

Oospira (O.) pyknosoma spec. nov. (Gastropoda, Pulmonata, Clausiliidae),
an impressive clausiliid species from Vietnam

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A very large and conspicuous clausiliid species was recently discovered in Vietnam. It belongs to the Phaedusinae, Megalophaedusini and is described as *Oospira (Oospira) pyknosoma* spec. nov.

Key words: Gastropoda, Pulmonata, Clausiliidae, Phaedusinae, *Oospira*, taxonomy, Vietnam.

INTRODUCTION

Some years ago, the second author of this paper discovered shells of a large and conspicuous clausiliid species in Vietnam, which could not be identified. Later on, Mr. W.J.M. Maassen found additional material, but still no live specimens. Since it seems unlikely that specimens for anatomical research will become available in the near future, the species is described here on the basis of shell characters.

The systematics of the Vietnamese clausiliids is still largely based on conchological characters only. Consequently, the generic classification of the various species may be problematic. Here we follow the rather conservative nomenclature proposed by Nordsieck (1997: 13). Species with a series of unmodified palatal lamellae, without a lunella, are classified in *Oospira* Blanford, 1872. If the inner part of the subcolumellaris is not reduced, they are considered to belong to *Oospira* s.str.

For collections, the following abbreviations are used: MNHN, Muséum National d'Histoire Naturelle, Paris; RMNH, National Museum of Natural History (formerly Rijksmuseum van Natuurlijke Historie), Leiden; V, private collection of J.J. Vermeulen, Singapore.

SYSTEMATIC PART

Clausiliidae Gray, 1855
Phaedusinae A. Wagner, 1922
Megalophaedusini Zilch, 1954
Oospira Blanford, 1872

Oospira (Oospira) pyknosoma spec. nov. (figs 1-10)

Material (paratypes, unless stated otherwise). – Vietnam, province of Haiphong, Cat Ba Island: on limestone soil in high and damp primary forest around lake Ao Ek, 20°48'05"N 107°01'33"E, J.J. Vermeulen & A.J. Whitten leg., 26.ix.1998 (RMNH 85874/holotype, 85875/two shell fragments [figs 3, 8]; V 6347/7 shells, 2 shell fragments [figs 4, 7]); national park, near entrance of the 'Medical Hospital Cave', 20°46.15' N 107°01.25' E, W.J.M. Maassen leg., 7.iv.2001 (RMNH 85876/incomplete shell: last and penultimate whorl); 1 km S. of village X. Gia Luan, limestone cliffs behind graveyard, outside the national park, 20°50.08' N 106°58.56' E, W.J.M. Maassen leg., 8.iv.2001 (RMNH 85877/6 shells). We also studied a worn specimen from Vietnam with less accurate locality data (MNHN), which is not considered a paratype.

