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A new Austromalayan *Hidakacoris* Tomokuni, 1998 species (Heteroptera: Rhyparochromidae: Drymini)

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Schmidt, P. & Kondorosy, E.: *A new Austromalayan Hidakacoris Tomokuni, 1998 species (Heteroptera, Rhyparochromidae, Drymini). - Natura Somogyiensis 44: 5-14.*

Abstract: The second species of the genus, *Hidakacoris meridionalis* **sp. nov**. is described from Southeastern Asia and New Guinea with discussing the place of the genus in the tribe Drymini.

Keywords: taxonomy, Lygaeoidea, Indonesia, New Guinea

Introduction

Drymini is a diverse and morphologically heterogenous tribe of Rhyparochromidae, the largest family of Lygaeoidea. It currently consists of 313 species belonging to 58 genera. Three of these genera are subdivided into two subgenera (Dellapé & Henry 2024, Kondorosy unpublished data). With this, it is the third largest tribe in the family from the 15 known tribes. The high number of the genera shows that the tribe Drymini is very diverse with many small groups (only Myodochini contains more genera): 20 of the genera are monotypic, further 23 contain less than 5 species, and only in 8 genera have more than 10 valid species. The majority of the species were described in the second half of the 20th century. This progress was made possible because of the work of several taxonomists, especially of G. G. E. Scudder (35 new species) and J. A. Slater and his coworkers (31 species). With the departure of both excellent researchers, the work did not stop and in the 21st century, 45 new species were described, mostly from the Oriental and the Austro-Pacific regions, many of them (18) from Indonesian islands (including Malaysia with Malaya, Brunei, and Papua New Guinea). Previously, before the year 2000, similarly 18 species were known from the islands (and Malaya) (Fig. 7).

During our study of the New Guinean Rhyparochromidae, we first listed the already known species of the region with description of several new species of the genus *Malipatilius* Kondorosy, 2013 (Kondorosy et al. 2024). We found other Drymini

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specimens which similarly do not belong to any known species but meet the generic diagnosis of *Hidakacoris* Tomokuni, 1998. The description of the species follows here.

Material and methods

We used an Olympus SZ-11 stereo microscope for studying the specimens, measurements were taken with a calibrated ocular micrometer attached to it. The dimensions were taken always in dorsal view of the measured part, therefore, on the head and pronotum not in the same plane as on the posterior parts of the body.

Photographs of the specimens were taken partly with a Canon EOS 6D M2 digital camera attached with Canon 100 mm EOS EF f/2.8 objective and Canon EF12 II extension tube, using Adobe Photoshop 7.0 software in the Rippl-Rónai Museum, Kaposvár.

Localities were illustrated with SimpleMappr (Shorthouse 2010) using the following layers: "country" "lakes (blue)", "rivers" "ocean (blue)" and "relief (alternate)" (Fig. 8).

The data on the labels are cited verbatim; every row on the labels are separated with a slash "/", and every label with a double slash "//". Corrected names and other remarks are given in square brackets "[ ]"; "hw" means handwriting.

The studied material originated from the following collections:
BMNH – The Natural History Museum, London, United Kingdom;
EKKH – Előd Kondorosy collection, Keszthely, Hungary;
HNHM – Magyar Természettudományi Múzeum, Budapest, Hungary;
MNCN – Museo Nacional de Ciencias Naturales, Madrid, Spain;
NHMW – Naturhistorisches Museum, Wien, Austria;
NSMT – National Science Museum (Natural History), Tokyo, Japan;
RMNH – Naturalis Biodiversity Centre, Leiden, The Netherlands;
ZSMC – Zoologische Staatssammlung, München, Germany.

The morphological terminology follows KMENT et al. (2016), TSAI et al. (2011) and TSAI & RÉDEI (2017), concerning metathoracic scent efferent system KMENT & VILIMOVÁ (2010).

