

A New species of *Aulacospira* (Pulmonata: Stylommatophora: Pupillidae) from Eastern Thailand

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ABSTRACT.– *Aulacospira panhai* n. sp. is described from a limestone hill in Rayong Province, Thailand. It is the seventh member of the genus recorded from Thailand. This new species has minute, brownish semi-depressed shell of which the first two whorls are slightly flat whilst the last two are more oval and have a much greater inflation. Six aperture barriers were observed.

KEY WORDS: *Aulacospira panhai*, Pupillidae, Pulmonata, Thailand

INTRODUCTION

Six species of *Aulacospira* Möllendorff, 1890, have been reported from Thailand. These are: *A. depressus* Dumrongrojwattana and Panha, 2006; *A. khaobote* Dumrongrojwattana and Panha, 2006; *A. khaopraturun* Dumrongrojwattana and Panha, 2005; *A. pluangtong* Panha and Burch, 2004; *A. smaesarnensis* Panha and Burch, 2001 and *A. lampangensis* Panha and Burch, 2001. Five of these species were reported from east Thailand, and one species (*A. lampangensis*) from north Thailand (Panha and Burch, 2001; Panha et al., 2004; Dumrongrojwattana and Panha, 2005;

Dumrongrojwattana and Panha, 2006).

During a survey of terrestrial snails by the author in eastern Thailand, a new species of *Aulacospira* was found in October and November 2007. It was collected from a limestone hill at Khao Pratun, Rayong Province, Thailand. The new species is named and described below.

SYSTEMATICS ACCOUNT

Aulacospira panhai n. sp. (Fig. 1)

Description: Shell minute, brownish semi-depressed. The approximately four whorls and free tuba project a little downward. The shell is semi-depressed, approximately, the first two whorls are slightly flattened while the last two whorls are more oval and have a much greater inflation. The shell surface is sculptured

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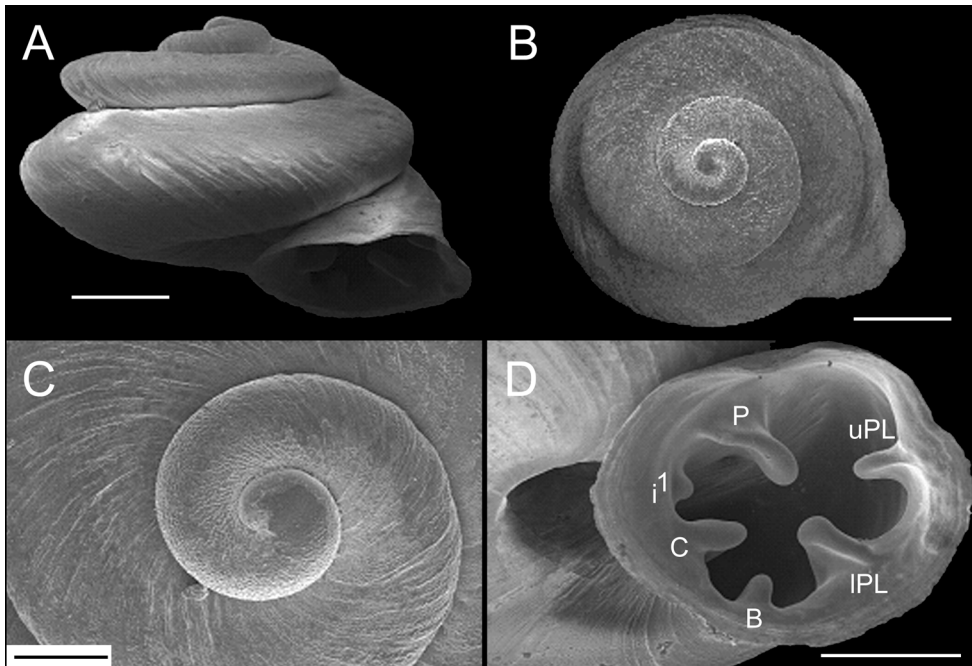


FIGURE 1. *Aulacospira panhai* n. sp. Holotype: **A**, frontal view (scale = 500 μ m); **B**, apical view (scale = 500 μ m); **C**, shell apex, showing protoconch (scale = 200 μ m); **D**, close up of apertural barriers (scale = 250 μ m). Abbreviations: B, basal; C, columellar; i, infraparietal; P, Parietal; IPL, lower palatal; uPL, upper palatal.

with uneven oblique growth lines, a few of which are more prominent than the others. There are no spiral striae. The first nuclear whorl begins with a pattern of granulose wrinkles, which merge into dense shallow pits. The protoconch consists of about 1¼ whorls. There is an abrupt change in sculpture pattern with the end of the protoconch and the beginning of the teleconch. The peristome is continuous, thickened, and expanded. The umbilicus is narrow. The aperture is round, and contains six barriers: the columellar, infraparietal, parietal lamellae, and basal, lower and upper palatal plicae. The columellar, parietal, basal, lower and upper palatal barriers are the most prominent. The infraparietal is low and small.

Type Locality: Thailand Khao Pratun, an isolated limestone hill of Rayong Province at 13° 07' 19" N, 101° 36' 03", 55 meters elevation.

Dimensions: Shell width 1.48-1.77 mm (holotype 1.53 mm); Shell height 2.47-2.80 mm (holotype 2.57 mm) (Table 1).

Etymology: It is with pleasure I name this new species after Prof. Dr. Somsak Panha, for his contributions to malacology and for the inspiration he has provided to me in the ways of mollusks.

Type Material: The holotype (ZRCBuU 0220) and five shell paratypes (ZRCBuU 0293) are deposited in the Burapha University Zoological Museum.

Three shell paratypes (ZRCBuU 0233) will be deposited in the collection of the Chulalongkorn University Museum of Zoology.

TABLE 1. Shell dimensions of *Aulacospira panhai* n. sp.

Types	Height (mm)	Width (mm)	Height/Width
Holotype	2.57	1.53	1.68
Paratype			
1	2.75	1.77	1.55
2	2.63	1.52	1.73
3	2.53	1.52	1.66
4	2.71	1.70	1.59
5	2.64	1.58	1.67
6	2.73	1.74	1.57
7	2.47	1.48	1.67
8	2.80	1.74	1.61

Geographic Distribution and Habitat:

A. panhai is known only from Khao Pratun, a limestone hill, Rayong Province, eastern Thailand. Specimens were found on limestone walls.

Diagnosis: Shell minute, brownish semi-depressed, the first two whorls are approximately flattened while the last two whorls are especially large and inflated, and having six apertural barriers which are the dominant characters for the new species.

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