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Studies on Indian species of the genus *Aeliomorpha* STAL (Heteroptera: Pentatomidae)

Abstract: The genus *Aeliomorpha* is divided into two subgenera: *Aeliomorpha* S. Str. and *Distantietta* Subgen. n. A key to Indian species of the genus *Aeliomorpha* STAL is also provided. Two new species *A. (A.) coimbatorensis* sp. n. and *A. (D.) viridis* sp. n. are described and illustrated.

Genus *Aeliomorpha* STAL

Aeliomorpha STAL, 1858: 313

Type species: *Aeliomorpha simulans* STAL

The genus is characterised as follows:

Head wider than long; juga with lateral margins sinuate before eyes; rostrum slender, extending upto hind coxae; antennae 5-segmented, first segment not reaching apex of head, second segment very small in male; pronotum with antero-lateral margins straight; humeral angles obtuse; scutellum well developed gradually narrowing apically; mesosternum with longitudinal carina medially; metasternal scent gland ostiole with peritreme long and curved, evaporatoria large; abdominal venter unsulcated and unarmed at base. Male genitalia: claspers (fig. H) F-shaped; subgenital plate (figs. D, I) anterior margin slightly prolonged medially, posterior margin broadly concave.

DISTANT (1902) placed the genus *Aeliomorpha* STAL under his division Dymantaria. Later, PUTSHKOV (1965) and AHMAD et al. (1974) included it in the tribe Aeliini, which has been accepted by the present authors.

The present authors collected specimens of two new species of *Aeliomorpha* STAL from various localities of India. A close observation reveals that these species differ from each other in certain characters which have subgeneric significance. DISTANT (1918) while describing two species of this genus (*Aeliomorpha fletcheri* DISTANT and *Aeliomorpha pusana* DISTANT) has also mentioned that these two species are at least subgenerically distinct. In the present studies the genus *Aeliomorpha* STAL is divided into two subgenera: *Aeliomorpha* S. Str. and *Distantietta* Subgen. n.

Distantietta Subgen. nov.

The new subgenus can be defined as follows:

Head with juga longer than tylus and depressed apically, lateral margins strongly sinuate before eyes; genae much prominent than anteroventral angles of bucculae; pronotum with a transverse depression before humeral angles, lateral margins strongly sinuate; scutellum acuminate apically; hemelytra with corium distinctly less than two times the length of membrane.

Type-species: *Aeliomorpha (Distantietta) viridis* subgen. et spec. nov.

This subgenus is named after renowned Hemipterist W. L. DISTANT, in recognition of his contributions to our knowledge of pentatomid taxonomy.

Key to subgenera and Indian species of the genus *Aeliomorpha* STAL

1. Head with juga longer than tylus and depressed apically, lateral margins strongly sinuate before eyes; pronotum with a transverse depression before humeral angles, lateral margins strongly sinuate; scutellum acuminate apically *Distantietta* Subgen. nov. 2
- Head with juga as long as or shorter than tylus and never depressed apically, lateral margins slightly sinuate before eyes; pronotum without a transverse depression before humeral angles, lateral margins slightly sinuate; scutellum broad apically *Aeliomorpha* S. Str. 3
2. Antennae with third segment slightly longer than fourth, segments fourth and fifth subequal in length; Scutellum finely punctate *A. (D.) fletcheri* DISTANT
- Antennae with third segment distinctly longer than fourth, segment fourth shorter than fifth; scutellum thickly punctate *A. (D.) viridis* spec. nov.
3. Head with tylus distinctly longer than juga., body thickly and finely punctate; membrane of hemelytra greyish white *A. (A.) pusana* DISTANT
- Head with tylus as long as juga, body thickly and darkly punctate; membrane of hemelytra ochraceous 4
4. Antennae with fourth segment longer than fifth; lateral margins of head and pronotum bright ochraceous, pronotum granulose basally *A. (A.) lineaticollis* (WESTWOOD)
- Antennae with fourth segment shorter than fifth; lateral margins of head and pronotum ochraceous; pronotum never granulose basally *A. (A.) coimbatorensis* spec. nov.