Results and discussion

Taxonomy

superfamily **Lygaeoidea**
family **Rhyparochromidae**
subfamily **Rhyparochrominae**
tribe **Drymini**

Hidakacoris Tomokuni, 1998

Hidakacoris: Tomokuni 1998: 231–233 original description of new genus, type species by original designation: *Dieuches tsutsuii* Hidaka, 1963 redescribed (1998: 233), PÉRICART (2001: 128) catalogued.

Tomokuni (1998) gave a detailed description of the genus based on the single known species. It is not necessary to repeat these features, therefore, we write here about the few missed or modified characters (which should be expanded because of the additional species) only. Similarly, the discussion of the systematic position of *Hidakacoris* is also correct, but he compared the new genus with *Paradieuches* Distant, 1883 only.

Corrections to the original description: pronotal collar – compared with most of the other genera of Drymini – well defined; external row of punctures of corium limiting exocorium curving inwards, therefore, exocorium 2-3 times wider here than near base.

Relation to other Drymini genera: the most characteristic features of *Hidakacoris* are the shortened inner row of punctures of the clavus; the hardly arched posterior margin of the pronotum with two posterolateral elongation above the base of the clavus; the concave lateral margin of the pronotum only slightly widening at the transversal furrow and only slightly narrowing anteriad; and the special form of the "Y-shaped" elevation of the scutellum, anterior arms nearing each other near base, therefore forming an incomplete circle.

Tomokuni (1998) correctly stated that it is similar to *Paradieuches*, but some other Drymini genera are also rather similar. All of these genera, distributed in the Oriental region, are rather slender, middle-sized (5-7 mm), they have two rows of tiny teeth on the profemur with only 1 large tooth, a relatively well visible punctate pronotal collar, a lamellate lateral margin on the pronotum, the latter having a largely impunctate anterior lobe, and a Y-shaped elevation of the scutellum. These features fit to only a few genera as *Paradieuches*, *Uzza* Distant, 1909, more or less to *Faelicianus* Distant, 1901 and also with reservation to *Eremocoris* Fieber, 1860 and *Scolopostethus* Fieber, 1860. Among these genera (and among the others as well) *Hidakacoris* is the only one which has only two full rows of punctures on the clavus and a shortened row along the scutellum reaching less than halfway forward. This feature is characteristic from 58 genera of Drymini only to *Ischnocoris* Fieber, 1860, *Malipatilius* Kondorosy, 2013 and *Trichodrymus* Lindberg, 1927 which are very dissimilar to *Hidakacoris*.

Eremocoris and *Scolopostethus* are only superficially similar as shows the inconspicuous pronotal collar and the shape of the inconspicuous Y-elevation (orientated to basal angles of the scutellum where a pair of fine oblique keels present); the posterior pronotal margin is evenly concave in whole width. *Faelicianus* also does not closely related, the straight posterior and lateral margins of the pronotum are well visible differences, the Y-shaped elevation of the scutellum is inconspicuous in anterior part. The most similar, perhaps most closely related genera are *Paradieuches* and *Uzza*. The lateral margin of the pronotum strongly narrowing forward in both genera; in *Uzza* the posterior margin is strongly, almost evenly arched, while in *Paradieuches* it is similar to *Hidakacoris*; furthermore, *Uzza* has an emergent impunctate midline in the posterior lobe of the pronotum, while it is absent in the other two genera. Concerning the features mentioned by Tomokuni (1998), the really important difference is the strongly (but because of the same coloration not conspicuously) punctate anterior lobe of pronotum, while the opaque dorsum and the coloration are not genus-level differences, not mentioning that the dorsum of *Hidakacoris* is mostly also not shining.

Hidakacoris meridionalis, sp. nov.
(Figs. 1-6)

Type material. Holotype. IRIAN JAYA / Jayawijaya-Prov. / leg: A. Riedel, 1992 / Diuremna, [=Dirwemna] / 1900-2100m / 9.-11. IX (m#, ZSMC).

