

**Notes on the non-marine molluscs of the island of Borneo 7.  
The genus *Niahia* gen. nov.  
(Gastropoda Prosobranchia: Diplommatinidae)**

J.J. VERMEULEN

Rijksherbarium, P.O. Box 9514, 2300 RA Leiden, The Netherlands

The new, monotypic genus *Niahia* is described for *N. obovon* spec. nov. Next to having a unique character within the SE. Asiatic Diplommatinidae, it displays such a combination of characters that inclusion in any existing genus is not possible.

Key words: Gastropoda, Prosobranchia, Diplommatinidae, *Niahia*, taxonomy, Malaysia, Indonesia, Borneo.

Batu Niah, also known as Gunung Subis, is an impressive, isolated hill in the lowlands of the 4th Division of Sarawak, Borneo. It is situated about 70 kms SSW. of the town of Miri; its coordinates are 113°47'00"E, and 03°47'30"N. The hill consists of a limestone outcrop of about triangular outline, and with a map surface of some 12 km<sup>2</sup>. Its highest point rises some 430 m above sea-level; its sides consist of steep or almost perpendicular rock faces, interrupted by ravines cutting deep into the limestone. The hill is covered with dense primary forest. It is surrounded by land on a bedrock of sandstone and shales; the closest limestone outcrops are a hill near Bekenu, about 35 kms NNE. of Niah, and some hills near Beluru, about 35 kms ENE. of Niah. Other limestone outcrops can be found further to the NE., along the Baram River. Although all surrounding forest has been logged or otherwise destroyed, most of Batu Niah itself has the status of National Park and is relatively well protected.

The terrestrial mollusc fauna of Batu Niah is extraordinary. It may well comprise some 100 species and is remarkably different from that of any surrounding limestone hill. Particularly among the smaller, strictly calcicole, species the rate of endemism is very high. The Diplommatinidae, for instance, are represented with 17 taxa (Vermeulen, 1991, 1993, 1994, in prep.), no less than 11 of which are endemic to this hill. The inner recesses of this deeply eroded karst surface have never been explored; more novelties are to be expected there.

A minute diplommatinid species found on Batu Niah, represented in our collections by a single shell only, does not fit well in any genus so far described. It has a unique character within the SE. Asiatic Diplommatinidae: its inner peristome abruptly widens at the level where the outer peristome is inserted in the shell wall. Inside, this widening is visible as a lip on the palatal and basal sides of the peristome. This lip is not homologous with the lip on the reflected part of the inner peristome as found in many species of *Diplommatina* Benson, 1849, as well as a few species of *Opisthostoma* W.T. & H. Blanford, 1860, and *Arinia* H. & A. Adams, 1865. Its position is also different: it is situated deeper inside the aperture. This character could be regarded as an autapomorphy on the species level if the species would otherwise fit in any existing genus. This is, however, not the case. It lacks the inverted tuba which characterizes *Opisthostoma*; and its distinctly tilted aperture pleads against inclusion in *Arinia*, in which it

would rather well fit otherwise. The lack of teeth in the constriction as well as the cylindrical shell preclude inclusion in *Diplommatina*, and the genus *Palaina* Semper, 1865, has a distinctly longer tuba. Therefore, the species has been accommodated in a separate, new genus, for which the name *Niahia* is proposed. Nothing can be said about the phylogenetic value of the genus; it seems, however, to be most similar to genera such as *Arinia*, or *Palaina*.

For the time being, the description of the type species may serve as a description of the genus as well. The next instalment of this series on the non-marine molluscs of Borneo (Vermeulen, in prep.) will complete the revision of the Bornean diplommatinids; it will include diagnostic descriptions of the genera occurring on the island.

The single shell available of the species described below is part of the collection of the author (abbreviated as V, followed by a collection number; the number after the slash refers to the number of specimens seen). It will be deposited in the Nationaal Natuurhistorisch Museum, Leiden (RMNH).

The drawings were made by the author, with a Wild M8 stereo microscope with a camera lucida device.

***Niahia oberon* spec. nov.**  
fig. 1

Material seen. — SARAWAK. 4th Div.: G. Subis (Batu Niah) (V 1506/1, HOLOTYPE RMNH 57206).

Shell white, dextral, shortly cylindrical, last two whorls widest. Whorls 4 1/2, moderately convex. Constriction without teeth. Tuba 1/4 whorl. Radial ribs single-crested, on the top whorls and on the penultimate whorl 36 ribs/0.5 mm, on the last whorl 12 ribs/0.5 mm, ribs absent above the aperture, but present again on most of the tuba. Spiral striation absent. Umbilicus seemingly closed but rimate in oblique view. Aper-

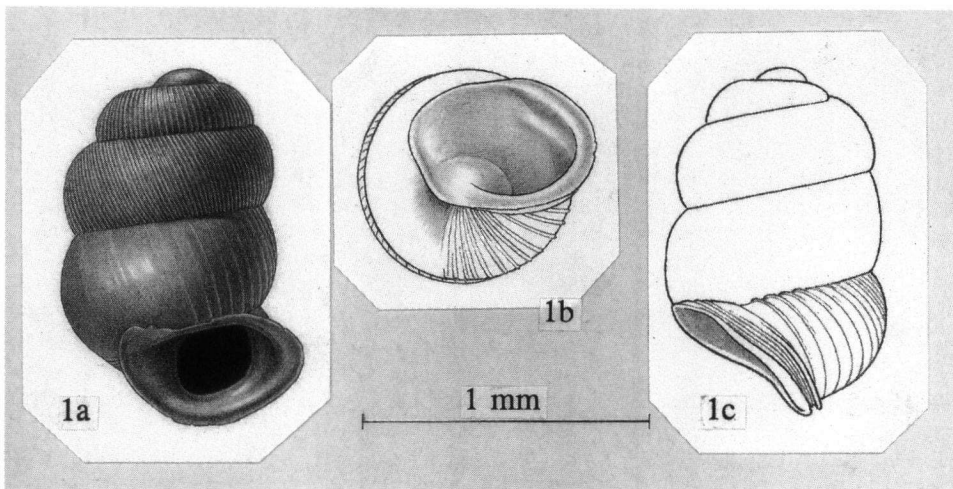


Fig. 1. a, *Niahia oberon* spec. nov., holotype specimen, Sarawak: G. Subis (RMNH), front view; b, do., umbilical view; c, do., right lateral view.

ture tilted about 45° with regard to the coiling axis, about ovate. Peristome: palatal side slightly protruding beyond the penultimate whorl, columellar side not sinuous; outer peristome a very narrow rim not spreading beyond the inner, mainly present on the basal and the columellar sides, inner peristome protruding from the outer, abruptly widened at the level where the outer is attached to the shell wall, and spreading at the margin but without a lip on the palatal and basal side, its outer surface with few fine lamellae. Height 1.25 mm; width 0.70 mm; index 1.7-1.8. Height aperture 0.2 mm; width 0.3 mm.

Ecology. — Calcicole.

Distribution. — Borneo: Sarawak, 4th Div., G. Subis only.

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