

A new genus of Lethaeini (Insecta: Heteroptera: Lygaeidae) from the Oriental Region

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Abstract

Aristaenetoides politus gen.n. et sp.n., a widespread Oriental species of the Lethaeini (Lygaeidae: Rhyparochrominae), is described. Comparisons of the new taxon with other Lethaeini genera are drawn.

Key words: Lygaeidae, Rhyparochrominae, Lethaeini, Oriental Region, new genus.

Zusammenfassung

Aristaenetoides politus gen.n. et sp.n., eine weit verbreitete, orientalische Art aus der Tribus Lethaeini (Lygaeidae: Rhyparochrominae), wird beschrieben. Vergleiche zwischen dem neuen Taxon und anderen Gattungen der Lethaeini werden angestellt.

Introduction

During my studies of the collections of the Natural History Museum in Vienna (NHMW), the Natural History Museum in London (BMNH), the Hungarian Natural History Museum (HNHM), and of the Ernst Heiss Collection in Innsbruck (EHC), I recognized several Lygaeidae specimen from the Oriental Region that do not belong to any of the known species. Some of them belong to the rhyparochromine tribe Lethaeini STÅL, 1872. This tribe was redefined by ASHLOCK (1964) but it has not been revised, except in the West Palaearctic Region (PÉRICART 1999) and in China (ZHENG & ZOU 1981). Presently 38 genera and 162 species are known from all zoogeographic regions (e.g., SLATER 1964, SLATER & O'DONNELL 1995). In the Oriental region, 43 species belonging to ten genera are known. A new genus discovered during this study is described below. Deposition of types in the mentioned collections and in the Museum of Natural History, Berlin (MNHB) is indicated below.

Aristaenetoides, gen.n.

Type species: *Aristaenetoides politus* sp.n. (by monotypy).

Etymology: Named for the similarities with *Aristaenetus*. Gender masculine.

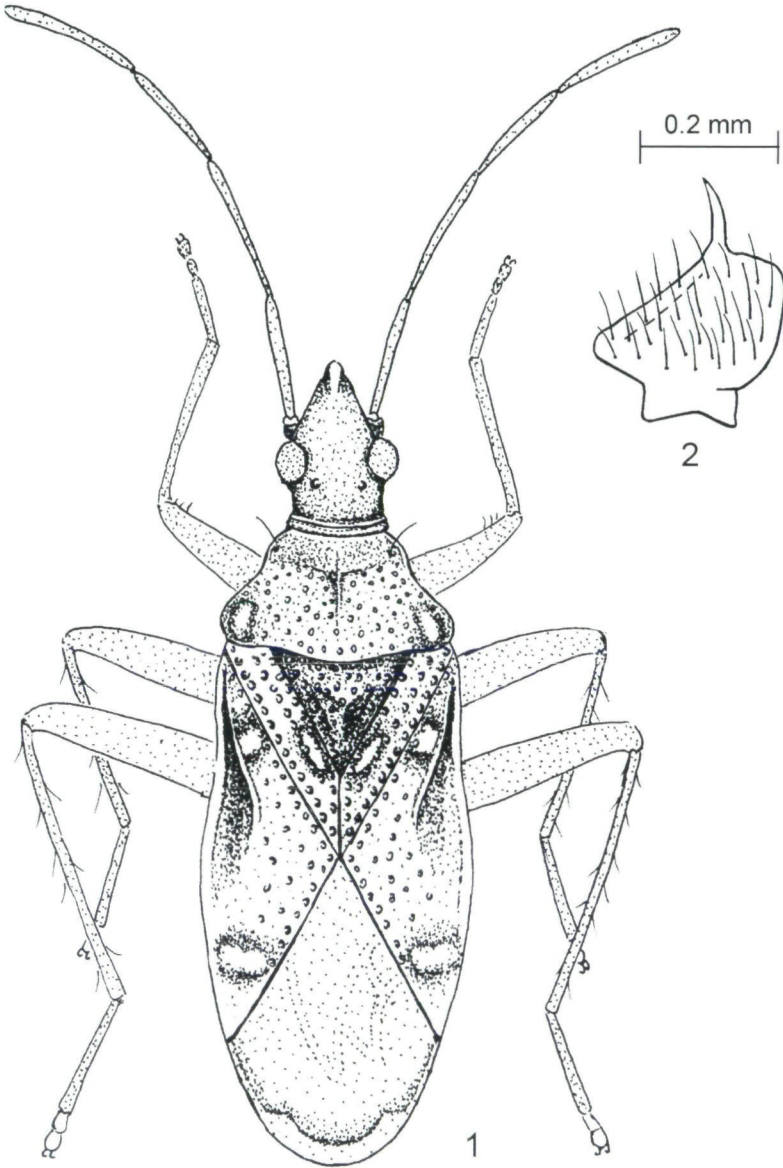
Description: Body shining, elongate, of moderately large size. Head correct, with length subequal to width, with moderately dense punctures, shorter or longer pubescence arisen out of them. One pair of long setae near eyes. Eyes prominent, not touching

