

Research Article

Description of Copulatory complex of *Eotrechus kalidasa* Kirkaldy, 1902 (Hemiptera: Heteroptera, Gerridae)

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Abstract: The genus *Eotrechus* Kirk, 1903 belonging to the subfamily *Eotrechinae* Anderson, 1975 is represented by a single species *Eotrechus kalidasa* Kirk, 1902 in India. The description of species by Kirk, 1903, Distant, 1903, Paiva, 1919 and Lundblad, 1933 has not taken into account the structure of copulatory complex, a feature of great taxonomic significance. The present contribution provides the description of copulatory complex of *Eotrechus kalidasa* for the first time.

Keywords: Copulatory complex, *Eotrechus*, Heteroptera, Gerridae.

Taxonomy

Eotrechus Kirkaldy, 1902

Eotrechus kalidasa Kirkaldy, 1902. (Pl. I, Figs. 1-2).

Eotrechus kalidasa Kirkaldy, 1902. *Entomologist*, p. 137.

Eotrechus kalidasa Distant, 1903. *Faun. Brit. India, Rhynchota*, 2(1): 182.

Eotrechus kalidasa Paiva, 1919. *Rec. Indian Mus.*, 16:364.

Eotrechus kalidasa Lundblad, 1933. *Arch. Hydrobiol. Suppl. Bd.*, 12(2): 370.

Description

This genus was erected by Kirkaldy (1902) with *Eotrechus kalidasa*, Kirkaldy, 1902 as type species.

Antenna slender, all segments nearly equal to each other. Clypeus with basal margin clearly defined. Mandibular and maxillary plates distinctly separated from each other. Intersegmental suture between mesonotum and metanotum lost laterally. Prosternum relatively long. Mesosternum only one and a half times as long as metasternum. Sternal and pleural regions of mesothorax clearly defined by paired longitudinal sutures. Metasternum with highly reduced omphalium. Omphalial groove absent. Middle leg shorter than hind leg. The tibia, a little longer than femur, in hind leg.

Claws arising apically. Second to seventh ventrites subequal in length. Pygophore with the styloide. Parameres present, slender and apically rounded.

Distribution: Burma, India.

This genus is represented by single species in India.

Eotrechus kalidasa Kirkaldy, 1902

(Pl. I, Figs. 1-2)

Male genitalia: Seventh segment, without connexival spine, ventral apical margin simply concave. Eighth ventrite shorter than seven ventrite, apical margin concave, eighth tergite broadly convex on hind margin. Ninth segment simple, narrow surnal plate; pygophore with a pair of distinct styloides, one on either side; parameres apically rounded, slender. Endosoma with definitive dorsal plate basally bifurcate, apically extending onto apical margin of endosoma, not connected with large apical plate; lateral plates simple and long; without basal plate; ventral plate short and membranous.

Female genitalia: Seventh segment well developed both dorsally and ventrally. Connexivum without connexival spine. Eighth segment with first valvula with inner lobe simple, narrow, extending a little less than halfway of outer lobe; outer lobe narrow, blunt apically. Ninth segment with second valvula broadly

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rounded on apical margins, slightly extending beyond apical margin of intervalvular membrane. Vulva membranous.

Remarks: This species was described by Kirkaldy. The description of the species is described in detail with an account of genitalia is described for the first time.

Material Examined: India: West Bengal, Darjeeling, Tiger Hills, winged 2 males, apterous 1 female,

10.viii.2000 (J.V. Singh); Assam, Above Tura, Garo Hills, 3500-3900 ft, apterous 1 female, 15.vii.-30.viii.1917 (S.W. Kemp.).

Distribution: Previously recorded from Burma by Kirkaldy. Paiva recorded one female specimen of the species from Assam in India. This is the first record of the species from West Bengal.