***Aeliomorpha (Aeliomorpha) coimbatorensis* spec. nov.**

(Figs. A—D)

Male.

Head (fig. A). — Brownish, thickly and densely punctate, puncts brownish; juga as long as tylus and never depressed apically, lateral margin slightly sinuate before eyes; eyes greenish, ocelli red; space between ocellus and inner orbital margin about one-fourth the inter-ocellar space. Rostrum brownish except apex dark; segments I, II, III and IV, 0.59, 0.99, 0.79 and 0.72 mm in length respectively; genae less prominent than anteroventral angles of bucculae. Antennae (fig. B) brownish; segments I, II, III, IV and V, 0.4, 0.1, 1.12, 0.9 and 1.1 mm in length respectively.

Thorax (fig. A). — Brownish thickly and densely punctate; pronotum with laevigate areas distinct, anterior margin slightly concave, antero-lateral margin straight and reflexed, humeral angles obtuse; maximum width of pronotum less than two and a half times its median length; scutellum slightly longer than wide, rounded apically. Hemelytra (fig. C) with corium thickly and densely punctate, slightly more than twice the length of membrane, membrane infuscated, extended beyond apex of abdomen. Hing wings with greenish metallic iridescent. Legs brownish.

Abdomen. Dorsum dark, thickly and densely punctate; venter brownish, lateral margins thickly and densely punctate, median portion finely and sparsely punctate. Genitalic characters as in generic description.

Body length: 6.5 mm.

Holotype ♂. INDIA: Tamil Nadu, Coimbatore, Mettupalayam, on *Trifolium alexandrinum* LINN., 22. xi. 1979 (M. NAYYAR AZIM).

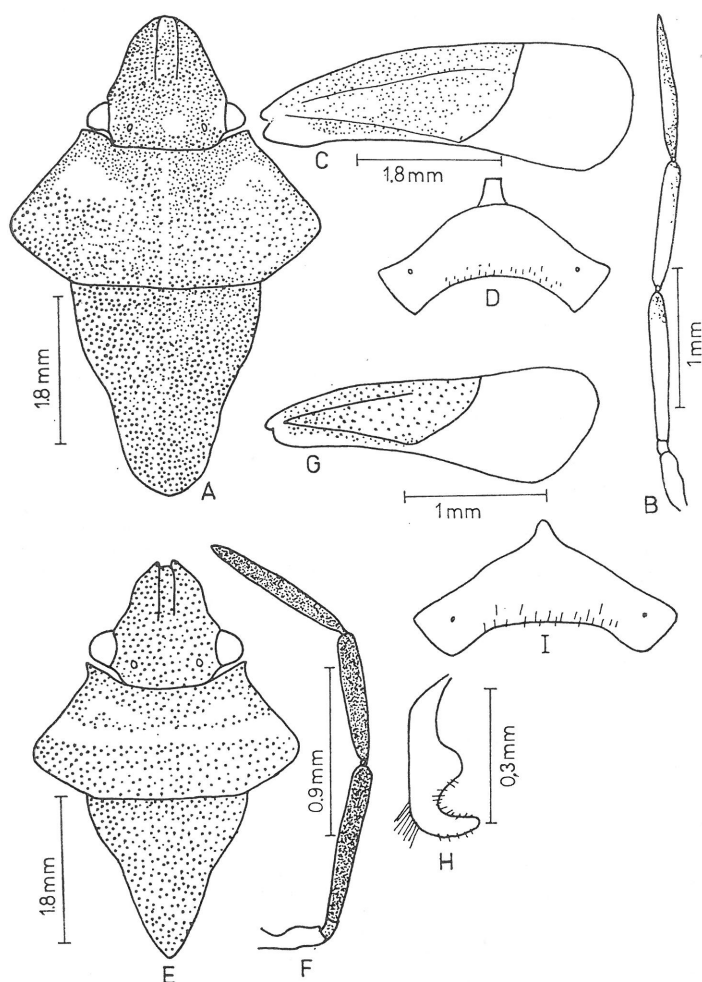
Paratypes. 2♂, Same data as holotype.