Paratypes. PHILIPPINES: Dolores / Mazarredo [hw] (m#, MNCN). MALAYSIA: MALAYSIA W., KELANTAN / Road between Kampong Raja / and Gua Musang, 1400–1700m. / (Ladang Pandrak), 1–28. iv. 2006 / 4°63'N 101°45'E – 4°88'N / 101°95'E, Cechovsky Petr lgt. (m#, NHMW); Sabah / Jesselton [=Kota Kinabalu] / 16. x. 1968 / P. J. L. Roche // RMNH INS. / 1483172 (f#, RMNH). INDONESIA: Museum Leiden / N SUMATRA: Bivouac Two / Mt. Bandahara / 3°44'N – 97°43'E. / 5–10. VII. 1972 / J. Krikken, no 24 / ca 1430 m // RMNH1483171 (m#, RMNH); same data // RMNH1483170 (f#, RMNH). NEW GUINEA: Same data as the holotype (f#, ZSMC); 17.-19. IX. 1991. / Irian Jaya, Wamena / Jayawijaya Prov. / Pronggoli, 2100-2400m / leg. A.Riedel (m#, ZSMC); Indonesia, Papua / Barat, Birdshead / Penins. Snow Mts. / Baliem Resort / S04°03.578' E139°01.747' / 1947 m, at light / 23-28.05.2014. / leg: R.Horváth (f#, HNHM); Indonesia, W. Papua, Arfak Mts./1190 m, Duebei env. / 20 km S of Warmere/Manokwari Distr./21.01. – 08.02. 2008./ leg. St. Jakl (f#, EKKH). PAPUA NEW GUINEA: Stn. No. 51 / New Guinea / Madang Dist. / Finisterre Mts. / Budemu . 4000 ft. / 15-24. X. 1964. / M.E. Bacchus. / B. M. 1965 – 120. (m#, BMNH); Papua New Guinea / Morobe-Province / leg. A Riedel, 1992 / Wau, Kuper-Range / Biaru-Camp, 1700-2000m, 10.X. (f#, ZSMC); New-Guinea (NE) / Wau, Mt. Kaindi / 1800 m / 2. IX.1968. / NG-W-R. 16. / leg. Dr. J. Loksa [hw] (m#, HNHM).

Description.

Colour: Head, anterior lobe of pronotum and most of scutellum fuscous (Fig. 1). Eyes dark reddish-brown. Labium, legs yellowish to light brown, femora (especially profemora) usually darker with slightly impressed tiny dark brown spots dorsally. Antennae yellow to brown: scape and pedicel usually unicolorous, apical half of flagelli darker than basal half. Posterior lobe of pronotum lighter brown, than anterior lobe in hue. Pronotum with bright, creamy lateral margin, also from below sharply contrasting at anterior half, but getting darker and fading posteriorly. Clavus, transverse middle section of corium, apical part of scutellum brown. Basal one-third of corium, inconspicuous spots at claval commissure, lateral spot at two-third of corium and the very apex of corium creamy. Rest of corium brown with variable tones. Most of membrane dark brown, base at apex of corium and basal one-third of vein Cu white. Thoracic sternites fuscous, abdominal sternites, metepimeron and collar of prosternum brown. Punctures dark brown on entire surface, best visible on the creamy sections of corium.

Integument: Body mostly dull, with strong rather sparse punctures and extremely short fine decumbent pubescence; head shiny and very densely and finely punctate except dull semicircular spot on vertex including ocelli being punctate similarly to other parts of body. Anterior lobe of pronotum mostly impunctate except collar and lateral parts along margin. Scutellum mostly finely and sparsely punctate, laterally in posterior two-third with very dense and strong punctures. Clavus with two dense and strong rows of punctures, along scutellum with traces of a third row (only with some punctures in posterior half). Corium with two rows of punctures along vein Cu, a third mostly arched row bordering vein R+M outwards connected near apical margin with row of Cu; after branching M inwards from vein R a short row present as well; between R+M veins rather densely punctate, on other parts only a few punctures, mostly in posterior half near exocorium. Antenna and legs with dense short decumbent pubescence; profemur sparsely with fine long setae on anterior surface and with two rows of dense short teeth; anteroventral row beginning with a straight long tooth submedially and consisting of 4-8 short teeth in apical half while posteroventral row of 11-15 tiny teeth extending to apical two-third (Fig. 3); stiff setae of tibiae relatively weak, most developed on mesotibia, fully

