contradens semmelincki* (sic!) *laticeps* — Danau Baru, Indragiri)
1928 DEGNER, Treubia, 10 : 387 (*Contradens semmelinki laticeps* — Sumatra)

Locality : Batang Hari, Djambi (ZMA).

Contradens ascia dimotus (LEA, 1870)

- 1859 LEA, Proc. Acad. Nat. Sci. Philad. 3 : 153 (*Unio sumatrensis* non *sumatrensis* DUNKER, 1852 — Sumatra)
1867 MARTENS, Malak. Blätt. 14 : 15 (*Unio sumatrensis* non *sumatrensis* DUNKER, 1852 — See Danau-luar, Tebingtingi)
1870 LEA, Synopsis Fam. Unionidae, 4th Edit. p. 30 (*Unio dimotus* — Sumatra)
1881 BOCK, Proc. Zool. Soc. London, p. 633 (*Unio dimotus* — Padang district)

- 1897 STRUBELL, Nachr. Blatt, 29, p. 9 (*Microcondylaea bicristata* — Südsumatra), p. 10 (*Unio hageni* — Südsumatra)
- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 308, 316 (*Unio hageni* — Sumatra)
- 1900 MARTENS, Nachr. Blatt, 32 : 13 (*Unio hageni* — Wampa-Fluss und Indragiri-Fluss)
- 1906 BULLEN, Proc. Malac. Soc. London, 7 : 15, pl. 2, fig. 9—11 (*Unio pajakomboensis* — River at Pajakombo; *U. sumatrensis* — Rivers Indragiri and Kwantan)
- 1913 HAAS, Nachr. Blatt, 45 : 36 (*Schizocleithrum pajakomboense* — no locality)
- 1913 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II, p. 176, Taf. 18, Fig. 6—7 (*Contradens hageni* — Südsumatra; Nordsumatra im Wampa-, Indragiri- und Belawan-Fluss; See bei Kampong), p. 178, Taf. 19, Fig. 1—5 (*Contradens dimotus* — Indragiri-Fluss; Kwala)
- 1914 HAAS, Ibid. p. 203, Taf. 22, Fig. 5—6 (*Schizocleithrum pajakomboense* — Fluss bei Pajakombo)
- 1920 HAAS, Ibid. p. 340 (*Pseudodon bicristata* — Südsumatra)
- 1921 PRASHAD, Rec. Ind. Mus. 22 : 503 (*Contradens dimotus* var. *lugens* — Soengei Krah, Medan; Freshwater area near Medan)
- 1923 HAAS, Abh. Senckenb. 38 : 198 (*Contradens ascia dimotus* — Sumatra)
- 1928 DEGNER, Treubia, 10, p. 386 (*Contradens hageni*, *C. ascia* var. *dimotus*, *C. ascia* var. *lugens*). p. 387 (*Schizocleithrum pajakomboense*), p. 388 (*Pseudodon bicristatus* — Sumatra)
- 1930 HAAS, Senckenbergiana, 12 : 9 (*Contradens ascia dimotus* — Pajakombo)
- 1931 MODELL, Trop. Binnengew. 1 : 682 (*Contradens ascia dimotus* — Ausfluss des Ranau-Meeress; Ranau-Meer, Nordufer vor dem Dorfe Surabaja; Ranau-Meer, Nordufer, östlich Surabaja)
- 1934 RENSCH, Trop. Binnengew. 5 : 249 (*Contradens ascia dimotus* — Nordufer und Ausfluss des Ranau-Sees)
- 1935 PARAVICINI, Arch. Moll. Kunde, 67 : 63 (*Contradens hageni* — Telok Betong, Lampong; *C. dimotus* — Indragiri, River Kwantan; *Schizocleithrum pajakomboense* — Pajakombo)
- 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19 : 569 (*Contradens ascia dimotus* — See von Singkarah)

Localities : Kroeëng Meureubo, Langsa District, Atjeh, May 1925 (ZMA); Deli (ZMA); River Belawan, Deli (MBa, By, ZMA); Sungei Krah, near Medan, February 1921 (ZMA); Raja mountains (MBa); Ambalutu Estate, near Kisaran, 50 m alt., in the mud of a rivulet, October 1951 and July 1952 (NI); Estate Sungei Kopas, near Kisaran, 89 m alt. (NI); Estate Silau Dunia, near Tebing Tinggi, 25 April 1956 (NI); Pajakombo (MBa); Taluk, Central Sumatra, 1907 (ZMA); Lake Korintji, 1952 (Dr.); River Kwantan (MBa); Palembang (MZh); Lake Ranau, March 1954 (Bt); Telok Betong, Lampong Districts (MBa); Lake near Kampong Djupara, Lampong Districts (ZMA).

***Contradens ascia dimotus* (LEA, 1870) forma *arenicola* MODELL, 1931**

- 1931 MODELL, Trop. Binnengew. 1 : 684 (*Contradens ascia dimotus* var. *biol. arenicola* — Strömung des Abflusses des Ranau-Meeress)

Locality : Lake Korintji, 900 m alt., sandbottom, June 1953 (ZMA).

***Contradens ascia verbeeki* (MARTENS, 1897)**

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 89, Taf. 5, Fig. 1, 2, 4, 5 (*Unio verbeeki* (err. typ.) — See von Singkarah)
- 1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II : 198, Taf. 22, Fig. 1—4, Textfig. 2—3 (*Contradens verbeeki* — See von Singkarah)
- 1922 HAAS, Abh. Ber. Mus. Natur- u. Heimatk. Magdeburg, 3 : 13, Taf. 9, Fig. 17—19 (*Contradens verbeeki* — Singkarah-See)
- 1928 DEGNER, Treubia, 10 : 387 (*Contradens verbeeki* — Sumatra)
- 1931 MODELL, Trop. Binnengew. 1 : 686 (*Unio ascia verbeeki* — See von Singkarah, N. Ufer vor der Einmündung des Batang Sumpur)

- 1934 RENSCH, Trop. Binnengew. 5 : 249 (*Contradens ascia verbeeki* — See von Singkarakah)
1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19 : 569 (*Contradens ascia verbeeki* — See von Singkarakah)

Locality : Lake Singkarakah, 1888, 1954, 1955 (ZMA, Bt)

Trapezoideus peninsularis SIMPSON, 1900

- 1865 SOWERBY, in : REEVE, Conch. Icon. vol. 16, pl. 28, fig. 142 (*Unio sumatrensis*, non *U. sumatrensis* DUNKER, 1852, nec *U. sumatrensis* LEA, 1859 — Sumatra)
1900 SIMPSON, Syn. Naiad. p. 859 (*Trapezoideus peninsularis* — Sumatra)
1914 SIMPSON, Descr. Catal. Naiades, p. 1186 (*Trapezoideus peninsularis* — Sumatra)
1928 DEGNER, Treubia, 10 : 388 (*Trapezoideus peninsularis* — Sumatra)

Not seen. The figure in Conchologia Iconica represents most probably a *Contradens ascia dimotus*.

Pilsbryconcha expressa (MARTENS, 1900)

- 1900 MARTENS, Nachr. Blatt, 32 : 12 (*Anodonta expressa* — Danau Baru, Indragiri)
1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II : 303, Taf. 38, Fig. 1—2 (*Pilsbryconcha expressa* — Danau Baru, Indragiri)
1928 DEGNER, Treubia, 10 : 388 (*Pilsbryconcha expressa* — Sumatra)

Locality : Danau Baru, Indragiri (By, ZMA).

From the collection of Dr. P. BOHNY, in Basle, I received for study a set of 9 specimens of this rare species, collected by G. SCHNEIDER.

The following is a table of the dimensions of their shells. The specimens marked ZMA were kindly presented by Dr BOHNY to the Amsterdam Zoological Museum, the others are in his own collection.

Dimensions in mm.

Length	113.0	110.5	105.0	100.2	99.0	91.6	86.7	86.0	68.0
Height	60.0	60.5	57.0	55.3	55.2	49.6	49.5	42.5	37.0
Diam.									
(2 valves)	26.0	25.0	24.3	22.0	27.0	21.2	20.4	14.8	13.0
		(ZMA)						(ZMA)	

Pilsbryconcha exilis (LEA, 1838)

- 1838 LEA, Trans. Americ. Philos. Soc. (N.S.) 6 : 81, pl. 22, fig. 68 (*Anodonta exilis* — no locality)
1867 MARTENS, Malak. Blätt. 14 : 12 (*Anodonta exilis* — Gunung Megang am Enimfluss)
1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II : 296, Taf. 36, Fig. 3—4, Taf. 37, Fig. 1—3 (*Pilsbryconcha exilis* — Siam, Kambodja, Cochinchina, Sumatra, Java)
1928 DEGNER, Treubia, 10 : 387 (*Pilsbryconcha exilis* — Sumatra)

Not seen.

Physunio superbus (LEA, 1845)

- 1845 LEA, Trans. Americ. Philos. Soc. 9 : 281, pl. 42, fig. 11 (*Unio superbus* — New Holland)
1867 MARTENS, Malak. Blätt. 14 : 14 (*Unio superbus* — See Danau Luar)
1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II : 289, Taf. 34, Fig. 2 (*Physunio superbus* — Cochinchina, Sumatra)
1928 DEGNER, Treubia, 10 : 387 (*Physunio superbus* — Sumatra)

Not seen.

