
A new species of the genus *Oospira* Blanford, 1872 (Gastropoda, Pulmonata, Clausiliidae) from central Vietnam

BUI Thi Chinh¹, Miklós SZEKERES²

¹ Faculty of Biology, College of Education, Hue University, 34 Le Loi, Hue, VIETNAM. E-mail: buihichinhhdhsphue@gmail.com

² Institute of Plant Biology, Biological Research Centre of the Hungarian Academy of Sciences, Temesvári krt. 62, 6726 Szeged, HUNGARY. E-mail: szekeres@brc.hu, corresponding author

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ABSTRACT. *Oospira haivanensis* sp. nov., a new member of the Clausiliidae subfamily Phaesusinae is described from the Hai Van Mountain in central Vietnam. The relationship of the new species to other taxa of the genus and the zoogeographical importance of *Oospira* species in Southeast Asia are discussed.

Introduction

In the remarkably rich land snail fauna of Mainland Southeast Asia clausiliids represent one of the most species-rich groups. But our knowledge of this family in the region is still scarce. Whereas detailed studies from the middle of the 19th century provided ample records on the diversity and distribution of Clausiliidae in some northern regions of Vietnam [for assessment see: Schileyko, 2011], other parts of the Indochina Peninsula remained poorly studied. From the central and southern provinces of Vietnam, until recently only one species, *Phaedusa cochinchinensis* (Pfeiffer, 1841) had been reported. Increased field work activity in the past couple of years, however, resulted in the discovery of several endemic clausiliids in these parts of the country [Nordsieck, 2010, 2016; Grego *et al.*, 2014; Nguyen, 2016; Páll-Gergely, Szekeres, 2017]. Here we describe a further new species from the central part of the Truong Son (Annamites) range.

Material and methods

Live specimens of the new taxon were hand collected during the dry season. Type material is deposited in collections of the Muséum National d'Histoire Naturelle (MNHN, Paris), Vietnam National Museum of Nature (VNMN, Hanoi), as well as the private collections of Bui Thi Chinh (BTC, Hue City) and Miklós Szekeres (SZ, Budapest).

Systematic part

Family Clausiliidae

Subfamily Phaesusinae

Genus *Oospira* Blanford, 1872

Type species: *Clausilia philippiana* Pfeiffer, 1847 (OD)

According to the currently accepted concept the genus *Oospira*, as defined by Nordsieck [2002, 2007], includes several subgenera, among which *O. (Oospira)* alone comprises about 60 valid species. Whereas remarkable differences in size and shape indicated apparent heterogeneity within this subgenus [Dharma *et al.*, 2009], there are too few distinctive shell characters (particularly in the clausiliar apparatus) that could serve as morphological basis for a more meaningful classification. Although recent molecular phylogenetic results from a few species have revealed that, indeed, *Oospira* in the aforementioned sense is not a monophyletic group [Motochin *et al.*, 2017], a reliable taxonomic reassessment would require molecular data from several further species that are presently classified in this genus. Thus the new species described below is placed in *Oospira* with reservation.

Oospira haivanensis sp. nov.

(Figs 1A, 3)

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Type material. Holotype: MNHN-IM-2012-27283, Vietnam, Thua Thien - Hue Province, Phu Loc District, Hai Van Mountain (16°12'58"N, 108°6'22"E, 120 m) (Fig. 2), coll. Bui Thi Chinh, 22.07.2018. Paratypes, same data, VNMN_IZ 000.000.159 (1 spm), BTC 001 (1 spm), SZ (1 spm).