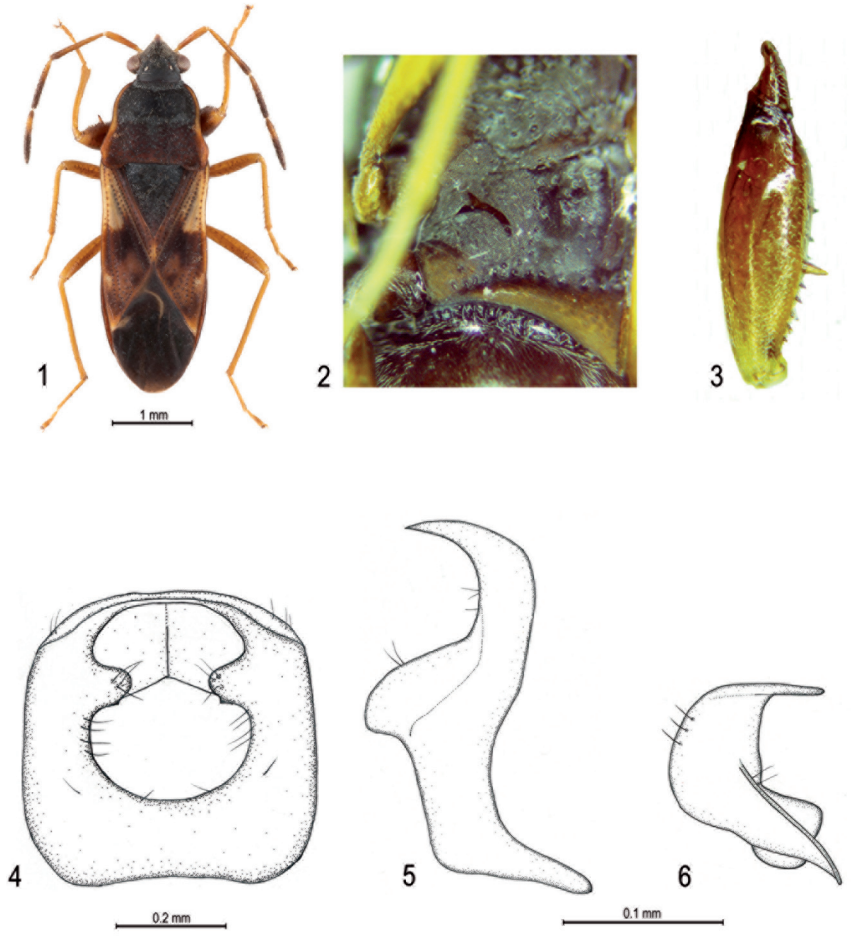

Fig. 1: *Hidakacoris meridionalis* sp. nov. habitus in dorsal view; Fig. 2: External scent efferent system; Fig. 3: Profemur; Fig. 4-6: Male genitalia of *H. meridionalis* sp. nov.: 4: pygophore, 5: paramere in ventral view, 6: paramere in apical view

