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## A NEW *TAHEITIA* SPECIES (MOLLUSCA: GASTROPODA PROSOBRANCHIA: TRUNCATELLIDAE) FROM IRIAN JAYA

by

**E. GITTENBERGER**

Gittenberger, E.: A new *Taheitia* species (Mollusca: Gastropoda Prosobranchia: Truncatellidae) from Irian Jaya.

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Key words: Mollusca; Truncatellidae; *Taheitia*; new species.

Shells and an operculum of *Taheitia heinrichi* spec. nov. are described from the Vogelkop area in western Irian Jaya. This new species, dedicated to the late Heinrich C. Kavelaars, is somewhat similar to *T. orrae*, known from the island of Biak.

E. Gittenberger, Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands.

### INTRODUCTION

While crossing every day, during periods of several weeks, the jungle of the Vogelkop area in Irian Jaya, on his way to the boring holes of an oil company, the late Heinrich Carl Kavelaars collected beautiful shells of terrestrial snails that caught his eye. Doing so, an interesting collection was brought together, which was donated to the Rijksmuseum van Natuurlijke Historie at Leiden. Among this material there are a few samples (shells and a single operculum) of a *Taheitia* species (Prosobranchia: Truncatellidae) that could not be traced in the literature. The species is neither mentioned by Turner (1959), in her review of the *Taheitia* species of the former New Guinea and its closely associated islands, nor by Clench & Turner (1948) in their monograph concerning the Truncatellidae. Therefore, it is described as new in the present paper and named in honour of its collector. Doing so, the number of *Taheitia* species known from Irian Jaya and nearby islands is raised to four. The genus itself is widely distributed on Pacific islands.

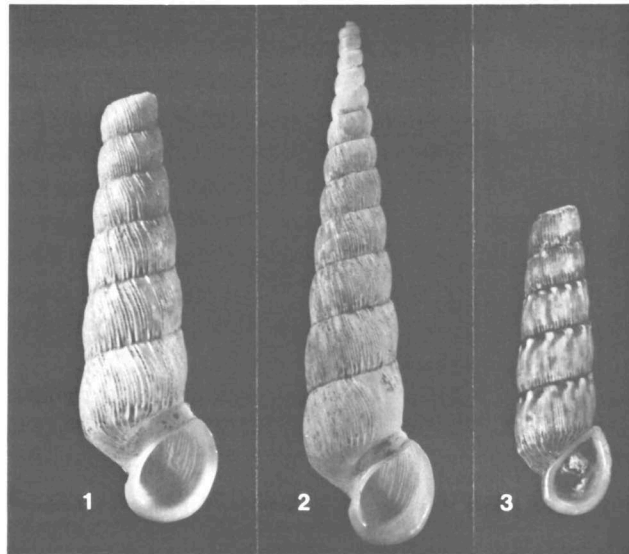
The following abbreviations are used for collections: ANSP, Academy of Natural Sciences, Philadelphia, U.S.A.; RMNH, Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands.

Mr. A. Bogan (Academy of Natural Sciences, Philadelphia), who provided photographs of *T. orrae* is thankfully acknowledged here.

***Taheitia heinrichi* spec. nov.**

(figs. 1, 2, 4)

**Material.** — All the specimens are from Indonesia, Irian Jaya. Holotype: island Warir off the east coast of the island Salawati, 7 km SE of Samate, 131°07'E 1°01'S (RMNH 56156). Paratypes: Type locality (ANSP 365362/3; RMNH 56157/30); Cendrawasih peninsula, 5.5 km ENE of Klamono at the drilling site Klamoeokoek, 131°33'E 1°06.5'S (RMNH 56158/23 & 1 operculum); Cendrawasih peninsula, 6 km ENE of Klamono at the drilling site Klawilis, 131°34'E 1°07'S (RMNH 56159/5); Cendrawasih peninsula, 16 km NNW of Klamono at the drilling site Klamesin, 131°26'E 0°59'S (RMNH 56160/3); island Salawati (RMNH 56161/47).



Figs. 1, 2. *Taheitia heinrichi* spec. nov. 1, holotype (RMNH 56156), Irian Jaya, island of Warir off the eastcoast of the island of Salawati, 7 km SE of Samate; H.C. Kavelaars leg.; actual height 19.1 mm. 2, paratype with the initial whorls not decollated (RMNH 56157), type locality; actual height 23.0 mm. Fig. 3. *T. orrae* Turner, holotype (ANSP 223656), Irian Jaya, island of Biak, under fern roots in a large sink-hole cave behind the air strip; A.W.B. Powell leg.; actual height 12.8 mm.

**Diagnosis.** — *T. heinrichi* is characterized conchologically by a uniform greyish colour, a relatively large size, a very broad parietal gap and narrowly spaced, more or less regular, fine transverse riblets.

**Description.** — The shell is uniformly greyish to whitish and very slender conical. Decollate specimens with a reflected, fully developed, apertural lip have about six to seven whorls. Two aberrant paratypes, which are full-grown but not decollate (fig. 2), have 12 and 13½ whorls, respectively. They show

most clearly, in single specimens, the (gradual) change in shape and sculpture of the whorls. The initial 2½ to 3 whorls are strongly inflated and glossy; the adjoining, sculptured ones gradually change in outline and the penultimate whorl is straightened to very weakly concave just below and just above the suture and moderately convex in between. The body-whorl has a weak but clearly discernible basal ridge, becoming obsolete near the aperture. In juvenile specimens this ridge is much more prominent. There is no umbilicus. The aperture is obliquely ovoid and provided with a broadly reflected, but not flattened, apertural lip. The last part of the body-whorl protrudes for about 2 mm and, consequently, there is a wide parietal gap. Bordering this gap, the roof of the free last part of the body-whorl, running from the penultimate whorl to the apertural lip, has an acute parieto-palatal angle, which is accentuated by a parietal impression.