Prohyriopsis stolata (MARTENS, 1900)

- 1900 MARTENS, Nachr. Blatt, 32 : 15 (*Unio stolatus* — Danau Baru, Indragiri)
1914 HAAS, Nachr. Blatt, 46 : 76 (*Prohyriopsis stolata* — Danau Baru)
1914 HAAS, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 2-II, Taf. 55, Fig. 1 (*Prohyriopsis stolata* — no locality)
1923 HAAS, Abh. Senckenb. 38 : 163 (*Prohyriopsis stolata* — Danau Baru, Indragiri)
1928 DEGNER, Treubia, 10 : 388 (*Prohyriopsis stolatus* — Sumatra)

Not seen.

Polymesoda bengalensis (LAMARCK, 1818)

- 1818 LAMARCK, Hist. Nat. Anim. s. Vert. 5 : 554 (sign. 36) (*Cyrena bengalensis* — Au Bengale, dans les rivières)
1821 SOWERBY, Genera Shells, vol. 1, pl. 65 (*Cyrena sumatrensis* — Sumatra)
1850 PHILIPPI, Abb. & Beschr. 3 : 109, Taf. 3, Fig. 4 (*Cyrena sumatrensis* — Rivuli insulae Sumatrae)
1879 CLESSIN, in : MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd 9, Abt. 3 : 107, Taf. 13, Fig. 1—2, Taf. 17, Fig. 4—6 (*Cyrena bengalensis* — Asien, Ostindien, Bengalen)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 92 (*Cyrena sumatrensis* — Benkulen)
1921 PRASHAD, Rec. Ind. Mus. 22 : 504 (*Cyrena sumatrensis* — Mangrove swamps at Belawan)
1928 DEGNER, Treubia, 10 : 389 (*Cyrena sumatrensis* — Sumatra)
1934 RENSCH, Arch. Moll. Kunde, 66 : 339 (*Cyrena sumatrensis* — Brackwasser von Lho Seumaweh)

Localities : Sumatra (ZMA); Praehistoric shell-mound in the Estate Ludwigsburg, Langkat district, March 1921 (ZMA); Shell-mound at Saentis Estate, NE of Medan, February 1930 (ZMA); Belawan, Deli (ZMA); Mangrove at Belawan, Deli (ZMA); Coast near Sungei Tuan, Deli, 1920 (ZMA); Beach near Pantai Tjermin, S of Belawan, Deli, 30 April 1937 (ZMA); Beach near Perbaungan, Serdang, December 1927 (ZMA); Tandjong Tiram, Batu Baru District, on the beach near the edge of the mud flats, 1954 (NI); Sibolga, Tapanuli, 1954, 1955 (NI).

Polymesoda coaxans (GMELIN, 1790)

- 1790 GMELIN, Syst. Nat. Ed. XIII : 3278 (*Venus coaxans* — In Zeylonae fluviis)
1818 LAMARCK, Hist. Nat. Anim. s. Vert. 5 : 554 (sign. 36) (*Cyrena zeylanica* — Ile de Ceylan)
1850 PHILIPPI, Abb. & Beschr. 3 : 108, Taf. 3, Fig. 3 (*Cyrena ceylonica* — Fluvii insulae Sumatrae ?)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 96 (*Cyrena ceylonica* — Sumatra)
1928 DEGNER, Treubia, 10 : 389 (*Cyrena ceylonica* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 229 (*Cyrena moussoni* — Mittlere Halbinsel der Lampoengs)
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc 20 : 68, pl. 5, fig. 1 (*Polymesoda erosa* — Lho Seumaweh)

Localities : Tandjong Tiram, Batu Bara District, 1954 (NI); Muara Padang, near Apenberg, 14 April 1952 (Dr).

Polymesoda expansa (MOUSSON, 1849)

- 1849 MOUSSON, Land & Süßw. Moll. Java, p. 89, Taf. 14 (*Cyrena expansa* — Oestliches Java)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 229 (*Cyrena expansa* — Küste zwischen Tirembaroe und Tirem; Zwischen Betoeng und Oemboelan Tandjoengan; Mittlere Halbinsel der Lampoengs)

Locality : Sibolga, Tapanuli, 1954 (N1).

Polymesoda buschi (PHILIPPI, 1849)

- 1849 PHILIPPI, Abb. & Beschr. 3 : 78, Taf. 2, Fig. 2 (*Cyrena buschii* — no locality)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 96 (*Cyrena buschi* — Palembang)
1928 DEGNER, Treubia, 10 : 388 (*Cyrena buschi* — Sumatra)

Not seen.

Polymesoda excavata (MARTENS, 1897)

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 96 (*Cyrena excavata* — Palembang)
1928 DEGNER, Treubia, 10 : 389 (*Cyrena excavata* — Sumatra)

Not seen.

Polymesoda suborbicularis (PHILIPPI, 1849)

- 1849 PHILIPPI, Abb. & Beschr. 3 : 77, Taf. 2, Fig. 1 (*Cyrena suborbicularis* — Manila)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 94 (*Cyrena suborbicularis* — Benkulen)
1934 RENSCH, Arch. Moll. Kunde, 66 : 339 (*Cyrena suborbicularis* — Brackwasser von Lho Seumaweh)

Not seen.

Batissa violacea (LAMARCK, 1818)

- 1818 LAMARCK, Hist. Nat. Anim. s. Vert. 5 : 553 (sign. 36) (*Cyrena violacea* — no locality)
1834 LEA, Trans. Americ. Philos. Soc. Philad. (N.S.) 5 : 108, pl. 17, fig. 52 (*Cyrena jayensis* — Batavia?)
1862 PRIME, Proc. Zool. Soc. London, p. 2 (*Batissa sphaericula* — Java)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 102 (*Batissa jayensis* — Benkulen), p. 106, Taf. 5, Fig. 9 (*Batissa violacea* var. *discoidea* — Fluss bei Maros, Celebes)
1898 ALDRICH, Nautilus, 12 : 2 (*Batissa sphaericula* — Marang)
1899 DAUTZENBERG, Ann. Soc. Roy. Malac. Belg. 34 : 26, pl. 2, fig. 12 (*Batissa violacea* var. *discoidea* — Indrapoera)
1928 DEGNER, Treubia, 10 : 389 (*Batissa jayensis*, *B. sphaericula*, *B. violacea* var. *discoidea* — Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 230, Taf. 20, fig. 6a—6 (*Batissa violacea* forma *paucicostulata* — Strand der Telok Karangberak)

Localities : Sumatra (ZMA); Tjalang, W coast of Atjeh (ZMA); Udjung Karang, near Padang, March 1951 (Dr); Muara Padang, near Apenberg, 14 April 1952 (Dr).

Corbicula javanica (MOUSSON, 1849)

- 1849 MOUSSON, Land & Süsw. Moll. Java, p. 86, Taf. 15, Fig. 2 (*Cyrena orientalis* var. *javanica* — Tjikojia, Java)
1854 DESHAYES, Catal. Conch. Brit. Mus. 2 : 227 (*Corbicula moussoni* — Tjikojia, in insula Javanica)
1861 SMIT, Natuurk. Tijdschr. Ned. Indië, 22 : 97 (*Cyrena orientalis* var. *javanica* — Meer van Menindjoe)
1862 PRIME, Proc. Boston Soc. Nat. Hist. 8 : 274 (*Corbicula ducalis* — Java)
1880 SCHEPMAN, Midden Sumatra Exp. p. 17 (*Corbicula ducalis* — Alahan Pandjang)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 114 (*Corbicula ducalis* — Ajer Tengenang bei Fort de Kock; in einem Weiher bei Solok oberhalb Singkarah; Fluss bei Kaju Tanam; Alahan Pandjang)

- 1904 BULLEN, Proc. Malac. Soc. London, 6: 109, pl. 6, fig. 7—9 (*Corbicula subrostrata* — Java)
 1906 BULLEN, Proc. Malac. Soc. London, 7, p. 16 (*Corbicula moussoni* — River Kwantan, affluent of the Indragiri; Souliki Range), p. 130 (*Corbicula subrostrata* — Kwantan river)
 1908 ROLLE, Nachr. Blatt, 40: 69 (*Corbicula fluminalis* var. — Sumpf bei Padang Pandjang)
 1928 DEGNER, Treubia, 10, p. 389 (*Corbicula ducalis* — Sumatra), p. 390 (*Corbicula moussoni*, *C. subrostrata* — Sumatra)
 1930 PRASHAD, Mem. Ind. Mus. 9: 195, pl. 24, fig. 7—12 (*Corbicula ducalis* — Java and Sumatra)
 1931 OOSTINGH, Arch. Moll. Kunde, 63: 231 (*Corbicula ducalis* — Lang Eiland)
 1935 PARAVICINI, Arch. Moll. Kunde, 67: 63 (*Corbicula moussoni* — Indragiri; River Kwantan)

Localities : Kroeëng Pendawa, District Pleureula, Atjeh, January 1926 (ZMA); Ajer Tengenang, near Fort de Kock, 1150 m alt., 23 May 1888 (ZMA); River near Kaju Tanam (ZMA); Solok (ZMA); Padang, Muara, May 1950 (Dr); Lake Korintji (Dr, Vm); Pager Alam, Palembang, 22 November 1918 (ZMA); River Kwantan, Indragiri (MBa); Pladju, Palembang, River Musi behind the swimming pool, 3 July 1948 (Nb); Passewah, Palembang, 1000 m alt., December 1939 (ZMA).

