Rec. zool. Surv. India, **67** : 59-64, 1972

ON THE GENUS *XENOCATANTOPS* DIRSH & UVAROV (ORTHOPTERA ACRIDOIDEA : CATANTOPINAE) IN INDIA

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(With 2 Text-figures)

INTRODUCTION

Dirsh and Uvarov (1953) established a new genus *Xenocatantops* for species previously included in *Catantops*, with *Acridium humile* Serville, 1839 as the type species by original designation. Out of the thirteen species dealt with by Kirby (1914) under the genus *Catantops* only the following two i.e., *Catantops dominans* Walker and *Catantops humilis* (Serville) can be referred to the genus *Xenocatantops*. In India, even after nearly two decades of the publication of Dirsh and Uvarov's paper, the name *Catantops* is still being used for what is actually referable to *Xenocatantops*. In this paper, I have included the diagnostic characters and distributional data of the genus *Xenocatantops*. An attempt has also been made towards re-determination of the specimens of the genus present in the collections of the Zoological Survey of India.

SYSTEMATIC ACCOUNT

Xenocatantops Dirsh & Uvarov

1953. *Xenocatantops* Dirsh & Uvarov, *Tijdschr. Ent.*, **96** : 237.

Diagnostic characters.—Size, medium. Antennae thin, filiform, longer or shorter than head and pronotum together. Carinulae of the fastigium of vertex slightly raised. Eyes prominent, interocular distance narrow. Frontal ridge sulcate ; Frons in profile straight, slightly sloping backwards. Pronotum weakly constricted half its length ; Prosternal tubercle conical, never compressed laterally. Tegmina extend beyond the hind knee or short. Legs fairly slender. Male sub-genital plate subconical, supra-anal plate triangular. Male cercus simple with rounded apex. Epiphallus strong, bridge-shaped, ancorae and

lateral plates large. Ovipositor with curved valves. Spermatheca sac-shaped with apical and preapical diverticula.

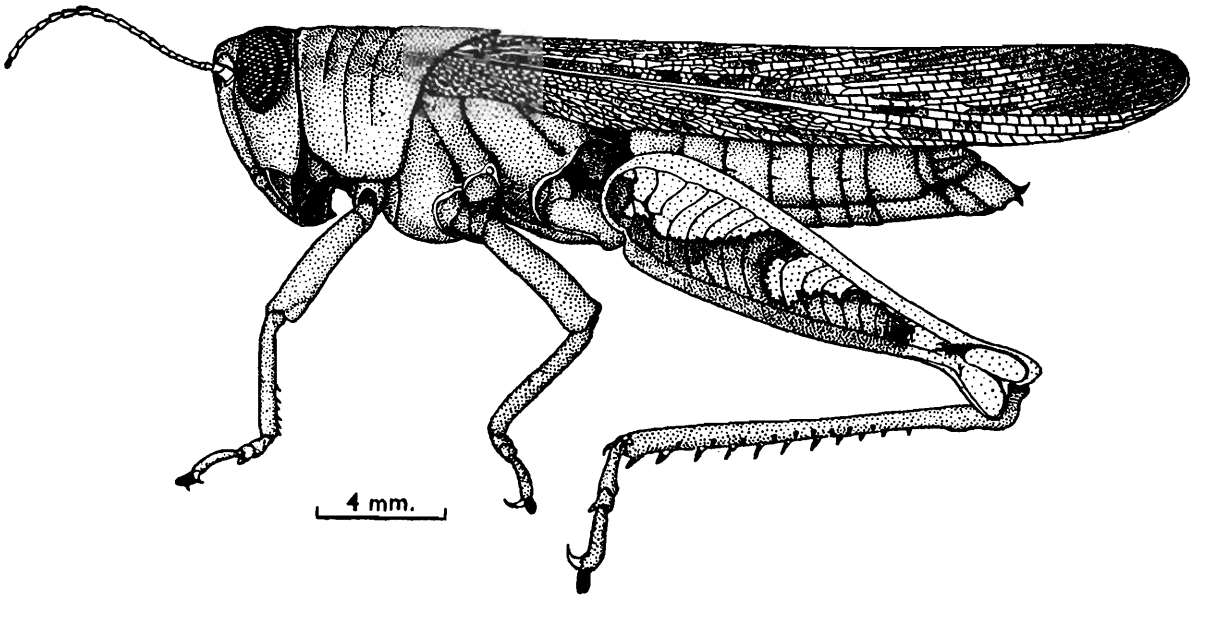
Xenocatantops differs from *Catantops* Schaum, in having constricted pronotum and conical prosternal tubercle.

