

Revision of the Melaniidae of British Guyana and Surinam

by
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INTRODUCTION

Perhaps the most serious difficulty which the present writer experienced in naming specimens of Melaniidae from the Guianas is the almost total lack of literature. The monograph of BROU (1874) and a paper by VERNHOUT (1914) being almost all that is available for reference.

British Guiana in particular has long been neglected conchologically, the brothers SCHOMBURGK being amongst the few explorers who paid any attention to the mollusca. The shells collected by RICHARD SCHOMBURGK, who travelled in Guiana between the years 1840 and 1844, were reported upon by TROSCHEL (1848) in the third volume of SCHOMBURGK's 'Reisen in Britisch Guiana'. HENRI DROUET (1852) gave an account of the Melaniidae found in French Guiana, but his work is now like that of BROU and TROSCHEL a century old!

Since that time PILSBRY (1913) gave a useful account of a number of Brazilian *Doryssa*, some related to Guiana species. H. B. BAKER (1930) in the course of his work on the Venezuelan Mollusca, referred to a number of species which are common also to the Guianas, but those which are not found in Venezuela are naturally omitted. A valuable paper by HALTENORTH and JAECKEL (1940) deals with the species occurring in Northwestern Brazil, many of which are found also in the Guianas.

So far as Surinam is concerned, a number of expeditions have been into the interior of that country, the Mollusca they collected being the subject of VERNHOUT's (1914) paper. Most of these shells are now in the Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands, where I was privileged to examine them in 1951. More recently Dr. D. C. GEIJSKES has made a number of journeys into the interior and it is the result of his energies as a collector that the writer has been able to include Surinam in an account of the Guiana Melaniidae. The extensive series of specimens obtained by Dr. GEIJSKES and which he generously placed at the authors disposal, has made it possible to determine the true position of several previously very doubtful forms, some known only by their often immature holotypes.

In British Guiana the 1938 Roriana Expedition, of which the author was a member, paid special attention to the Mollusca and wherever possible series of specimens were obtained. It is upon this

material, together with that collected in Surinam by Dr. GEIJSKES, that this revision is based.

For the figures 1a-f, 3a-3c, 4a-4c, 7a, 8a and 8c, 9c and 10c and 10d, the author is greatly indebted to Dr. GEIJSKES. The remaining figures are the work of Mr. T. E. CROWLEY, without whose kind help the illustrating of this paper would not have been possible.

DORYSSA H. & A. Adams, 1845

Doryssa devians Brot

Figs. 1a-f

1874 *Doryssa devians* Brot, Syst. Conch. Cab. (n. F.), vol. 1 pt. 24 (Melaniaceen), p. 35, pl. 35 figs. 10, 10a-c.

1914 *Doryssa devians* Vernhout, Notes Leiden Mus., vol. 36, p. 33.

1940 *Pachybilus (Doryssa) devians maranhaoensis* Haltenorth & Jaekel, Arch. Molluskenk., vol. 72, p. 106, pl. 6 figs. 9-10.

British Guiana: Demerara River, Mazaruni River near Bartica (PAIN).

Surinam: Maroni River (KAPPLER), Lawa and Lenabari (VERNHOOT), Surinam River, Tapanahoni River, Marowyne River (GEIJSKES).

