Megymenum lisi and M. megaspinosum, two new species of Oriental Dinidoridae (Hemiptera: Heteroptera: Dinidoridae)

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ABSTRACT. Megymenum lisi n. sp. from Bhutan and M. megaspinosum sp. n. from Sumatra are described and compared with their relatives (M. salebrosum Lis and M. dohrni Lis, respectively).

Key words: entomology, taxonomy, new species, Heteroptera, Dinidoridae, Megymeninae, Oriental Region.

Dinidoridae is a small family of Pentatomoidea divided into two subfamilies (Dinidorinae and Megymeninae); currently there are 97 nominal species described in 16 genera (Lis B. 1996, Lis & Kocorek 1996, Rolston et al. 1997, Kocorek & Lis 2000). Recently during studies on the phylogeny and taxonomy of subfamily Megymeninae a new classification of the subfamily has been proposed (Kocorek & Lis 2000).

During studies on the Oriental material of *Dinidoridae*, I have found two species, from Sumatra and Bhutan, new to the science. Their descriptions are provided below.

Megymenum lisi n. sp.

ETYMOLOGY

The new species is dedicated to Professor Jerzy A. Lis (University of Opole, an eminent specialist in *Dinidoridae* and *Cydnidae*)

DIAGNOSIS

Megymenum lisi is very similar to M. salebrosum Lis in its body outline and sculpture. Nevertheless, it can easily be separated by its smaller preocullar processes (figs 1, 5), larger and sharper processes of collar-like structure, larger antero-lateral margins projecting forwards to form rounded processes (figs 2, 6) and less pointed hypophysis of parameres (figs 4, 8).

DESCRIPTION

Body brown without metallic tinge, elongate, abdomen slightly broader than pronotum.

Head (fig. 5) slightly punctate; paraclypei concave, much longer than clypeus and joined in front of it; preocular surface distinctly swollen with very small processes, eyes round, protruding, brown, ocelli of the same colour as head; ocular index about 5.6; distance between ocelli about 1.21 times longer than distance between ocellus and eye; antennae similarly coloured as head, 4-segmented, 1st segment short and not reaching apex of head, 2nd longest, 3rd and 4th subequal and slightly dilated; rostrum light brown, reaching mid-coxae, 1st segment extending beyond base of head, buccula lobed anteriorly incrised, surface convex and rugose.

Pronotum (fig. 6) with numerous fine ridges and puncture-like spots; anterior border drawn forwards to form a collar-like structure behind base of head, with sharp and narrow teeth at the corners; antero-lateral margins projecting forwards to form small, rounded processes, lateral borders irregular, with small projections; posterior angles rounded; posterior border straight at base of scutellum, anterior median tuberosity very large and conspicuous.

Scutellum with dispersed puncture-like spots; cavity-like depressions present at basal angles of scutellum.

Hemelytra narrower than abdomen, corium slightly longer than scutellum, membrane creamy coloured, not reaching posterior extremity of abdomen.

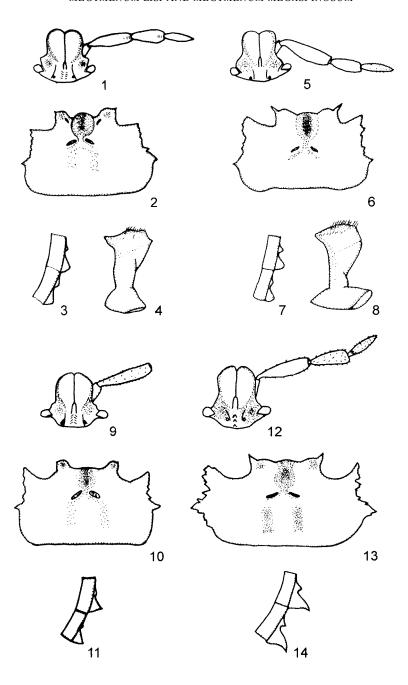
Legs uniformly coloured, as rest of body, femora with small spines on undersurface, spines extending in 2 rows only near apex of femora (about 4 spines), female hind tibia slightly dilated.

Meso- and metasternum with a deep median groove; scent gland spout large and conspicuous, evaporatoria wrinkled.

Abdomen. Abdominal connexivum not covered by hemelytra, conspicuous; posterior lateral corners of segment with a rounded apical lobe and a small median lobe occupying more than half-length of abdominal segments (fig. 7); sterna punctate; spiracles of first visible abdominal sternum not covered by metasternum, placed in linear arrangement near lateral margins and closer to anterior intersegmental border of each segment.

Male genitalia very similar to M. salebrosum, but differ in the shape of paramere (figs 4, 8).

Female genitalia: 9th paratergite similar to *M. salebrosum*, 1st valvifers with distinguished median and lateral elevation.



