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A new genus and species of Mezirinae flat bugs from Laos (Hemiptera, Heteroptera, Aradidae)

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A b s t r a c t : Although the Aradidae fauna of the Oriental Region is rich, that of Laos is still insufficiently known and need further studies. Examination of flat bugs collected already long time ago has proved, that a conspicuous Mezirinae species cannot be assigned to one of the East-Palaearctic or Oriental Mezirinae genera for which a new genus is proposed. *Allomezira pilosicornis* nov.gen. et nov.sp. is described and figured.

K e y w o r d s : Heteroptera, Aradidae, Mezirinae, Laos, new genus, new species.

Introduction

The Aradidae fauna of continental and insular East Palaearctic and Oriental Region is rich in genera and species. The last comprehensive publications on Mezirinae of the Oriental Region and South Pacific by KORMILEV (1971) and the Catalog of Flat Bugs of the World by KORMILEV & FROESCHNER (1987) recorded 17 Mezirinae from Laos. Examination of some flat bugs from Laos collected already long time ago has proved, that a conspicuous Mezirinae species cannot be assigned to one of the East-Palaearctic or Oriental Mezirinae genera for which a new genus is proposed. *Allomezira pilosicornis* nov.gen. et nov.sp. is described and figured.

Material and methods

The type specimens are from the collection of the author, which will be deposited at the Zoologische Staatssammlung Munich, Germany (holotype CEHI) and the Moravian Museum Brno Czech Republic (paratypes MMB). Measurements were taken with a micrometer eyepiece and are given in millimeters. Photos were taken with a Nikon Coolpix P300 camera and processed with paint.net software.

When citing the text of the labels of the pin attached to the specimens (/) separates the lines and (//) indicates the end of text.

Abbreviations used:

deltgdorsal external laterotergite (Connexivum)

ptgparatergite

Taxonomy

Family Aradidae BRULLÉ, 1836

Subfamily Mezirinae OSHANIN, 1908

Allomezira gen.nov.

Type species: *Allomezira pilosicornis* nov.sp.

Diagnosis: Medium sized macropterous Mezirinae (6.3-6.5mm), habitus elongate, abdomen parallel sided; coloration dark brown with yellowish pattern along connexivum and on legs; surface finely granulate without pilosity except ventral side of antennae; these more than twice as long as width of head, eyes inserted in head, postocular tubercles present; pronotum anterolaterally constricted, posterior margin nearly straight; membrane with irregular veins; spiracles II-VI ventral, VII-VIII lateral.

Allomezira gen.nov. resembles the bicolored East-Palaearctic *Mezira* species *M. hoberlandti* JOSIFOV & KERZHNER, 1974; *M. scabrosa* SCOTT, 1874; *M. subsetosa* JOSIFOV & KERZHNER, 1974; *M. subtilis* JOSIFOV & KERZHNER, 1974; *M. verruculata* KIRITSHENKO, 1959 (JOSIFOV & KERZHNER, 1974). However, it differs and is recognized by a set of characters not shared by these *Mezira* species: spiracles II-VI ventral, VII-VIII lateral and visible from above (vs. spiracles II-VII ventral, VIII lateral); lateral margin of pronotum abruptly constricted on anterior lobe (vs. bisinuate); body longer, subparallel, ratio length / width of abdomen 1.9 times (vs. shorter, 1.5-1.6 times); posterior margin of male pygophore bicarinate (vs. rounded without carina).

Habitus and color pattern of the new genus resembles also the Oriental genus *Usingerida* KORMILEV, 1955, but *Allomezira* nov.gen. differs by spiracles II-VI ventral, VII-VIII lateral (vs. II-VII ventral), membrane with distinct veins (vs. smooth or roughened); anterolateral angles of scutellum without pale elevations (vs. with distinct elevations); pygophore truncate posteriorly (vs. triangularly pointed).

As the undescribed species cannot be assigned with certainty to the abovementioned genera, a new genus is proposed to accommodate *Allomezira pilosicornis* nov.sp.

Description: Head: Longer than wide, genae produced over clypeus; antenniferous lobes acute, antennae more than twice as long as width of head, segment III longest; segments II-IV with long ventral pilosity; eyes inserted in head, postocular lobes with acute tubercle.