The genus is represented in India by a single species i.e., *Xenocatantops humilis humilis* (Serville).

Xenocatantops humilis humilis (Serville)

(Text-fig. 1)

1839. *Acridium humile* Serville, *Ins. orth.*: 662.
1870. *Caloptenus dominans* Walker, *Cat. Derm. Salt. Brit. Mus. Nat. Hist.*, **4**: 705.
1873. *Catantops humilis*: Stal, *Rec. orth.*, **1**: 71.
1914. *Catantops dominans*: Kirby, *Faun. Brit. India, Orth., Acrid.*: 248.
1914. *Catantops humilis*: Kirby, *ibid*: 250.
1953. *Xenocatantops humilis humilis* Dirsh & Uvarov, *Tijdschr. Ent.*, **96**: 237.

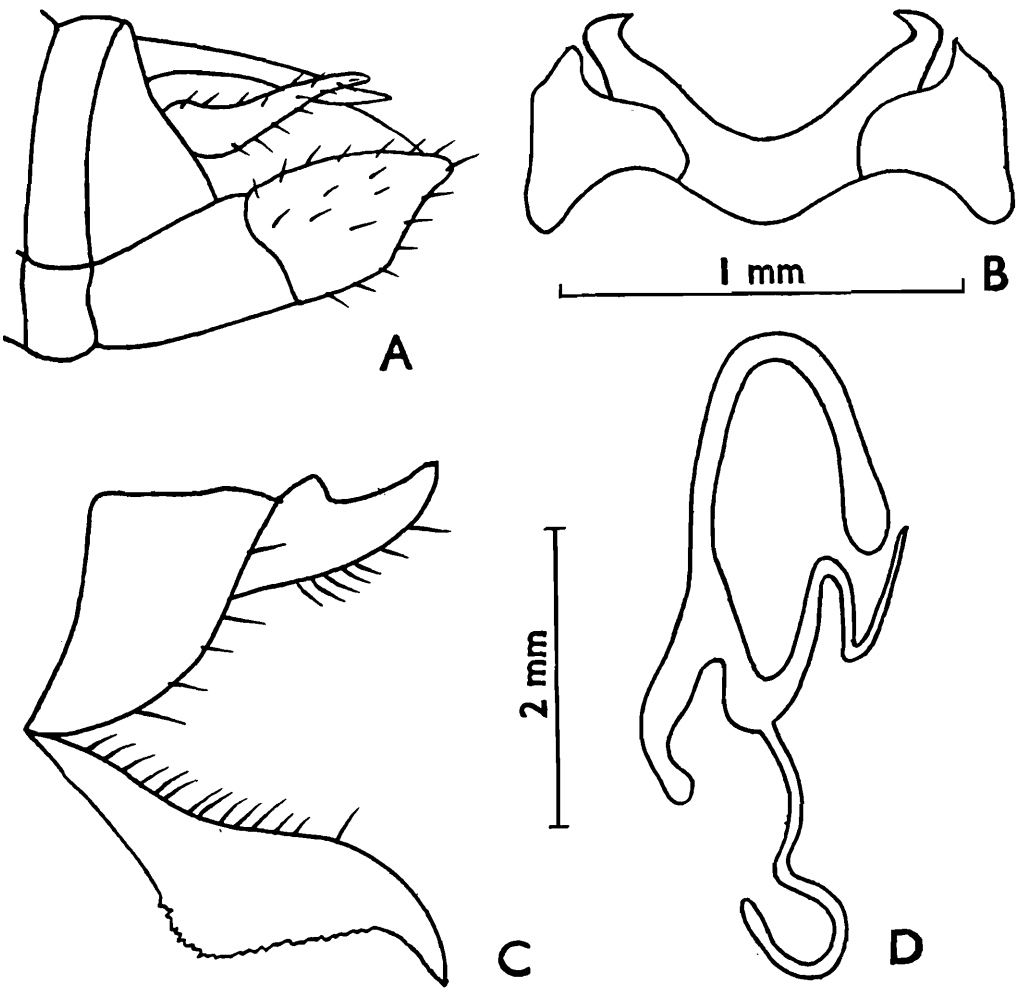


Text-fig. 1. *Xenocatantops humilis humilis* (Serv.), male.

Diagnostic characters.—♂—Of medium size, body slender. Antennae longer than head and pronotum together, its middle segments more than three times as long as wide. Prosternal tubercle acutely pointed, moderately inclined backwards, apex obtuse. Tegmina extended beyond the hind knees. Sub-genital plate short and obtusely pointed in male (Text-fig. 2, *a*); Male cercus short, gradually narrowing towards apical third,

slightly incurved apically and obtusely pointed. Epiphallus bridge-shaped, with long ancorae (Text-fig. 2, *b*).