Diagnosis. Medium-size *Oospira* with thick apex,

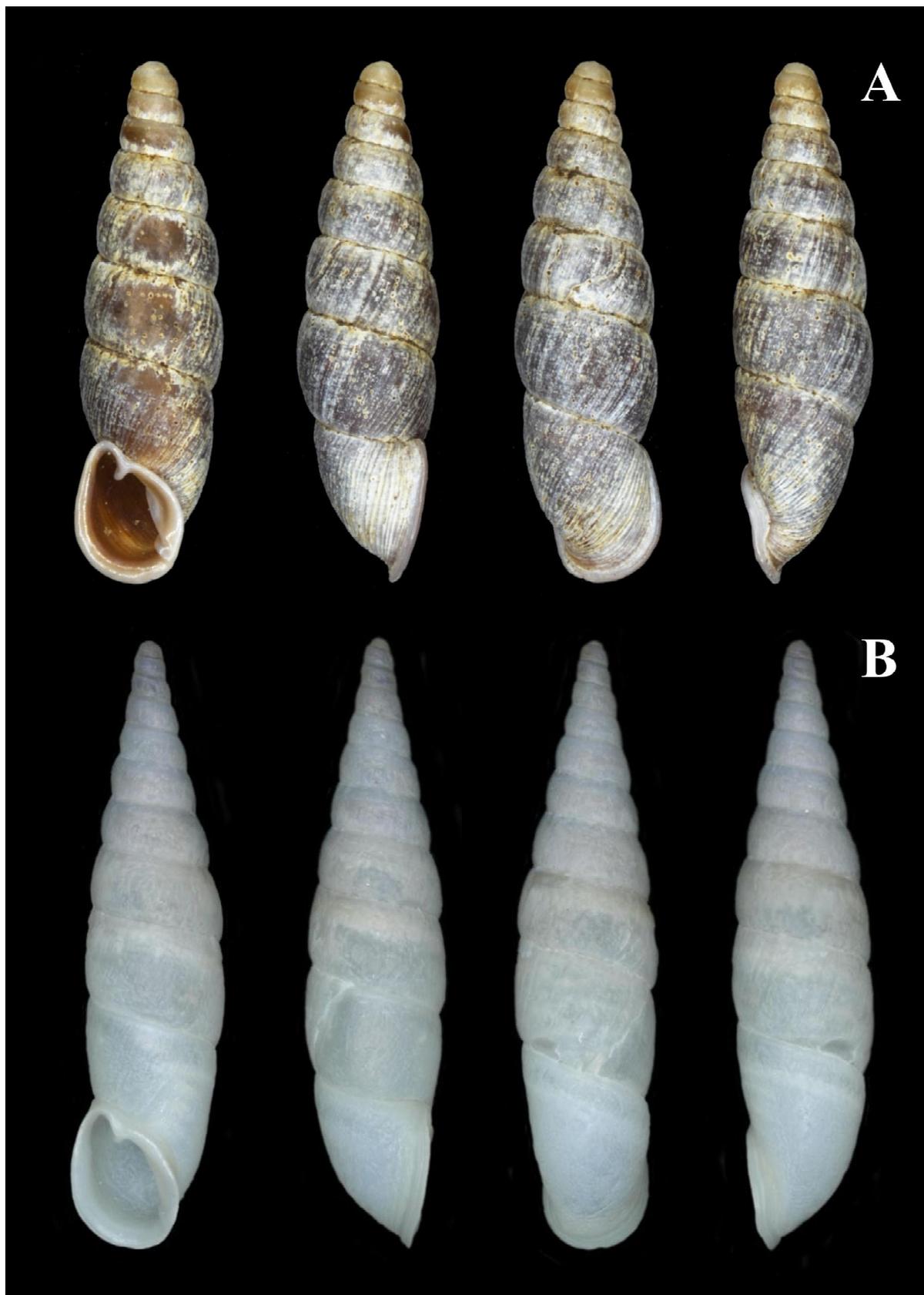


FIG. 1. **A.** Holotype of *Oospira haivanensis* sp. nov. (MNHN-IM-2012-27283), 16.7 mm. **B.** *Oospira bolovenica* (Möllendorff, 1898), Laos, Boloven Plateau, 19.5 mm.

РИС. 1. **A.** Голотип *Oospira haivanensis* sp. nov. (MNHN-IM-2012-27283), 16,7 мм. **B.** *Oospira bolovenica* (Möllendorff, 1898), Лаос, Плато Боловен, 19,5 мм.

steeply descending, almost marginally ending lamella inferior, marginal lamella subcolumellaris, and strong ventral-ventrolateral plicae.

[**Диагноз.** *Oospira* средних размеров, с утолщенной вершиной, нижняя пластинка круто спускается и почти доходит до края устья, субколумеллярная пластинка занимает маргинальное положение, вентро-латеральные складки хорошо развиты].

Description. The medium-size shell of chestnut colour consists of 8.3 to 8.5 whorls. The suture is weakly papillate. Strong striation of the surface increases to dense fine ribs at the rounded neck. The apical whorls are thick, the aperture is wide. The broad, light reddish-brown peristome with non-reflexed margin is detached. The strong lamella superior reaches the margin of the peristome. Inward it makes straight fusion with the lower lamella spiralis. The weakly emerged lamella inferior descends steeply, bending slightly only before its ending close to the peristome margin. Right below it terminates the lamella subcolumellaris, which reaches the margin of the peristome. The plica principalis initiates ventrally. Its outer part, gradually weakening from the dorsal side, reaches near the aperture. On the ventral-ventrolateral side there are four to six parallel plicae, which decrease in length toward the basis. The positions of the lamellae and plicae are shown in Fig. 3. The strongly bent clausilium plate, visible through the shell, cannot be viewed through the aperture.

