

STUDIES ON INDIAN SPECIES OF *HERMOLAUS* (HETEROPTERA: PENTATOMIDAE)

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Abstract. The genus *Hermolaus* is redefined. A key to Indian species is given. *Hermolaus rolstoni*, n. sp., and *H. brevis*, n. sp., are described and illustrated. *Hermolaus typicus* is treated and illustrated.

The genus *Hermolaus* was proposed by Distant in 1902 for his species *H. typicus* at which time he placed it under the division Eusarcocoriaria of the subfamily Pentatominae. Later (1918), he proposed another species, *H. robustus*, and also redescribed *H. horni* Breddin. After that no systematic record is available on this genus. The present authors, during the course of a pentatomid survey, collected specimens representing 3 species of *Hermolaus* (*H. typicus* Distant, *H. rolstoni*, n. sp., and *H. brevis*, n. sp.).

The material is deposited in the Zoological Museum, Aligarh Muslim University, Aligarh, India (ZMAMU).

Genus *Hermolaus* Distant

Hermolaus Distant, 1902: 169.

Type-species: *Hermolaus typicus* Distant.

Diagnostic characters. Head usually as long as wide, gradually narrowing apically; juga as long as tylus, lateral margins sinuate before eyes; rostrum extending beyond hind coxae; bucculae distinctly shorter than 1st rostral segment, anteroventral angles rounded; antennae 5-segmented, 1st segment not reaching apex of head; pronotum with anterolateral margins straight, humeral angles obtuse; scutellum broadly rounded apically, extending beyond middle of abdomen; mesosternum sulcate medially; metasternal scent gland ostiole with small peritreme, apex slightly raised, directed apically, evaporatoria small, semicircular; abdominal venter dark metallic medially, unsulcate, unarmed at base; last tergum in ♀ (Fig. 1D) with anterior and posterior margins convex. Female genitalia: external plates (Fig. 1E), 1st gonocoxa and 8th paratergites triangular, 9th paratergites short, oblong; spermatheca (Fig. 1F) dilation never constricted at proximal part of sclerotized tube as in other genera of Eysarcorini. Male genitalia: claspers (Fig. 1H, 2N) small, apical process claw-shaped.

The genus *Hermolaus* is represented by 5 species including 2 new species from India.

KEY TO INDIAN SPECIES OF *HERMOLAUS* DISTANT

1. Antennae (Fig. 1B, 2J) with 2nd segment longer than 1st, as long as or longer than 3rd; scutellum never extending onto last abdominal segment; body long, >3 mm in length, covered with dark punctures 2

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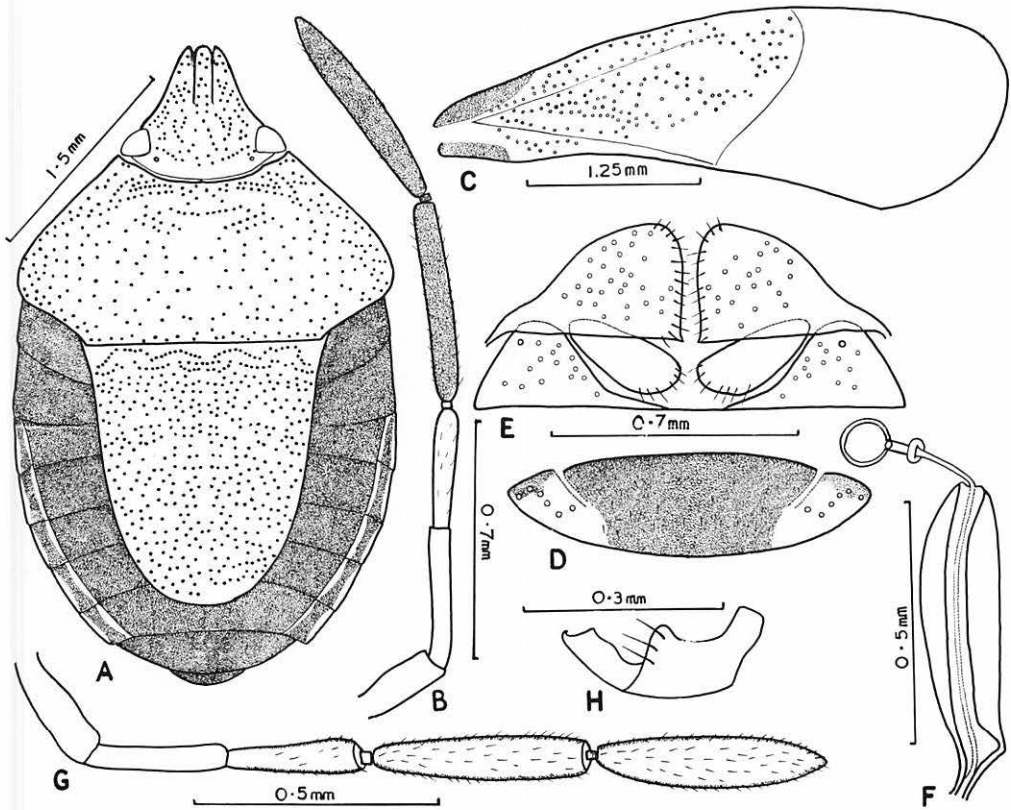


