

A NEW SPECIES OF *CATALOIPUS* BOLIVAR, 1890 (ORTHOPTERA :
ACRIDOIDEA : EYPREPOCNEMIDINAE) FROM NORTH WEST INDIA

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ABSTRACT

A new species of *Cataloipus* Bolivar is described from India. It is named *Cataloipus himalayensis* sp. n. Characters for differentiating from its closely allied species *C. indicus* Uvarov, 1942 are discussed.

INTRODUCTION

Genus *Cataloipus* Bolivar, is an African genus which contains a large number of species distributed throughout Africa. So far only one species, *C. indicus* Uvarov belonging to this genus has been reported from India and is known to occur at Jaipur, Delhi, Kanpur and Unao. Study of the acridids collected from Kumaon and Siwalik Hills has revealed the presence of second Indian species of this genus which is being described here as new.

Male (Holotype) : Six medium. Antennae filiform, slightly flattened, a little longer than head and pronotum together. Head smooth, shorter than pronotum, vertex horizontal passing smoothly into the frontal costa, space between the eyes wider than the width of frontal costa, between the antennae frontal costa well raised, wide, slightly and gradually widening below, smooth, with a few, very shallow puncta. Lateral carinae ill defined, eyes oval, not prominent.

Pronotum coarsely punctured except for a comparatively smooth medium strip on both sides of the median carina, slightly tectiform, with a well developed median carina, cut by three transverse sulci, principal sulcus placed well behind the middle lateral carinae poorly developed, slightly diverging posteriorly and completely obliterated in the posterior half of the metazona ; hind margin broadly rounded. Prosternal tubercle spatulate, with broadly rounded tip, inclined backwards.

Metathoracic pleura coarsely punctured. Mesosternal lobes broader than long (Fig. 2D), their inner angles broadly rounded. Mesosternal space longer than broad. Metasternal lobes contiguous posteriorly. Tegmina slightly shorter than abdomen, but not extending beyond hind knees. Wings hyaline, slightly shorter than tegmina. Hind femora elongated, extending well beyond the abdomen, dorsal carina almost smooth. Hind tibiae slightly shorter than hind femora, with strongly developed white spines, tipped with black,

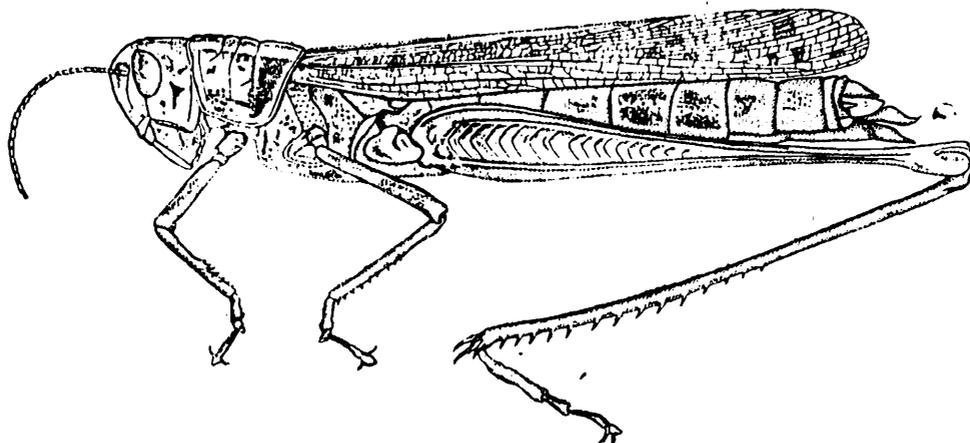


Fig. 1. *Cataloipus himalayensis* sp. n. Female, lateral view.

external apical spine absent. Arolia almost as long as the claws.

Abdomen with a well developed median carina. Tympanum large, well developed, tympanal lobe short. Tenth tergum with a pair of small, dorsal, posteriorly directed processes. Epiproct broadly triangular, longer than broad, with a well defined median sulcus in the basal half posterior angle obtuse. Cerci as long as epiproct, laterally compressed, turned ventrally at the posterior extremity. Subgenital plate long, bilobed posteriorly, the lobes pointed behind and separated by a well marked, deep, triangular notch (Fig. 2A and B). Phallic complex (Fig. 2E and F): apical valves of penis moderately long and narrow, subapically truncate but acute at apex valves of cingulum shorter; basal valves of penis robust and expanded from near middle to a little before the apex, the latter narrow and rounded; zygoma of cingulum narrow in the middle, apodemes short, arch of cingulum simple. Epiphallus (Fig. 2G) with moderately broad bridge; ancorae large, articulated with bridge, with acute, turned inwards apices; lophi large, lobiform.

