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Identification and description of copulatory complex of *Baptista gestroi* distant, 1903 from India (Hemiptera: Veliidae)

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Abstract

Baptista Distant, 1903 is an important genus of family Veliidae 1843. It is represented by a species *Baptista gestroi* Distant, 1903. The genus was first described by Distant in the fauna of British India with the type species *Baptista gestroi* Distant, 1903. The description was incomplete due to absence of Copulatory complex. Identification and description of Copulatory complex is firstly described with complete illustrations.

The *Veliidae* are best known of all aquatic hemiptera of the world and are extremely common in Indian waters. The members of the family are easily differentiated from the related family *Gerridae* based on hind leg not surpassing beyond the tip of abdomen and the presence of median longitudinal groove on vertex. The Genus *Baptista* Distant, 1903 are easily recognized from the members of other genera due to anterior femora which is strongly curved in female and antennae with 3rd and 4th joints slender.

Genus: *Baptista* Distant, 1903

Type species: *Baptista gestroi* Distant, 1903

Type: British Museum, London

Keywords: *Baptista gestroi*, aquatic Hemiptera, *Gerridae*

Introduction

Baptista Distant, 1903. Fauna British India, Rhynchota 2:173 Apterous or macropterous, body elongated, covered by dense pubescence. Head posteriorly protruded, extending well behind hind margin of eyes. Clypeus protruding, rostrum slender with its apex reaching middle of mesosternum. Pronotum pentagonal. Lateral evaporator small. Hind leg longer than middle leg, fore leg of male more or less modified, femur or tibia curved, with tumescence, pilosities etc. Femora moderately incrassate. Fore tibia of male with grasping comb, arolia bristle like. Male genital segment small but distinctly protruding, segment eight slightly modified ventrally. Female genital segment visible behind seventh sternum. Gonocoxae first subquadrate.

Material and Method

The genitalia were taken out with the help of forceps. From the dry specimens the genitalia were similarly taken out after the insects were softened with desiccators. The genitalia were then mounted on D.P.X. after processing as usual.

In order to study the structural details of male genitalia, dried specimens were softened in alcohol, the genital segment detached, macerated in hot 10% KOH solution, dissected and placed in lactic acid and glycerin. The genitalia were stored in a drop of glycerin contain in a microvial made from a plastic tube which was pinned with the specimen. Measurements are given in micrometer units. All drawing were made with camera lucida.

Material Examined

India: West Bengal, Hugli River, macropterous 8 males, 7 females. Diamond harbor (20.xi.2017: B. Banerjee).

Distribution: This species has been recorded earlier by Distant from West Bengal.

Male Genitalia: Male genital segment eight highly modified ventrally. Claspers large, falciform, proctiger narrow, pygophore simple. Claspers symmetrically developed. Ninth segment with suranal plate simple. Endosoma with apical margin a little prolonged with weak sclerotization.

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Female genitalia: Female genital segment small but usually plainly visible behind sternum seven. Hind margin of sternum eight emarginated; exposing most of gonocoxae 1st; quadrate in shape, proctiger small, eight segment with both valvifers produced at middle, first valvulae with well differentiated inner lobe; apex of outer lobe narrow; acute posteriorly. Second valvulae swollen and rounded at apex, extending to apical margin of inter valvular membrane which is with a small median notch.

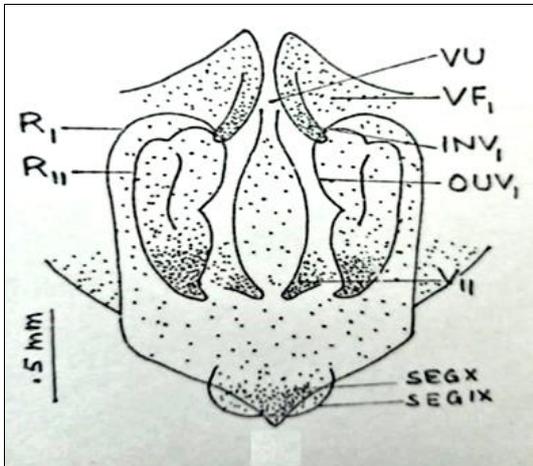


Fig 1: Female Genitalia

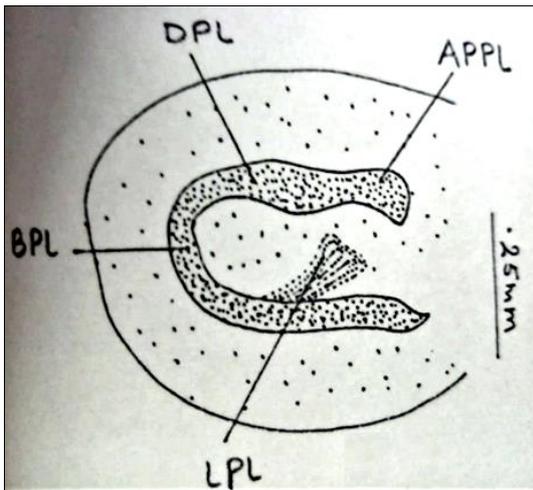


Fig 2: Male Genitalia

Uppasala. 1925;7A(20):1-19.8 figs.

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