Corbicula gustaviana MARTENS, 1900

- 1900 MARTENS, Nachr. Blatt, 32: 16 (*Corbicula gustaviana* — Danau Baru)
 1928 DEGNER, Treubia, 10: 390 (*Corbicula gustaviana* — Sumatra)
 1930 PRASHAD, Mem. Ind. Mus. 9: 199, pl. 25, fig. 11—12 (*Corbicula gustaviana* — Sumatra)

Localities : Danau Baru, Indragiri (MBa, By); Danau di Bawah, March 1954 (ZMA, Bt).

Corbicula sumatrana CLESSIN, 1887

- 1887 CLESSIN, Malak. Blätt. (N.F.) 9: 78, Taf. 3, Fig. 7 (*Corbicula sumatrana* — Singkarah See), p. 79, Taf. 3, Fig. 8 (*Corbicula verbecki* (sic!) — Singkarah See)
 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4, p. 115, Taf. 7, Fig. 14—19 (*Corbicula trapezoidea* — Danau di Atas), p. 116, Taf. 7, Fig. 28—31 (*Corbicula angulifera* — Danau di Atas und Danau di Bawah), p. 121, Taf. 7, Fig. 25—27 (*Corbicula gibba* — Danau di Atas)
 1900 MARTENS, Nachr. Blatt, 32: 17 (*Corbicula sulcata*, non *C. sulcata* Clessin, 1879 — Rajah-Vorberge)
 1921 PRASHAD, Rec. Ind. Mus. 22, p. 504 (*Corbicula trapezoidea* — Streamlet at Timbang Langkat), p. 505 (*C. angulifera* — Freshwater near Medan and Tandjong Djatti; Soengei Lapan, Langkat; Streamlet at Timbang Langkat)
 1928 DEGNER, Treubia 10, p. 389 (*Corbicula angulifera*, *C. gibba* — Sumatra), p. 390 (*Corbicula trapezoidea*, *C. sulcata*, non *C. sulcata* Clessin, 1879 — Sumatra)
 1930 PRASHAD, Mem. Ind. Mus. 9: 198, pl. 25, fig. 1—8 (*Corbicula sumatrana* — Lakes of Sumatra)
 1934 RENSCH, Trop. Binnengew. 5: 245 (*Corbicula sumatrana* — See von Singkarah, aus dem Litoral und aus 21 m Tiefe)
 1951 THIENEMANN, Arch. Hydrobiol. Suppl. Bd 19: 569 (*Corbicula sumatrana* — See von Singkarah)

Localities : Kroeëng Pendawa, District Pleureula, Atjeh, January 1926 (ZMA); Takengon, Atjeh, April 1920 (ZMA); Deli River, near Belawan, 1948 (Dr); Sungei Tuan, E of Medan, 7 March 1920 (ZMA); Freshwater near Tandjong Djatti, Langkat, 29 March 1917 (ZMA);

Freshwater near Medan, 13 May 1917 (ZMA); Lake Maninjau, 26 m deep, 1954 and 1955 (ZMA, Bt); Fort de Kock, 920 m alt., 1925 (ZMA); Lake Singkarah (ZMA, MBo, Bt, Dr); Danau dit Bawah (ZMA); Danau di Atas (ZMA); Alahan Pandjang (ZMA).

Corbicula lacustris MARTENS, 1897

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 118, Taf. 7, Fig. 20—24 (*Corbicula lacustris* — See von Singkarah, bis zu einer Tiefe von 50 Metern)
1928 DEGNER, Treubia, 10: 390 (*Corbicula lacustris* — Sumatra)
1930 PRASHAD, Mem. Ind. Mus. 9: 199, pl. 25, fig. 9—10 (*Corbicula lacustris* — Lake of Singkarah)

Locality: Lake Singkarah (ZMA).

Corbicula moltkiana PRIME, 1878

- 1878 PRIME, Bull. Mus. Comp. Zoöl. 5: 43, pl. 2, fig. 2 (*Corbicula moltkiana* — Sumatra)
1880 SCHEPMAN, Midden Sumatra Exp. p. 17 (*Corbicula moltkiana* — Alahan Pandjang; Bedar Alam)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 111, Taf. 7, Fig. 1—6 (*Corbicula moltkeana* — See von Maninjau; Alahan Pandjang; Bedar Alam)
1900 MARTENS, Nachr. Blatt, 32: 17 (*Corbicula moltkeana* — Belawan-Fluss)
1921 PRASHAD, Rec. Ind. Mus. 22: 504 (*Corbicula moltkeana* — Streamlet at Timbang Langkat)
1922 VAN HEURN & PARAVICINI, Natuurk. Tijdschr. Ned. Indië, 82: 32, fig. 14 (*Corbicula moltkeana* — Laet Tawar en Peusangrivier, Atjeh)
1928 DEGNER, Treubia, 10: 390 (*Corbicula moltkeana* — Sumatra)
1930 PRASHAD, Mem. Ind. Mus. 9: 200, pl. 25, fig. 17—22 (*Corbicula moltkiana* — Sumatra)

Localities: Laut Tawar, Gajo Highlands (MBa); Raja Mountains near Pasumbu (ZMA, By); Deli (ZMA); Belawan river, Deli (MBa, By, ZMA); Streamlet at Timbang Langkat, 18 July 1917 (ZMA); Ambalutu Estate, near Kisaran, 50 m alt., in sawahs, in the mud, October 1952 (N1); Lake Maninjau (ZMA); Lake Singkarah (ZMA); Bedar Alam, NE of Mt Korintji (ZMA); Lake Ranau, 500 m alt., 1929 (MBo); Indragiri, 9 May 1901 (ZMA); Talang Djimar, Palembang, 20 March 1949 (MBo); River Musi, near Palembang, June 1948 (MBo).

Corbicula pullata (PHILIPPI, 1850)

- 1850 PHILIPPI, Abb. & Beschr. 3: 110 (*Cyrena pullata* — Danau Luar)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4: 117 (*Corbicula pullata* — Danau Luar; Bei Palembang; Gunung Megong)
1921 PRASHAD, Rec. Ind. Mus. 22: 505 (*Corbicula pullata* — Streamlet at Timbang Langkat)
1928 DEGNER, Treubia, 10: 390 (*Corbicula pullata* — Sumatra)
1930 PRASHAD, Mem. Ind. Mus. 9: 201, pl. 26, fig. 1—6 (*Corbicula pullata* — Borneo, Sumatra)
1931 OOSTINGH, Arch. Moll. Kunde, 63: 232 (*Corbicula pullata* — Lang Eiland)

Locality: Lake near Kampong Djupara, Lampong Districts (ZMA).

Corbicula rivalis (PHILIPPI, 1850)

- 1850 PHILIPPI, Abb. & Beschr. 3: 110, Taf. 3, Fig. 5 (*Cyrena rivalis* — Java)
1930 PRASHAD, Mem. Ind. Mus. 9: 197, pl. 24, fig. 15—16 (*Corbicula rivalis* — Java)

Localities: Sungei Merah, near Medan, 14 February 1921 (ZMA); Sungei Sikaming, Deli, 18 May 1919 (ZMA).

New records for Sumatra.

Corbicula tobae MARTENS, 1900

- 1900 MARTENS, Nachr. Blatt, 32 : 17 (*Corbicula tobae* — Toba See bei Tongging)
1928 DEGNER, Treubia, 10 : 390 (*Corbicula tobae* — Sumatra)
1930 PRASHAD, Mem. Ind. Mus. 9 : 200, pl. 25, fig. 13—16 (*Corbicula tobae* — Lake Toba)

Localities : Lake Toba, near Tongging (MBa, By, ZMA); Lake Toba, 28 October 1920 (ZMA).

Corbicula gracilis PRIME, 1862

- 1862 PRIME, Journ. de Conch. 10 : 389, pl. 14, fig. 7 (*Corbicula gracilis* — Java)
1881 BOCK, Proc. Zool. Soc. London, p. 633 (*Corbicula gracilis* — Lakes in Sumatra, especially Lake Singkarak)
1928 DEGNER, Treubia, 10 : 389 (*Corbicula gracilis* — Sumatra)
1930 PRASHAD, Mem. Ind. Mus. 9 : 197, pl. 24, fig. 17—19 (*Corbicula gracilis* — Java)
1934a RENSCH, Trop. Binnengew. 5 : 247 (*Corbicula gracilis* — Ausfluss des Ranau-Sees)
1934b RENSCH, Arch. Moll. Kunde, 66 : 339 (*Corbicula gracilis* — Takengon)
1939 ADAM & LELOUP, Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) vol. 2, fasc. 20 : 67, pl. 4, fig. 7 (*Corbicula gracilis* — Takengon, Atjeh)

Not seen.

Corbicula tumida DESHAYES, 1854

- 1854 DESHAYES, Proc. Zool. Soc. London, p. 343 (*Corbicula tumida* — Borneo)
1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 113 (*Corbicula tumida* — Lahat, Benkoelen; Pulo-bai bei Benkulen)
1928 DEGNER, Treubia, 10 : 390 (*Corbicula tumida* — Sumatra)
1930 PRASHAD, Mem. Ind. Mus. 9 : 202, pl. 25, fig. 23—26 (*Corbicula tumida* — Borneo)
1931 OOSTINGH, Arch. Moll. Kunde, 63 : 231 (*Corbicula tumida* — Wai Teboe, Lam-poengs)

Not seen.

