Genus Vol. 11 (2): 119-124 Wrocław, 30 VI 2000

Paraphatnomella, a new Oriental genus of Phatnomatinae with two new species (Hamintona: Hatavantana: Tinaidae)

(Hemiptera: Heteroptera: Tingidae)

Barbara Lis

Department of Zoology, University of Opole, Oleska 22, 45-052 Opole, Poland

ABSTRACT. Paraphatnomella indica gen. et sp. n. and P. tamasi sp.n. from India are described, illustrated and compared with their relatives.

Key words: entomology, taxonomy, new genus, new species, *Hemiptera*, *Heteroptera*, *Tingidae*, *Phatnomatinae*, India.

The subfamily *Phatnomatinae* (sensu B. Lis 1999) is represented by thirteen extant genera in the Oriental fauna (Froeschner 1996, Péricart 1981, 1991), but only five of them occur in India, namely *Gonycentrum* Bergroth, *Indocader* Péricart, *Microcader* Péricart, *Phatnomella* Péricart, and widely distributed genus *Phatnoma* Fieber.

In the course of my studies on the family *Tingidae* I have had an opportunity to examine two specimens representing a genus and two species of *Phatnomatinae* not described so far.

The material was borrowed from the Hungarian Natural History Museum (Budapest, Hungary), and therefore I owe my thanks to Dr. Tamás Vásárhelyi (the curator of *Heteroptera* at the museum) for the loan of the material for my study.

Paraphatnomella n. gen.

Type species: Paraphatnomella indica n. sp.

DIAGNOSIS

The new genus resembles two Oriental representatives of the subfamily *Phatnomatinae*, namely *Phatnocader* Štusak (with one species, *Ph. froeschneri* Štusak from Java), and *Phatnomella* Péricart (with *Ph. cristata* Péricart from India and *Ph. variabilis* Péricart from Thailand). The shape of paranotum (figs 1, 2) distinguishes the new genus from the former (the paranotum forms two distinct, slightly acute angles in *Phatnomella*), whereas the tricarinate pronotal disc distinguishes *Paraphatnomella* from the latter (pronotal disc is unicarinate in *Phatnocader*). Moreover, the presence of relatively long occipital spines (as long as or slightly shorter than the eye) distiguishes *Paraphatnomella* from both genera (the occipital spines are rudimentary or distinctly shorter than the eye in both, *Phatnomella* and *Phatnocader*).

DESCRIPTION

Head long, armed with eight cephalic spines: jugal, frontal and occipital (paired), and clypeal and dorsomedial (unpaired); occipital spines as long as or slightly shorter than the eye; bucculae long, distinctly surpassing head apex, and touching each other along their dorsal edges in front of the clypeus; antennae relatively short.

Pronotal disc tricarinate; collar slightly inflated, forming distinct tectation; paranota moderately broad, their lateral margins sinuate, forming two, weakly developed lobes; posterior pronotal margin straight or slightly rounded; scutellum visible.

Hemelytra areolate, moderately broad; subcostal area with several, weakly developed transverse veins; discoidal area divided by two transverse veins into three smaller parts.

The peritreme forming slightly elongated, apically closed loop.

Ventral plates of abdominal segment IX (laterotergites IX in female, and ventral part of pygophore in male) slightly elongated posteriorly.

ETYMOLOGY

Gender feminine; the name refers to *Phatnomella* Péricart, which seems to be the closest relative of the new genus.

Paraphatnomella indica n. sp.

(fig. 1)

DESCRIPTION

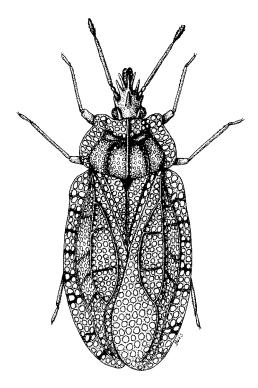
Based upon a unique macropterous male.

Total body length -2.33 mm, maximum body width (across hemelytra) -1.0 mm, head length -0.39 mm, pronotum length -0.5 mm, pronotum width -0.78 mm, length of hemelytra -1.55 mm.

General colour dark brown, with several patches brighter than the remaining surface.

Head strongly elongated in its preocular part, cephalic spines moderately long, rather blunt; occipital spines as long as eye diameter; eyes rather small, brown; frons twice broader than eye width; outer apical angle of the antennal tubercle prolonged into obtuse spine; antennae dark brown, but segments I-II and basal part of segment III slightly brighter, length of segments: 0.1 mm: 0.08 mm: 0.45 mm: 0.17 mm; bucculae long, distinctly surpassing head apex and touching each other along their dorsal edges in front of clypeus; rostrum reaching posterior margin of metasternum.

Pronotum brown, its disc convex, finely areolate, tricarinate; lateral carinae rather low, composed of one row of small areolae; median carina lower than lateral ones, without areolae; collar slightly inflated, tectiform; posterior margin of pronotum slightly rounded; paranota moderately broad, bearing two rows of rather regular areolae; lateral margins of paranota sinuate, forming small, indistinct lobe opposite collar on either side; calli brown; scutellum visible, brown, its apex slightly prominent.