General coloration dark brownish. Head pale, with a broad, median, dark brown band on the vertex extending anteriorly over frontal costa where it becomes lighter and eventually disappears a little below the median ocellus. Eyes light brown, with short dark bands below. Pronotum with two bright yellow bands running along inner sides of the lateral carinae. Tegmina with two bright yellow bands, on the costal area and the other in the vannal area; with irregularly scattered brown patches of different shapes. Hind femora yellowish, with an ill defined dark band along the ventral edge of the externo-dorsal carina in the basal half. Hind tibiae bluish with a very broad, poorly defined whitish band near the proximal end.

Measurements: Body, 31.00 mm; Pronotum, 5.5 mm; Tegmina 22.0 mm; Hind femora, 21.0 mm.

Female (Allotype): Similar to the holotype but much larger. Metasternal lobes separated (Fig. 2C). Tenth tergum with posteriorly directed processes. Epiproct with poorly developed basal sulcus, rounded posteriorly. Cerci smaller than epiproct, conical. Subgenital plate almost truncated behind.

ovipositor valves rather short. Coloration is rather dull as compared to that of the holotype. Median band of the vertex is poorly developed. Yellow bands of the pronotum and tegmina are quite dull. Hind tibiae are dull blue.

Females ; Body, 46.5-48.0 mm ; Pronotum 8.5-9.0 mm ; Tegmina, 34.0-34.5 mm ; Hind femora, 31.0-33.0 mm.

Material studied : Holotype Male ;