Pisidium sumatranum MARTENS, 1897

- 1897 MARTENS, Erg. Reise Nied. Ost Indien, 4 : 121, Taf. 9, Fig. 16—18 (*Pisidium sumatranum* — Ajer Tengenang bei Fort de Kock, 1150 m Höhe)
1928 DEGNER, Treubia, 10 : 390 (*Pisidium sumatranum* — Sumatra)
1940 ODHNER, Nova Guinea (2) 4 : 128, pl. 13, fig. 23—24, textfigs 16—17 (*Pisidium sumatranum* — Balige; Ajer Tengenang, near Fort de Kock)

Localities : Ambalutu Estate, near Kisaran, in muddy ditch with little water 1952, 1955 (NI); Ajer Tengenang, near Fort de Kock, 1150 m alt. (ZMA).

Sphaerium ceciliae PRASHAD, 1921

- 1921 PRASHAD, Rec. Ind. Mus. 22 : 505, pl. 14, fig. 17 (*Sphaerium ceciliae* — Valley of the Lau Kling, stream near Brastagi in the Karo-Batak High Plain)
1928 DEGNER, Treubia, 10 : 390 (*Sphaerium ceciliae* — Sumatra)
1940 ODHNER, Nova Guinea (2) 4 : 116 (*Sphaerium ceciliae* — Sumatra)

Not seen.

NON-MARINE MOLLUSCA OF THE SATELLITE ISLANDS OF SUMATRA

After the foregoing account of the land and freshwater Mollusca of Sumatra I will now give short summaries of the non-marine molluscs of the little islands off the coast of Sumatra.

Starting at the northern tip with Pulu Weh we pass to the islands along the West Coast (Simalur, Babi, Nias, Batu, Mentawai and Enggano), then to those of the East Coast of Sumatra (Rotan, Billiton, Bangka, Singkep, Riouw Islands, Pandjang, Berhala).

Some of these islands have already been explored more or less intensively on former occasions, and reports on their molluscan inhabitants have been published.

In the following pages, under each island, the literature dealing with the non-marine molluscs preceeds. It is followed by a list of the species occurring in the island. These species are often recorded here under scientific names different from those under which they were published originally, but specialists will easily coördinate ancient and modern nomenclature. Moreover they may find explanations for most of the nomenclatorial unconformities in the foregoing report of Sumatran molluscs and in my revisions of the non-marine molluscs of Java (Treubia, 1948, 19 : 539—604; 1950, 20 : 381—505; 1952, 21 : 291—435; 1953, 22 : 19—73 and 1956, 23 : 259—477).

To each species is added the number of the publication in which the species was mentioned. Species names without numbers are new records for that particular island.

Zoogeographically the islands along the west coast of Sumatra show several points of resemblance with the main island, but on the other hand they also possess various species which are unknown in Sumatra, but which are identical with, or at least related to species of the Nicobars, the Andamans and Burma.

Several explanations for this connection excluding Sumatra have already been ventured. They were discussed by DE BEAUFORT in 1926 (De Zoögraphie van den Indischen Archipel, p. 70—78).

Pulu Weh

1. ADAM, W. & E. LELOUP, 1938. Prosobranchia et Opisthobranchia. — Mém. Mus. Roy. Hist. Nat. Belg. (Hors Série) Vol. 2, Fasc. 19, p. 1—209, pl. 1—8
2. BAVAY, A., 1908. Mollusques terrestres et fluviatiles. — Nova Guinea (Zool.) 5 : 169—292, pl. 1.
3. BENTHEM JUTTING, T. VAN, 1935. Land and freshwater Mollusca from Poeloe Weh. — Misc. Zool. Sum. 95 : 1—9, fig. 1.
4. HORST, R., 1907. Mollusken van Poeloe Weh. — Tijdschr. Ned. Dierk. Ver. (2) 10, versl. verg. p. LI.
5. OOSTINGH, C. H., 1927. Neritidae from North East Sumatra. — Misc. Zool. Sum. 10 : 1—5.
6. PRASHAD, B., 1921. Report on a collection of Sumatran molluscs from fresh and brackish water. — Rec. Ind. Mus. 22 : 461—507, 1 pl.

- 6-bis. REGTEREN ALTENA, C. O. VAN, 1940. A revision of Cerithidea (Cerithideopsilla) cingulata (Gmelin) and some related species (Mollusca, Gastropoda). — Zool. Meded. Mus. Leiden, 32 : 211—222, pl. 20.
 7. RENSCH, B., 1933. Die Molluskenfauna von Pulu Weh und ihre zoogeographischen Beziehungen. — Zool. Anz. 102 : 195—208, fig. 1—11.
 8. SCHEPMAN, M. M., 1915. On a collection of Land and Freshwater and Marine Mollusca from Waigeu, Ceram, Pulu Weh and Java. — Bijdr. t. d. Dierk. 20 : 17—33.
 9. VERNHOUT, J. H., 1913. On two forms of Amphidromus semifrenatus. — Notes Leyden Mus. 35 : 154—155, fig. 1—3.
 10. ZILCH, A., 1953. Die Typen und Typoide des Natur-Museums Senckenberg, 10 : Mollusca, Pleurodontidae (1). — Arch. Moll. Kunde, 82 : 131—140, pl. 22—25.
 11. ZILCH, A., 1955. Die Typen und Typoide des Natur-Museums Senckenberg, 15 : Mollusca, Cyclophoridae, Cyclophorinae-Cyclophoreae (2). — Arch. Moll. Kunde, 84 : 183—210, pl. 13—15.
 12. ZILCH, A., 1956. Die Typen und Typoide des Natur-Museums Senckenberg, 17 : Mollusca, Cyclophoridae, Cyclophorinae-Cyclophoreae (3). — Arch. Moll. Kunde, 85 : 33—54, pl. 2—3.
 13. ZILCH, A., 1956. Die Typen und Typoide des Natur-Museums Senckenberg, 18 : Mollusca, Cyclophoridae, Cyclophorinae-Cyclophoreae (4). — Arch. Moll. Kunde, 85 : 171—196, pl. 12—15.
- Clithon corona* (LINNÉ) 1, 3, 4, 5, 6, 7
„ *diadema* (RÉCLUZ)
„ *flavovirens* (VON DEM BUSCH) 3.
„ *squarrosus* (RÉCLUZ) 3, 6.
- Neritodryas cornea* (LINNÉ) 3, 6
„ *subsulcata* (SOWERBY) 3, 7
- Neritina auriculata* LAMARCK
„ *pulligera* (LINNÉ)
„ *squamaepicta* (RÉCLUZ)
„ *turrita* (GMELIN) 5
„ „ *fa semiconica* LAMARCK
„ *variegata* LESSON 1, 3, 4, 6, 7, 8
„ *zigzag* LAMARCK 5
- Septaria borbonica* (BORY)
„ *porcellana* (LINNÉ)
„ *lineata* (LAMARCK) 3, 6, 7
- Leptopoma altum* MOELLENDORFF 3, 7
Crossopoma inflammatum RENSCH 3, 7, 11
Cyclophorus hebereri RENSCH 3, 7, 12
Cyclotus simplicissimus RENSCH 3, 7, 13
Alycaeus reinhardti sabangensis RENSCH 3, 7
Bellamyia javanica (VON DEM BUSCH) 3, 6, 7
Pila ampullacea (LINNÉ) 3, 7
„ *polita* (DESHAYES)
- Syncera bedaliensis* (RENSCH) 3, 7

- Thiara scabra* (MÜLLER) 1, 3, 6
Melanoides granifera (LAMARCK)
 " *torulosa* (BRUGUIÈRE) 3, 6, 7
 " *tuberculata* (MÜLLER) 3, 6, 7
 " *punctata* (LAMARCK) 3, 6, 7, 8
 " *plicaria* (BORN) 1, 2, 3, 6, 7
 " *maculata* (BORN) 3, 6, 7
Cerithidea alata (PHILIPPI) 6-bis
 " *cingulata* (GMELIN) 6-bis
 " *djadjariensis* (MARTIN) 6-bis
Telescopium telescopium (LINNÉ)
Terebralia palustris (LINNÉ)
Melampus fasciatus (DESHAYES) 3
 " *lividus* (DESHAYES)
 " *luteus* (QUOY & GAIMARD)
Cassidula auris-felis (BRUGUIÈRE)
 " *mustelina* (DESHAYES)
Pythia pantherina (ADAMS) 3
Lymnaea rubiginosa (MICHELIN) 3, 7
Gyraulus convexiusculus (HUTTON) 3, 6
 " *proclivis* (MARTENS) 3, 6
 " *sumatranus* (MARTENS) 3, 6
Indoplanorbis exustus (DESHAYES) 3, 6, 7
Succinea sp. juv.
Semperula maculata (TEMPLETON) 3, 7
Subulina octona (BRUGUIÈRE)
Lamellaxis gracilis (HUTTON) 3
Prosopeas achatinaceum (PFEIFFER) 3, 7
Achatina fulica (BOWDICH)
Trochomorpha castra (BENSON)
Taphrospira convallata sabangensis RENSCH 3, 7
Hemiplecta humphreysiana (LEA) 3, 7
Chloritis crassula (PHILIPPI) 3
Satiella extrema RENSCH 3, 7
Amphidromus ilsa RENSCH 3, 7, 9, 10
Bradybaena similis (FÉRUSAC) 3, 7
Discartemon vandermeermohri VAN BENTHEM JUTTING (cfr. p. 166 of this publication)

Simalur Island

1. LAIDLAW, F. F. 1954. Notes on species of the genus *Amphidromus* (Mollusca, Pulmonata, Pleurodontidae) from islands lying off the West Coast of Sumatra, with descriptions of new races based on collections made by Dr. E. JACOBSON in 1913. — Zool. Meded. Mus. Leiden, 33: 75—81, fig. 1—2.
2. LAIDLAW, F. F. 1957. Notes on the collection of land-mollusca made by Dr. E. JACOBSON on the islands of Simalur and Babi in 1913, with descriptions of new species and races. — Zool. Meded. Mus. Leiden, 35: 125—138, fig. 1—2.
3. LOOSJES, F. E. 1953. Monograph of the Indo-Australian Clausiliidae. *Beaufortia*, 31: 1—226, fig. 1—56, photo 1—4.

