

## A new species of the subgenus *Cyphocele* C. G. Thomson 1859 of *Agathidium* Panzer 1797 (Coleoptera: Leiodidae) from China

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**Taxonomy, Leiodidae, Leiodinae, Agathidiini, *Agathidium*, *Cyphocele*, description, new species, China.**

**Abstract.** *Agathidium* (*Cyphocele*) *pseudoyushanicum* sp. n. (China: Sichuan) resembles *A. (C.) yushanicum* Angelini & De Marzo 1995 (Taiwan), from which it differs in absence of microreticulation on the head and pronotum, its presence on the elytra, and features of the aedeagus including the spermatheca.

### Introduction

The new species described in the present paper belongs to the subgenus *Cyphocele* C. G. Thomson 1859 of *Agathidium* Panzer 1797. It exhibits typical characters, among them apomorphic features such as well developed temples and clypeus not protuberant. The basic works on Old World *Agathidium* including *Cyphocele* were published by Angelini (1995, 2004, 2010). Additionally Hoshina (1999) and Hoshina et al. (2003) dealt with taxonomy of *Cyphocele* from Japan and Korea.

Currently 26 *Cyphocele* species, including the new species described in the present paper, are known.

### Material and methods

Abbreviations:

JCCH – collection of Jonathan Cooter, Hereford, England;

MPCP – collection of Michel Perreau, Paris, France;

ZSCP – collection of Zdeněk Švec, Prague, Czech Republic.

The studied material made available by Dr. Perreau was compared with type and other specimens deposited in ZSCP and JCCH, among them with *Agathidium yushanicum* Angelini & De Marzo 1995. Collecting data cited in quotation marks are taken from the locality labels accompanying the examined specimens. The measurements are taken from specimens mounted on cards; they are approximated on the first decimal place. If it is not stated otherwise, the description is based on the holotype only. Some additional features observed on the paratype are presented in the paragraph Variation.

The dissected male genitalia were mounted in Euparal on the same label as the relevant specimen.-

## Taxonomy

### *Agathidium (Cyphocheble) pseudoyushanicum* sp. n.

(Figs. 1-4)

**Type locality.** China, Sichuan Province, Micang Shan Mountains, environs of Daba.

**Type material.** Holotype m\* (MPCP): "China, N.Sichuan, Micang Shan, 1350-1450 m., DABA env. 32°40'N 106°55'E, 21.v.-12.vi.2008, Jaroslav Turna leg." (JCCH). Paratype f\*, same locality data.

**Description.** Length 4.7-5.1 mm. Length of body in holotype 4.7 mm, maximum length of head 0.9 mm, of pronotum 1.2 mm, of elytra 2.6 mm; width of head 1.8 mm, of pronotum 2.7 mm, of elytra 2.2 mm.

Body dark reddish brown with margins of pronotum, an ill-defined area on disc of head, mouthparts except mandibles, legs, antennomeres 1-6 and 11 and ventral surface including elytral epipleura lighter reddish brown.

Head. Broadest at the temples which are long, ratio of eye to temples = 1.4. Temples behind eye strigose under supraocular carina and just behind eye, furnished with scattered pale hairs. Clypeal line very fine, superficially impressed and detectable in central part only. Ratio of length of antennomeres III:II = 2.4. Punctuation double with minute, moderately to weakly impressed punctures separated by 3-6x their diameters, interspaced with microscopic punctures at least one-quarter the diameter of the larger punctures. Punctuation a little more evident between disc and lateral areas. No microsculpture evident.

Pronotum. With double punctuation of intensity similar to that of the head; the larger punctures are typically of smaller diameter than on the head, but are also interspersed with microscopic punctures. Margins are finely bordered anteriorly, laterally to just beyond posterior corners, leaving the majority of the posterior margin simple.

Elytra. With somewhat superficial irregular, coarse, transverse, weakly impressed microsculpture. Elytra are bordered from base to apex, borders are slightly dilated in apical halves. Sutural striae are clearly impressed from apex to just beyond middle and continue basally as vague, puncture-lined linear depressions. Double punctuation is similar to that of head, more clearly impressed apically. Toward base there is an indication of punctures aligned longitudinally in double rows.

Mesoventrite. Longitudinal carina lacking, lateral lines developed.

Metaventrite. Without specific characters. Membranous wings fully developed.