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pronotum. Ocelli well developed, located at hind margin of eyes, closer to them than to each other. Ventral surface of head punctate, nearly flat but in front of base of antenna moderately swollen. Gena with distinct longitudinal carina from base of antenna to clypeus. Antennae slender, with fairly short recumbent or semi-erect hairs; segment I with length subequal to head width, extending for more than half its length beyond apex of head; segment II subequal to I; remaining segments little shorter. Labium reaching to hind coxae or abdominal sternite II (1st visible sternite); segment I extending for about base of head; segment II of similar length; segment III shorter than I; segment IV shortest. Thorax: Pronotum trapezoidal, wider than long, strongly narrowed anteriorly, at anterior margin narrower than head with eyes; lateral margin shortly concave, carinate but not explanate. Anterior collar impunctate, well delimited by punctate groove, not protruding posteriorly in middle. Both lobes separated by shallow transverse impression; anterior lobe convex, impunctate except micropunctures; lateral margin with one pair of long anterolateral setae, only here slightly explanate. Posterior lobe strongly but not densely punctate except smooth raised humeral angles and fine median carina not reaching posterior margin; posterior margin convex. Scutellum with subbasal depression, evenly punctate, similarly to posterior pronotal lobe. Clavus with three rows of punctures (sometimes with a few further punctures between both inner rows). Corium with carinate costal margin, which shallowly concave at basal third and posteriorly convex, posterior margin straight except medial one-fourth convex; punctures about as dense as on scutellum, with two rows along claval margin; vein M+R elevated as strong ridge in basal four-fifths of corium; between both rows of punctures with slightly elevated carina, too. Membrane more or less distant from apex of abdomen; with basal cell and three or four veins. Sterna strongly punctate except smooth pleural areas. Metapleural evaporative area and scent gland auricle not very extensive and not sexually dimorphic. Legs slender, fore femur proximally with slender bristles and at distal end with three or four thorn-like spines. Hind femur distally with slender spine. Middle and hind tibiae with four rows of strong bristles and with girdle of bristles at apices. Abdomen impunctate except micropunctures and a few fine punctures; with very fine decumbent hairs and stronger trichobothrial hairs. Trichobothria clearly visible, located as in other genera of Lethaeini. All abdominal spiracles visible ventrally. Posterior margin of sternum VII simple, without teeth.

Comparative notes: The new genus is close to the Australian genus *Aristaenetus* DISTANT, 1901. The most significant differences between the genera are: head of *Aristaenetus* not punctate (but ventrally striolate); clavus of *Aristaenetus* with four rows of punctures instead of three; evaporative area of *Aristaenetus* sexually dimorphic.

In the monobasic genus *Aristaenetus* DISTANT, 1901 two species are included now. The genus was revised and both species figured by WOODWARD & O'DONNELL (1988). The type species, *Aristaenetus diffinis* (WALKER, 1872), is closer related to the new genus. *Aristaenetus similis* WOODWARD & O'DONNELL, 1988 probably belongs to *Neolethaeus* DISTANT, 1909 or another genus, but further investigations are required to confirm this. The distinct pronotal collar, the anterolateral setae on pronotum, and the closed basal membrane cell of *Aristaenetoides* are important characteristics among Lethaeini. They can be also found in the genera *Neolethaeus* and *Lophoraglius* WAGNER, 1961. In these genera the head is punctate below, similarly to *Aristaenetoides*, but the pronotum has a laminate lateral margin and is never concave laterally, and the scutellum has prominent



Figs. 1 - 2: *Aristaenetoides politus* sp.n.: (1) habitus, dorsal view; (2) right paramere, inner view.