- Clithon corona* (LINNÉ)
Neritodryas subsulcata (SOWERBY)
Neritina auriculata LAMARCK
 „ *pulligera* (LINNÉ)
 „ *turrita* (GMELIN)
 „ „ *fa semiconica* LAMARCK
 „ *variegata* LESSON
Septaria lineata (LAMARCK)
Sulfurina behniana (PFEIFFER) 2
 „ *bensoni* WAGNER 2
Leptopoma niasense FULTON 2
Theobaldius dautzenbergi (FULTON) 2
Cyclophorus schepmani LAIDLAW 2
Cyclohelix crocata jacobsoni LAIDLAW 2
 „ *nicobarica* PFEIFFER 2
 „ *kibleri simalurensis* LAIDLAW 2
Pupina degneri LAIDLAW 2
Syncera javana (THIELE) 2
Thiara amarula (LINNÉ)
 „ *scabra* (MÜLLER)
Melanoides riqueti (GRATELOUP)
 „ *granifera* (LAMARCK)
 „ *tuberculata* (MÜLLER)
 „ *maculata* (BORN)
 „ *rustica* (MOUSSON)
Terebralia sulcata (BORN)
Pseudonemia jacobsoni LOOSJES 2, 3
Subulina octona (BRUGUIÈRE) 2
Taphrospira sp. 2
Trochomorpha crassicarinata FULTON 2
 „ *niasensis* FULTON 2
Macrochlamys ? sp. 2
Hemiplecta simalurensis LAIDLAW 2
 „ *humphreysiana* (LEA) 2
Xesta ? sp. 2
Helicarion hyaleus (BOCK) 2
Planispira quadrivolvris (MARTENS) 2
Amphidromus webbi simalurensis LAIDLAW 1, 2
 „ „ *babiensis* LAIDLAW 1
 „ *sumatranus jacobsoni* LAIDLAW 1, 2

Pulu Babi

1. LAIDLAW, F. F. 1954. Notes on species of the genus *Amphidromus* (Mollusca, Pulmonata, Pleurodontidae) from islands lying off the West Coast of Sumatra, with descriptions of new races based on collections made by Dr. E. JACOBSON in 1913. — Zool. Meded. Mus. Leiden, 33: 75—81, fig. 1—2.
2. LAIDLAW, F. F. 1957. Notes on the collection of land-mollusca made by Dr. E. JACOBSON on the islands of Simalur and Babi in 1913, with descriptions of new species and races. — Zool. Meded. Mus. Leiden, 35: 125—138, fig. 1—2.

Clithon corona (LINNÉ)
Neritodryas subsulcata (SOWERBY)
Neritina variegata LESSON
Septaria porcellana (LINNÉ)
Leptopoma niasense FULTON 2
Cyclohelix crocata jacobsoni LAIDLAW 2
 „ *kibleri babiensis* LAIDLAW 2
Thiara scabra (MÜLLER)
Melanoides tuberculata (MÜLLER)
 „ *blatta* (LEA)
 „ *rustica* (MOUSSON)
Trochomorpha crassicarinata FULTON 2
Macrochlamys ? sp. 2
Hemiplecta humphreysiana (LEA) 2
Xesta ? sp. 2
Amphidromus webbi babiensis LAIDLAW 1, 2
 „ *sumatranus jacobsoni* LAIDLAW 1

Nias Island

1. BENTHEM JUTTING, T. VAN, 1934. Non marine Mollusca from Nias Island. — Misc. Zool. Sum. 84—85 : 1—17, fig. 1—10.
2. BENTHEM JUTTING, T. VAN, 1935. Additional data on the Non marine Mollusca from Nias Island. — Misc. Zool. Sum. 89 : 1—4.
3. FULTON, H. C. 1907. Description of new species of Trochomorpha, Cochlostyla, Amphidromus, Bulimulus, Drymaeus, Placostylus, Stenogyra, Leptopoma, Cyclophorus, Cyclotus and Alycaeus. — Ann. Mag. Nat. Hist. (7) 19 : 149—159, pl. 9—10.
4. GRIMPE, G. & H. HOFFMANN, 1925. Versuch einer Revision der indischen, indo- und polynesischen Vaginuliden. — Zeitschr. wiss. Zool. 124 : 1—50, fig. 1—10.
5. HEYNEMANN, D. F. 1885. Über Vaginula-Arten im British Museum (Natural History) in London. — Jahrb. d. malak. Ges. 10 : 1—16, pl. 1—2.
6. ROLLE, H. 1908. Zur Fauna von West-Sumatra. — Nachr. Blatt, 40 63—70, fig. 1—4.

Clithon corona (LINNÉ) 1
Neritodryas cornea (LINNÉ) 1
 „ *subsulcata* (SOWERBY) 1, 2
Neritina auriculata LAMARCK 1
 „ *pulligera* (LINNÉ) 1
 „ *turrita* (GMELIN) 1, 2
 „ *variegata* LESSON 1
 „ *violacea* (GMELIN) 2
 „ *zigzag* LAMARCK 1, 2
Septaria porcellana (LINNÉ)
 „ *lineata* (LAMARCK) 2
Sulfurina behniana (PFEIFFER) 1
Leptopoma niasense FULTON 1, 3
Lagochilus garreli (EYDOUX & SOULEYET) 1
Theobaldius dautzenbergi (FULTON) 1, 2, 3
Cyclophorus egregius MARTENS

- Cyclohelix kibleri* (FULTON) 1, 2, 3
Cyclotus niasensis FULTON 1, 3
Pupina turgidula DOHRN 1
Syncera javana (THIELE) 1
Faunus ater (LINNÉ) 1
Thiara scabra (MÜLLER) 1, 2
 " *cancellata* RÖDING 1
Melanoides granifera (LAMARCK) 1
 " *carolitaciturni* (VAN BENTHEM JUTTING) 1
 " *uniformis* (QUOY & GAIMARD) 1, 2
 " *tuberculata* (MÜLLER) 1, 2
 " *punctata* (LAMARCK) 1, 2
 " *plicaria* (BORN) 1, 2
 " *turris* (BROT) 1, 2
Terebralia palustris (LINNÉ) 1
Melampus fasciatus (DESHAYES) 1
Pythia pantherina (ADAMS) 1
 " *imperforata* (ADAMS) 1
Lymnaea rubiginosa (MICHELIN) 2
Semperula maculata (TEMPLETON) 4, 5
 " *birmanica* (THEOBALD)
Subulina octona (BRUGUIÈRE) 1, 2
Lamellaxis gracilis (HUTTON) 1
Prosopaeas achatinaceum (PFEIFFER) 1
 " *obelisciforme* VAN BENTHEM JUTTING 1, 2
Trochomorpha crassicarinata FULTON 1, 2, 3
 " *niasensis* FULTON 1, 2, 3
Hemiplecta humphreysiana niasensis (ROLLE) 1, 2, 3, 6
Helicarion hyaleus (BOCK) 1
Landouria rotatoria (VON DEM BUSCH) 1
Chloritis crassula (PHILIPPI) 1
Amphidromus niasensis FULTON 3
 " *webbi* FULTON 3
 " *sowerbyi* FULTON 1, 2, 3
Bradybaena similaris (FÉRUSAC)
Batissa violacea (LAMARCK) 1, 2
Polymesoda suborbicularis (PHILIPPI) 1

Batu Islands

1. LOOSJES, F. E. 1953. Monograph of the Indo-Australian Clausiliidae. — *Beaufortia*, 31 : 1—226, fig. 1—56, photo 1—4.
2. MARTENS, E. VON, 1867. *Ostasiatische Landschnecken*, p. 1—447, pl. 1—22.
3. SMITH, E. A., 1887. Description de quelques espèces de coquilles terrestres de Sumatra, Java et Bornéo. — *Ann. Soc. Roy. Malac. Belg.* 22 : 215—222, pl. 9.
4. ZILCH, A., 1954. Die Typen und Typoide des Natur-Museums Senckenberg, 12 : Mollusca, Clausiliidae (1): *Phaedusinae*, *Neniinae*. — *Arch. Moll. Kunde*, 83 : 1—63, pl. 1—4.

