

A first record of *Truncatellina* (Pulmonata: Vertiginidae) from SE. Asia: *Truncatellina* cf. *insulivaga* (Pilsbry & Hirase) on Java, Indonesia

A.J. DE WINTER & J.J. VERMEULEN

Nationaal Natuurhistorisch Museum, P.O. Box 9517, 2300 RA Leiden, The Netherlands

A *Truncatellina* species (Vertiginidae) was found in the Gunung Gedeh-Pangrango National Park, West Java, Indonesia. It is provisionally identified as *T. insulivaga* Pilsbry & Hirase, 1904, and it represents the first record of the genus in the SE. Asian region.

Key words: Gastropoda, Pulmonata, Vertiginidae, *Truncatellina*, biogeography, Java, Indonesia.

The genus *Truncatellina* Lowe, 1852, is distributed over much of the western part of the Palaearctic and over the Afrotropical region, but was so far unknown from tropical SE. Asia (Pilsbry, 1921; Adam, 1954).

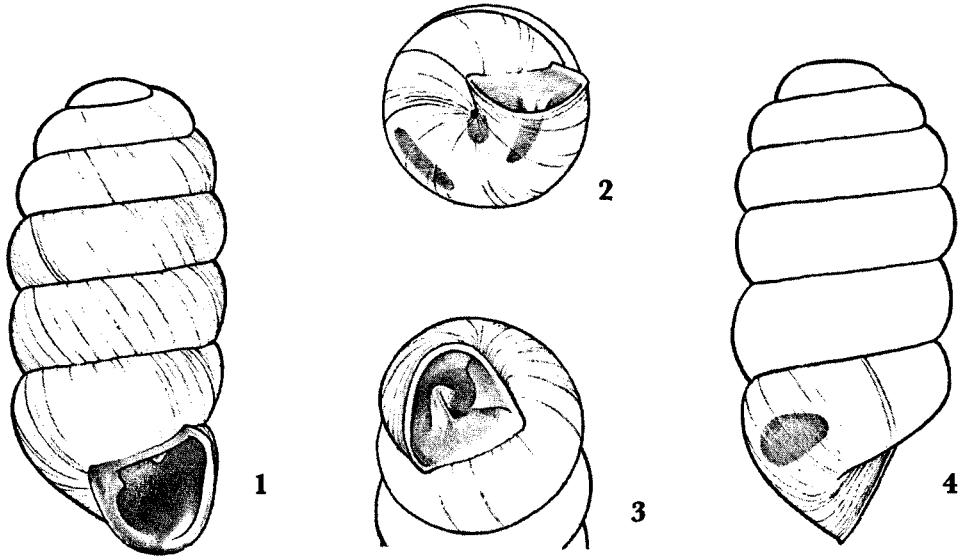
In November 1996 the first author accidentally spotted a single tiny snail in the Gunung Gedeh-Pangrango National Park, West Java, Indonesia. Later examination revealed its identity as a *Truncatellina* species. In the absence of more material (the species was not present in a litter sample from a nearby site) we provisionally have identified it with a species from the Ryukyu Islands, Japan.

Truncatellina cf. *insulivaga* (Pilsbry & Hirase, 1904) (Figs. 1-4)

Material.- West Java, Gunung Gedeh-Pangrango National Park, in more or less undisturbed montane forest, under a piece of loose bark on the forest floor, about halfway along the path between park entrance and the Cibeureum Waterfalls, approx. 200 m W. of 'Blue' Lake, 1500 m, approx. 6° 45' S 106° 59' E, Colln. National Museum of Natural History, Leiden (RMNH). The specimen was originally preserved in ethanol, with part of the soft parts protruding from the aperture. In order to study the apertural barriers, the specimen was dried and the soft parts pushed back into the shell.

Description.- Shell minute, rimate, cylindrical, thin, partly translucent. Height 1.7 mm, width 0.8 mm, whorls 6. Surface somewhat silky, locally shining, with irregularly spaced growth lines and some weak axial ribs immediately behind the peristome. Colour yellowish brown. Whorls rather convex. Edge of aperture somewhat thickened. Aperture with three barriers, two of which (partly) visible in frontal view: a short parietalis, somewhat bifid in front, and an oblong columellaris. The deeply set palatalis is visible externally through the transparent shell as a conspicuous, large and pale, elliptical mark.

Remarks.- The shell from Java belongs to the group of *T. claustralis* (Gredler, 1856), which is characterized by a deeply set palatalis. Most taxa of this group occur in Europe and are usually treated as varieties or subspecies of *T. claustralis* (see Pilsbry, 1921). However, members also occur in Africa, like *T. schilleri* Jickeli, 1874, from Ethiopia and *T. perplexa* (Burnup, 1908) from South Africa. The geographically isolated *T. insulivaga* from the Ryukyu Islands (Okinawa, Japan), the only outpost of a *Truncatellina* species in eastern Asia, also belongs here. The taxa of this group differ mainly by the presence



Figs. 1-4. *Truncatellina* cf. *insulivaga* (Pilsbry & Hirase). Gunung Gedeh-Pangrango National Park, Java (RMNH). J.J. Vermeulen del. Actual shell height 1.7 mm.

or absence of a parietalis, in shell sculpture (ranging from regularly ribbed to entirely smooth), and in shell dimensions.

Conchologically, the Javanese specimen resembles both *T. claustralis* and *T. insulivaga*. For comparison, various samples of *T. claustralis* were studied. No material of *T. insulivaga* was available; we relied on the description by Pilsbry (1921). The Javanese shell has a parietalis as in *T. claustralis*, but it was not bifid in any *T. claustralis* studied. The sculpture of the Javanese shell resembles that of the smooth *T. insulivaga*. *Truncatellina claustralis* is usually finely but distinctly and regularly ribbed, but more or less smooth populations occur (*T. c. saturnensis* Reinhardt, 1879). *Truncatellina claustralis*, *T. insulivaga* and the Javanese shell all have a palatalis in similar position, but in the Javanese shell it is almost twice as wide as in the specimens of *T. claustralis* studied.

The largely southern European *T. claustralis* inhabits dry, sun-exposed, calcareous rocky sites (Kerney & Cameron, 1979; Pokryszko, 1990). This differs considerably from the continuously moist montane forest on volcanic soil where the Javanese specimen was found. The habitat of *T. insulivaga* has not been described. The Javanese shell is provisionally attributed to *T. insulivaga* because this species is geographically closest.

In view of the undisturbed habitat, *T. cf. insulivaga* might well be indigenous on Java. *Truncatellina* species are minute and therefore easily overlooked, and their occurrence might thus be expected locally elsewhere in SE. Asia. In view of the substantial number of litter samples searched in recent times from various parts of the Malesian region, the species is unlikely to be common in the area. A recent report by Kirchner et al. (1997) indicates that wind dispersal of *Truncatellina* species is at least theoretically possible.

Apart from reporting this biogeographically interesting record, the purpose of this note is also to stimulate further study of the terrestrial molluscs on Java. The author-

itative publications by Van Benthem Jutting (1948-1956) and Loosjes (1953) give the impression that the island is malacologically well known. However, the present record and other recent additions to the fauna (De Winter, 1983; Vermeulen, 1996, and unpublished; Vermeulen & Whitten, 1998) suggest otherwise.

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