***Aeliomorpha (Distantietta) viridis* spec. nov.**

(Figs. E—I)

Male.

Head (fig. E). — Light green, dorsum densely and venter sparsely punctate, puncts shallow; juga slightly longer than tylus and depressed apically, lateral margins strong-



Figs. A—D. *Aeliomorpha (A.) coimbatorensis* sp. n. (A). Head and thorax in dorsal view, ♂; (B). Antenna, ♂; (C). Hemelytra, ♂; (D). Subgenital plate, ♂
 Figs. E—H. *Aeliomorpha (D.) viridis* sp. n.; (E). Head and thorax in dorsal view, ♂; (F). Antenna, ♂; (G). Hemelytra, ♂; (H). Clasper, ♂; (I). Subgenital plate, ♂

ly sinuate before eyes; eyes green, ocelli red; space between ocellus and inner orbital margin about one-fourth the inter-ocellar space. Rostrum yellowish, apex of apical segment dark; segments I, II, III and IV, 0.57, 0.93, 0.56 and 0.42 mm in length respectively; genae much prominent than anteroventral angles of bucculae. Antennae (fig. F) brownish; segments I, II, III, IV and V, 0.32, 0.1, 0.80, 0.63 and 0.80 mm in length respectively.

Thorax (fig. E). — Light green, densely punctate, puncts shallow except two laevigate areas on anterior region of pronotum; pronotum with anterior margin slightly concave, antero-lateral margins slightly sinuate, a transverse depression before humeral angles; maximum width of pronotum about two and a half times its median length; scutellum gradually narrowing and acuminate apically. Hemelytra (fig. G) with corium sparsely and uniformly punctate, slightly less than twice the length

of membrane, membrane transparent, extending beyond apex of abdomen. Legs yellowish green.

Abdomen. — Dorsum brownish, finely and sparsely punctate, connexiva thickly punctate; venter greenish, finely and sparsely punctate. Genitalic characters as in generic description and as shown in figures.

Body length: 5 mm.

Holotype ♂. INDIA: Uttar Pradesh, Aligarh, University Botanical Garden, on wild plant, 12. iv. 1977 (M. NAYYAR AZIM).

Paratypes. ♂, Same data as holotype. 1 ♂, INDIA: Uttar Pradesh, Shahjahanpur, Jalalabad, on grass, 10. 5. 1984.

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Zusammenfassung

Die Gattung *Aeliomorpha* wird in zwei Untergattungen eingeteilt: *Aeliomorpha* S. Str. und *Distantiella* Subgen. n. Eine Bestimmungstabelle der indischen Arten der Gattung *Aeliomorpha* STAL wird ebenfalls mitgeteilt. Zwei neue Arten, *A. (A.) coimbatorensis* sp. n. und *A. (D.) viridis* sp. n., werden beschrieben und mit Illustrationen dargestellt.

Summary

The genus *Aeliomorpha* is divided into two subgenera: *Aeliomorpha* S. Str. and *Distantiella* Subgen. n. A key to Indian species of the genus *Aeliomorpha* STAL is also provided. Two new species *A. (A.) coimbatorensis* sp. n. and *A. (D.) viridis* sp. n. are described and illustrated.

Резюме

Род *Aeliomorpha* подразделяется на 2 подвида: *Aeliomorpha* S. Str. и *Distantiella* Subgen. n. Кроме того, дана определительная таблица индийских видов рода *Aeliomorpha* STAL. Описаны и приведены рисунки 2 новых вида, *A. (A.) coimbatorensis* sp. n. и *A. (D.) viridis* sp. n.

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