Clithon corona (LINNÉ)

Leptopoma bodjoense SMITH 3

Crossopoma planorbulum (LAMARCK) 3
Cyclophorus rafflesi eximius (MOUSSON)
Pila ampullacea (LINNÉ)
Faunus ater (LINNÉ)
Thiara scabra (MÜLLER)
Melanoides tuberculata (MÜLLER)
Terebralia palustris (LINNÉ)
" *sulcata* (BORN)
Pythia scarabaeus (LINNÉ) 3
Phaedusa corticina batuensis LOOSJES 1, 4
Trochomorpha planorbis (LESSON) 3
" *strubelli* BOETTGER
Hemiplecta humphreysiana (LEA) 2
Dyakia weyersi (SMITH) 3

Mentawai Islands

1. DEGNER, E. 1928. Spolia mentaweisiana: Binnen-Mollusken von den Mentawai-Inseln. — *Treubia*, 10 : 319—354, pl. 10.
2. EHRMANN, P. 1928. *Phaedusa mentaweiensis* n.sp. — *Treubia*, 10 : 332—335, fig. 1.
3. LAIDLAW, F. F. 1954. Notes on species of the genus *Amphidromus* (Mollusca, Pulmonata, Pleurodontidae) from islands lying off the West Coast of Sumatra, with descriptions of new races based on collections made by Dr. E. JACOBSON in 1913. — *Zool. Meded. Mus. Leiden*, 33 : 75—81, fig. 1—2.
4. LOOSJES, F. E. 1953. Monograph of the Indo-Australian Clausiliidae. — *Beaufortia*, 31 : 1—226, fig. 1—56, photo 1—4.

Clithon corona (LINNÉ) 1
" *squarrosus* (RÉCLUZ) 1
Neritodryas cornea (LINNÉ) 1
" *subsulcata* (SOWERBY)
Neritina auriculata LAMARCK 1
" *pulligera* (LINNÉ) 1
" *cryptospira* MARTENS 1
" *turrita* (GMELIN) 1
" " *fa cumingiana* (RÉCLUZ) 1
" " *fa semiconica* LAMARCK 1
" *variegata* LESSON 1
Leptopoma niasense FULTON 1
" *bodjoense mentaweense* DEGNER 1
Crossopoma planorbulum (LAMARCK) 1
Cyclophorus perdix tuba (SOWERBY) 1
Faunus ater (LINNÉ) 1
Thiara scabra (MÜLLER) 1
Melanoides tuberculata (MÜLLER) 1
" *punctata* (LAMARCK) 1
" *plicaria* (BORN) 1
" *rustica* (MOUSSON) 1
Terebralia palustris (LINNÉ)
" *sulcata* (BORN) 1
Melampus fasciatus (DESHAYES) 1

Pythia imperforata (ADAMS) 1
Pseudonenia mentaweiensis (EHRMANN) 2, 4
Trochomorpha bicolor MARTENS 1
" *strubelli* BOETTGER 1
Macrochlamys mentaweiensis DEGNER 1
Hemiplecta humphreysiana (LEA) 1
Elaphroconcha bataviana (VON DEM BUSCH) 1
Dyakia weyersi (SMITH) var. *rotundata* DEGNER 1
Landouria mentaweiensis (DEGNER) 1
Amphidromus webbi FULTON subsp. ? 4
" *enganoensis sykesi* FRUHSTORFER

Enggano Island and Pulu Dua

1. ANCEY, C. F. 1905. Notes critiques et synonymiques. — Journ. de Conch. 53 : 319—320.
2. BENTHEM JUTTING, T. VAN, 1937. Non marine Mollusca of Enggano Island. — Treubia, 16 : 47—50, fig. 1.
3. FRUHSTORFER, H. 1905. Neue Landschnecken von Bawean und Enggano. — Nachr. Blatt, 37 : 198—201.
4. FULTON, H. C. 1896. List of the species of *Amphidromus*, Albers, with critical Notes and Descriptions of some hitherto undescribed species and varieties. — Ann. Mag. Nat. Hist. (6) 17 : 66—94, pl. 5—7.
5. HENDERSON, J. B. 1898. A list of land and fresh water shells of Enggano with descriptions of new species. — Nautilus, 12 : 13—17, pl. 2.
6. LAIDLAW, F. F. 1954. Notes on species of the genus *Amphidromus* (Mollusca, Pulmonata, Pleurodontidae) from islands lying off the West Coast of Sumatra, with descriptions of new races based on collections made by Dr. E. JACOBSON in 1913. — Zool. Meded. Mus. Leiden, 33 : 75—81, fig. 1—2.
7. SYKES, E. R. 1904. On some non-marine shells from the Austro- and Indo-Malayan regions. — Journ. Malac. 11 : 87—92, pl. 9.
8. ZILCH, A. 1953. Die Typen und Typoide des Natur-Museums Senckenberg, 10 : Mollusca, Pleurodontidae (1). — Arch. Moll. Kunde, 82 : 131—140, pl. 22—25.

Neritodryas cornea (LINNÉ) 2, 5
" *subsulcata* (SOWERBY) 2
Neritina turrita (GMELIN) 2, 5
" *variegata* LESSON 2
" *zigzag* LAMARCK 2, 5
Septaria porcellana (LINNÉ) 2
Helicina sp. 2, 5
Sulfurina behniana (PFEIFFER)
Leptopoma perlucidum (GRATELOUP) 2, 5
Lagochilus ciliferum (MOUSSON) 2, 5
Crossopoma enganoense HENDERSON 2, 5
Pupina treubi BOETTGER
Paludinella sumatrana THIELE
Brotia costula (RAFINESQUE) 2, 5
Thiara scabra (MÜLLER) 2

- Melanoides badia* (HENDERSON) 2, 5
 " *tuberculata* (MÜLLER) 2
 " *plicaria* (BORN) 2, 5
 " *punctata* (LAMARCK) 2
Melampus fasciatus (DESHAYES) 2, 5
Cassidula mustelina (DESHAYES) 2, 5
Pythia pantherina (ADAMS) 2
 " *striata* (REEVE) 2, 5
Glessula sp. 2, 5
Prosopeas argenteum HENDERSON 2, 5
Trochomorpha dautzenbergi SYKES 2, 7
 " *gulielmi* SYKES 2, 7
 " ? *hartmanni* (PFEIFFER) 2, 5
Macrochlamys hendersoni ANCEY 1, 2, 5
Hemiplecta humphreysiana (LEA)
Helicarion lineolatus MARTENS 2
 " ? *abellus* MARTENS 2, 5
Planispira aldrichi HENDERSON 2, 5
Amphidromus enganoensis enganoensis FULTON 2, 4, 5
 " *enganoensis fruhstorferi* LAIDLAW 2, 3, 6
 " *enganoensis sykesi* FRUHSTORFER 2, 3

Pulu Rotan (S.E. of Billiton)

- Faunus ater* (LINNÉ)
Terebralia sulcata (BORN)
Pythia pantherina (ADAMS)
Elaphroconcha javacensis (FÉRUSSAC)

Billiton

- Leptopoma perlucidum* (GRATELOUP)
Melanoides tuberculata (MÜLLER)
Ellobium auris-malchi (MÜLLER)
Everettia cinnamomea (VALENCIENNES)
Elaphroconcha hageni (WEBER)
Dyakia mackensiana (SOULEYET)
Bradybaena similis (FÉRUSSAC)

Bangka

1. ISSEL, A. 1874. Molluschi Borneensi. — Ann. Mus. Civ. Stor. Nat. Genova, 6: 366—486, pl. 4—7
2. MARTENS, E. VON, 1865. Neue Landschnecken aus Ostindien und zwei Seesterne von Costa Rica. — Monatsber. Kgl. Akad. Wiss. Berlin, p. 51—59.
3. MARTENS, E. VON, 1867. Ostasiatische Landschnecken, p. 1—447, pl. 1—22.
4. MARTENS, E. VON, 1879. Nerita und Neritina, in: MARTINI-CHEMNITZ, N. Syst. Conch. Cab. Bd. 2, Abt. 10.
5. MARTENS, E. VON, 1897. Süß- und Brackwassermollusken des Indischen Archipels, in: M. WEBER, Erg. Reise Nied. Ost Indien, 4: 1—331, pl. 1—12.

6. REGTEREN ALTENA, C. O. VAN, 1940. A Revision of Cerithidea (*Cerithideopsilla*) *cingulata* (Gmelin) and some related species (Mollusca, Gastropoda). — Zool. Meded. Mus. Leiden, 32 : 211—222, pl. 20.
7. WEBER, A. 1906. Eine neue Nanina von der Insel Banka. — Nachr. Blatt, 38 : 164—165.

