# DESCRIPTION OF A NEW PALEARCTIC SPECIES OF MACROCEPHALUS SWEDERUS (1787) (HETEROPTERA, REDUVOIDEA, PHYMATIDAE) FROM PAKISTAN.

by

## \*Qamar A. Abbasi and Narjis Yousuf

Abstrsct. A new species belonging to the genus Macrocephalus Swederus is described below from Swat and is compared with Macrocephalus notatus Westwood its close ally. This is the first record of a phymatid from Pakistan.

Introduction. The phymatids are an important group of insects for their predatory habits (Uhler 1877) particularly the fore legs are modified for this purpose. They are found prowling on the stems and flowers of Euphorbiacae and compositae waiting for the visiting bees and other insects. The present genus is the first record of any phymatid from Pakistan. The occurrence of these insects is very rare and it is difficult to collect them. This is probably the reason that hardly any species of this genus is known so far from the Indo-Pakistan subcontinent (Distant 1902). The present description is based on a unique single female from Morghzar; Swat (Pakistan) on R. hastatus.

#### DESCRIPTION

Macrocephalus pakistanensis, new species

(Fig. 1)

Body oblong ovate, predominently brown in colour, tylus, juga, vertex, antennal segments, anterior portion of pronotum, scutellum, connexivae, abdominal sternites and legs brown, posterior portion of pronotum, wing membrane, labial segments and eyes, dark ochraceous, ocelli dark red.

Head characteristic, porrect elongately ovate with an anterior notch, densely granulated, posterior portion of head (including eyes) more than twice the anterior portion of head (excluding eyes), judgae serrated laterad anteriorly porduced with a deep median notch, apices not meeting each other, median invagination enclosing almost basal halves of the first antennal segments, tylus much smaller than jugae, eyes sessile almost triangularly placed in the anterior half, ocelli placed closer to each other than to eyes almost in the centre, anteriorly concave, antennae inserted between lateral extensions of jugae, 1st segment increassate granulated, 4th segment leaf-shaped; labium reaching prolegs,

<sup>\*</sup>Department of Zoology, University of Karachi, Karachi-PAKISTAN.

second segment about as long as 3rd and 4th segments. Length of head 2.05 mm, length of anterior portion of head (excluding eyes) 0.55 mm, posterior portion of head 1.5 mm, width of head 1.10, mm, interocular distance 0.65 mm, Interocellar distance 0.45 mm, length of antennal segments I, 0.65 mm, II, 0.35 mm, III, 0.3 mm, IV, 0.8 mm.

Pronotum distinctly broader than long anterior margin deeply concave and broader than the width of the head across the eyes. Anterior half of the lateral margin dentate and anteriorly produced forming a socket and fitted in the posterior portion of head, posterior half of the lateral margin sinuate pronotal angles acute distinctly raised upwards with an oblique ridge, postero-lateral margin sinuate, posterior margin sinuate and projected in the middle over the basal portion of the scutellum. Two longitudinal brownish striations, one on each lateral margin of the dorsum of the pronotum. Length of pronotum 3.20 mm, width 4.45 mm.

Scutellum large with apex reaching almost anterior margin of VII abdominal segment, laterally compressed, apically broad and rounded, base slightly raised and longitudinal medial ridge running almost  $\frac{3}{4}$  of the distance of scutellum. Length of scutellum 5.3 mm, width 2.5 mm. Distance between apex of scutellum and apex of abdomen 0.60 mm. Mcmbrane of hemelytra extended upto the apex of abdomen with simple longitudinal veins, clavus and corium partially exposed. Abdomen laterally much expanded and flattened longer than broad connexivum completely exposed. Abdominal sternites medially projected anteriad sternites each entering and fitted into other's concavity from third to sixth abdominal segments.

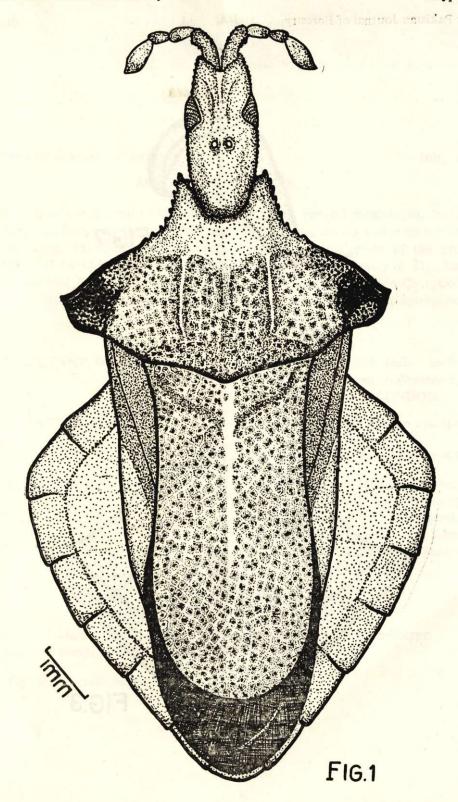
Fore leg modified for prey catching, femur distally flattened and broad with an outer strong spine, distal margin grooved and finely toothed to receive the small blade like curved tibia with inner margin finely toothed. (Fig. 2).

Posterior margin of seventh abdominal sternum deeply concave, eighth paratergite highly developed lobe like U-shaped extended much beyond the ninth paratergite, ninth paratergite much smaller, first gonocoxae triangular highly reduced and telescoped within eighth paratergites, proctiger vase-shaped and enlarged. (Fig. 3).

Comparison. Macrocephalus n. sp. comes closer to Macrocephalus notatus Westwood but could easily be separated from the latter by elongated scutellum not reaching upto the apex of abdomen contrary to Macrocephalus notatus where it reaches upto apex of abdomen, medial ridge narrow and longitudinal in new species as contrary to leaf-shaped in Macrocephalus notatus Westwood.

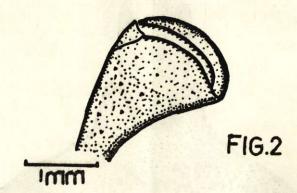
Material examined. Holotype single female from Swat on R, hastatus by S. Shabbar Ali, 5. ix.72 deposited in Entomological Museum, Pakistan Forest Institute, Peshawar.

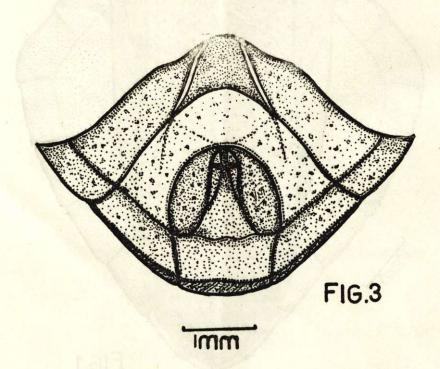
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#### REFERENCES

1. DISTANT, W.L. 1902. The Fauna of British India including Ceylon and Burma Rhynchota 1

(Heteroptera): 146. LONDON.

2. SWEDERUS, N. S. 1787. Et nytt Genus, och Femtio nya species

of Insekter Beskrifne.

Vet. Nya. Handl., 8: 181-201, 276-290.

3. UHLER, P.R.1877. Report upon the Insects collected by P.R. Uhler during the Explorations of 1875, including the Monographs of the Families Cydnidae and Saldidae,

etc.Bull. U. S. Geol. Geog. Surv. Terr. 3; 355-475, 765-801.

### EXPLANATION OF FIGURES

Fig. 1: Macrocephalus pakistanensis n. sp. dorsal view female, holotype.

Fig. 2: Foreleg (only femur and tibia shown), tarsi absent)

Fig. 3: Female terminalia: ventral view.