General colouration dull brown to dark brown. Antennae yellowish-brown, with dark apex. Lateral margins of pronotal disc with a dirty yellow stripe. Dorsum of pronotum with brown to dark brown hour-glass-shaped pattern. Elytra brown, sometimes sparsely tessellated with dark patches. Wings hyaline, with basal disc infumated. External disc of hind femur yellow or yellowish-brown, with two dark brown or black bands. The internal disc red or reddish-yellow, with three black spots along the upper margin. Hind tibiae red to dull red, hind tarsus red dorsally, reddish-yellow ventrally, tibial spines red with black tips.



Text-fig. 2. A, End of male abdomen. B, Epiphallus. C, End of female abdomen. D, Spermatheca.

♀—As the male, but larger, ovipositor short, robust (Text-fig. 2, *c*) ; Sub-genital plate longer than wide, obtusangulate.

Spermatheca sac-shaped with apical and preapical diverticula (Text-fig. 2, *d*).

Range of measurements.—Based on 50♂♂ and 50 ♀♀ from different biotopes.

	♂♂	♀♀
Length of body	18.0-25.0 mm.	27.5-34.0 mm.
Pronotum	3.5-5.2 mm.	6.1-8.0 mm.
Elytra	14.5-21.0 mm.	23.0-31.0 mm.
Hind femur	9.6-13.0 mm.	12.0-17.8 mm.

Remarks.—Shorter antennae and elytra found in material from mountainous regions and longer antennae and elytra from the plains. General colour varying from brown to dark-brown. Phallic complex and transverse band of hind femur hardly show any variation, which is remarkable in examples from different biotopes. I have come across only a single male example from NEFA having narrow proximal fascia, with black tibiae instead of red. The persistent occurrence of shorter antennae and elytra in the material from high altitude indicates a correlation in the decrease in size with an increase in altitude.

The species is associated with grassy meadows and cultivated fields specially near streams in NEFA. The adults were collected in NEFA during February June, September January from grassy meadows and cultivated fields, particularly paddy. Nymphs were found at Siang and Lohit in early October and in February March, respectively. They were mostly found in groups hiding under the leaves, occasionally occurring in small numbers near the streams.

Material.—104♂♂ and 213 ♀♀ ; Uttar Pradesh : Dehra Dun, Ompta Tehri ; 9.iv.1958 ; 1♂ , Asarai, 15.vii.1966, 1♂ ; Timli forest, 13.viii.1966, 1♂ ; Lachiwala, 30.ix.1966, 1♂ , Assam ; Charduar, 27.v.1966, 1♂ ; 29.v.1966, 1♂ ; Dibrugarh, 27.ii.1969, 1♂ and 2♀♀, Dinjan, 27.ii.1969, 1♂ ; Goalpara, Raimona, 5.iv.1957, 1♀, Shillong, 8.v.1905, 1♀, Sibsagar, 8.v.1905, 1♀, Tezpur, (Sonai Rupai forest), 30.xi.1965, 1♀, 22.v.1966 1♀. NEFA : Kameng Dist. ; Bairag Kund, 5.iii.1961, 1♀, Kalatung, 17.iii.1961, 3♀♀, Sigon, 31.iii.1961, 1♂ and 2♀♀, Rahung village, 7.iv.1961, 3♀♀, Chug village, 14.iv.1961, 1♂ , Milankang village, 19.iv.1961, 1♂ and 2♀♀, 20.iv.1961,, 1♂ and 2♀♀, Duplako bank, 31.v.1961, 2♀♀, Sigon, 31.v.1961, 2♀♀, Nephla. But, 4.vii.1961, 2♀♀, Diron Dzong, 24.vii.1961, 1♂, Tenga river side, 14.xii.1965, 2♂♂ and 2♀♀, Elephant flat (Bhaluk Pong), 25.xii.1965, 2♂♂