V- or Y-shaped keel. Both genera have 4 claval rows of punctures, and in *Neolethaeus* the posterior margin of the sternum VII of the male is armed with teeth. It seems possible to the author, that *Lophoraglius* is a synonym of *Neolethaeus*, but this requires further studies. *Lethaeograndellus* SCUDDER, 1962 also shows great similarity with *Aristaenetoides*, e.g., in the pronotal shape, but the anterior pronotal lobe is densely punctate,

the pronotal margin moderately laminate, and the forewing has four claval rows of punctures. Thus, among the genera of Lethaeini of the Palaearctic, Oriental, Australian and Ethiopian regions the combination of the following characteristics is typical only for *Aristaenetoides*: a) 3 claval rows of punctures (common with *Diniella* BERGROTH, 1893, *Exomyocara* SLATER & WOODWARD, 1974, *Lamproceps* REUTER, 1882, *Lampropunctus* SCUDDER, 1971, *Paramyocara* WOODWARD & MALIPATIL, 1977); b) closed basal membrane cell(s) (common with *Aristaenetus*, *Lethaeus*, *Lethaeograndellus*, *Lophoraglius*, *Neolethaeus*); c) distinct pronotal collar (common with *Adauctus* DISTANT, 1909, *Aristaenetus*, *Austroxestus* WOODWARD, 1962, *Diniella*, *Exomyocara*, *Hexatrachocoris* KIRITSHENKO, 1931, *Lethaeograndellus*, *Lophoraglius*, *Myocara* BERGROTH, 1916, *Neolethaeus*, *Paramyocara*, *Porrectolethaeus* SCUDDER, 1971); d) carinate pronotal lateral margins (common with *Aristaenetus*, *Atkinsonianus* DISTANT, 1901, *Camptocera* JAKOVLEV, 1877, *Carabocoris* GROSS, 1958, *Coleocoris* GROSS, 1958, *Diniella*, *Hexatrachocoris*, *Lamproceps*, *Lampropunctus*, *Lethaeus*, *Porrectolethaeus*).

Aristaenetoides politus sp.n. (Figs. 1 - 2)

Type material: Holotype (♂): NE India, Meghalaya State, West Garo Hills, Nokrek N. P., 950-1250 m, 25.29 N 90.19.5 E, E. 9.-17.V.1996, leg. Jendek & O. Sausa (NHMW); Paratypes: 1 ♀, India, W. Bengal, Darjeeling Distr., Kurseong, No. 849, beaten, leg. G. Topál; 1 ♀, Thailand, Kaeng Krachan N. P. (Phetchaburi) No. 57, light trap, 8.II.1994, leg. S. Mahunka & L. Papp; 1 ♂, Thailand, pr. Trang Khao Chong Bot. G., 21.XI.2003, leg. A. Orosz et Gy. Sziráki; 1 ♀, Thailand, pr. Prachin Buri Sakaerat Ecol. Research Institute, No. 95, at light, 16.VI.2001, leg. E. Horváth & Gy. Sziráki; 1 ♂, 2 ♀♀, Vietnam, Cuc Phuong, 400 m, No. 69., on light, 17.X.1986, leg. Vászárhelyi (all HNHM); 3 ♂♂, NE India, Meghalaya State, West Garo Hills, Bagmara, ca. 100 m, 25.11 N 90.38 E, 19.-21.V.1996, leg. E. Jendek & O. Sausa; 2 ♀♀, NE India, Meghalaya State, West Garo Hills, Nokrek N. P., 950-1250 m, 25.29 N 90.19.5 E, E. 9.-17.V.1996, leg. Jendek & O. Sausa; 1 ♂, 3 ♀♀, NE India, Meghalaya State, West Garo Hills, Balphakram N. P., ca. 100 m, 22.-27.V.1996, 250-550 m, 25.11 N 90.51 E, leg. E. Jendek & O. Sausa; 1 ♂, 1 ♀, S. Vietnam, 14.10N 109.30E, 40 km NW of An Khe, Buon Lui, 620-750 m, 28.3.-12.4.1995, leg. P. Pacholátko & L. Dembicky; 2 ♂♂, 1 ♀, S. Vietnam, Nam Cat Tien N. P., 1.-15.5.1994, leg. P. Pacholátko & L. Dembicky; 1 ♀, S. Vietnam, 14 km SW of Bao Loc, 18.-29.5.1994, leg. P. Pacholátko & L. Dembicky; 1 ♂, Malaysia – Pahang, 350-550 m, 20 km NE Raub, Lata Jarom Gg. Benom, 18-22.II.1995, leg. M. Strba & R. Hergovits; 2 ♀♀, Malaysia: Sarawak, Mulu NP, Benaret Inn on light, 3.-6.III.1993, leg. H. Zettel; 1 ♂, 2 ♀♀, Sarawak, III.1994, Rumah kabau anak mungot Ng sebong Baleh, 25 km E Kapit, leg. Kodada (all NHMW); 1 ♀, Sarawak, Gunong Mulu Nat. Park, Site 10. February Camp 1, Mulu 160 m, 386470, J. D. Holloway, RGS Mulu Exped. B. M. 1978-206 (BMNH); 1 ♀, Danai Beach b. Kuching, Sarawak, leg. H. Franz; 1 ♀, Indonesien – Bali, Gg. Catur – Bergwald, Env. Bratansee 1500, 26.XI.1999, leg. E. Heiss (both EHC); 1 ♀, NE India, Meghalaya State, West Garo Hills, Balphakram N. P., ca. 100 m, 22.-27.V.1996, 250-550 m, 25.11 N 90.51 E, leg. E. Jendek & O. Sausa (MNHB).