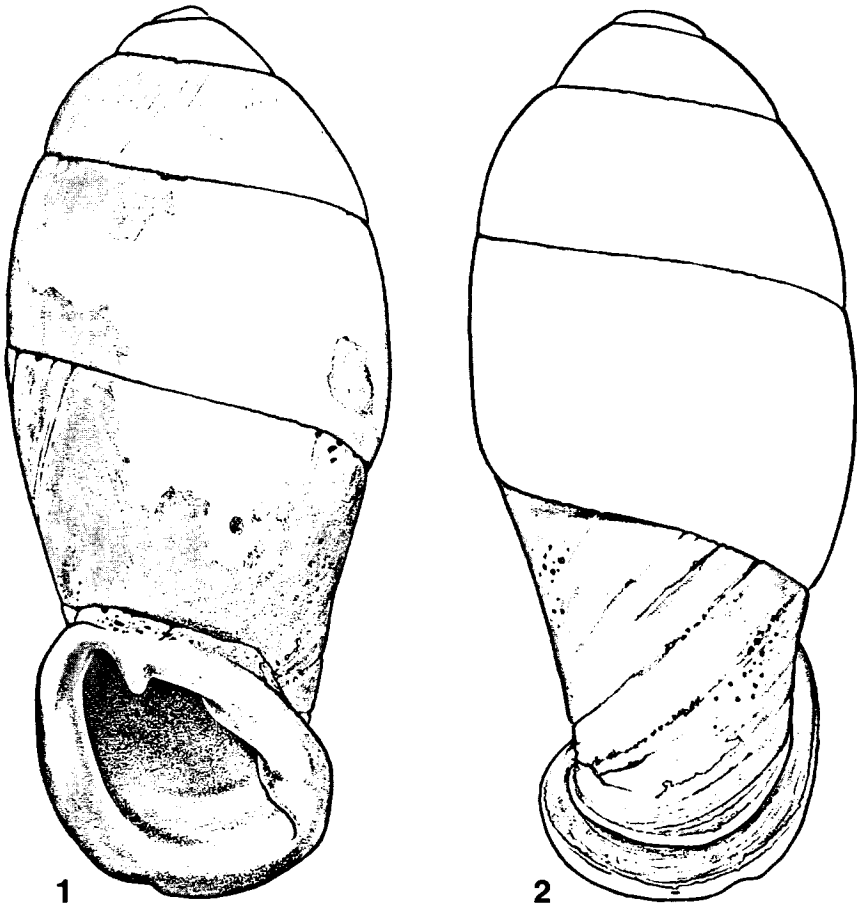
Description. – Shell (figs 1-2, 9-10) large, dark brown when fresh, with an inflated, spindle-shaped spire and a very oblique aperture. In frontal view, the left side of the body whorl follows the curvature of the spire, whereas the right side of the penultimate whorl is slightly concave to nearly straight in outline. Nearly all specimens, including the holotype, are decollate, with about five whorls present and the apical part not deviating from the outline of the spire of the shell. In only a single, much worn shell (figs 9-10), the protoconch is still present, forming a distinct, narrow, rounded-conical addition to the shell spire. Aperture somewhat protruding; its lip very heavily thickened by a greyish-white callus. The parietal-columellar side of the aperture forms a weakly curved entity opposite the strongly curved palatal-basal side. Outer lip broadly reflected, accompanied by a narrow rib at the outside, shortly behind the apertural border. No umbilicus. Whorls with numerous very fine riblets, separated by equally broad interstices (sculpture largely eroded away in all specimens, however). Suture not indented, not interrupting the curvature of the whorls, and inconspicuous, therefore, particularly in worn shells. Body whorl dorso-ventrally compressed.

Three lamellae clearly reach the heavy callus of the apertural lip, i.e. parietalis, columellaris and subcolumellaris (figs 1, 9). The parietalis is connected to the spiralis, which runs inside to about ventrally, accompanied by the principalis over most of its length; the columellaris is considerably lower inside but runs equally far or slightly further, whereas the subcolumellaris can be followed up to c. 1/4 whorl further inside (figs 7-8).

Palatal centre slightly thickened, situated right ventro-laterally, with five palatal lamellae below the principalis. The uppermost of these five, relatively short, palatal lamellae is about straight or slightly curved and somewhat longer than the following two, which are increasingly more clearly curved or angled where the clausilial blade in situ touches them. The fourth one is most prominent; it is clearly angled, higher, in particular its anterior part, and somewhat longer than the uppermost short palatal lamella. The curved or angled fifth short palatalis, situated slightly further away from the others, is touched by the tip of the clausilial blade in situ; it starts deeper inside the shell and runs also deeper inside than the other lamellae. The clausilial blade (figs 5-6) is pointed, without any notches.

Shell height, decollate (n=10) 26.8-31.0 mm; shell width 10.9-11.6 mm. The only shell with the protoconch still present has 6 1/4 whorls and is 27.5 mm high.