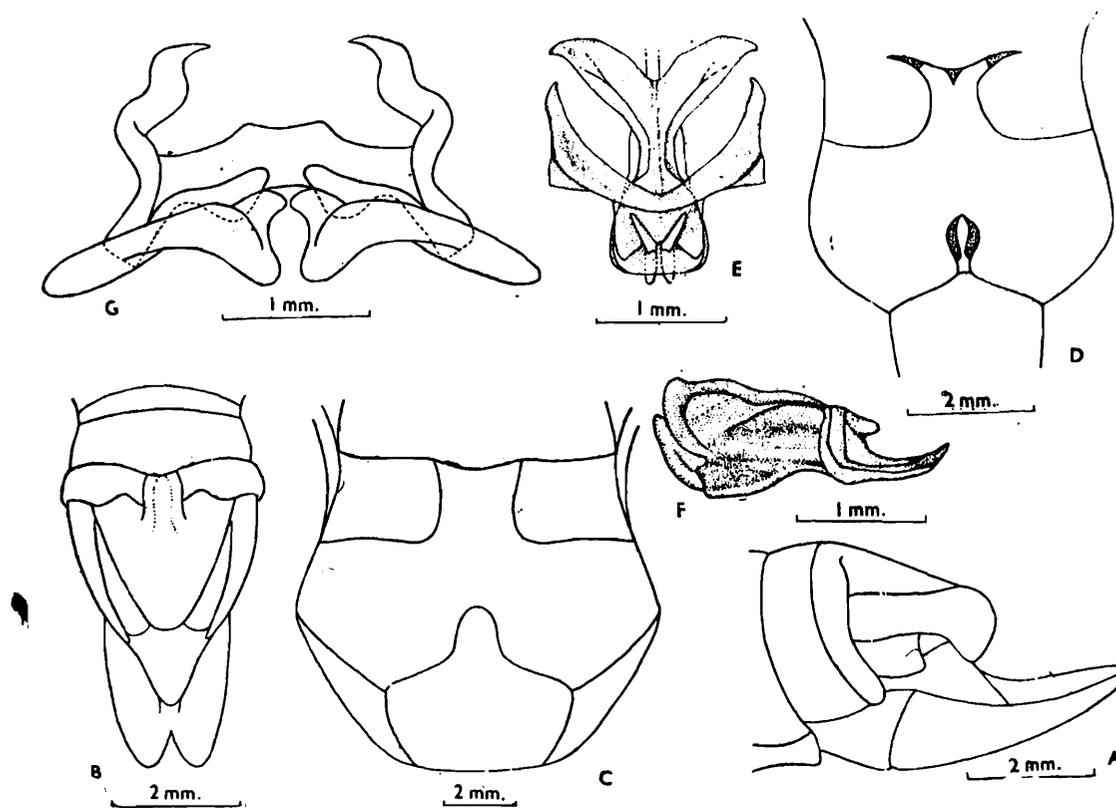


Fig. 2. *Cataloipus himalayensis* sp. n. (A) end of male abdomen, dorsal view ; (B) end of male abdomen, dorsal view ; (C) male mesosternum ; (D) female mesosternum ; (E) phallic complex, dorsal view ; (F) the same, lateral view ; (G) epiphallus.

Measurements : Body, 51.0 mm ; Pronotum, 8.5 mm ; Tegmen, 37.0 mm ; Hind femur, 33.0 mm.

Paratypes : They are similar to the holotype and allotype but differ slightly in coloration and length of the tegmina which may be slightly shorter than the abdomen. In some dorsal carina of the hind femora is very weakly serrated.

Measurements : Males ; Body, 31.0-35.00 mm ; Pronotum, 5.5-6.0 mm ; Tegmen, 21.5-25.0 mm ; Hind femur, 21.0-22.6 mm.

INDIA ; U. P. Distt. Nainital, Kakrighal, 1000 m. 14.xi. 1976. Coll. Asket Singh ; Zoological Survey of India, Northern Regional Station Dehra Dun. Field Collection No. 282.

Allotype : Female ; INDIA ; U.P. Distt. Almora, Bageshwar, 950 m. 16. xi 1976. Coll. Asket Singh ; Zoological Survey of India, Northern Regional Station, Dehra Dun. Field Collection No. 322.

Paratypes : 1 ♂ ; Same date as the holotype 3 ♂♂ ; same data as the allotype, 2 ♂♂ ; and 1 ♀ INDIA, Distt. Kangra,

Nagrota, 26.8. 1967. Coll. Asket Singh. 1 ♂ ; INDIA, Dist. Kangra, Polian, 18.9.1867, Coll. M. Prasad. 2 ♀ ♀ ; INDIA, Distt. Rupar, Nangal, 1200'. 22.9.1967. Coll. M. Prasad ; Distt. Hoshiarpur Gujjar 1300', 17.9.1967, Coll. M. Prasad, 1 ♂ .

Remarks : The new species is closely related to *Cataloipus indicus* Uvarov 1942, from which it can be differentiated by the following characters. *C. himalayensis* sp.n. is smaller in size, its tegmina do not extend beyond hind knees ; face is smoother and has very few but fine puncta ; fastigium of the vertex lacks shallow depressions and the median carina.

Genus *Cataloipus* Bolivar is essentially African in distribution with only one species viz. *C. indica* Uvarov so far known from India. This species has been recorded from Delhi, Unao, (U.P.) and Rajasthan. The occurrence of *C. cognatus* (Walker) which has been included in the checklist of Indian species by Tandon (1976) is rather doubtful. Kirby

(1914) recorded *Heteracris elegans* Walker, [a junior synonym of *Cataloipus cognatus* (Walker)] from North India, but Uvarov (1921) states that the only specimen of *H. elegans* in the British Museum on the basis of which Kirby (1914) could have included in species in the Indian Fauna does not bear any locality label. It would thus not be correct to regard this species as Indian. *H. cognatus* is known to from Nyasaland, Rhodesia, Transvaal, Oranga free State and Natal (Dirsh, 1965).

REFERENCES

- DIRSH, V. M. (1975). The African Genera of Acridoidea Cambridge. 579 pp.
- KIRBY, W. F. 1914. The Fauna of British India, Orthoptera, Acrididae,—Taylor Francis, London. 276 pp.
- TANDON, S. K. 1976. A Check-list of the Acridoidea (Orthoptera) of India. Part 1. Acridoidae. *Rec. zool. Surv. India. Occ. Pap.* No 3 : 48 pp.
- UVAROV, B. P. 1921. Notes on the Orthoptera in the British Museum. 1. The group of Eupreopcnemis. *Trans, ent. Soc. London.* 1921 ; 106-144