FIG. 1. *Hermolaus rolstoni*: A, ♀ head, thorax and abdomen, dorsal view; B, ♀ antenna; C, ♀ hemelytra; D, ♀ last abdominal tergum; E, ♀ external genitalia; F, ♀ spermatheca; G, ♂ antenna; H, ♂ clasper.

- Antennae (Fig. 2M) with 2nd segment as long as 1st, distinctly shorter than 3rd; scutellum extending onto last abdominal segment; body small, 3 mm in length, covered with reddish brown punctures **brevis**, n. sp.
2. Body dorsally ochraceous; scutellum with dark patch before apex; 4th antennal segment distinctly longer than 5th 3
 Body dorsally dark brown; scutellum without dark patch before apex; 4th antennal segment shorter than 5th 4
3. Abdominal venter dark, lateral margins ochraceous; body 3.5 mm in length **robustus** Distant
 Abdominal venter grayish ochraceous, lateral margins castaneous; body 4.0–4.5 mm in length **horni** Breddin
4. Rostrum extending onto 2nd abdominal segment; 2nd antennal segment longer than 3rd (Fig. 1B); head with tylus blunt apically (Fig. 1A) **rolstoni**, n. sp.
 Rostrum extending onto 4th abdominal segment; 2nd antennal segment as long as 3rd (Fig. 2J); head with tylus acuminate apically (Fig. 2I) **typicus** Distant

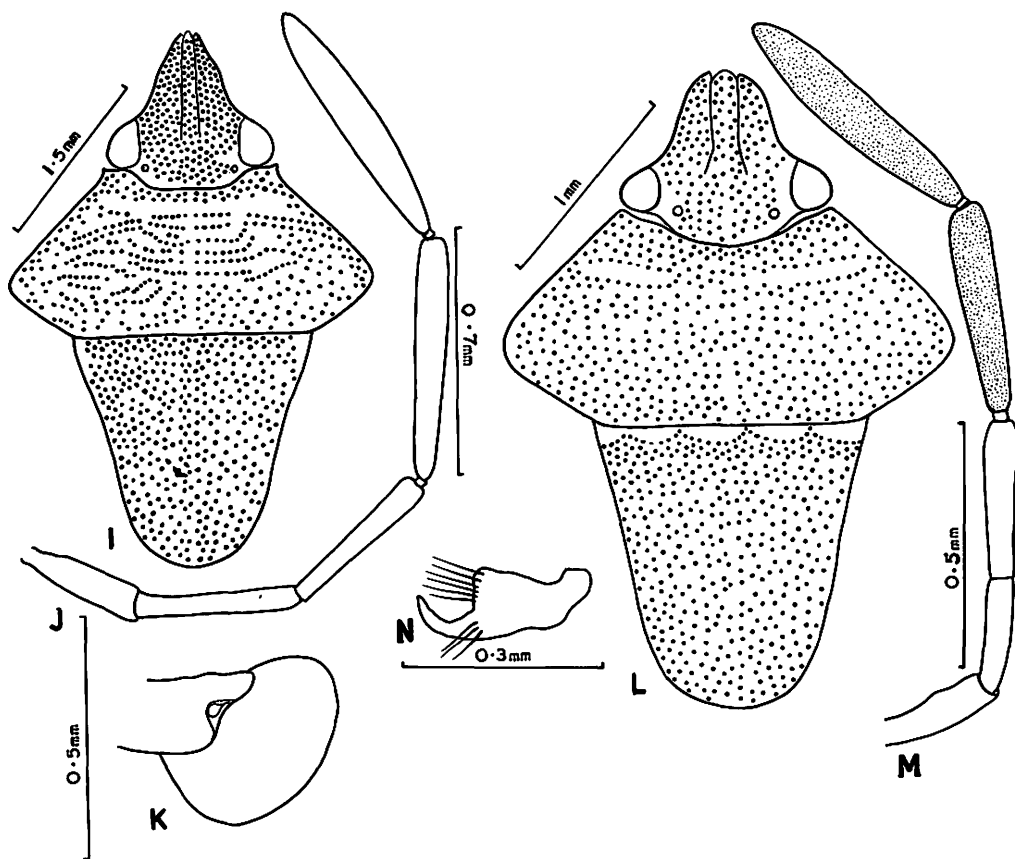


FIG. 2. I-K, *H. typicus*: I, ♀ head and thorax, dorsal view; J, ♀ antenna; K, ♀ metasternal scent gland. L-N, *H. brevis*: L, ♀ head and thorax, dorsal view; M, ♀ antenna; N, ♂ clasper.

