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An aberrant new genus and new species of Carpocorini Stål (Hemiptera: Pentatomidae: Pentatominae) from Pakistan¹

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A new genus to accomodate a new species from Pisheen in Baluchistan is described with special reference to their metathoracic scent gland ostioles and male and female genitalia. Their relationships within Pyrrhocoridae is also briefly discussed.

During various expeditions to northern areas of Pakistan from 1967 through 1983, five unique specimens were collected on a wild bush from Pisheen in Baluchistan. These certainly belong to the tribe Carpocorini STÅL (AHMAD 1979) for they possess the characters noted presently under the section "comparative note" and "relationships". However, they appear isolated in the entire tribe Carpocorini in their simple sickles shaped paramere and much abbreviated metathoracic scent gland ostiolar complex. These are presently described as a new genus and new species with reference to their metathoracic scent gland ostiole and male and female genitalia. The new genus is named *Qadriana* in honour of Late Professor Dr. M. A. H. QADRI, University of Karachi in acknowledgement of his valuable contributions in the field of systematics and biology of Hemiptera. For the dissections of male and female genitalia, and for measurements and diagrams the conventional procedures specially those used by the present authors (1981) were generally followed.

Qadriana Gen. nov.

General shape: Body elongately ovate; longer than broad, broadly rounded in the posterior abdominal half; pronotum medially raised, much deflected in the anterior half.

Head: Distinctly longer than broad; anterior of head excluding eyes distinctly shorter than remainder of head; paraclypei not passing beyond clypeus, with their outer margins entire, distinctly sinuate in front of eyes, acuminate and slightly reflexed in the anterior half; clypeus distinctly prominent; labium short not passing hind coxae; antenniferous tubercles visible from above, antennae with second segment distinctly longer than the 3rd.

Thorax: Pronotum much deflected in the anterior half, slightly shorter than head length with anterior margin broader than the width of head across the eyes, anterior angles subacute, lateral margins entire, humeral angles broadly

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rounded, mesosternum obsoletely sulcate; metathoracic scent gland ostioles indistinct with peritremes extremely reduced.

Abdomen: Connexiva distinctly visible at repose; in females 8th spiracles located on ventro-posterior margin of the 8th paratergites, 7th abdominal sternum with ventro-posterior margin distinctly concave, lateral angles subacute.

Male genitalia: Pygophore much broader than long, proctiger somewhat quadrangular with rounded apex; paramere sickle-shaped with elongate blade, inner margin serrate; inflated aedeagus with pair of dorsal membranous conjunctival appendages, vesica remarkably long.

Female genitalia: 1st gonocoxae placed wide apart, somewhat triangular; 2nd gonocoxae broader than long; 9th paratergites elongated, reaching margins of fused 8th paratergites; spermathecal bulb distinct but small with distal and proximal flanges prominent; pump region tubular and distinct.

Comparative note: The genus appears quite aberrant in the entire tribe Carporini in having body obovate, short, scutellum distinctly broad at apex, metathoracic scent gland ostioles reduced with poorly marked long impression of peritremes and parameres sickle-shaped with irregular, serrate inner margins.

Qadriana pisheenensis sp. nov.
(Fig. 1)

Colour: Body uniformly dull straw-coloured with greenish sheen; antennae yellowish brown, entire body with uniform reddish brown punctures; membrane of hemelytra hyaline, yellowish brown; eyes dark ochraceous with blackish tinge; ocelli dark pink.

Head: Distinctly longer than broad; paraclypei not enclosing clypeus, slightly passing beyond clypeus; latter prominently raised at apex; length of head equal to length of pronotum, antennae with apical segment longer than 3rd, length of segments. I 0.3 mm, II 0.5 mm, III 0.45 mm, IV 0.67 mm, V 0.72 mm, antennal formula $1 < 3 < 2 < 4 < 5$; labium with $\frac{1}{4}$ of the basal segment extending beyond bucculae, reaching to hind coxae, length of segments, I 0.57 mm, II 0.95 mm, III 0.55 mm, IV 0.47 mm, labial formula $4 < 3 < 1 < 2 <$; length of anterior portion of head excluding eyes 0.7 mm, length posterior of head including eyes 0.9 mm, width 1.5 mm, interocular distance 0.9 mm, intercellar distance 0.7 mm.

Thorax and abdomen: Pronotum with anterior angles subacute, broadly rounded, anterolateral margins entire, on anterior half two dark ochraceous callosities present, nearly 3x broader than length, length 1.6 mm, width 4.0 mm, scutellum with apical half portion, broader but gradually tapering towards apex with two black impressions at basal margin in the middle, distinctly longer than broad, length 2.7 mm, width 2.3 mm; metathoracic scent gland ostiole (Fig. 2) indistinct, peritreme extremely reduced, evaporatoria quite large but less rugulose; distance base scutellum-apex clavus 1.2 mm; apex clavus-apex corium 1.5 mm, apex corium-apex abdomen including membrane 1.2 mm, connexiva exposed at repose; female's posterior margin of 7th abdominal sternum broadly concave with lateral angles subacute. Total length ♂ 7.1 mm, ♀ 8.7 mm.