Description: Colour brown; head, anterior pronotal lobe and collar, scutellum and thorax ventrally slightly darker; tibiae and tarsi yellowish brown; an elongate spot on end of clavus between two inner rows of punctures, a spot at inner corial margin at basal one-fourth, another spot at half of costal margin of corium and a subapical spot on corium pale.

Structure: Body shining, nearly hairless, with hardly visible short and fine pubescence on head and abdomen. Head length 0.80 - 0.95 mm; maximum head width (with eyes) 0.75 - 0.95 mm; eye width 0.20 - 0.25 mm, length of antennal segments I - IV 0.8 - 1.0, 0.8 - 1.0, 0.7 - 0.85, and 0.8 mm; length of labial segments I - IV 0.7 - 0.75, 0.6 - 0.7, 0.5 - 0.6, and 0.4 - 0.45 mm; pronotum length 0.8 - 1.15 mm; width of pronotal collar

0.65 - 0.75 mm; maximum pronotum width 1.3 - 1.7 mm; scutellum length 0.7 - 0.85 mm; length of claval suture 0.5 - 0.55 mm; total length of body 4.3 - 5.55 mm. Paramere of male as in Fig. 2.

Geographical distribution: Northeastern India, Thailand, Vietnam, Peninsular Malaysia, Borneo.

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References

- ASHLOCK P.D., 1964: Two new tribes of Rhyparochrominae: a re-evaluation of the tribe Lethaeini (Hemiptera-Heteroptera: Lygaeidae). – *Annals of the Entomological Society of America* 57: 414-422.
- PÉRICART J., 1999: Hémiptères Lygaeidae euro-méditerranéens. Vol 2. – *Faune de France* 84B, Fédération française des Sociétés des Sciences Naturelles, Paris, 453 pp.
- SLATER J.A., 1964: A Catalogue of the Lygaeidae of the World. Vol. II. – University of Connecticut, Storrs, pp. 779-1668.
- SLATER J.A. & O'DONNELL J.E., 1995: A Catalogue of the Lygaeidae of the World (1960-1994). – New York Entomological Society, New York, 410 pp.
- WOODWARD T.E. & O'DONNELL J.E., 1988: The genus *Aristaenetus* DISTANT (Hemiptera: Lygaeidae: Rhyparochrominae) with the description of a new species. – *Memoirs of the Queensland Museum* 25(2): 481-491.
- ZHENG L.Y. & ZOU H.G., 1981: Lygaeidae. – In: HSIAO T.Y. (ed.): A Handbook for the determination of the Chinese Hemiptera-Heteroptera. – Science Press, Peking, pp. 564-612.