1. Paraphatnomella indica gen. et sp. n. - dorsal habitus of the holotype

Hemelytra dark brown with small, irregular patches brighter than the remaining surface; their lateral margins nearly parallel-sided; costal area composed mostly of two rows of regular areolae; subcostal area composed of five rows of areolae in its widest part, and bearing several, almost indistinct transverse veins; discoidal area divided into three smaller areas by two transverse veins, and bearing five rows of areolae in its widest part; sutural area composed of six rows of areolae in its widest part.

Femora brown, tibiae and tarsi yellowish brown; abdominal sterna yellowish brown.

Type material

Holotype male: India, Maharashtra, Bhaja, leg. Gy. Topál; No. 614, extracted grass clumps, 6. VIII. 1967; in the collection of the Hungarian Natural History Museum, Budapest, Hungary.

ETYMOLOGY

The name "indica" refers to the country of origin of the new genus and species.

Paraphatnomella tamasi n. sp.

(fig. 2)

DESCRIPTION

Based upon unique coleopterous female.

Total body length -2.35 mm, maximum body width (across hemelytra) -1.2 mm, head length -0.37 mm, pronotum length -0.5 mm, pronotum width -0.95 mm, length of hemelytra -1.53 mm.

General colour dark brown with irregular patches brighter than the remaining body surface.

Head brown, elongated, with eight, rather blunt cephalic spines; occipital spines shorter than eye diameter; eyes brown, relatively small; frons 2.25 times broader than eye; outer apical angle of antennal tubercle prolonged into sharply ended spine; antennae dark brown, length of segments: 0.1 mm: 0.08 mm: 0.51 mm: 0.17 mm; bucculae long, distinctly surpassing head apex and touching each other along their dorsal edges in front of clypeus; rostrum slightly surpassing middle of metasternum.

Pronotum brown; pronotal disc slightly convex, tiny areolate, tricarinate; carinae laminate and composed of one row of regular areolae; collar inflated, tectiform; posterior margin of pronotum straight; paranota rather broad, composed of three to four rows of areolae in its anterior part and two rows of areolae in the posterior part; lateral margins of paranota sinuate; calli brown; scutellum triangular, brown, its apex slightly prominent.

Hemelytra dark brown with irregular patches brighter than their remaining surface; lateral margins of hemelytra widely rounded; costal area composed

mostly of three rows of areolae; subcostal area composed of five rows of areolae in its widest part, and bearing several, hardly visible transverse veins; discoidal area divided into three smaller parts by two transverse veins, bearing six rows of areolae in its widest part; sutural area narrow, composed of three rows of arolae in its widest part, and bearing one almost indistinct, transverse vein.

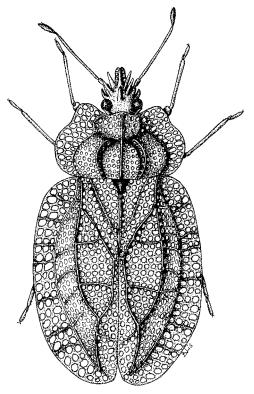
Legs yellowish brown, femora slighty darker than tibiae and tarsi; abdominal sterna brown.

Type material

Holotype female: India, Maharashtra, Bhaja, leg. Gy. Topál; No. 613, extracted moss samples, 6. VIII. 1967; in the collection of the Hungarian Natural History Museum, Budapest, Hungary.

ETYMOLOGY

The new species is dedicated to Dr. Tamás VÁSÁRHELYI (the Curator of *Heteroptera* at the Hungarian Natural History Museum in Budapest), with thanks for providing material for my study.



2. Paraphatnomella tamasi n. sp. - dorsal habitus of the holotype

COMPARATIVE NOTES

In a general body shape both new species at first glance resemble *Phatnocader froeschneri* Štusak from Java, but differ from the latter in the characters given in the diagnose of the new genus. The two new species of *Paraphatnomella* can be easily separated from each other on the basis of following characters:

- 1. length of occipital spines on head as long as eye diameter in *P. indica*, about twice shorter than eye diameter in *P. tamasi*;
- 2. number of rows of areolae in paranotum two rows along its entire length in *P. indica*, three to four rows in its anterior part and two rows in the posterior part in *P. tamasi*;
- 3. number of rows of areolae of costal area mostly two rows in *P. indica*, mostly three rows in *P. tamasi*;
- 4. number of rows of areolae of the pronotal median carina none in *P. indica*, one in *P. tamasi*.

REFERENCES

- FROESCHNER, R.C., 1996. Lace Bug Genera of the World, I: Introduction, Subfamily *Cantacaderinae* (*Heteroptera: Tingidae*). Smithsonian Contributions to Zoology, **547**: 1-43.
- Lis, B., 1999. Phylogeny and classification of *Cantacaderini* [= *Cantacaderidae* stat. nov.] (*Hemiptera: Tingoidea*). Annales Zoologici (Warszawa), **49** (3): 157-196.
- PÉRICART, J., 1981. Quatre espèces nouvelles de *Cantacaderinae* du nord de l'Inde, représentant trois genres nouveaux (*Hemiptera Tingidae*). Revue suisse Zool., **88** (3): 595-605.
- —, 1991. *Cantacaderinae* de Thaïlande, Bornéo et Palawan: Genres nouveaux, espèces nouvelles ou intéressantes ainsi qu'une nouvelle synonymie (*Hemiptera*, *Tingidae*). Revue suisse Zool., **98** (1): 33-50.