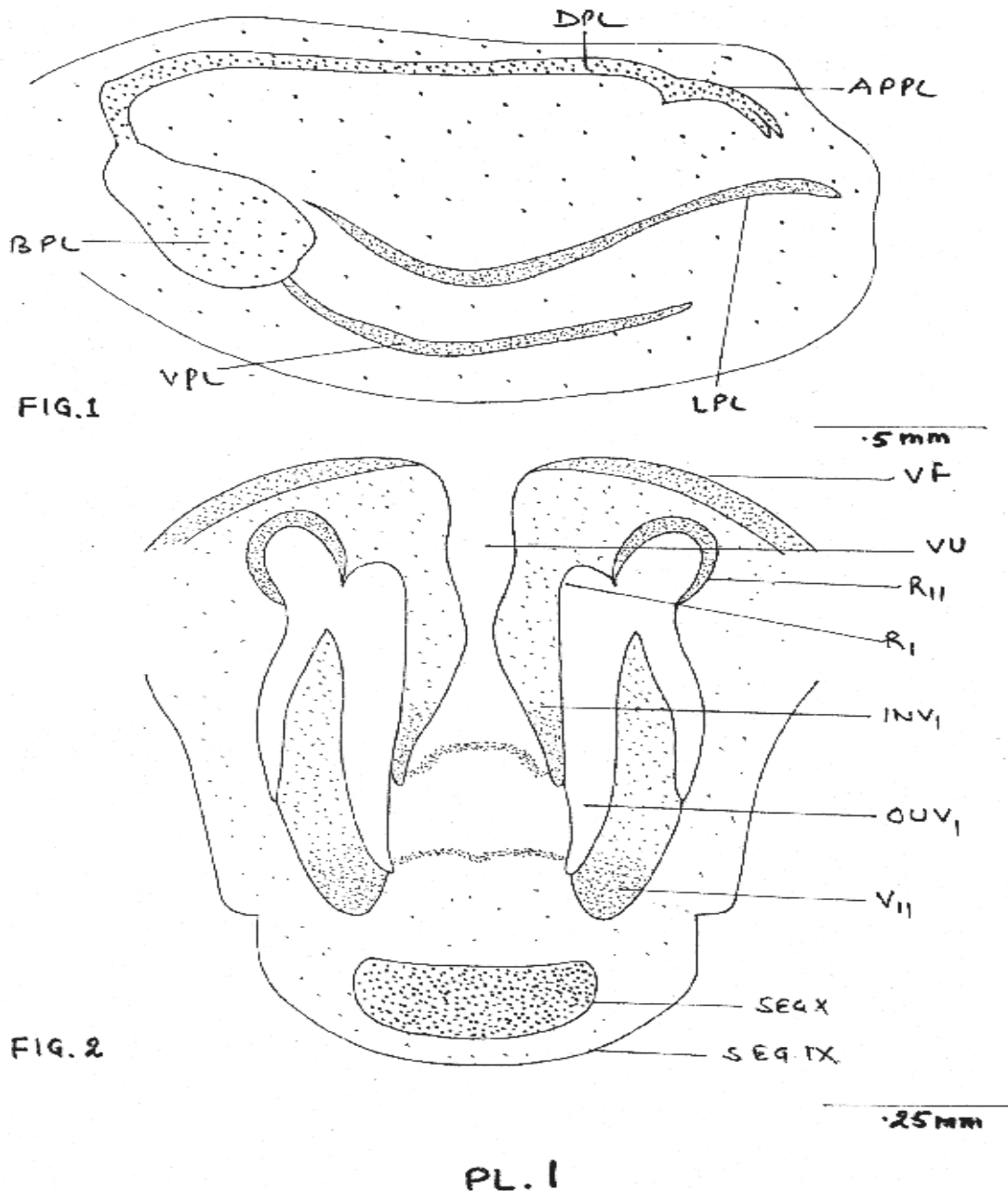


Plate 1: Fig. 1. Male Copulatory complex. Fig. 2. Female Copulatory complex.

(APPL = Apical Plate; BPL = Basal Plate; DPL = Dorsal Plate; LPL = Lateral Plate; Py = Pygophore; SEG = Segment; SUAPL = Suranal Plate; VPL = Ventral Plate; Ri/Rii = Ramus; VU = Vulva; V = Valvula; OUV = Outer valvulae; INV = Inner Valvulae; VF = Valvifer).

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