***Hermolaus rolstoni* Azim & Shafee, new species**

Fig. 1A-H

♀ (Fig. 1A). *Head*. Brownish, thickly and darkly punctate, distinctly wider than long (1.27: 0.99 mm); juga as long as tylus, acuminate apically, lateral margins slightly sinuate before eyes; eyes and ocelli reddish brown; space between ocellus and inner orbital margin ca. $\frac{1}{2}$ interocellar space. Rostrum extending onto 2nd abdominal segment; segments I, II, III, and IV, 0.85, 0.86, 0.33, and 0.39 mm in length, respectively. Antennae (Fig. 1B) yellowish, 4th and 5th segments brown; segments I, II, III, IV, and V, 0.27, 0.42, 0.36, 0.63, and 0.66 mm in length, respectively. *Thorax*. Brownish, sternum dark medially, thickly and darkly punctate except 2 transverse areas on anterior region of pronotum and 3 small spots on base of scutellum levigate; pronotum with anterior margin concave, anterolateral margins straight, humeral angles obtuse; maximum width of pronotum ca. $2\frac{1}{2} \times$ its median length (2.9:1.2 mm); scutellum as long as wide, apex broadly rounded, extended much beyond middle of abdomen; pro- and mesosterna slightly sulcate medially. Hemelytra with corium yellowish, sparsely punctate, not extending beyond apex of scutellum; membrane transparent, extending beyond apex of abdomen. Legs yellowish

with dark patches. *Abdomen*. Dorsum and venter dark medially, connexiva yellowish, abdominal venter brownish laterally. Genitalia as in generic description and figures. *Body length*. 4 mm.

♂. Resembles ♀. Antenna and clasper as in Fig. 1G and H.

Holotype ♀, INDIA: Kerala, Ernakulum, 28.III.1979, on grass (M. Nayyar Azim). Paratypes: 5♀, 5♂, same data as holotype.

The species is named for Prof. L.H. Rolston, Department of Entomology, Louisiana State University, Louisiana, USA, in recognition of his contributions to our knowledge of pentatomid taxonomy.

***Hermolaus typicus* Distant**

Fig. 2I–K

Hermolaus typicus Distant, 1902: 170.

Distant (1902) described the species in detail. Head, pronotum, and scutellum as in Fig. 2I. Genitalia as in generic description.

Material examined. 1♀, INDIA: Uttar Pradesh, Aligarh, University Agricultural Farm, 3.VI.1979, on grass (M. Nayyar Azim).

***Hermolaus brevis* Azim & Shafee, new species**

Fig. 2L–N

♀ (Fig. 2L–M). *Head*. Ochraceous with reddish brown punctures, distinctly wider than long; eyes and ocelli red; space between ocellus and inner orbital margin ca. $\frac{1}{2}$ interocellar space. Rostrum extending onto 2nd abdominal segment. Antennae yellowish, 4th and 5th yellowish brown; segments I, II, III, IV, and V, 0.23, 0.24, 0.31, 0.43, and 0.53 mm in length, respectively. *Thorax*. Ochraceous with reddish brown punctures; pronotum with 2 transverse patches anteriorly, scutellum with 5 small spots basally that are levigate; pronotum with anterior margin concave, anterolateral margins straight, humeral angles obtuse; maximum width of pronotum ca. $2\frac{1}{2} \times$ its median length (2.2:0.93 mm); scutellum about as long as wide, broadly rounded apically, extending onto last abdominal segment. *Abdomen*. Dorsum ochraceous, venter with median reddish brown patch; as long as wide. *Body length*. 3 mm.

♂. Resembles ♀. *Genitalia*. Clasper (Fig. 2N) with apical process claw-shaped.

Holotype ♀, INDIA: Uttar Pradesh, Aligarh, University campus, 14.XII.1983, at light (M. Nayyar Azim). Paratypes: 2♂, same data as holotype.

Remarks. The species is closely related to *H. horni* Breddin but differs from it by having an ochraceous body with reddish brown punctures, antennae with the 2nd segment shorter than the 3rd, the 4th shorter than the 5th, and the scutellum reaching to the apex of the abdomen.

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