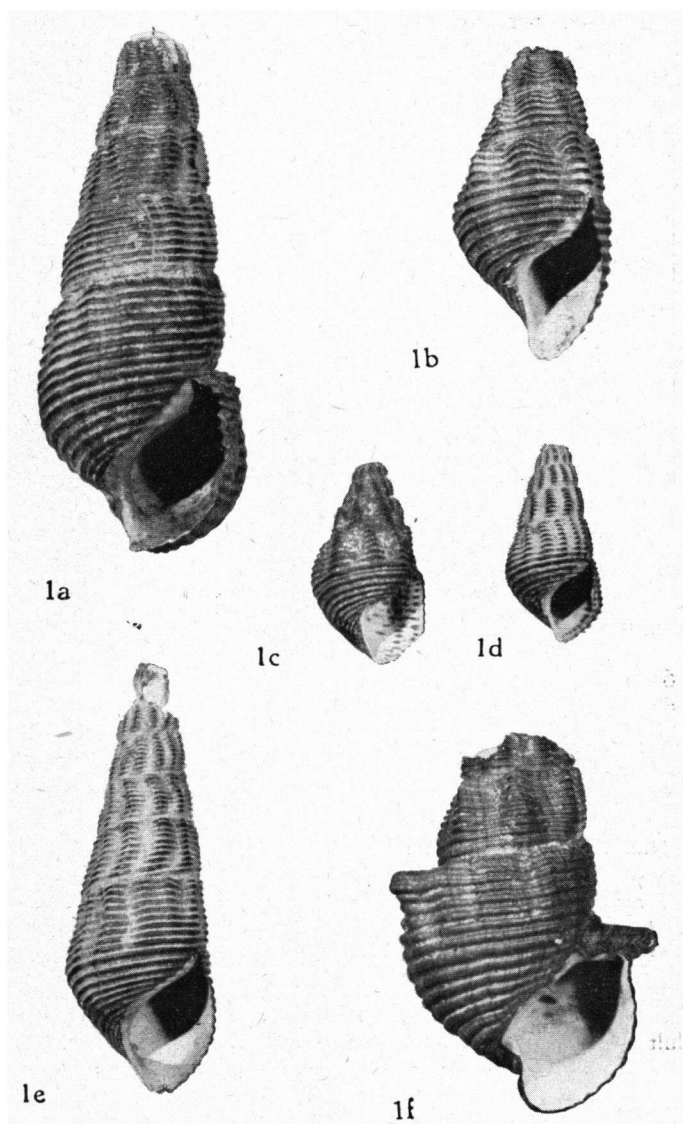
Other localities: Northwestern Brazil (HALTENORTH & JAECKEL).

Measurements (in millimeters)

Length	Greatest		Aperture		Whorls remaining
	Width	Length	Length	Width	
63	23	21.5	12	7	(Surinam River)
67	26	24.5	14.5	5½	id.
60	30	24	13	4½	id.
53	20	17.5	10	6½	(Mazaruni River)
49	18	15	9	8	id.
47	33	19.5	14	4½	(Demerara River)

This fine species is perhaps the most common of all Guiana *Doryssa*. It has a wide distribution in both British Guiana and Surinam, and often occurs in great numbers in suitable localities. In the Mazaruni River above Bartica it is to be found in abundance. There are not, so far as I am aware, any records of its occurrence outside the Guiana region.

D. devians is much subject to erosion, all the many hundreds of adult specimens which I examined being more or less affected. The spire is always decollate. In Surinam this species attains a far larger size than in British Guiana, as will be seen from the table of measurements. Specimens in which the suture of the last whorls is flattened out forming a broad flange up to 7 mm in width, are not uncommon and occur amongst normal shells in all localities, one such specimen having been figured by BROT (1874, pl. 35 fig. 10).



Figs. 1a—f. *Doryssa devianis* Brot, Marowyne River; Surinam.

D. devians is by far the largest of all the Guiana species, its nearest relative would seem to be *D. lamarckiana* from which it can be distinguished by the proportionately thinner shell, bright blue aperture and columella, and thin lip, produced at the base and not rounded as in *lamarckiana*.

Doryssa lamarckiana Brot

Figs. 2a-b

- 1860 *Melania atra* Reeve [not of Bruguière, 1792], Conch. Icon., vol. 12, *Melania*, Figs. 195a, b.
 1870 *Doryssa lamarckiana* Brot, Amer. Journ. Conch., vol. 6, p. 305.
 1874 *Doryssa lamarckiana* Brot, Syst. Conch. Cab. (n. F.), vol. 1 pt. 24 (*Melaniaceen*), p. 344, pl. 35 figs. 1, 1a.
 1914 *Doryssa lamarckiana* Vernhout, Notes Leiden Mus, vol. 36, p. 32.
 1930 *Doryssa lamarckiana* H. B. Baker, Occ. Papers Mus. Zool. Univ. Michigan, vol. 210 pt. 4, p. 29.
 1940 *Pachybilus (Doryssa) consolidatus* Haltenorth & Jaekel [part, not of Bruguière, 1789], Arch. Molluskenk., vol. 72, p. 111, fig. 16.

British Guiana: Essequibo River; Rockstone (PAIN).