- Clithon corona* (LINNÉ) 4, 5
„ *oualaniensis* (LESSON) 4, 5
Neritina violacea (GMELIN) 4
„ „ *fa exaltata* RÉCLUZ
„ „ *fa cornucopiae* BENSON 1
„ *variegata* LESSON 4
Cyclophorus perdix perdix (BRODERIP & SOWERBY) 3
„ „ *bankanus* MARTENS 3
Opisthoporus corniculum (MOUSSON)
Bellamyia sumatrensis (DUNKER)
Pila ampullacea (LINNÉ) 5
„ *scutata* (MOUSSON) 5
Syncera carinata (LEA) 1, 5
„ *lirata* (MORELET) 1, 5
Brotia costula (RAFINESQUE)
Melanoides riqueti (GRATELOUP) 5
„ *granifera* (LAMARCK) 5
„ *tuberculata* (MÜLLER) 5
„ *punctata* (LAMARCK)
Cerithidea alata (PHILIPPI) 6
„ *charbonnieri* (PETIT)
„ *cingulata* (GMELIN) 5, 6
„ *djadjariensis* (MARTIN) 6
„ *microptera* (KIENER)
„ *obtusa* (LAMARCK)
„ *ornata* (ADAMS)
„ *quadrata* SOWERBY
Telescopium telescopium (LINNÉ)
Melampus fasciatus (DESHAYES)
Cassidula auris-felis (BRUGUIÈRE) 5
„ *mustelina* (DESHAYES)
„ *multiplicata* MARTENS 2, 5
Pythia pantherina (ADAMS)
„ *plicata* (FÉRUSAC)
„ *trigona* (TROSCHER)
Ellobium auris-judae (LINNÉ) 5
„ *auris-malchi* (MÜLLER)
„ *auris-midae* (LINNÉ) 5
Lymnaea rubiginosa (MICHELIN) 5
Subulina octona (BRUGUIÈRE)
Prosopeas achatinaceum (PFEIFFER)
Achatina fulica BOWDICH
Everettia cinnamomea (VALENCIENNES)
Everettia consul (PFEIFFER) 1, 3

- Elaphroconcha javacensis* (FÉRUSSAC) 3
 „ *hageni* (WEBER) 7
Dyakia mackensiana (SOULEYET) 1, 3
Amphidromus inversus (MÜLLER)
Bradybaena similaris (FÉRUSSAC)
Polymesoda bengalensis (LAMARCK)

Singkep Island

1. FULTON, H. C. 1907. Descriptions of new species of Trochomorpha, Cochlostyla, Amphidromus, Bulimulus, Drymaeus, Placostylus, Stenogyra, Leptopoma, Cyclophorus, Cyclotus and Alycaeus. — Ann. Mag. Nat. Hist. (7) 19 : 149—159, pl. 9—10.
Cerithidea cingulata (GMELIN)
Ellobium auris-judae (LINNÉ)
Trochomorpha modesta FULTON 1
Hemiplecta humphreysiana (LEA)

Riouw Archipelago

1. ISSEL, A. 1874. Molluschi Borneensi. — Ann. Mus. Civ. Stor. Nat. Genova, 6 : 366—486, pl. 4—7.
Clea nigricans ADAMS 1
Pythia trigona (TROSCHEL) 1
Ellobium auris-judae (LINNÉ)
Indoplanorbis exustus (DESHAYES)
Amphidromus perversus (LINNÉ) fa *melanomma* (PFEIFFER) 1

Pulu Pandjang

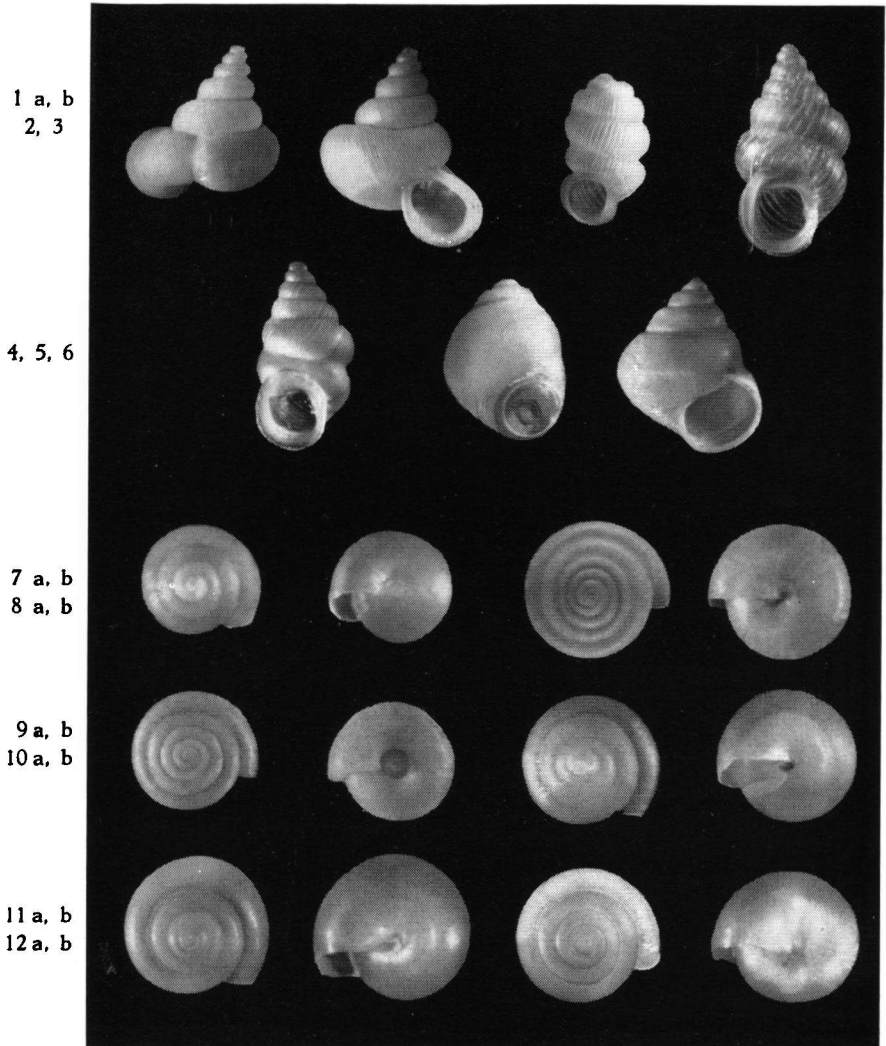
- Neritina violacea* (GMELIN)
Melampus fasciatus (DESHAYES)

Pulu Berhala

1. MEER MOHR, J. C. VAN DER, 1926. Molluscs from Pulau Berhala. — Misc. Zool. Sum. 8 : 1—2.
 2. MEER MOHR, J. C. VAN DER, 1930. Notes on the fauna of Palau Berhala. — Treubia, 12 : 277—298, fig. 1—4.
 3. PARAVICINI, E., 1935. Beiträge zur Kenntnis der Land- und Süßwassermollusken von Sumatra. — Arch. Moll. Kunde, 67 : 59—63.

- Lagochilus* sp. 2
Chamalycaeus fruhstorferi (MOELLENDORFF) 2
Diplommatina calcarata MOELLENDORFF 2
Turbacmella dohertyi (ALDER) 2
Melanoides tuberculata (MÜLLER) 1, 2
Melampus fasciatus (DESHAYES) 2
Pythia pantherina (ADAMS) 1, 3
 „ *striata* (REEVE)
Semperula sp. 2
Subulina octona (BRUGUIÈRE)
Lamellaxis gracilis (HUTTON) 2
Prosopeas achatinaceum (PFEIFFER) 1, 2
Liardetia doliolum (PFEIFFER)
Chloritis crassula (PHILIPPI) 1, 2

PLATE I



- FIGURE 1 a and b. *Alycaeus praetextus*, n.sp. Holotype. Batu Sangkar, Padang Highlands.
 FIGURE 2. *Palaina pumila*, n.sp. Holotype. Brastagi.
 FIGURE 3. *Diplommatina strophosa*, n.sp. Holotype. Brastagi.
 FIGURE 4. *Diplommatina tardigrada*, n.sp. Holotype. Brastagi.
 FIGURE 5. *Stenothyra cyrtochila*, n.sp. Holotype. Tandjong Tiram.
 FIGURE 6. *Paludinella trifilaris*, n.sp. Holotype. Pedada Bay, Lampong Districts.
 FIGURE 7 a and b. *Pyramidula gracilitesta*, n.sp. Holotype. Hanna Estate, near Kampong Gunting Saga.
 FIGURE 8 a and b. *Charopa perlata*, n.sp. Holotype. Hanna Estate, near Kampong Gunting Saga.
 FIGURE 9 a and b. *Charopa caloglypta*, n.sp. Holotype. Hanna Estate, near Kampong Gunting Saga.
 FIGURE 10 a and b. *Liardetia fraterna*, n.sp. Holotype. Ambalutu Estate, near Kisaran
 FIGURE 11 a and b. *Microcystina consobrina*, n.sp. Holotype. Brastagi.
 FIGURE 12 a and b. *Microcystina muscorum*, n.sp. Holotype. Hanna Estate, near Membang Muda.

