FIVE NEW SPECIES OF THE RHYNCHOTAN GENUS CORIXA.

By the late C. A. PAIVA and CEDRIC DOVER.

When Mr. W L. Distant's third volume on the Rhynchota in the "Fauna of British India" series was published in 1906, the widely distributed Corixa hieroglyphica was the only species of the genus then known from India. In 1910 Distant' described seven more species and Paiva2 recently added another two to the fauna of British India, thus making a total of ten species in all. The present note adds five more species to the list, and many more species will no doubt eventually be described.

This paper has been compiled from notes left by the late Mr. Paiva. My own share in its production has been mainly to check Mr. Paiva's rough descriptions, give his species names, and compare them with the other known species of the genus. As at the close of this work I had obtained a good deal of knowledge of the genus I have ventured to incorporate the description of another species which I believe to be new.

[C. Dover.]

Corixa rambhaensis, sp. nov.

Two specimens from an ornamental fountain in the palace of the Raja of Kallikota, Rambha, Ganjam District, Madras (N. Annandale, 3'xii'13).

Head stramineous, longer than width at base between eyes, about half the greatest breadth of the pronotum; on each side of the centre of the vertex with a short line of shallow punctures, and a small tubercle on the middle of the hind margin; eyes large, posteriorly overlapping the anterior angles of the pronotum.

Pronotum ochraceous, with six dark castaneous transverse fasciae; about twice as broad as medial length; obtusely angularly rounded, behind lateral angles posteriorly somewhat acutely pointed.

Elytra very pale ochraceous, rather faintly mottled with castaneous; costal margin pale white.

The body beneath and the legs pale ochraceous.

Length 6.15 mm.

This species is closely allied to C. promontoria and C. affinis,

¹ Faun. Brit. Ind. Rhyn. V, p 340, 1910.
2 Rec. Ind. Mus. XIV, p. 19, 1918.
3 Dr. Annandale has published a short obituary notice of Mr. Paiva in his Report on the Zoological Survey India, for the years 1917-1920 (Calcutta: 1920), which has also been adopted by Mr. T. Bainbrigge-Fletcher, Imperial Entomologist, in his Presidential address to the Fourth Entomological Meeting held at Pusa in February, 1921. (See Rep. Proc. Fourth Ent. Meeting Pusa, 1921, p. 4.)

but differs from the former in the less produced head and the absence of any dark markings on the hind tibiae, and from the latter in the more regularly fasciate pronotum and less mottled elytra. Type in the collection of the Zoological Survey of India.

Corixa annandalei, sp. nov.

Two specimens from Satpara, Orissa (N. Annandale, 16'ix'13).

Head ochraceous, about as long as width at base between eyes, obscurely centrally carinate, the carina ending posteriorly in an obtuse tubercle at the middle of the hind margin of the head, on each side of the carina a row of four or five shallow punctures; face with a few scattered rather long silky white hairs, a blackish spot at apex of clypeus.

Pronotum ochraceous, with five distinct dark castaneous transverse fasciae, the second one short and not reaching the lateral margins, breadth between humeral angles twice the medial length, posterior margin broadly rounded, anterior and posterior margins narrowly dark castaneous, the ochraceous interspaces somewhat broader than the fasciae

Elytra ochraceous, rather densely mottled with castaneous, the markings on the clavus linear, and transverse towards the base, costal margins dull white, very sparingly mottled with castaneous a little before apex, a linear castaneous marginal fascia at apex.

Length 7.25 mm. Body beneath and legs ochraceous.

Easily distinguished from all other Indian species of Corixa by its large size and the small number of fasciae on the pronotum.

I have much pleasure in associating this species with the name of its collector, Dr. N. Annandale, to whom I am personally indebted for many favours. Type in the collection of the Zoological Survey of India.

Corixa dubia, sp. nov.

A single example from Mazbat, Darrang District, Assam (S. W. Kemp, 4'i'II).

Head ochraceous, about as long as width at base between eyes, distinctly acutely tuberculate at middle of posterior margin, a short rather obscure carina on posterior area of vertex, on each side of which is a moderately long line consisting of shallow single punctures; posterior margin narrowly spotted with castaneous; eyes blackish-grev.

Pronotum ochraceous with six transverse blackish fasciae, the second and third broken in the centre, anterior area with a short carina, posterior margin obliquely subacute.

Elytra ochraceous, mottled with castaneous; costal margin much paler, with three fasciate fuscous spots on outer margin, the apical one darkest and most conspicuous.

Body beneath and legs ochraceous, posterior tarsi with two fuscous streaks on upper side.

Length 6 mm.

Closely allied to *C. affinis*, but differing in the nature of the markings on the pronotum. Type in the collection of the Zoological Survey of India.

Corixa ribeiroi, sp. nov.

A single example from Malwa Tal, 3000 ft., Kumaon, W. Himalayas.

Head yellowish-white, shining, the basal margin reddishbrown, distinctly longer than width at base between eyes, wider than pronotum, a few scattered punctures on disk of vertex; eyes black, large, overlapping the anterior angles of the pronotum.

Pronotum twice as broad as medially long, disk with about six castaneous, transverse lines, posterior margin broadly rounded.

Elytra ochraceous, rather thickly mottled with castaneous, on the basal claval area the markings are more or less linear and transverse.

Body beneath and legs ochraceous, posterior tarsi fuscous. Length 6 mm.

I have named this species after Mr. Sydney Ribeiro, the Entomological Assistant of the Zoological Survey of India, in recognition of the assistance he has rendered me in various ways. Type in the collection of the Zoological Survey of India.

Corixa paivana, Dover, sp. nov.

Several specimens from Kalka, Umballa District, base of W. Himalayas (N. Annandale, 16'v'11); Dhurampur Kooa, Patiala State, base of Simla Hills (R. Hodgart, 21'vii'17); Satpara, Orissa (N. Annandale, 16'ix'13); from an ornamental fountain in the palace of the Raja of Kallikota, Rambha, Ganjam District, Madras. Anwargangi, Cawnpore District, U.P. (J. Caunter, 1-13'x'11).

Head pale yellowish, rather paler at base, short, about as long as width at base between eyes, a distinctly raised tubercle at middle of hind margin in front of which is a short blackish fasciate spot; a few shallow punctures on each side of the middle of the vertex, and another line of small punctures within the margin of each eye.

Pronotum olivaceous-brown, unicolorous, minutely punctured; anterior margin slightly sinuate in the middle, lateral margins truncate, its posterior angle acute; posterior margin rounded; a pale, somewhat obscure medial carina on middle of disk.

Elytra olivaceous-brown, thickly but very finely punctured, having a large piceous spot on anterior area of clavus; the subcostal area dull ochraceous, the outer margins fuscous or black.

The body beneath and legs rather pale ochraceous.

Length 7-7.5 mm.

A distinct species. I have named it after the late Mr. C. A. Paiva as a slight recognition of his services to entomology. Type in the collection of the Zoological Survey of India.

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