

DESCRIPTION OF A NEW GENUS AND SPECIES OF PENTATOMIDAE (HEMIPTERA: HETEROPTERA) FROM PAKISTAN

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A new species of a new genus of the family Pentatomidae Leach is described from Pakistan. Its affinities with closely related genera are discussed in detail.

Key words: Heteroptera, Pentatomidae, Riaziana.

Introduction

The Pentatomid fauna of Pakistan which represent oriental, ethopian and palaeartic components includes a number of species of Halyini and Tropicorini Distant [1,2], Ghauri [3,4] and Ahmad *et. al.* [5-9]. During analysis of Pentatomid bugs collected from conifer trees of Galiat Areas, North Western Frontier Province of Pakistan, a number of specimens were encountered with characters similar to those of some halyines and tropicorines, but infact significantly differ from both of them. In the light of these findings the specimens recognized as belonging to a new genus and a species of Pentatomidae.

For taxonomic procedures and dissection of the genitalia the method described by Ahmad [10] was followed. Drawings were prepared using a camera lucida. All measurements are given in millimeters.

*Riaziana gen. nov***. Body oval, thickly punctate, ochraceous brown; humeral angles of pronotum prominent but not spinose, antero-lateral margins of pronotum serrate; clypeus slightly longer than paraclypei; labium reaching 5th abdominal segment, mesoternum carinate; abdomen without any trace of sulcation and basal spine. Basal inner process of parameres greatly produced and apically unequally triradiate; blade with outer small finger-like process but without any ridge; inflated aedeagus with spindle-shaped penial lobes; vesica not passing apices of penial lobes; only dorsal and ventral conjunctival appendages distinguishable. Spermathecal bulb with two elongated and one minute finger-like processes; spermathecal pump region bilobed with distinct proximal and distal flanges.

Type species: *Riaziana serrata* sp. nov.

Riaziana Serrata sp. nov.

Colouration. Body above ochraceous-brown with dense black punctures, clypeus sparsely punctate, bases and inner margins of eyes, postero-lateral margins of head pale-ochraceous, ocelli crimson red, basal antennal segments

ochraceous, dorso-lateral and antero-medial areas of pronotum with sparse punctures; antero-lateral and antero-medial areas and apex of scutellum impunctate and ochraceous; connexiva with alternate dark and ochraceous bands with sparse punctures; clavus and corium more or less uniformly punctate; membrane of hemelytra black with luteous veins. Body beneath ochraceous with uniformly sparse punctations except median region of meso- and metasternum and median region of 3rd-7th abdominal segments. (Figs 1-7).

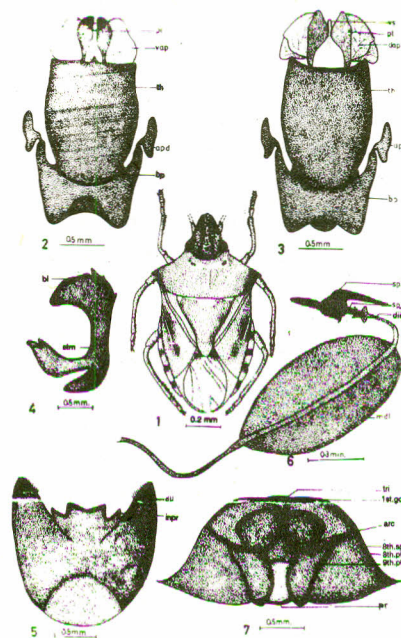


Fig. 1. Female dorsal view; Fig. 2. Aedeagus ventral view; Fig. 3. Aedeagus dorsal view; Fig. 4. Paramere lateral view; Fig. 5. Pygophore; Fig. 6. Spermatheca; Fig. 7. Female genitalia

Structure. Head distinctly broader than long, paraclypei slightly shorter than clypeus, lateral margins slightly angulate in front of eyes, labium very long, extending beyond anterior margin of 5th abdominal segment, length of labial segments I = 1.85, II = 1.82, III = 1.82, IV = 1.32, labial formula 1 > 2 = 3 > 4; length of antennal segments I = 0.52, II - V mutilated; length of

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anterior portion of head excluding eyes 1.61, length of posterior portion of head including eyes 1.02, interocular distance 1.81, interocellar distance 1.05; humeral angles of pronotum prominent but not spinose, anterior pronotal angles produced anteriorly into spines, anterior half of antero-lateral margins of pronotum serrate; scutellum with apical lobe distinct; mesosternum carinated; membrane of hemelytra passing apex of abdomen; connexiva partially exposed at repose; pronotal length 2.57, width 6.82; scutellar length 3.94, width 5.37; distance base scutellum-apex clavus 3.28, apex clavus-apex scutellum 1.08, apex scutellum-apex abdomen 2.97, apex clavus-apex corium 2.68. External metathoracic scent gland apparatus with ostioles semicircular, peritremal discs spoon-like, evaporative areas well developed, rugose and less densely punctate than rest of thoracic sternites.

Total length ♀ = 12.1, ♂ = 11.6

Female genitalia. 1st gonocoxae fused, triangular, plate-like and sclerotized postero-medially; 8th paratergites triangular with anterior acute margins distinctly produced; 9th paratergites longer than 8th paratergites and distinctly apart; triangulin and arcus visible; posterior margin of proctiger convex. Spermathecal bulb with two elongated and one minute finger-like processes, proximal spermathecal duct longer than distal spermathecal duct, spermathecal pump bilobed with distinct proximal and distal flange, median dilation significantly large and spindle-shaped.

Male genitalia. Pygophore with dorsomedian surface concave, ventromedian surface convex, lateral lobes highly developed; parameres with large and broad blade, bearing outer small, finger-like process, basal inner process of parameres greatly produced and unequally triradiate apically, base of parameres plough-shaped; aedeagus with theca strongly sclerotized, penial lobes spindle-shaped, vesica not passing apices of penial lobes, dorsal membranous conjunctival appendages shorter than ventral conjunctival appendages.

Material examined. Holotype ♀, Pakistan, Dunga Gali,

1-viii-1984, leg M. Afzal, in Pakistan Museum of Natural History, Islamabad. Paratype 3♂, 2♀ with same data, 24-x-1989.

Comparative Note. In appearance the present new genus seems to be related to several halyine genera like *Sarju* Ghauri and *Izharocoris* Afzal and Ahmad. However, the structure of paraclypei and parameres and absence of abdominal sulcation are sufficient evidences to show that *Riaziana* is not similar to the above genera and also precludes its inclusion in the Halyini. Although serrate margins of the pronotum give an impression of the tropicorine affinity of *Riaziana*, the unarmed abdomen precludes it being placed in this group. The tribal status of the genus remains undetermined till further investigation.

Index of abbreviations

apd	apodeme	tri	triangulin
arc	arcu	sp.b	spermathecal bulb
bl	blad	sp.p	spermathecal pump
bp	bassal plate	stm	stem
dap	dorsal conjunctival appendage	th	thec
dis.d	distal spermathecal duct	vs	vesica
dll	dorsolateral lobe	1st gox	1st gonocoxae
in.pr	inner process	8th pt	8th paratergite
m.dl	median dilation	8th sp	8th spiracle
pl	penial lobe	9th pt	9th paratergit
pr	proctiger		

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