Measurements. Holotype: shell height 16.7 mm, spire width 4.5 mm, aperture height 4.4 mm, aperture width 3.4 mm. Paratypes (n = 3): shell height 16.8–17.3 mm, spire width 4.1–4.3 mm, aperture height 4.5–4.6 mm, aperture width 3.3–3.5 mm.

Habitat. The specimens were collected from leaf litter of evergreen lowland tropical forest of the Hai Van Mountain (Fig. 4), part of the Truong Son range near the coast. The erosion soil of the forest is formed on granite rock base.

Etymology. The new species is named after the Hai Van Mountain, its type locality.

Remarks. By the ventral-ventrolateral position of its palatal plicae *O. haivanensis* sp. nov. markedly differs from most other congeneric species in Mainland Southeast Asia, which possess lateral plicae. In this region the only other *Oospira* with similarly deep plicae is *O. bolovenica* (Möllendorff, 1898) (Fig. 1B), which occurs in the Boloven Plateau of southern Laos [Möllendorff, 1898] (Fig. 2). However, *O. haivanensis* sp. nov. is easily distinguishable from that species by its smaller and stout shell, striate surface, and papillate suture.

Discussion

The Clausiliidae of central and southern Vietnam have characters very distinct from those of the

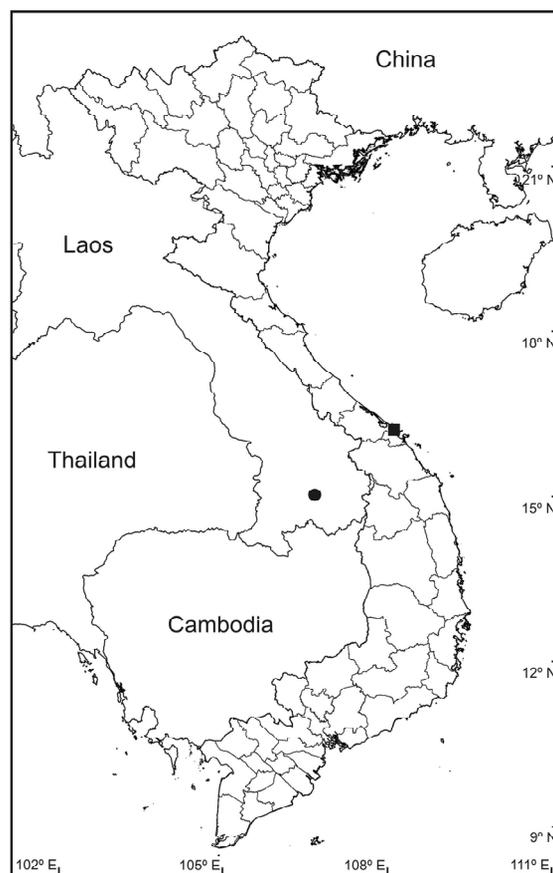


FIG. 2. Map of Vietnam and the neighbouring regions, showing the type localities of *Oospira haivanensis* sp. nov. (square) and *Oospira bolovenica* (circle).

РИС. 2. Карта Вьетнама и соседних регионов с указанием типовых местонахождений *Oospira haivanensis* sp. nov. (квадрат) и *Oospira bolovenica* (кружок).

country's northern regions. Furthermore, despite the larger area, the number of species known from this region is much lower (about 10%) compared to those of the northern provinces. This can partly be due to the lack of major limestone habitats, but differing climatic and floristic characters of the central and southern territories [Averyanov *et al.*, 2003] suggest that this part of the country belongs to a zoogeographic area less favourable for clausiliids. This notion is consistent with the presence of endemic genera and almost exclusively endemic species [Nordsieck, 2010; Grego *et al.*, 2014; Nguyen, 2016; Páll-Gergely, Szekeres, 2017], which seem closest related to taxa of southern Laos. Whereas currently we still have only scarce knowledge of this unique Clausiliidae fauna, future field and molecular phylogenetic studies will certainly help better assessment of its diversity and elucidation of its origin.