and 2♀♀, Dunn bridge, 4.iv.1966 ; 1♀, 21.iv.1966 ; 1 ♂, Bhaluk Pong, 3.v.1966 ; 1♂ and 3♀♀, Pinjuli, 4.v.1966 ; 1 ♂ and 2♂♂, Denling forest, 5.v.1966 ; 1♀, Bhaluk Pong, 6.v.1966 ; 1 ♂ and 2♀♀ ; Kimin, 9.v.1966 ; 2 ♂ ♂, Dejo, 10.v.1966 ; 2♀♀, Pamir bridge, 17.v.1966 ; 1 ♂, Tamen, 18.v.1966 ; 1 ♂ and 3♀♀, 19.v.1966 ; 3♂ ♂, 20.v.1966 ; 4♀♀, Chukro, 21.v.1966 ; 1♂, Bela village, 27.x.1966 ; 1 ♂ and 7♀♀, Pakha camp, 26.x.1966 ; 1 ♂ ; Siang Dist. : Lekhabali, 6.x.1966 ; 1♀, 7.x.1966 ; 1♀, 21.xi.1966 ; 1♀, Dali, 10.x.1966 ; 6♀♀, Pading village, 11.x.1966 ; 2 ♂ ♂ and 6♀♀, Serum bridge, 14.x.1966 ; 2♀♀, Kambang camp, 16.x.1966 ; 1♂, Tarak village, 18.x.1966 ; 1♂ and 2♀♀, Old Jinning, 20.x.1966 ; 2 ♂ ♂ and 8♀♀, Tappi (Dulla), 22.x.1966 ; 25 ♂ ♂ and 27♀♀, Tappi, 23.x.1966 ; 8 ♂ ♂ and 6♀♀, Tachidoni, 24.x.1966 ; 6 ♂ ♂ and 18♀♀, Bame, 30.x.1966 ; 1 ♂ and 12♀♀, Basar, 31.x.1966 ; 4♀♀ ; Lohit Dist : Sunpura, 3.iii.1969 ; 2♀♀, Bolung, 4.iii.1969 ; 3♀♀, Dambuk, 5.iii.1969 ; 5 ♂ ♂ and 8♀♀, Deopani, 6.iii.1969 ; 2 ♂ ♂ and 1♀, Sadiya Road, 8.iii.1969 ; 6 ♂ ♂ and 4♀♀, Teju, 10.iii.1969 ; 5♂ ♂ and 5♀♀, Digaru Road, 11.iii.1969 ; 1♂ and 6♀♀, Hayliaung Road, 12.iii.1969 ; 3 ♂ ♂ and 3♀♀, Lohitpur, 13.iii.1969 ; 1♀, Lohitpur road, 13.iii.1969 ; 5♂ ♂ and 10♀♀, Sitpani (Namsai), 16.iii.1969 ; 1♀ ; Tirap Dist. : Changlong, 5.i.1962 ; 1♀. West Bengal : Calcutta, 1.x.1904 ; 1♀, 16.iv. 1957 ; 1♀, 20.iv.1961 ; 1♀ ; Darjeeling, Rhoni, 2.xi.1944 ; 1♀, Chantong, 16.vi.1957 ; 2♀♀ ; Kurseong, 10.iii.1926 ; 2♀♀, Eagles cragg, Kurseong, 9.iii.1924 ; 1♀. Bihar : Monghyr, 22.ix.1909 ; 1♀, Rameswar Kond, Monghyr, 9.iv.1945 ; 1♂ Madhya Pradesh : Balaghat ; Muki Banjar valley, 4.x.1957 ; 1♀. Tamil Nadu : Madurai, 10.ix.1912 ; 1♀. Kerala : Cochin, 24.ix.1914 ; 1♀. Andaman Islands : Port Blair, 15.iii.1915 ; 1♀.

DISTRIBUTION

Xenocatantops humilis humilis (Serville) occurs in India, Bangladesh, Ceylon, Burma, Thailand ; Malaya, Viet-Nam, Philippines and Indonesia. It is typically a tropical grasshopper. The available material indicates that the species is wide spread in India, particularly in the inner valleys of the Brahmaputra and its tributaries in the North-eastern Himalaya. Mani (1962) found the species sparsely occurring in the inner valleys of North-western Himalaya, particularly in the Spiti. On the

eastern coast the species appears to be rather limited in its distribution, whereas there is no record of its distribution along the western coast excepting from the Kerala coast. In the Indo-gangetic plain the species is again scanty. The species has also been collected from Port Blair in the Andaman Islands.

SUMMARY

The paper deals with the diagnostic characters of the genus *Xenocatantops* Dirsh & Uvarov and the species *Xenocatantops humilis humilis* (Serville). Specimens of the genus present in the collection of the Zoological Survey of India have been studied. It is a typical tropical grasshopper. The species is well distributed in Assam, NEFA and North Bengal in India.

ACKNOWLEDGMENTS

I offer my grateful thanks to Dr. A. P. Kapur, Director, Zoological Survey of India, for facilities and encouragement in this work. I am also thankful to Shri K. S. Pradhan, Superintending Zoologist, for his suggestions in the preparation of this paper.

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