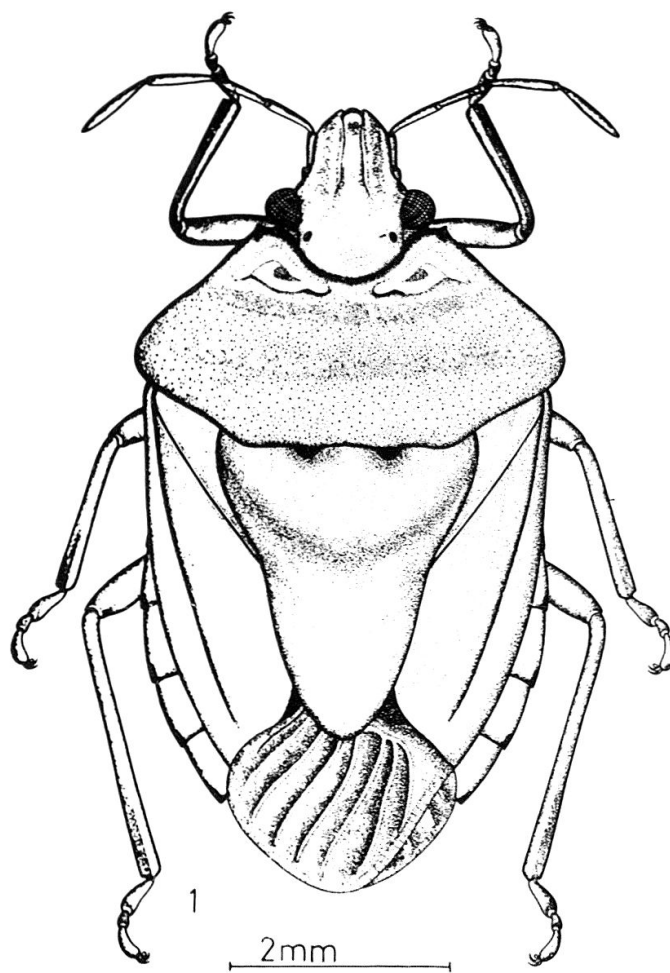
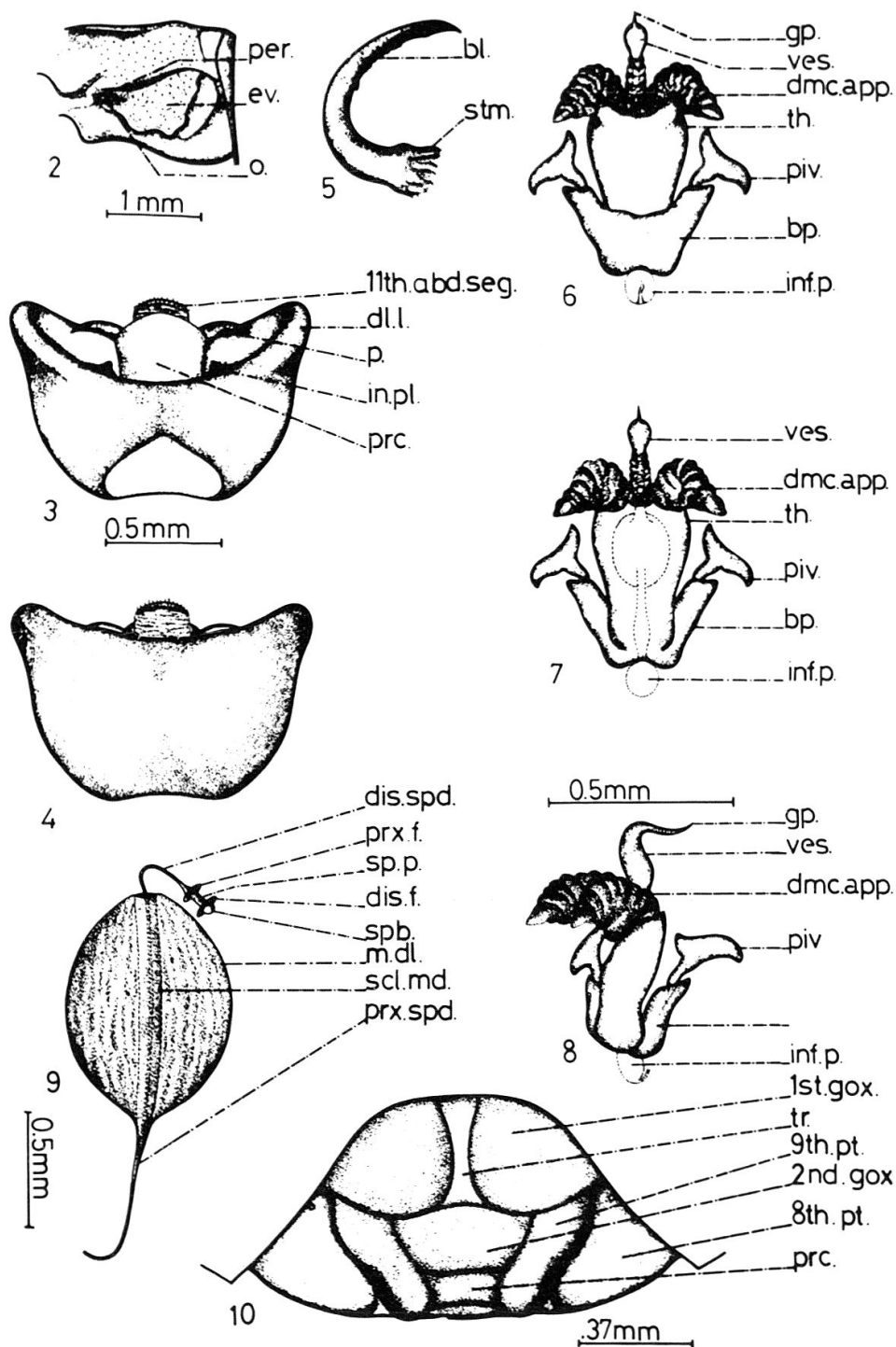