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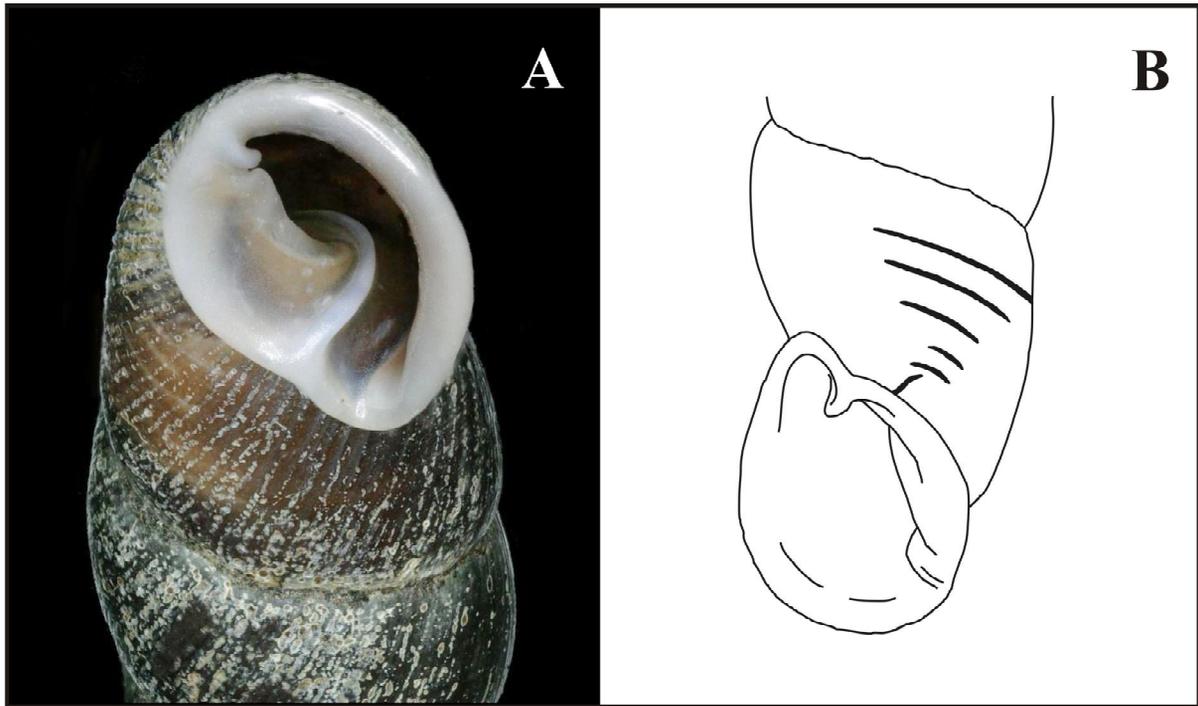


FIG. 3. **A.** Lamellae and **B.** palatal plicae of *Oospira haivanensis* sp. nov.

РИС. 3. **A.** Пластинки и **B.** палатальные складки у *Oospira haivanensis* sp. nov.



FIG. 4. Eastern slopes of the Hai Van Mountain, type locality of *Oospira haivanensis* sp. nov.

РИС. 4. Восточные склоны горы Хай Ван, типовое местонахождение *Oospira haivanensis* sp. nov.

ucation) for their help in this study, Jonathan Ablett (Natural History Museum, London), Anita Eschner (Naturhistorisches Museum, Vienna), and Ronald Janssen (Naturmuseum Senckenberg, Frankfurt am Main) for providing access to the public collections at their care, Barna Páll-Gergely (Plant Protection Institute, HAS, Budapest) for contributing photo images, and

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Новый вид рода *Oospira* Blanford, 1872 (Gastropoda, Pulmonata, Clausiliidae) из центрального Вьетнама

БУИ ТИ ШИН¹, МИКЛОШ СЕКЕРЕШ²

¹ Faculty of Biology, College of Education, Hue University, 34 Le Loi, Hue, VIETNAM. E-mail: buithichinhdsphue@gmail.com

² Institute of Plant Biology, Biological Research Centre of the Hungarian Academy of Sciences, Temesvári krt. 62, 6726 Szeged, HUNGARY. E-mail: szekeres@brc.hu

РЕЗЮМЕ. Приводится описание *Oospira haivanensis* sp. nov. с горы Хай Ван в центральном Вьетнаме. Обсуждается связь нового вида с другими таксонами рода *Oospira* и зоогеографическое значение представителей рода в Юго-Восточной Азии.