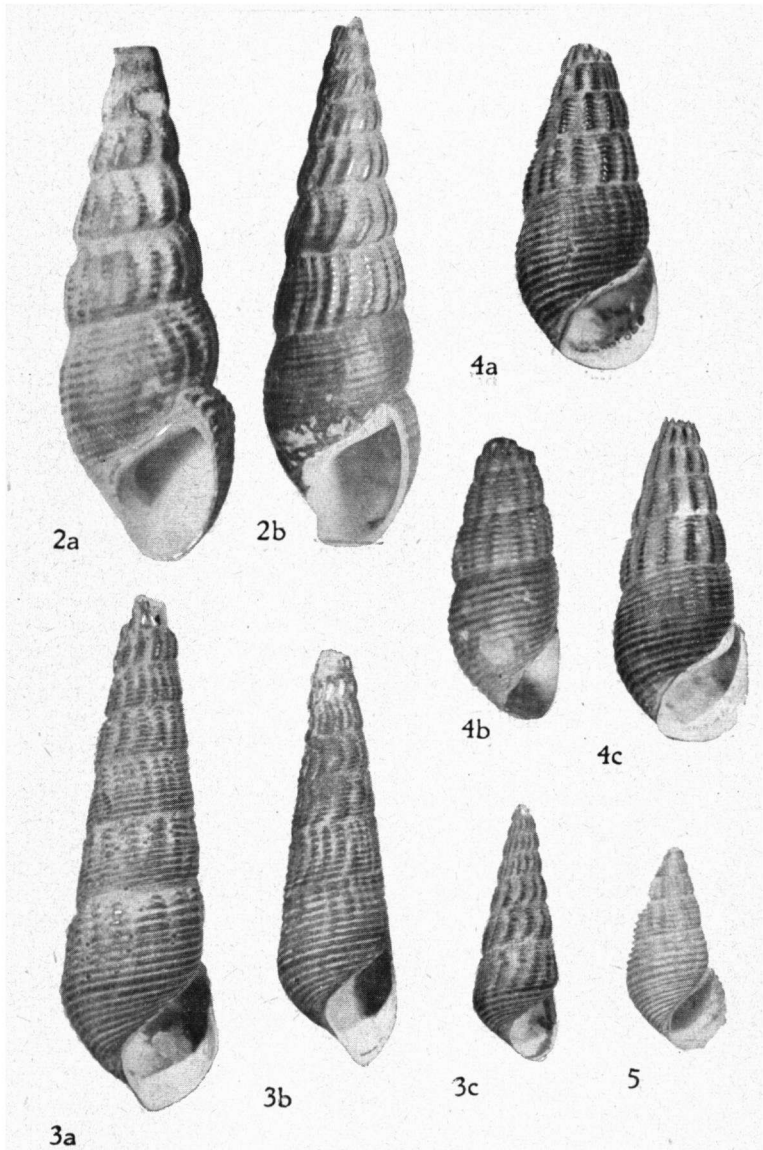
Surinam: Upper Nickerie and Corantyne Rivers (TEN KATE); Surinam River; Lucie River (all fide VERNHOUT, but probably all are *D. atra* (Brug)).

Other localities: Venezuela; Rio Yuruari (WHEATLEY).

Measurements (in millimeters)

Length	Greatest		Aperture		Whorls remaining
	Width	Length	Width	Length	
72	21	22	13	9	(Rockstone)
75	20	16.5	11	10½	id.
68	23	19	13.5	7½	id.
66	22	19.5	11.5	7½	id.
49	21	18	10	5½	copied from BROT
68	21	19	11	9	id.

Doryssa lamarckiana is the most elongated of all known species of the genus, often with as many as 10½ whorls preserved (see table above). It varies considerably in colour from reddish-brown shells, with bluish white aperture and columella, to black, with an orange columella and lip. Strong oblique ribs are present on each whorl, becoming obsolete on the last. This species differs from *D. atra* (Brug.) in having the ribs continued on all but the last whorl, whereas in *atra* these are absent on the last two; it is also when adult a much larger shell. At Rockstone, British Guiana, this species is fairly common in pools below the rapids in the Essequibo River. The occurrence of true *lamarckiana* in Surinam, would seem very doubtful; it has not been taken by Dr. GEIJSKES. VERNHOUT's specimens should probably be referred to *D. atra* (Brug.), most are, however, immature.



Figs. 2a, b. *Doryssa lamarkiana* Brot, Essequibo River; British Guiana.

Figs. 3a—c. *Doryssa atra* (Brug.), Tapanahoni River; Surinam.

Figs. 4a—c. *Doryssa transversa* (Lea), Corantyne River; Surinam.

Fig. 5. *Doryssa brevior* (Troschel), Mazaruni River; British Guiana.