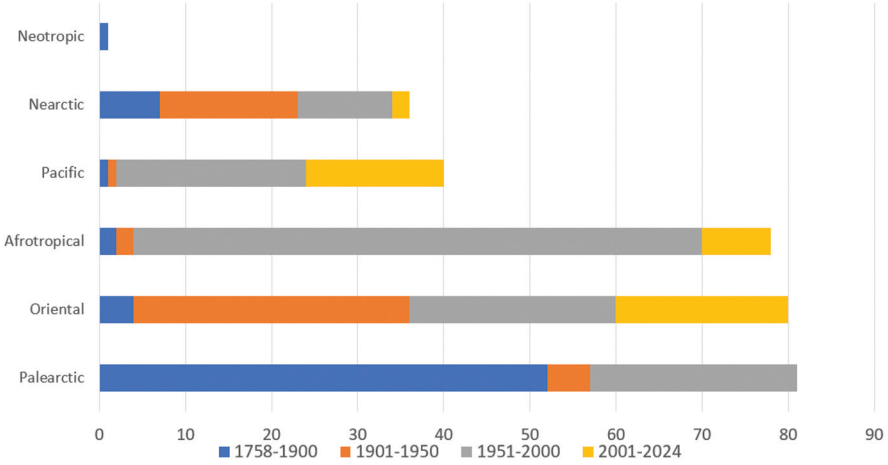

Fig. 7: The history of the descriptions of Drymini species classified by biogeographic realms

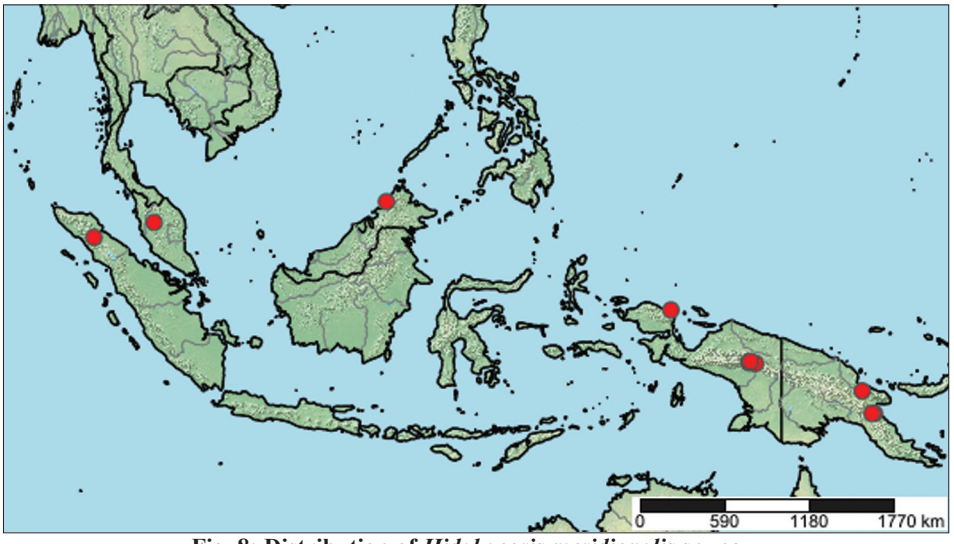

Fig. 8: Distribution of *Hidakacoris meridionalis* sp. nov.

absent on protibia. Abdomen shiny with very dense short decumbent pubescence and very dense fine punctures, almost touching each other.

Structure: Bucculae long, reaching about middle of eyes, gradually narrowing posteriad, in posterior half barely emergent. Antenniferous tubercles short, less than one-third as long as eye. All antennomeres subcylindrical, only barely thickening, distiflagellum slightly fusiform. Ocelli situated farther from each other than 2.5 times their distance from eyes. Pronotum campanulate, concave at transverse impression. Lateral margin carinate, carina almost evenly broad, slightly broader than base of pedicel, posteriad thickened ventrally and laterally, so, margin anteriad of humeral angles situated dorsally but shortened, not reaching humeral angles. Posterior margin along scutellum straight, laterally with elliptic depressed lobe covering base of clavus. Disc of anterior lobe of