The shell is narrowly sculptured with slightly curved, not very regular, fine and sharp costae. Many costae are slightly enlarged just below the suture and near the basal ridge; such costae often occur in couples or, more rarely, larger groups. The other costae do not always run from suture to suture. On the body-whorl the same sculpture is developed both above and below the basal ridge; only in juvenile specimens the radial sculpture is obsolete below the ridge. On the body-whorl, in full-grown specimens, there are at least c. 75 costae.

Decollate adult specimens are 14.8-21.3 mm high and 4.8-7.4 mm broad. The two full-grown but not decollate shells are 23.0 and 24.6 mm high.

Among the shells a single operculum (fig. 4) was found, which apparently had been inside one of the specimens. Its dimensions suggest that it belonged to a (nearly) adult animal, its greatest diameter being 3.6 mm. The paucispiral, chitinous base bears a calcareous plate with a conspicuous, erect ridge at one side, a very prominent apophysis with two cusps at the opposite side and, in between, a zone with irregular lamellar elevations, becoming increasingly larger away from the apophysis.

Differentiation. — *T. heinrichi* can be distinguished easily from the congeneric species known from Irian Jaya and nearby islands, not only by its larger dimensions, but also by other characters mentioned in the diagnosis.

*T. orrae* Turner, 1959 (fig. 3) from the island of Biak is considered most similar conchologically, although it can be distinguished at first sight; the shells are smaller (height not over 12.8 mm), not uniformly coloured, a parietal gap is lacking and the apertural lip is also broadly reflected but flattened. Despite the differences in size of adult specimens, the initial whorls of juvenile specimens are about equally broad in both *T. orrae* and *T. heinrichi*. The operculum of *T. orrae* (see Turner, 1959: pl. 32 figs. 2-5) is strikingly dif-

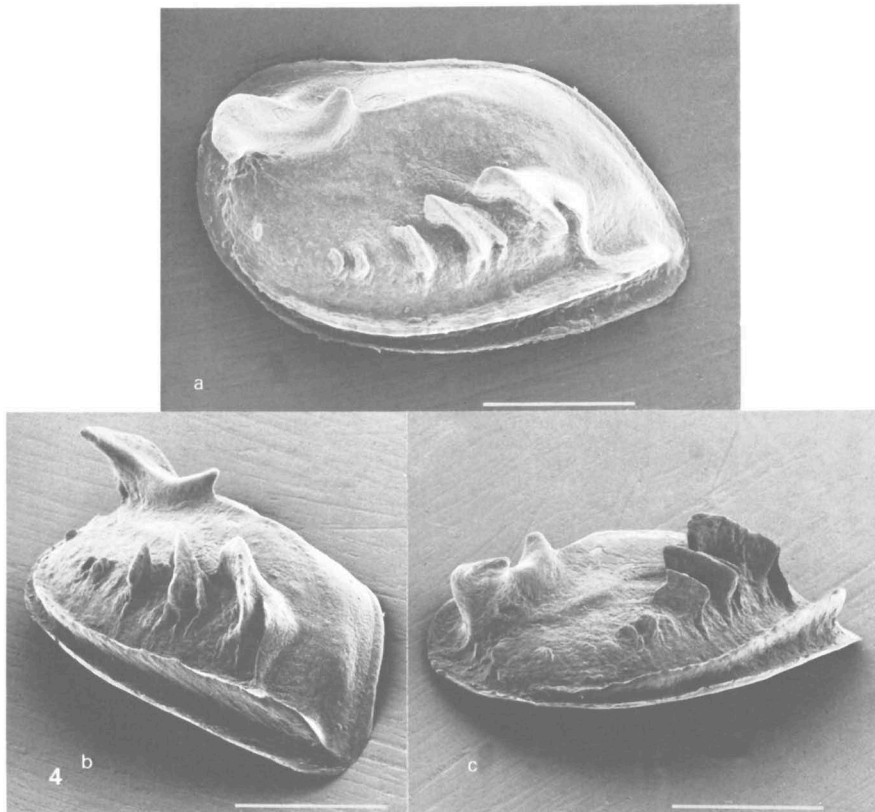


Fig. 4. *Taheitia heinrichi* spec. nov., operculum, Irian Jaya, Cendrawasih peninsula, 5.5 km ENE of Klamono at the drilling site Klamoeokoek; H.C. Kavelaars leg.; scale bar 1 mm. Photographs by J.H.W. Krom.

ferent from that of *T. heinrichi*; its thick calcareous part is dominated by a very high denticle with two small cusps at the end. (Turner [1959: 181] emphasized already that in *Taheitia* the opercula “are strikingly different to judge from the relatively few species for which they are known.”).

*T. ultima* (Rensch, 1937) from the Bismarck Archipelago is about as large as *T. heinrichi* but differs by the sculpture of the body-whorl. In the former species there are many fine costae only on the upper part of the body-whorl and three times fewer, much coarser ones on its base.

#### REFERENCES

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