1-4. Megymenum salebrosum; 5-8. Megymenum lisi n. sp.; 9-11. Megymenum dohri; 12-14. Megymenum megaspinosum n. sp.: 1, 5, 9, 12 - head, 2, 6, 10, 13 - pronotum, 3, 7, 11, 14 - lateral margin of abdomen, 4, 8 - paramere

Measurements (in mm) (male followed by female): body length 14.82, 16.0; body width 8.56, 8.86; head length 2.4, 2.65; head width 3.15, 3.2; pronotum length 4.3, 4.5; pronotum width 7.05, 7.45; scutellum length 3.95, 4.1; scutellum width 4.0, 4.25; antennal segments: 0.85:2.3:1.6: and 0.8:2.3:1.55:1.5.

Type material

Holotype male: [Bhutan] Bhoutan Anglais, R. OBERTHUR, 1899; paratype female, Museum Paris, Bhoutan Anglais, R. OBERTHUR, 1900; paratype female, Museum Paris, Bhoutan Pedong, R. OBERTHUR, 1897. Holotype and one paratype in the collection of the Muséum National d'Histoire Naturelle in Paris; one paratype in the collection of the Department of Zoology, University of Opole.

Megymenum megaspinosum n. sp.

ETYMOLOGY

The name of the new species refers to its very big processes (spines) of pronotum and connexivum.

DIAGNOSIS

Megymenum megaspinosum is clearly separable from all other species of the genus by its very big and sharp, triangularly shaped spines of connexival segments. It is most similar to M. dohrni Lis, but has different shape of collar-like corners of pronotum (figs.10, 13), and size of projections of abdominal segments (figs 11, 14) and has no preocular spines (figs 9, 12).

DESCRIPTION

Body brownish black with a cupreous metallic tinge (especially pronotal margins, pronotal and scutellum protrusions, and apical connexival segments). Body elongate, abdomen slightly broader than pronotum. Lateral margins of pronotum and abdomen bearing distinct processes.

Head (fig. 12) slightly punctate; paraclypei deeply concave and much longer than clypeus joined in front of it; eyes round, protruding and appear pedunculate, light-brown, ocelli of the same colour as head surface; ocular index 4.3; distance between ocelli about 1.23 times longer than distance between ocellus and eye; antennae 4-segmented, 1st segment short, not reaching apex of head, 2nd longest, 3rd and 4th subequal, but 3rd slightly dilated, first three segments including base of 4th similarly coloured as head, rest yellowish; rostrum light brown, reaching midcoxae, 1st segment extending beyond base of head, buccula lobed, anteriorly incised, surface convex and rugose, similarly coloured as head.

Pronotum (fig. 13) generally of same colour as head, with numerous fine ridges, and puncture-like spots; anterior border drawn forwards to form a collar-like structure behind base of head, bearing sharp corners; lateral margins irregu-

larly rugged with one very sharply pointed projection; posterior angles rounded; posterior border straight at base of scutellum, anterior median tuberosity large and conspicuous, two small depressions present below tuberosity.

Scutellum with dispersed puncture-like spots; cavity-like depressions present at basal angles of scutellum.

Hemelytra narrower than abdomen, corium slightly longer than scutellum, membrane not extending beyond abdomen, creamy coloured with brownish patches.

Legs uniformly coloured as rest of body, femora with small spines on undersurface, spines extending in two rows from near apex to base of femora (about 8 spines), hind tibia of female slightly dilated.

Meso- and metasternum with a deep median groove; scent gland spout large and conspicuous, evaporatoria wrinkled.

Abdomen. Connexivum not covered by hemelytra, well conspicuous; posterior lateral corners of segments with a large pyramid-shape apical projection and smaller median projection (fig. 14); sterna punctate.

Measurements (in mm) (female only): body length 17.21; body width 10.4; head length 3.0; head width 3.25; pronotum length 4.5; pronotum width 9.0; scutellum length 4.6; scutellum width 4.75; antennal segments: 1.0:2.5:1.95:1.55.

Type material

Holotype female: [Sumatra]: Indrapura - Estate. Ost Sumatra; Gebr. Siemssen leg. IX - XII 1893, det. 6 IV 1894, *Megymenum basale dohrni* J.A. Lis, det B. Lis (preserved in the collection of the Department of Zoology, University of Opole.

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REFERENCES

- KOCOREK, A., Lis, J, A., 2000. A cladistic revision of the Megymeninae of the World (Hemiptera: Heteroptera: Dinidoridae). Pol. Pismo Entomol., 69: 7-30.
- Lis, B. 1996. Coridius pseudaffinis, a new species of the Dinidoridae (Hemiptera: Heteroptera) from Ghana, and new records for several other Afrotropical species of the family. Entomol. Mitt. Zool. Hamburg, 12 (154): 51-54.
- Lis, J. A., Kocorek, A. 1996. *Thalma secunda* n. sp. from New Guinea, and notes on other species of the family (*Hemiptera: Heteroptera: Dinidoridae*). Ann. Upper Siles. Mus., Ent., 6-7: 249-252.
- ROLSTON, L.H., RIDER, D.A., MURRAY, M.J., AALBU, R.L., 1996. Catalog of the *Dinidoridae* of the world. Papua New Guinea Journal of Agriculture, 39(1): 22-101.