Doryssa atra (Bruguère)

Figs. 3a-c

- 1792 *Bulimus ater* Bruguère, Act. Soc. Nat. Hist. Paris, vol. 1, p. 126.
 1819 *Bulimus ater* Lamarck, Ann. s. Vert., vol. 6, pt. 2, p. 164.
 1819 *Melania truncata* Lamarck, Ibid., p. 164.
 1875 *Doryssa atra* Brot, Syst. Conch. Cab. (n. F.), vol. 1 pt. 24 (Melaniaceen), p. 343, pl. 35 fig. 7.
 1940 *Pachychilus (Doryssa) atra* Haltenorth & Jaekel, Arch. Molluskenk., vol. 72, p. 106, pl. 5 figs. 11a-i.
 1952 *Melania truncata* Mermod, Rev. Suisse Zool., vol. 59, p. 65, fig. 127.

British Guinana: not recorded.

Surinam: Lenabari, Lawa (VERNHOUT), Tapanahoni River, Palumen Apetina (GEIJSKES).

Other localities: French Guiana; Cayenne (LEBLOND), Brazil (REEVE), Venezuela; Cumbres Mountains (APPUN):

As noted by BAKER (1930, p. 29) BRUGUIÈRE's original description is too brief for accurate recognition, but he suggests that since LAMARCK quotes it in the synonymy of his *Melania truncata*, which was founded on material from the same collector, and has been generally accepted, one hesitates to pronounce it unidentifiable.

No mention is made by BRUGUIÈRE of 'RICHARD' to whom this species is usually attributed, the origin of this person whoever he may have been, apparently resting with LAMARCK. The type of *Melania truncata* from LAMARCK's collection now in the Geneva Museum has been well figured by MERMOD (1952, p. 66).

VERNHOUT (1914) noticed the strong resemblance between *D. atra* and *D. lamarckiana* Brot and drew up a key for the purpose of separating them. However, as pointed out under *D. lamarckiana*, that species is when adult a far larger and thicker shell, often with a pronounced canal at the base of the columella. Most, if not all, of VERNHOUT's so-called *lamarckiana* are unfortunately immature shells, but in my opinion should more correctly be referred to *D. atra*.

Doryssa atra would seem to be known with certainty only from Surinam and French Guiana. Its occurrence in British Guiana and Venezuela would, so far, seem to be extremely doubtful. HALTENORTH & JAECKEL (1940) record it from Northwestern Brazil.

Measurements (in millimeters)

Length	Greatest		Aperture		Whorls remaining
	Width	Length	Width	Length	
62.5	20	19	11	7	(Tapanahoni R.)
62	19	18	10.5	8	id.
51	15	16.5	9	6½	id.
49	15.5	16	9	7½	id.

Doryssa transversa (Lea)

Figs. 4a-c

- 1850 *Melania transversa* Lea, Proc. Zool. Soc. London, p. 186.
 1856 *Melania macapa* Moricand, Journ. de Conchyl., vol. 5, p. 176, pl. 6 fig. 7.
 1860 *Melania aquatilis* Reeve, Conch. Icon., vol. 12, *Melania*, fig. 73.
 1860 *Melania Charpentieri* Reeve, Ibid., fig. 76.
 1860 *Melania branca* Reeve, Ibid., fig. 193.
 1860 *Melania nicotiana* Reeve, Ibid., fig. 202.
 1860 *Melania aspersa* Reeve, Ibid., fig. 325.
 1913 *Doryssa gracilis* Vernhout, Notes Leiden Museum, vol. 36, p. 33, pl. 1 fig. 10.
 1940 *Pachybilus (Doryssa) transversa* Haltenorth & Jaekel, Arch. Moluskenk., vol. 72, p. 110, pl. 6 figs. 15a-g.

British Guiana: not recorded.

Surinam: Corantyne River (VERNHOUT), Kabalebo River, Avanarero Falls; Coppename River, Wilhelmina Mountains (GEIJSKES).

Other localities: Northwestern Brazil (HALTENORTH & JAECKEL).

Measurements (in millimeters)

Length	Greatest		Aperture		Whorls remaining
	Width	Length	Width	Length	
37	15	14	9	4½	(Kabalebo creek)
34	13	11	7	6½	id.
32	12	10	6	7⅓	id.

This variable and widely distributed species has been described under a variety of names, principally by REEVE (1860). All are, however, variations of typical *transversa* as will be seen when a large series, even from one locality, is carefully examined. VERNHOUT compared his *D. gracilis* with *D. atra* (Brug.), but makes no mention of LEA's species, with which he was not apparently acquainted. The type of *gracilis* is in the Leiden Museum; it is a small and slightly immature shell. The large series obtained by Dr. GEIJSKES convinces me, however, that it is identical with *transversa*, some thickening behind the outer lip is often present in adult examples, resembling *D. lamarckiana* in this respect. *D. transversa* is, however, a much smaller, lighter shell, the ribs extending even to the last whorl.