Fig. 1. *Quadriana pisheenensis* sp. nov.

Male genitalia: Pygophore (Figs. 4–8) having dorsomendian surface broadly concave, anterolaterally much broad with anterior angles roundly projected, dorsolateral inner processes knoblike, ventroposterior margins sinuate; paramere (Fig. 5) sickleshaped, pointed at apex with outer margin convex, inner margin concave with inner dentation, blade slightly showing lamination; aedeagus with (Figs. 6–8) a pair of dorsal membranous conjunctival appendages, semisclerotized at apex, tubular vesica very much dilated before the apical curved tubular half, gonopore with opening located dorsad.

Female genitalia: First gonocoxae (Fig. 10) placed wide apart, somewhat triangular with their inner angles rounded; 8th paratergites triangular, never reaching posterior margin of 1st gonocoxae; 9th paratergites elongated, placed wide apart; 2nd gonocoxae quadragular with anterior margin straight; spermathecal bulb small but distinct without processes, distal and proximal flanges distinct, pump region uniformly tubular (Fig. 9).

Material examined: Holotype ♂, Baluchistan, Pisheen, wild bush; 14-10-1978, University of Karachi. Paratypes 3 ♂, 1 ♀ with the same data as holotype, in the above museum, at Unites States National Museum, Washington, D.C., USA, at Natural History Museum, Basel, Switzerland and in Ahmad's collection.



Figs. 2-10 *Quadriana pisheenensis* sp.nov. 2, scent gland ostiole; 3, pygophore, dorsal view; 4 pygophore, ventral view; 5, paramere; 6, aedeagus, dorsal view; 7, aedeagus, ventral view; 8 aedeagus, lateral view; 9, spermatheca; 10, female terminalia. per., peritreme; ev., evaporatoria; o. ostiole; 11th abd. seg., 11th abdomina segment; dl.l. dorsolateral lobe; p., paramere; in.pl., inner plate; prc., proctiger; dis.spd. distal spermathecal duct; prx.f. proximal flange; sp.p., spermatheca pump; dis.f., distal flange; spb. spermathecal bulb; m.dl. median dilation; scl. md., sclerotized median duct; prx. spd., proximal spermathecal duct; gp., gonopore; ves., vesica; dmc. app., dorsal membranous conjugal appendage; th., theca; piv., pivot; bp., basal plate; inf.p., inflatory pump gp., gonopore; 1st gox., 1st gonocoxa; tr., triangulin; 9th. pt., 9thparatergite; 2nd gox., 2nc gonocoxae; 8th pt., eighth paratergite.

Relationships of the new taxa

Quadriana pisheenensis, new species, possesses the characters of scutellum which is distinctly longer than broad with apical portion narrow, tapering near middle and sides of pronotum entire, which are also shared by the species of *Brachynema* MUSLANT & REY, *Cappaea* ELLNER, *Carpocoris* KOLENATI, *Codophila* MUSLANT & REY, *Croantha* STÅL *Dolycoris* MUSLANT & REY, *Halyomorpha* MAYR, *Holcostethus* FIEBER, *Manoriana* AHMAD & KAMALUDDIN, *Mormidella* HORV. and *Palomena* MUSLANT & REY found in Pakistan.

GROSS (1976) although considered the most important characteristic feature of his *Carpocoris* group, the strong and thick F-shaped parameres but in the present new taxon the parameres are simple sickleshaped with irregular serrations on inner margins, showing little affinity towards any carpocorine known from Pakistan and Azad Kashmir (AHMAD 1979, 1980). The present taxon was also found isolated in the tribe Carpocorini in having the characters of scutellum distinctly broader in the apical half, narrow at apex and metathoracic scent gland ostioles reduced with ill-marked long impression of peritremes and other characters noted in the comparative note of the genus. The reduced ostiolar peritreme and the simple sickleshaped parameres also relate it to the members of some extant Strachiini STÅL.

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