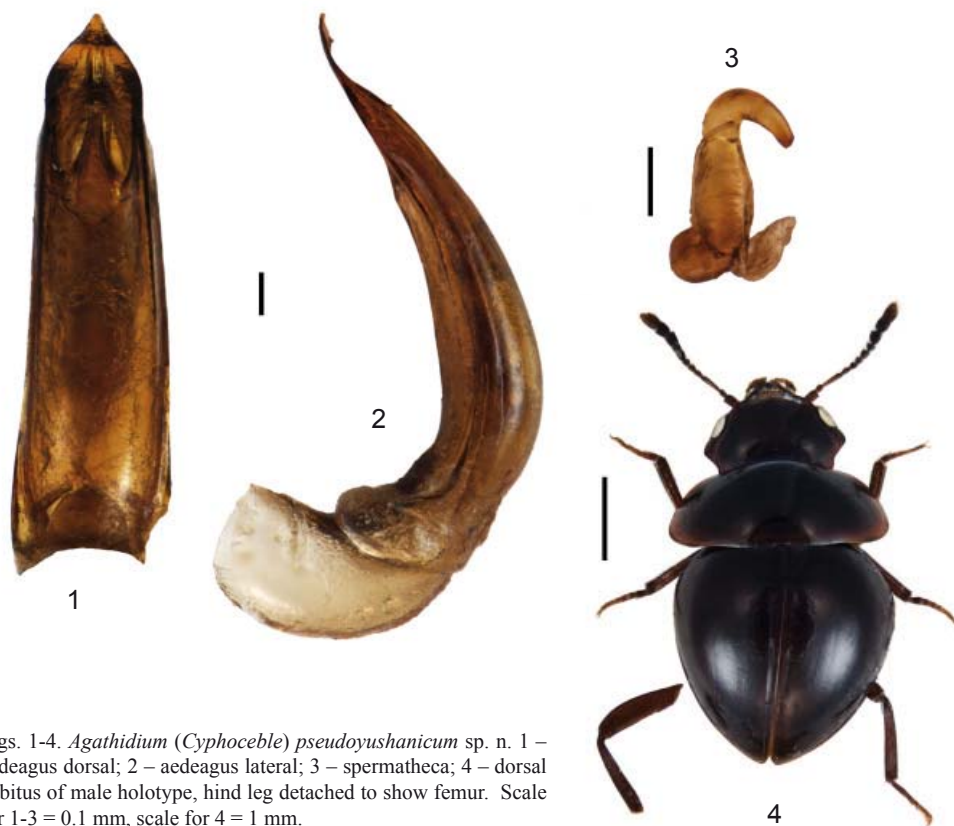
Legs are simple, tarsal formulae in male 5-5-4, in female 4-4-4. Basal segments of protarsi are slightly dilated in male, simple in female. Basal segments of mesotarsi are hardly visibly dilated even in male. Metafemora have posterior margins simple, linear in both sexes.

Genitalia. See Figs. 1-3.

Variation. The length ratio of antennomeres III:II varies in the range 2.4-2.6.

**Etymology.** The name indicates resemblance with *Agathidium (Cyphocheble) yushanicum* Angelini & De Marzo 1995.

**Differential diagnosis.** *Agathidium (Cyphocheble) pseudoyushanicum* sp. n. is similar to *Agathidium (Cyphocheble) yushanicum* Angelini & De Marzo 1995 from Taiwan in the size



Figs. 1-4. *Agathidium (Cyphocele) pseudoyushanicum* sp. n. 1 – aedeagus dorsal; 2 – aedeagus lateral; 3 – spermatheca; 4 – dorsal habitus of male holotype, hind leg detached to show femur. Scale for 1-3 = 0.1 mm, scale for 4 = 1 mm.

and the colour of the body (Fig. 4), double puncturation of elytra and similar length ratio of antennomeres III:II. It clearly differs in absence of microreticulation on the head and pronotum and its presence on the elytra. Also the heart-shaped apex of aedeagus in the new species is different from the laterally angled and abruptly narrowed apex in *A. yushanicum*. The spermatheca in the new species also shows characters different from those in *A. yushanicum*, having a stout basal part and a backward bent distal process. The new species can be distinguished from all other species known to occur in the region as follows:

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| 1 Length of body 4.5-5.1 mm. Ratio of antennomeres III:II at least 2.0. Dorsum reddish brown, antennae partly dark. ....   | 2  |
| --Length of body 2.5-3.8 mm. Ratio of antennomeres III:II at most 1.5; if more, then body black or bicoloured, antennae unicoloured. .... (6 remaining species from China, Taiwan and Nepal) |  |
| 2 Head and pronotum not microreticulate, elytra with microreticulation. Length of body 4.7-5.1 mm. China (Sichuan). ....   | <i>Agathidium (Cyphocele) pseudoyushanicum</i> sp. n.        |
| --Head and pronotum microreticulate, elytra lacking microreticulation. Length of body 4.5-5.1 mm. Taiwan. ....   | <i>Agathidium (Cyphocele) yushanicum</i> Angelini & De Marzo |

## References

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