Doryssa brevior (Troschel)

Fig. 5

- 1848 *Melania brevior* Troschel, Schomburgk's Reisen in Britisch Guiana, vol. 3, p. 550.
 1848 *Melania chloris* Troschel, Ibid., p. 550.
 1854 *Melania brevior* Hanley, Conch. Misc., *Melania*, fig. 5.
 1860 *Melania brevior* Reeve, Conch. Icon., vol. 12, *Melania*, fig. 197.
 1874 *Doryssa brevior* Brot, Syst. Conch. Cab. (n. F.), vol. 1, pt. 24 (Melaniaceen), pl. 36 figs. 3, 4.

British Guiana: Essequibo River, Cuyani River, Mazaruni River (TROSCHER), Mazaruni River near Bartica (PAIN).

Surinam: not so far recorded.

Other localities: Brazil; Rio Branco (YATES).

Measurements (in millimeters)

Length	Greatest		Aperture		Whorls remaining
	Width	Length	Width	Length	
28	12	11.5	8	6	(Mazaruni River)
28	12	12	7	5½	id.

This little species occurs in a small swampy brook flowing into the Mazaruni River near Bartica, British Guiana, along with *D. devians* Brot and *Pomacea (Effusa) glauca* (L.), but it is by no means common. I was unable to locate it elsewhere in British Guiana. The Mazaruni shells are yellowish brown, with strong concentric ribs, which are almost obsolete on the spire, becoming very prominent on the last four whorls. The aperture is pale blue within and speckled with brown. The light coloration and coarse prominent sculpture separate *D. brevior* from other Guiana species.

Doryssa consolidata (Bruguière)

Fig. 6

1789 *Bulimus consolidatus* Bruguière, Enc. Méth., no. 48.

1858 *Melania circumsulcata* von dem Busch, Malakoz. Blätt., p. 58.

1860 *Melania scarabus* Reeve, Conch. Icon., vol. 12, *Melania*, fig. 201.

1874 *Doryssa consolidata* Brot, Syst. Conch. Cab. (n. F.), vol. 1 pt. 24 (Melaniaceen), pl. 36 fig. 9.

1940 *Pachychilus (Doryssa) consolidata* Haltenorth & Jaeckel, Arch. Mol-luskenk., vol. 72, p. 111, fig. 16.

British Guiana: Cayuni River; at Kamaria (ELRED & MORRISON, 1925), Mazaruni River; at Issano (PAIN).

Surinam: no authentic record so far.

Other localities: Brazil; Maranaon River (REEVE), Rio Branco (YATES), Venezuela; Orinoco drainage (BAKER, 1930).

Measurements (in millimeters)

Length	Greatest		Aperture		Whorls remaining
	Width	Length	Width	Length	
42	23	23.5	13	4½	(Mazaruni River)
34	15	14.5	8	5½	id.
23	14	12	8	3½	id.

D. consolidata, as the name implies, is a very solid imperforate shell. It lacks the prominent varices so characteristic of many species of *Doryssa*, the sculpture being confined to very evenly spread concentric ridges, which are present on all whorls remaining. I have not seen any even young specimens in which the apex was preserved. In this species the body whorl is more globose than in other *Doryssa*

