Nassarius smitsorum, a new species from the western Pacific (Gastropoda, Prosobranchia: Nassariidae)

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An examination of the family Nassariidae in the Zoölogisch Museum, Amsterdam, in 1988 revealed an undescribed *Nassarius* species from the 'Moluccas', Indonesia. Additional material was studied from northern West Irian (New Guinea). The new taxon is named *Nassarius smitsorum* n.sp.

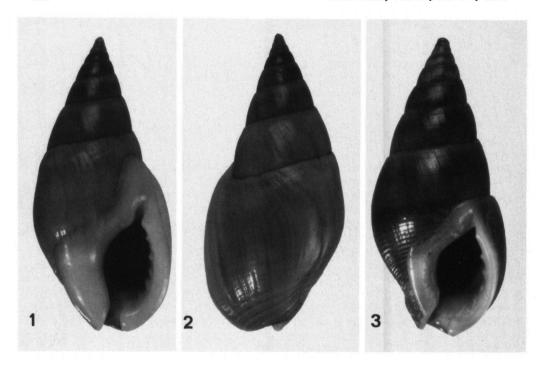
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Amongst unidentified nassariid samples in the collection of the Zoölogisch Museum Amsterdam (ZMA) I found a shell from the G.J.L. van der Hucht collection, donated in 1853 (and at that time identified as "Strombus glabratus Sowerby") with the locality 'Moluccas' (Indonesia). At first sight this shell could not be identified to species level. There was in my opinion only one species with some similarity, Nassarius fraudator Cernohorsky, 1980, a species from Northwest Australia and Papua/New Guinea.

In June 1988, I studied some nassariid specimens, identified as Nassarius gaudiosus (Hinds, 1844) and N. foveolatus (Dunker, 1847) in the collection of Mr. D. Smits (Woudenberg, the Netherlands). Both samples appeared to be the same species as the one from the Moluccas, only the colour pattern was different. The Moluccan shell is bright orange brown with a clear white callus, the other specimens vary from beigegrey to yellowish, fawn and dark brown, all with a cream to yellow callus. They were all from Doré Bay, West Irian (formerly Dutch New Guinea), and were collected by Mrs. J.H. & Mr. D. Smits, who lived in that region from 1958 until 1962. Additional material was obtained from the collector, all specimens without animals or operculum. All appear to represent an as yet undescribed species; literature consulted was Cernohorsky (1972, 1975, 1984) and Kaicher (1982, 1983).

Nassarius smitsorum n.sp., figs. 1-2

Description of holotype.—Shell, length 16.3 mm., width 7.6 mm, shiny, solid, slender, elongate-ovate. Protoconch of two brownish glassy whorls, teleoconch up to seven smooth and slightly convex whorls. Only the body-whorl, of which the height is about 2/3 of the shell height, has spiral grooves. Towards the outer lip there are nine hardly visible, spiral grooves adaptical and seven grooves on the base (the upper three hardly visible and all situated near the thickened outer lip). Siphonal fasciole with six to seven spiral cords. Irregular axial colour streaks are visible under magnification. Aperture ovate, siphonal notch and anal canal well defined. Outer lip with a strong varix, inner side with seven denticles (lirae). Columellar callus relatively thick and



Figs. 1-3. Nassarius smitsorum n.sp. West Irian, Doré Bay. 1-2. Holotype, length 16.3 mm (ZMA Moll 3.90.005). 3. Paratype (ZMA Moll. 3.90.006/1), length 12.2 mm.

large, folded over the fasciole, well margined, smooth, widely spread over the anal canal area. Parietal tooth weak.

Protoconch brownish, the first three postnuclear whorls uniform bluish-grey. Towards the body whorl the shell becomes beige-grey, with a narrow yellowish band just below the suture. Columellar callus and outer lip yellowish cream.

Variability.—The variation in size and colour within this species is rather great. The size of adult specimens varies between 8 and 21 mm. Some specimens have about 12 spiral grooves on the base (fig. 3) and the more bulbous specimens sometimes have the first two to three postnuclear whorls axially ribbed. Some paratypes have a less widely developed columellar callus. The colour ranges from dark brown to cream and some individuals have one to three pale or dark brown spiral bands on the body whorl.

Type locality.—New Guinea, northern West Irian, Doré Bay, mouth of the Uriami river, Manokwari, 1960, leg. J.H. & D. Smits.

Material studied.—Holotype (ZMA, Moll. 3.90.005) and 14 paratypes (ZMA Moll. 3.90.006), 146 paratypes coll. D. Smits (Woudenberg), 40 paratypes coll.H.H. Kool (Dieren) and 7 paratypes in the National Museum of Natural History (RMNH, Leiden, The Netherlands). Two paratypes will be distributed to the United States National Museum (USNM, Washington DC), the Museum of Comparative Zoology (MCZ, Cambridge, Mass., U.S.A.), the American Museum of Natural History

(AMNH, New York), and the Los Angeles County Museum of Natural History (LACM, Los Angeles). All paratypes are from the type locality.

One specimen from Indonesia, Moluccas (ex coll. G.J.L. van der Hucht, ZMA). Etymology.—Named in honour of Mrs. J.H. Smits-den Os and Mr. D. Smits, who collected the material and kindly put it at my disposal for study.

Distribution.—Only known from West Irian.

Discussion.—The shell from the 'Moluccas' is from an old 19th century collection and for that reason this locality needs confirmation. In May 1989 specimens of Nassarius fraudator Cernohorsky, 1980, were studied in the United States National Museum (USNM no. 220563). After comparison it became evident that these are different from the new nassariid. The latter differs in being more elongate and the absence of axial ribs on the body whorl. Furthermore, no representatives of the new species could be found in the collections of the Museum of Comparative Zoology, Harvard University, Cambridge, Mass., the American Museum of Natural History in New York or in the Los Angeles County Museum.

Two specimens of the new species were sent to Mr. W.O. Cernohorsky (Terranora, N.S.W., Australia) for a critical examination. His conclusion (in litt., XI. 1989) was that the shells represent "just a slender form of the numerous forms of Nassarius (Telasco) reeveanus (Dunker)." However, N. reevanus (Dunker, 1847) has crenulation just below its suture, the first two to four postnuclear whorls have axial ribs and spiral striae, and it has a more pronounced parietal tooth; the inside of the outer lip bears 10-12 lirae and there are a few denticles on the lower part of the columella. Moreover, typical N. reeveanus lives sympatrically with the new species in Doré Bay, without intergrades.

I thank Robert G. Moolenbeek for his general support in studying the collection of the ZMA and this species in particular. Mr. D. Smits gave information about the material collected in West Irian. Drs. R.S. Houbrick (USNM) and H.E. Coomans (ZMA) read an earlier draft of this manuscript and made valuable comments. Last but not least, I want to express my gratitude to Dr. S.P. Kool (MCZ), who initiated and stimulated my studies on shells in general and on nassariids in particular.

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SAMENVATTING

In het Zoölogisch Museum te Amsterdam werd een nog niet beschreven soort van het geslacht Nassarius van de 'Molukken' gevonden. In de verzameling van de heer D. Smits (Woudenberg) bleek deze soort eveneens aanwezig te zijn. Dit materiaal was verzameld in het voormalige Nederlands Nieuw-Guinea, thans West Irian genaamd, en aan de hand van deze schelpen is de soort beschreven als Nassarius smitsorum. De nieuwe soort is genoemd naar de heer en mevrouw Smits-den Os.