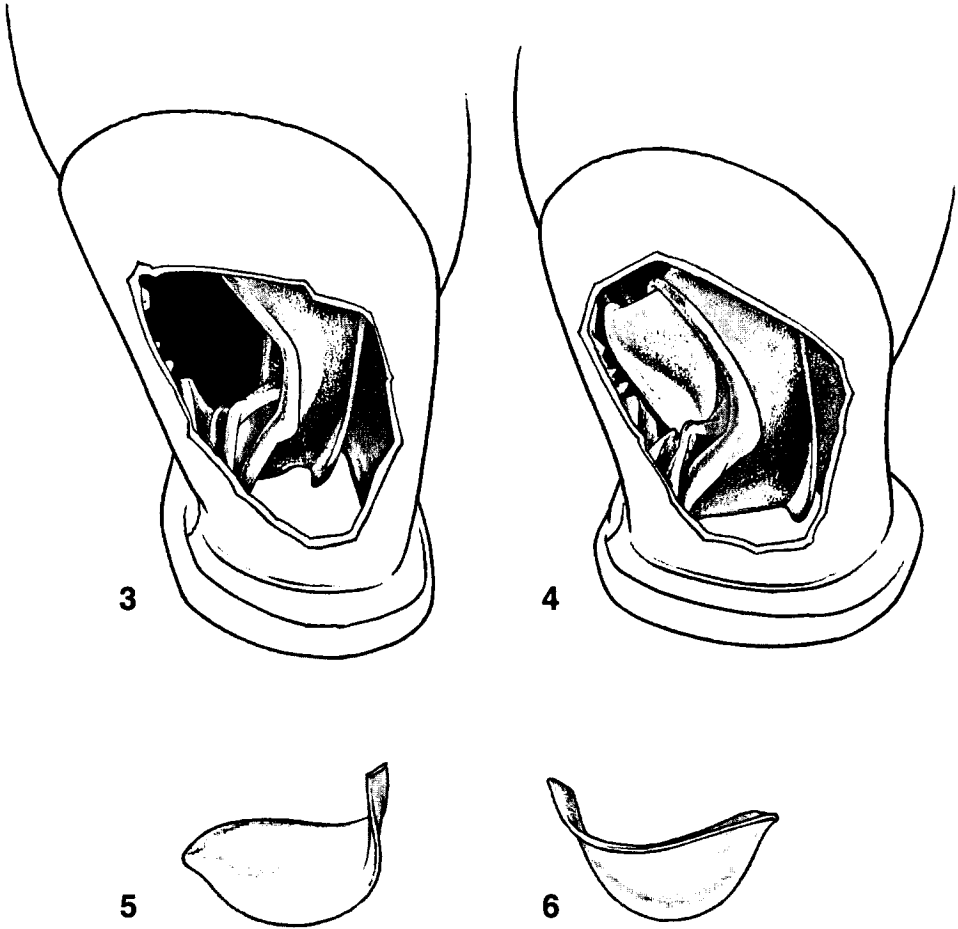
Differentiation. – *Oospira (O.) rhopaloides* (fig. 11), the type species of *Atractophaedusa* Ehrmann, 1927, is somewhat similar but can be distinguished at first sight by its smaller, more slender shells, with a broadly decollate apical part, and an aperture with a subcolumellaris which is hardly or not visible in frontal view.