Pronotum: More than twice as wide as long, posterior lobes parallel as wide as abdomen, anterior lobe constricted, anterolateral angles rounded; surface granulate, anterior lobe with two conical elevations.

Scutellum: Triangular, wider than long, lateral margins carinate, disk with a cross-like elevation.

Abdomen: Parallel sided, posterolateral angles of deltg II-VI slightly produced, VII truncate and produced posteriorly; deltg II+III not fused; hemelytra fully developed with distinct veins on membrane; spiracles II-VI ventral, VII-VIII lateral and visible from above. Legs. Unarmed, tibiae cylindrical, tarsi two-segmented, claws with long pulvilli.

Etymology: The generic name is composed of "allos" (Greek) meaning a different one and *Mezira* the closest related genus.

***Allomezira pilosicornis* nov.sp.** (Figs 1-10)

Type material: Holotype ♂, labelled: N-Laos, 14-16 May 7 VIANG CHAN prov. 1997 / VANGVIANG N from / VIENTIANE / legit S.BECVAR j.& sc. // (CEHI). Paratypes two ♀♀, labelled: Laos-N, 24 IV-16 V 1999 / Louang Prabang prov. / 22°33-4'N, 102°14' E / Ban Song Cha (5km W) / ~1200m, Vit Kubán leg // Vit Kubán expedition / "Laos 1999" / Moravian Museum Brno / Czech Republic // (MMB).

The specimens are provided with type labels accordingly.

Description: Macropterous male: Coloration of head, pronotum, scutellum, corium and membrane of hemelytra and appendages dark brown, yellowish spotted are deltg II-VI, tergite VII; ptg VIII, the lateral margins of pronotum; apex of femora and median part of tibiae are also predominantly yellowish; surface of body and appendages with fine granulation.

Head: Slightly longer than wide (1.0 / 0.90), clypeus shorter than anteriorly produced finger-like genae, those reaching 1/2 of antennal segment I; antenniferous lobes divaricating with acute apex; antennae 2.28 times as long as width of head (2.05 / 0.90), length of antennal segments I / II / III / IV = 0.50 / 0.35 / 0.75 / 0.45; segments II-IV with conspicuous long erect setae on ventral side; eyes oval inserted in head, postocular lobes with acute tubercle reaching outer margin of eyes, then strongly converging posteriorly to constricted neck; rostrum arising from a slit-like atrium, shorter than head, rostral groove open posteriorly.

Pronotum: 2.28 times as wide as long (2.05 / 0.90), collar ringlike and carinate, lateral margins subparallel on posterior lobe, then recessed and converging to rounded anterolateral angles, surface of anterior lobe with two conical elevations at middle.

Scutellum: Triangular, wider than long (1.15 / 1.0), lateral margins carinate, surface with a cross-like elevation.

Abdomen: Lateral margins subparallel, posterolateral angles of deltg II-VI slightly produced, those of tergite VII truncate and directed posteriorly; deltg II-III not fused; hemelytra covering tergal plate, laterally confined by a carina, reaching 1/2 of tergite VII, irregular veins developed; spiracles II-VI ventral, VII-VIII lateral and visible from above; pygophore wider than long, truncate posteriorly, dorsal rim with with bicarinate elevation; paratergites VIII slender, club shaped, produced over apex of pygophore.

Female: Habitus as male; paratergite VIII bilobate, produced posteriorly, bicuspidate tergites IX and X as long as ptg VIII. Venter. Sternite VI with a semi - circular median excision for the reception of split sternite VII.

Measurements: Male, length 6.4mm; length of antennae 2.05; width of abdomen 2.40; Female. Length 6.5mm; length of antennae 1.95; length of antennal segments I / II / III / IV = 0.50 / 0.35 / 0.70 / 0.40; head length / width 1.0 / 0.85; pronotum l / w 1.0 / 2.15; scutellum l / w 1.05 / 1.20; width of abdomen 2.55.

Etymology: The specific epithet refers to the unusual long pilosity on ventral side of antennal segments II-IV.

Note: From the description and the figured holotype of *Usingerida longiceps* KORMILEV, 1977 from Borneo, it was suspected, that this might represent the new species. Jim Boom, Bishop Museum Honolulu, USA was kind enough to submit images of the holotype preserved at Bishop Museum. Comparison proved now that *U. longiceps* is a distinct different taxon.