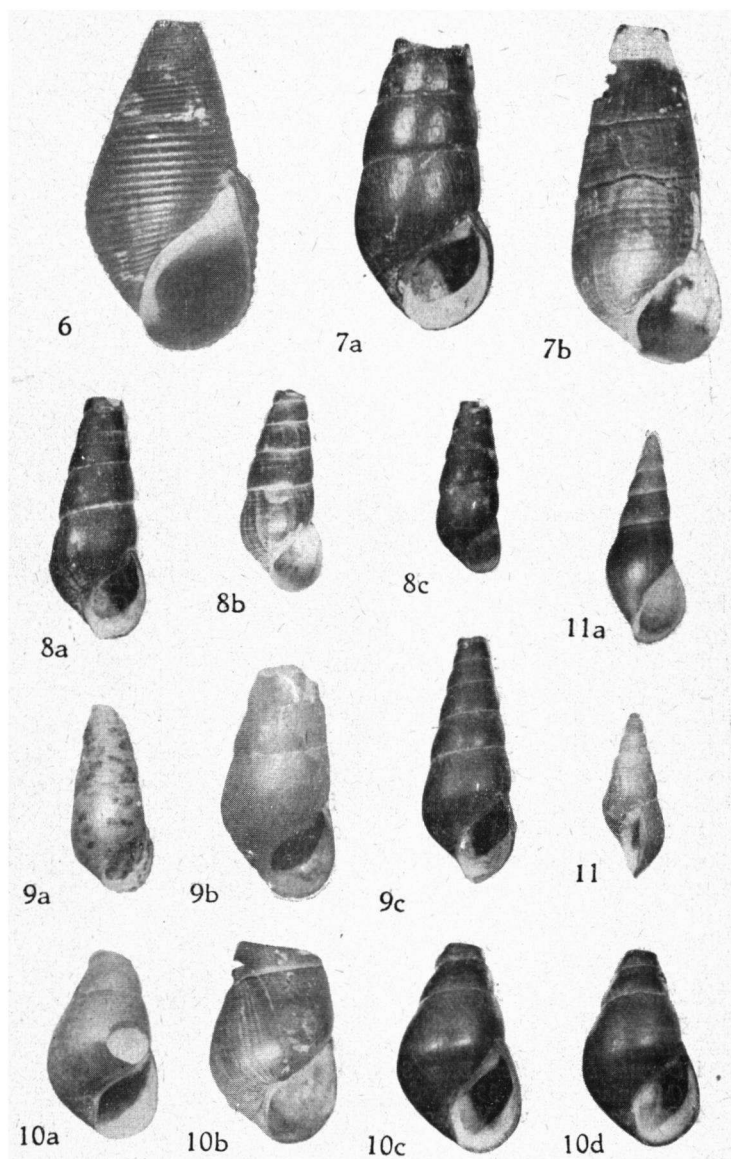


Fig. 6. *Doryssa consolidata* (Brug.), Mazaruni River; British Guiana.
 Figs. 7a, b. *Doryssa petechialis* Brot, Upper Sipaliwini River; Surinam.
 Figs. 8a—c. *Doryssa hobenackeri* (Phil.), figs. 8a, c: Surinam River; Surinam, fig. 8b: Apisiké; Surinam.
 Figs. 9a—c. *Doryssa hobenackeri kappleri* Vernhout, fig. 9a: Kabalebo River; Surinam, fig. 9b: Kamarang River; British Guiana, fig. 9c: Surinam River, Surinam.
 Figs. 10a—d, *Doryssa geijskesi* nov. spec. (holotype fig. 10a), Makambo Island; Coppename River; Surinam.
 Figs. 11a, b. *Hemisinus lineolatus* (Gray), Pomeroon River; British Guiana.

and the spire comparatively short. It is withall a distinctive shell and unlikely to be confused with any other species.

Doryssa petechialis (Brot)

Figs. 7 a, b

1860 *Melania petechialis* Brot, Rev. Zool., p. 263, pl. 17 fig. 10.

1870 *Doryssa petechialis* Brot, Cat. Rec. Species *Melania*, p. 306.

1874 *Doryssa petechialis* Brot, Syst. Conch. Cab. (n. F.), vol. 1 pt. 24 (Melaniaceen), p. 348, pl. 36 fig. 6.

British Guiana: not so far recorded.

Surinam: Kabalebo River; at Avanarero Falls, Coppename River, Upper Sipaliwini River (GEIJSKES).

Measurements (in millimeters)

Length	Greatest Width	Aperture		Whorls remaining	
		Length	Width		
45	18	16	9.5	6½	(Coppename River)
42	18	14.5	9	5½	id.
45	20.5	16	10	4½	(Kabalebo River)
41	18	13.5	8	6½	id.

The habitat of this species was unknown to BROT. All the specimens I have seen are from Surinam, collected by Dr. GEIJSKES. It was not recorded by VERNHOUT.

D. petechialis is not likely to be confused with any other species except perhaps *D. consolidata* (Brug.), from which it differs, however, in being smoother, with a far greater number of whorls in proportion to its length. It is often lighter in colour than most *Doryssa*, blotches of dark reddish-brown being visible on the body whorl, as well as in the aperture. Specimens obtained in the Coppename River by GEIJSKES are identical in appearance with that figured by BROT (1874). Although appearing almost smooth to the naked eye, the sculpture of *D. petechialis* will be seen under a very strong lens to consist of very fine lines. Near the columella there are a group of about 8 strong spiral cords.

Doryssa hobenackeri (Philippi)

Figs. 8a-c

1851 *Melania hobenackeri* Philippi, Zeitschr. Malakozool., vol. 8, p. 82.