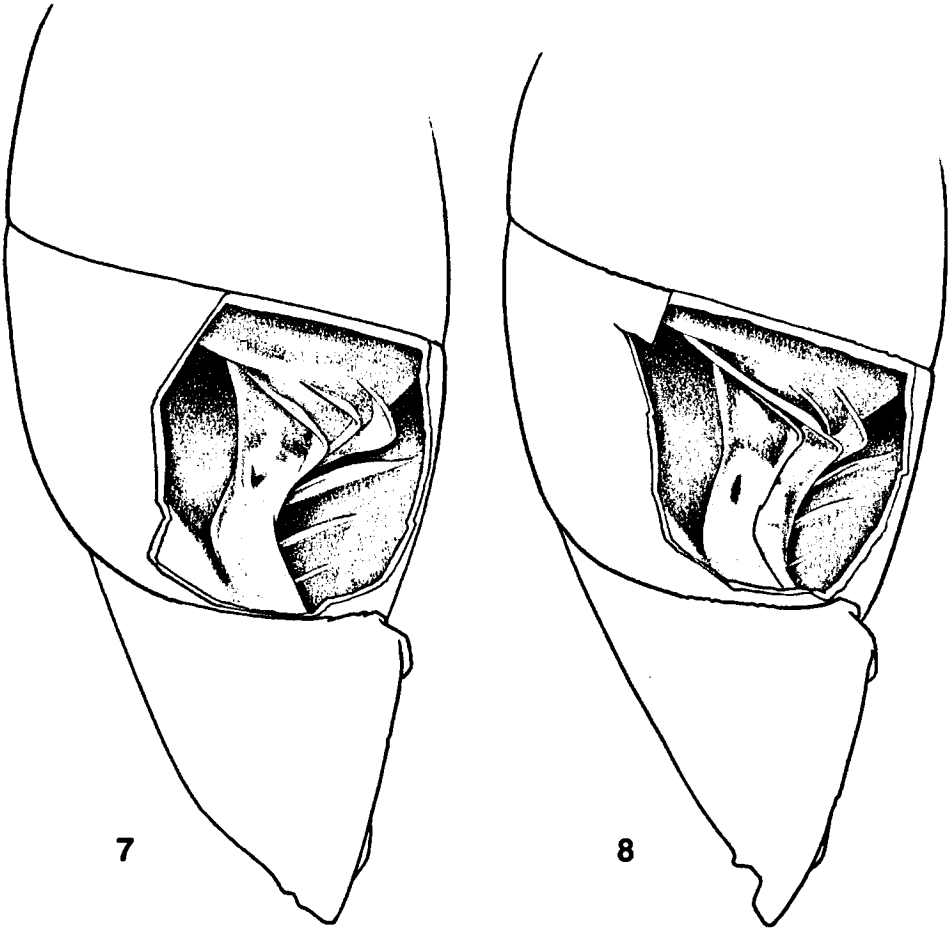
Figs 1-2. *Oospira (O.) pyknosoma* spec. nov., holotype (RMNH 85874), height 26.9 mm; Vietnam, province of Haiphong, Cat Ba Island, on limestone soil in high and damp primary forest around lake Ao Ek, 20°48'05"N 107°01'33"E; J.J. Vermeulen & A.J. Whitten leg., 26.ix.1998. J.J. Vermeulen del.

Etymology. – After the Greek words *pyknos* (thick) and *soma* (body).

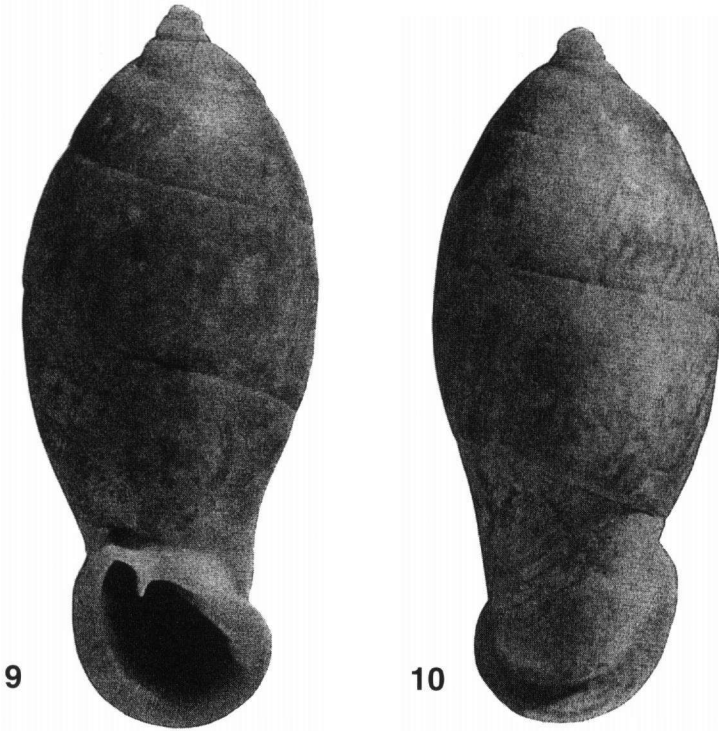
Acknowledgements. – We thank Mr. H. Nordsieck, who independently discovered this species in the collection of the Muséum National d'Histoire Naturelle, Paris, and let us benefit from his expertise, leaving it to us to actually describe it. We are grateful to Mrs. V. Héros and Mr. Th.E.J. Ripken, who made it possible to compare the specimen from the Paris museum.