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Zusammenfassung

Die Fauna der Heteropterenfamilie Aradidae ist in der Ost-Paläarktischen und Orientalischen Region durch zahlreiche Gattungen und Arten vertreten (KORMILEV & FROESCHNER, 1987). Die Fauna von Laos ist dagegen noch wenig bekannt und von der artenreichsten Unterfamilie Mezirinae sind nur 17 Arten von 7 Gattungen nachgewiesen worden. Eine neue Gattung und Art, *Allomezira pilosicornis* nov. gen. et nov. sp., werden beschrieben und abgebildet.

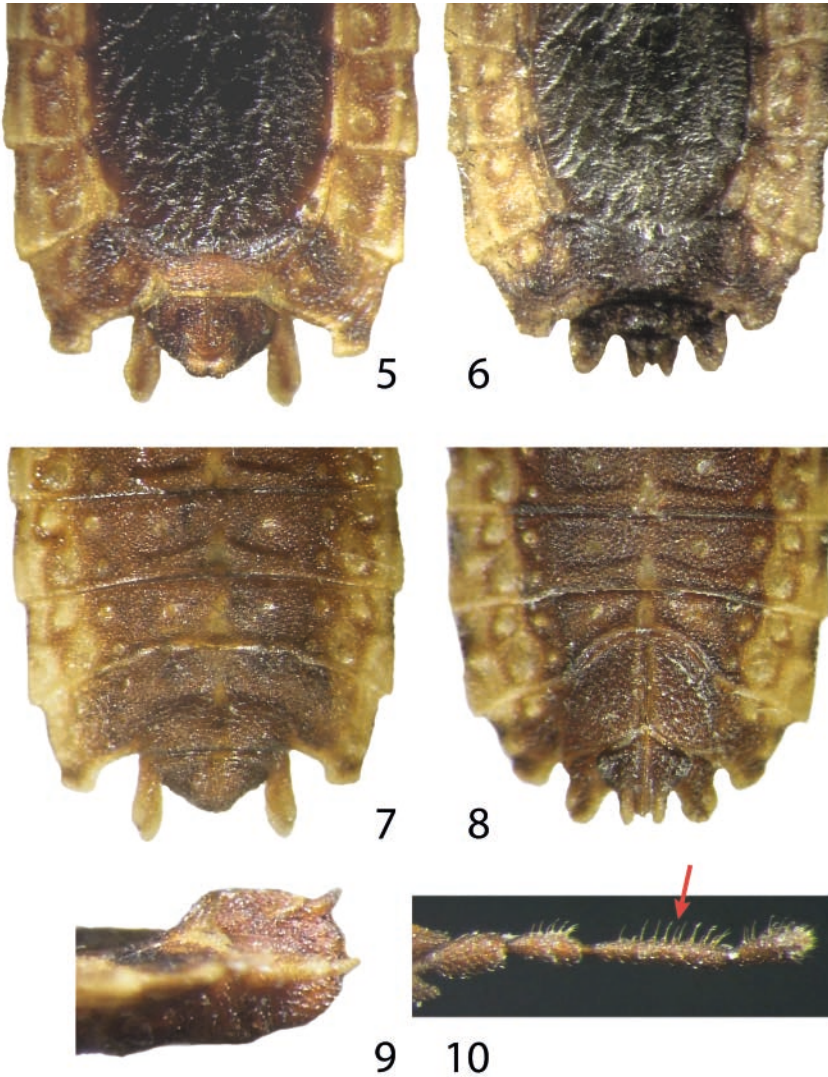
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Figs 1-4: *Allomezira pilosicornis* nov.gen. et nov.sp. (1, 3) holotype ♂ dorsal and ventral; (2, 4) paratype ♀ dorsal and ventral (damaged head and pronotum). Scale 1mm.



Figs 5-10: *Allomezira pilosicornis* nov.gen. et nov.sp. (5, 7) holotype ♂ terminal abdominal segments dorsal and ventral; (6, 8) paratypes ♀ terminal abdominal segments dorsal and ventral; (9) holotype ♂, pygophore lateral view; (10) paratype ♀ antenna ventral view with erect pilosity (arrow). Scales 1mm (5-8), 0.5mm (9, 10).

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