1874 *Doryssa hobenackeri* Brot, Syst. Conch. Cab. (n. F.), vol. 1 pt. 24 (Melaniaceen), pl. 35 fig. 6.

1914' *Doryssa guyanensis* Vernhout, Notes Leiden Mus., vol. 36, p. 35, pl. 1 fig. 12.

1914 *Doryssa hobenackeri* Vernhout, Ibid., p. 35.

1940 *Pachychilus (Doryssa) decollata* Haltenorth & Jaekel (not of Lamarck, 1835), Arch. Molluskenk., vol. 72, p. 112.

British Guiana: not recorded.

Surinam: Kabalebo Creek, Surinam River, Jandé Creek, Apisiké (GEIJSKES).

Other localities: French Guiana, Mount Cottica (VERNHOUT).

Measurements (in millimeters)

Length	Greatest Width	Aperture		Whorls remaining	
		Length	Width		
22	9	6.5	5	6	(Kabalebo Creek)
26.5	11	8.5	5.5	5½	id.
25.5	9.5	7	5.5	7½	id.
21	9	6.5	4.5	4½	id.
36	11.5	10	5	8	(copied from BROT)

The shell of this small species appears almost smooth to the naked eye, but showing under a lens, a series of close transverse ribs crossed by fairly prominent growth lines. The suture is deep and marked by a pronounced carination at the base of each whorl. The colour varies from black to reddish brown, with faint purple blotches, which are in dark shells visible only on the inside of the pale blue aperture.

D. hobenackeri is far narrower in proportion to its length than the closely related subspecies *D. hobenackeri kappleri* Vernhout which, as pointed out by its author, is more noticeable conic in shape. The only other species of Melaniidae recorded from the Guianas with which *D. hobenackeri* might be confused is *Melania decollata* Lamarck, a somewhat similar species from Cuba, which is unknown from the South American mainland, records of its occurrence in Guiana being based upon specimens of *D. hobenackeri*.

VERNHOUT's type and paratype of his *D. guyanensis* are in the Leiden Museum, where I examined them in 1951. Both are very immature and cannot in my opinion be separated from *D. hobenackeri*. VERNHOUT in his original description of *guyanensis* stated that it was intermediate in shape between *hobenackeri* and the subspecies *kappleri*.

Dr. GEIJSKES informs me (in lit. 1953) that although *guyanensis* and *hobenackeri* are much alike the former lives in the lower courses of the bush-creeks, whereas the latter is found in the upper reaches only. On these grounds and after examination of a good series he would be inclined to consider them as separate species.

Doryssa hobenackeri kappleri (Vernhout)

Figs. 9a-c

1914 *Doryssa kappleri* Vernhout, Notes Leiden Mus., vol. 36, p. 34, pl. 1 fig. 11.

British Guiana: Paruima Mission of the Kamarang River (PAIN).

Surinam: Surinam and Lucie Rivers (VERNHOUT), Bigidjompo and Kabalebo Creeks (GEIJSKES).

Length	Greatest Width	Measurements (in millimeters)		Whorls remaining	
		Length	Aperture Width		
30	15	12	8	4	(British Guiana)
28	13	10.5	7	5½	id.
29	11	10.5	7	5½	id.
28	10	10	6	5¼	(Surinam)
26	11	9.5	6	5¼	id.

As pointed out by VERNHOUT in his original description this subspecies, which was founded upon an immature holotype (Leiden Museum), bears a strong resemblance to *D. hobenackeri* (Phil.). Nevertheless, adult examples taken on the Kamarang River in British Guiana by the author in 1938 along with immature specimens closely resembling VERNHOUT's holotype, show that when full-grown this subspecies is considerably more globose with rounder whorls, than in the case of *D. hobenackeri*. It would also appear to be more widely distributed, the nominate race being recorded only from Surinam.

In view of the fact that this species was founded upon immature specimens the following additional description is added from an adult example.

Shell solid, whorls remaining 4, rapidly increasing in size, the last convex below the periphery, suture impressed but not channelled. Aperture ovate, a little expanded and effused at the junction of the columellar and basal margins. Columella concave. Parietal callus thin, variegated in colour from bluish-white to orange. Interior of aperture pale blue within, often with prominent brown blotches. External sculpture consisting of fine minutely rippled spiral striae, visible only under a strong lens.

Most specimens are heavily coated with iron-oxide, which must be carefully removed in order to see the microscopic sculpture. Around the columella a group of 4 small cords are visible on cleaned specimens.

Doryssa geijskesi nov. spec.