pronotum bulging in lateral view, transverse impression deep, connected with shallow posteriad disappearing median furrow; transversal furrow laterad of median impression with narrow, hardly impressed part. Scutellum elongate, emergent, trifuncate median carina mostly blunt except more keel-like posterior one-fourth part. Lateral margin of hemelytra slightly S-form, narrowest at half-length of clavus. Peritreme of external scent efferent system short, very slightly S-formed, directed toward posterolateral edge of metepimeron, but ending well before half length toward it. Evaporatorium reaching laterally about half of metepisternum, also posteriorly leaving a relatively large area uncovered; on mesepimeron covering supracoxal lobe, laterally strongly narrowing, along metathoracic spiracle mostly linearly narrow (Fig. 2). Legs moderately incrassate, profemur about two times as thick as other femora and four times as thick as metatibia. Metatarsus long, tarsomere I elongate, 1.6-1.8 times as long as tarsomeres II-III together (without claws).

Suture between sternites II-III, III-IV and VI-VII vertical, between IV-V and V-VI dorsally orientated anteriad in both sexes, suture between sternites IV and V strongly curving anteriad and ending in trichobothrial furrow as typical in Rhyparochrominae, while suture between sternites V and VI reaching lateral margin of abdomen.

Male genitalia: Pygophore subquadrate, posterior margin thickened (Fig. 4), posterior aperture large, ventral (posterior) sinus short, dorsal (anterior) sinus more than 2.5 times longer (but only 1.2 times wider); projection separating sinuses with a prominent tooth on anterior surface. Blade of paramere acute, curved ventrad like a hook from plain of projections (Fig. 6) (while most Drymini species have plain paramere), dorsal projection vestigial, ventral projection triangular with slightly arched apical margin (Fig. 5).

Measurements: (6 males and 4 females, range of paratypes in parentheses): Total body length: 5.35 (5.10-6.05); head: length 0.78 (0.72-0.92), width 0.91 (0.86-1.02), interocular space 0.54 (0.49-0.65); eye length: 0.32 (0.29-0.38); antenniferous tubercle length: 0.09 (0.07-0.10); length of antennomeres: I 0.55 (0.48-0.60), II 0.95 (0.85-0.98), III 0.79 (0.75-0.83), IV 0.82 (0.75-0.82); pronotum: length 1.22 (1.15-1.42), width 1.62 (1.62-1.85); scutellum: length 1.12 (1.12-1.30), width 0.87 (0.87-0.97); claval commissure length: 0.47 (0.43-0.48).

Diagnosis:

We had the opportunity to study two *H. tsutsuii* specimens (male and female) of the NSMT from Honshu (Japan) thanks to Dr. Tomokuni. Based on them, *H. meridionalis*, sp. nov. is rather similar to *H. tsutsuii* (Hidaka), but clearly different in several features (Table 1).

Etymology: The Latin adjective meridionalis means southern which refers to the distribution of the species.

Distribution (Fig. 8): *Hidakacoris meridionalis* is distributed in southeastern part of the Oriental Region (Malaysia: Malaya, Sabah, Indonesia: Sumatra, Philippines: Samar) and in New Guinea (both Indonesian and Papua New Guinean part). The Philippine specimen cannot located on the map, because there are many localities with name “Dolores”.

Table 1: Comparison of *Hidakacoris* species

Character	***H. tsutsuii***	***H. meridionalis***
dull spot of vertex	reaching to ocelli	largely surpassing ocelli
antenniferous tubercle : eye length	more than two-third	about one-third
pronotal collar	medially much wider than laterally	almost evenly thick
lateral margin of pronotum	wide at transverse impression, narrowing anteriad and posteriad	almost evenly wide
anteroventral teeth of profemur	row in apical three-fourth	row in apical half
posteroventral teeth of profemur	barely recognizable	11-15 tiny teeth extending to apical two-third
ratio of tarsomeres I : II-III of metatarsus	2.2-2.3	1.6-1.8
colour of antenna	fuscous, distiflagellum white except dark base	pale, distiflagellum unicolorous dark or paler towards base

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