Figs 3-6. *Oospira (O.) tyknosoma* spec. nov., paratypes; Vietnam, province of Haiphong, Cat Ba Island, on limestone soil in high and damp primary forest around lake Ao Ek, 20°48'05"N 107°01'33"E; J.J. Vermeulen & A.J. Whitten leg., 26.ix.1998. 3, 4, shells with an artificial hole, showing from below, from right to left, the parietalis, the columellaris, the subcolumellaris and the short palatal lamellae, without (3, RMNH 85875) and with (4, V6347) the clausilial blade in situ; 5, 6, the clausilial blade. J.J. Vermeulen del.



Figs 7-8. *Oospira (O.) tyknosoma* spec. nov., paratypes; Vietnam, province of Haiphong, Cat Ba Island, on limestone soil in high and damp primary forest around lake Ao Ek, 20°48'05"N 107°01'33"E; J.J. Vermeulen & A.J. Whitten leg., 26.ix.1998. shells with an artificial hole behind the palatal centre, showing at the parietal side the internal ends of, from right to left, the spiralis, the columellaris and the subcolumellaris, and at the palatal side the principalis and the closest two short palatal lamellae, without (7, V6347) and with (8, RMNH 85875) the clausilium in situ. J.J. Vermeulen del.



Figs 9-10. *Oospira (O.) tyknosoma* spec. nov., paratype with the apical whorls not decollated (RMNH 85877), Vietnam, province of Haiphong, Cat Ba Island, 1 km S. of village Gia Luan, limestone cliffs behind graveyard, outside the national park, 20°50.08' N 106°58.56' E, W.J.M. Maassen leg., 8.iv.2001.

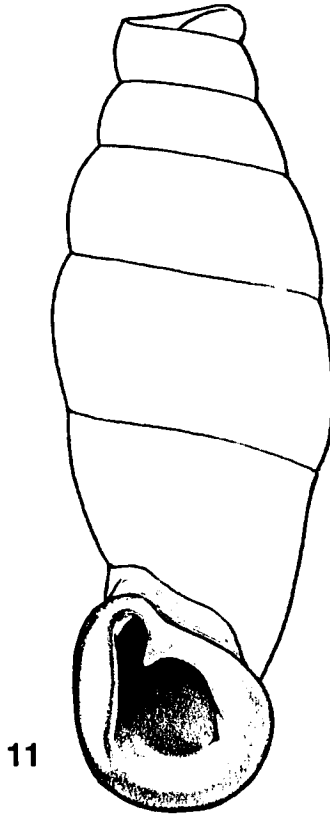


Fig. 11. *Oospira (O.) rhopaloides* (Möllendorf, 1901), Vietnam, "Bah-Min" (RMNH, ex H. Fulton), height 24.4 mm. J.J. Vermeulen del.

REFERENCES

- NORDSIECK, H., 1997. Annotated check-list of the Taiwanese Phaedusinae (Gastropoda: Stylommatophora: Clausiliidae). - *Mitteilungen der Deutschen Malakozoologischen Gesellschaft* 60: 11-19.