Figs. 10a-d

Shell of medium size, elongate, turritiform, imperforate, solid. Colour dark purplish-black. Spire decollate, number of whorls remaining 3½, almost flat, covered with extremely fine and close minutely rippling or granulose spiral striolae. Body whorl somewhat inflected and angulated at the periphery, sloping rapidly below.

Suture crenulated, a little impressed above. Aperture acuminate ovate, narrowly rounded at the base, bluish white within. Peristome simple, columella curved and slightly twisted, brownish white.

Parietal callus thick opaque. Operculum and animal unknown.

Measurements (in millimeters)

Length	Greatest		Aperture		Whorls remaining
	Width	Length	Width	Length	
28	18	15	8.5		3½ (holotype)
27	18	16	9		2½ (paratype)
25	16	13	7.5		3½ id.

Habitat: Surinam; Coppename River; Makambo Island (GEIJSKES, 1943).

Holotype in the Leiden Museum. Paratypes in possession of Dr. D. C. GEIJSKES and the author.

The comparatively smooth surface of this new species and its elongate turriform shape, resemble *D. hohensackeri kappleri* Vernhout, from which *D. geijskesi* may be distinguished by its ponderous shell and more inflated angular body-whorl. It has not so far been taken outside the type locality.

HEMISINUS Swainson, 1840

Hemisinus lineolatus (Gray)

Figs. 11a, b

1828 *Strombus lineolatus* Gray in Wood, Ind. Test., Suppl., fig. 11.

1834 *Melania lineolatus* Gray in Griffith's ed. Cuvier, Animal Kingd., pl. 13 fig. 4.

1860 *Hemisinus punctatus* Reeve, Conch. Icon., vol. 12, *Hemisinus*, fig. 1.

1860 *Hemisinus buccinoides* Reeve, Ibid., fig. 3.

1860 *Hemisinus lineolatus* Reeve, Ibid., fig. 4.

1874 *Hemisinus lineolatus* Brot, Syst. Conch. Cab. (n. F.), vol. 1 pt. 24 (Melaniaceen), p. 373, pl. 38 figs. 6a-c.

British Guiana: N. W. District; Pomeroon River (PAIN).

Surinam; recorded by VON MARTENS.

Other localities: Jamaica (PHILIPPI), Venezuela (BROT), Pernambuco (REEVE), French Guiana (DROUET).

H. lineolatus, which seems to have a far wider distribution than the other Guiana Melaniidae, has been known since 1828 when it was described by GRAY. A long and very thorough description has been furnished by BROT (1874). This species was further figured by REEVE (1860) under various names.

Specimens from British Guiana are considerably smaller than those recorded by BROT (1874), the largest being only 28 mm. long. They are dark olive-green in colour, bluish white within the aperture. *H. lineolatus* has not been found amongst the extensive material

collected in Surinam by Dr. GEIJSKES, and its occurrence there must be considered extremely doubtful. It has been recorded from the Black River in Jamaica, but does not appear to occur elsewhere in the West Indies. The Guiana occurrence may be due to introduction by man, from Jamaica.

The following species have been erroneously attributed to the Guianas: *Melania decollata* Lam.

Hemisinus strigillatus (Dunker)

Hemisinus brasiliensis (Moricand)

Pachychilus laevissimus (Sowerby)

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DISTRIBUTION TABLE

Species	British Guiana	Surinam	French Guiana 1)	Brazil	Venezuela	Other localities
<i>Doryssa devians</i> Brot	BrG	Sur	—	—	—	—
" <i>lamarckiana</i> Brot	BrG	Sur?	FrG?	—	Ven	—
" <i>atra</i> (Brug.)	BrG?	Sur	FrG	Braz	Ven	—
" <i>transversa</i> (Lea)	BrG?	Sur	FrG?	Braz	—	—
" <i>brevior</i> (Troschel)	BrG	—	—	Braz	—	—
" <i>consolidata</i> (Brug.)	BrG	Sur?	—	Braz	Ven	—
" <i>petebialis</i> (Brot)	—	Sur	—	—	—	—
" <i>hobenackeri</i> (Phil.)	BrG?	Sur	FrG	—	—	—
" <i>hobenackeri kappleri</i> Vernhout	BrG	Sur	—	—	—	—
" <i>geijskesi</i> nov. sp.	—	Sur	—	—	—	—
<i>Hemisinus lineolatus</i> (Gray)	BrG	Sur?	FrG	Braz	Ven	Jamaica

1) Records for French Guiana are very incomplete and often unreliable.