PLATE II

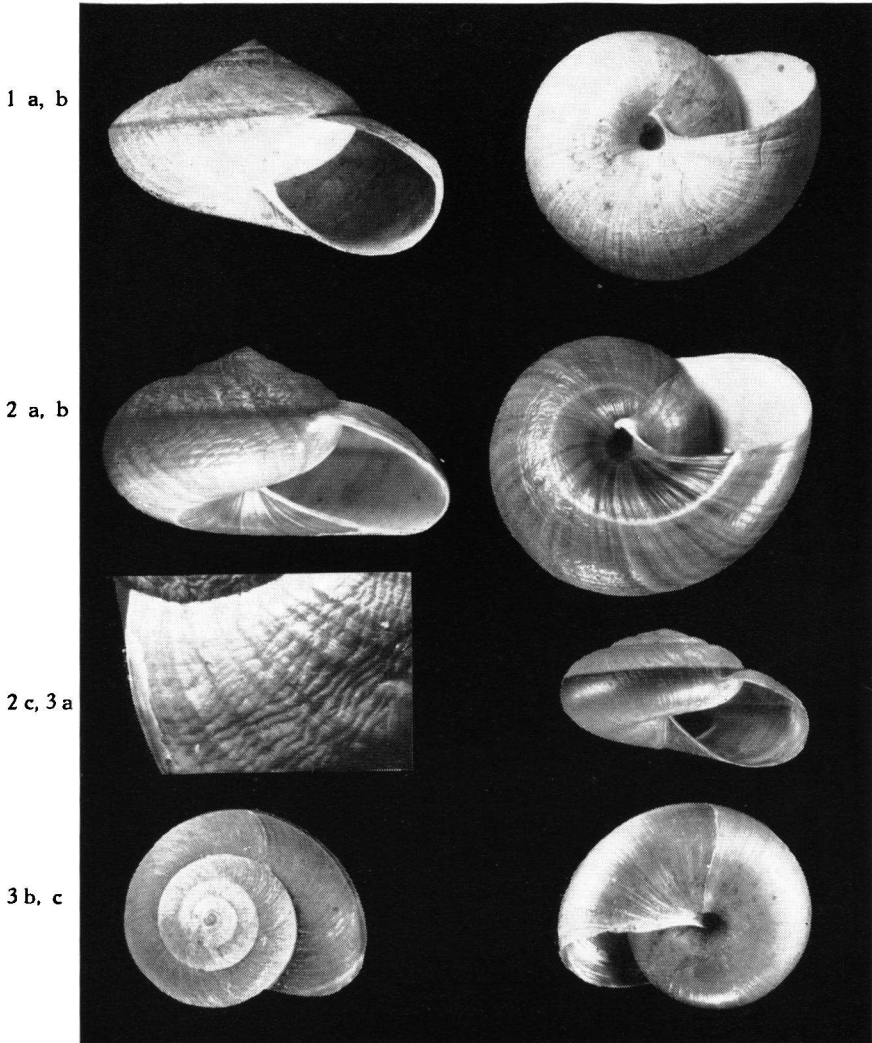
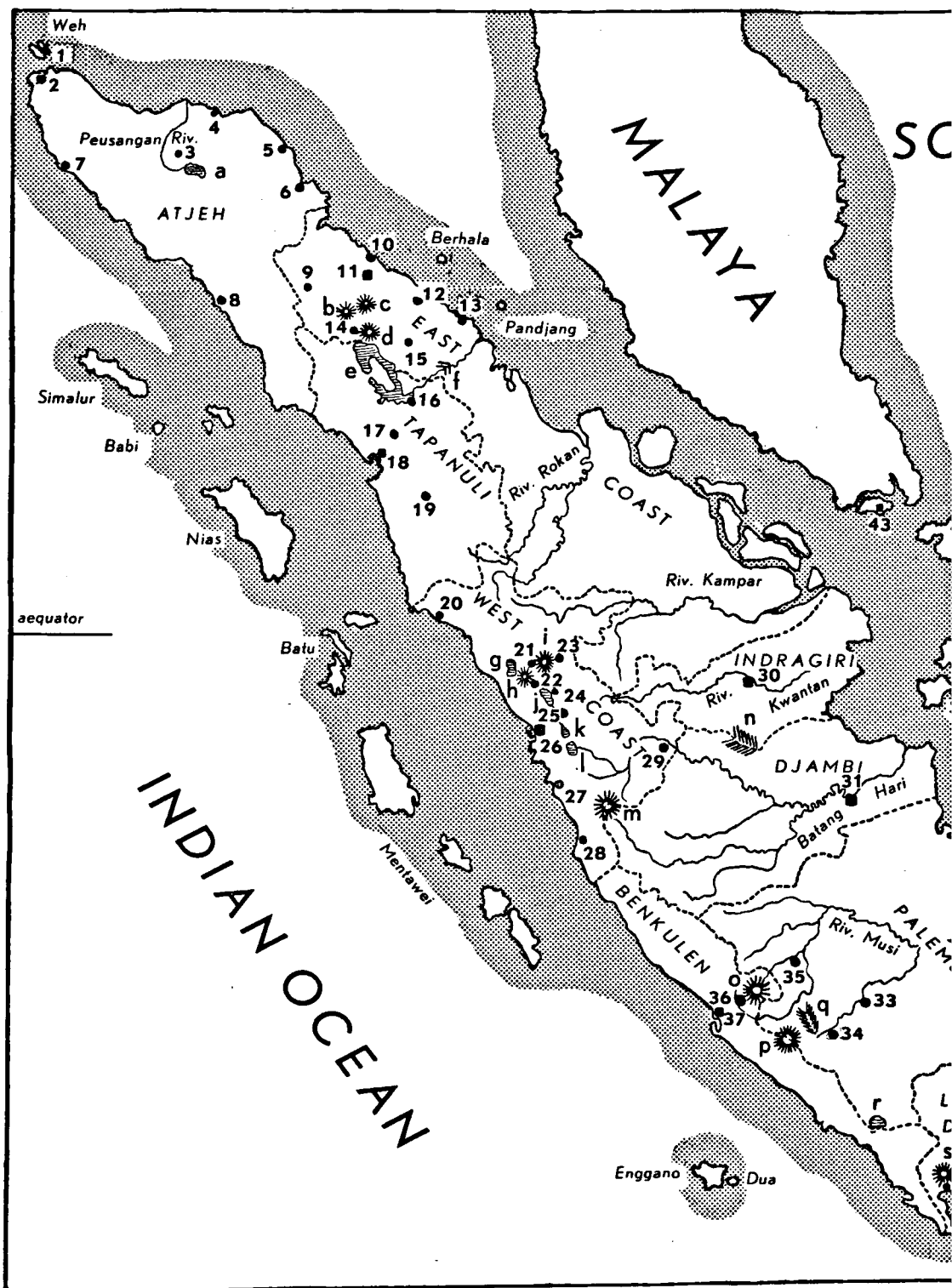


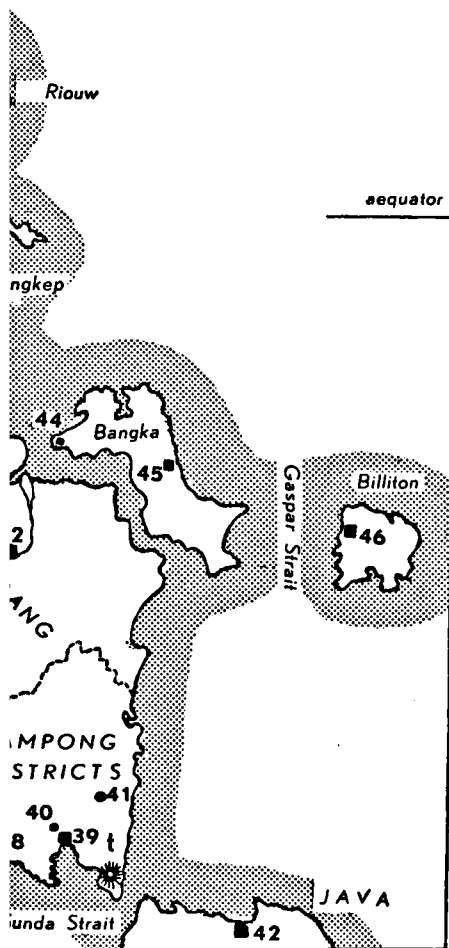
FIGURE 1 a and b. *Hemiplecta goliath*, n.sp. Holotype. Renggat, Indragiri.
FIGURE 2 a, b and c. *Hemiplecta oblique-undulata*, n.sp. Holotype. Kaju Aro Estate
Mt Korintji. Fig. c. detail of sculpture enlarged.
FIGURE 3 a, b and c. *Elaphroconcha minangkabau*, n.sp. Holotype. Kaju Aro Estate,
Mt Korintji.

The photographs of Plates I and II were taken by Miss H. A. W. SMIT.



SOUTH CHINA SEA

Sketch Map of the Island of Sumatra,
indicating localities mentioned in the text.
Letters denote mountains and lakes,
arabic figures towns and villages.



- | | |
|--------------------------------------|---|
| a. Lake Tawar | k. Danau di Bawah |
| b. Mt Sinabung | l. Danau di Atas |
| c. Mt Sibajak | m. Mt Korintji |
| d. Mt Singgalang (East Coast) | n. Tiga Pulu Mts |
| e. Lake Toba | o. Mt Kaba |
| f. Sampuran Harimau Waterfall | p. Mt Dempo |
| g. Lake Manindjau | q. Gumai Mts |
| h. Mt Singgalang (West Coast) | r. Lake Ranau |
| i. Mt Merapi | s. Mt Tanggamus |
| j. Lake Singkarak | t. Mt Radjabasa |
| 1. Sabang | 24. Batu Sangkar
(= Fort van der Capellen) |
| 2. Kota Radja | 25. Solok |
| 3. Lampahan | 26. Padang |
| 4. Lho Seumaweh | 27. Painan |
| 5. Idi | 28. Indrapura |
| 6. Langsa | 29. Kota Baru |
| 7. Tjalang | 30. Renggat |
| 8. Tapak Tuan | 31. Djambi |
| 9. Bohorok | 32. Palembang |
| 10. Belawan | 33. Muara Enim |
| 11. Medan | 34. Lahat |
| 12. Tebing Tinggi | 35. Muara Beliti |
| 13. Tandjong Tiram | 36. Kepahiang |
| 14. Brastagi | 37. Benkulen |
| 15. Pematang Siantar | 38. Kota Agung |
| 16. Balige | 39. Telok Betong |
| 17. Tarutung | 40. Tandjong Karang |
| 18. Sibolga | 41. Sukadana |
| 19. Padang Sidempuan | 42. Djakarta
(= Batavia) |
| 20. Ajer Bangis | 43. Singapore |
| 21. Bukit Tinggi
(= Fort de Kock) | 44. Muntok |
| 22. Padang Pandjang | 45. Pangkal Pinang |
| 23. Pajakomboh | 46. Tandjong Pandan |