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FIRST RECORD OF *CLONACRIS KIRBYI* (ORTHOPTERA: ACRIDIDAE) IN MAHARASHTRA STATE, INDIA

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The genus *Clonacris* was established by Uvarov in 1943, which belongs to the subfamily Hemiacridinae of the family Acrididae. The characteristic features of this genus suggest affinity with genus Pareuthymia. In addition, it shows more intimate relationship with the genera Phalinus, Hemiacris, Diademacris and Pristocorypha (Rehn 1944). The genus *Clonacris* is characterized by its nonstrumose ventral genal margins. The pronotum is short and transverse. The lateral lobes with more vertical and not all longitudinally oblique axis. The narrower and more elongate tegmina, wings more attenuate and the moderately compressed. The male has the subgenital plate rostrately produced and the cerci elongate, tapering, aciculate and subfalciform.

There are 4 species of *Clonacris* distributed in the India, viz: *C. finoti, C. grenni, C. kirbyi* and *C. sila* (Tandon 1976). The species *Clonacris kirbyi* was described by Finot (1903) and then by Kirby (1914) as *Euthymia kirbyi*. Later Uvarov (1943) and Rehn (1944) placed this species under the genus *Clonacris*. This species is known from different states of India:, Chhattisgarh (Chandra *et al.* 2007), Madhya Pradesh (Chandra et al. 2007; Gupta & Chandra 2009), Karnataka, Tamil Nadu and Uttar Pradesh (Shishodia et al. 2010). The other species *Clonacris sila* Rehan, 1944 was described from Bihar and Tamil Nadu (Shishodia et al. 2010).

In Maharashtra state the species C. kirbyi is recorded for the first time from evergreen forested area of Patgaon, Taluka Chandgad, Dist., Kolhapur [N 16° 07' 40.66" E 73° 56' 04.15", 2098 ft (639.5 m) asl], which is part of the North Western Ghats ecoregion. The specimen (Fig. 1) was collected in winter on 1 Dec 2012. The identification was confirmed with the help of reference collection of Zoological Survey of India (ZSI), Kolkata, and detailed characters given by the original author (Kirby 1914), i.e., body very stout, light brown with green spots and blotches. Head reddish brown, with green marking above, finely punctured; antennae slender, 23 jointed, shorter than the head and pronotum together, rusty brown, darkest in the middle. Pronotum short, constricted in the middle, brown, with the deflexed lobes more yellowish, impress-punctate, rugose behind and with a very slight median carina, hind border obtusely rounded; deflexed lobes with the lower margin nearly straight and strongly rounded at the hinder angle; the transverse sulci dark, well-marked, the hind slucus placed beyond the middle. Tegmina nearly as long as the abdomen, grayish brown, with dense brown reticulation and sub-hyaline areolae; wings shorter than the tegmina, pale red at the base, with the tip and hind margin slightly clouded. Legs rather short; hind femora testaceous brown with greenish black spots; internally with a long black green-spotted space towards the base and a greenish black spot on the apical third; hind tibiae with ten black spines on each side. Prosternal tubercle broad and truncated. Abdomen brown above, paler below.

Chandra & Gupta (2012) have compiled the list of Orthoptera from Maharashtra, which is based on earlier records and fresh survey. The list contains 143 species/subspecies belonging to 98 genera and 8 families. Only 6 of them belonged to the Hemiacridinae and *Clonacris kirbyi* is not among the species mentioned therein. Hence, this is the first record of *C. kirbyi* for Maharashtra in the region of North Western Ghats.

SUMMARY

Clonacris kirbyi Finot (Orthoptera: Acrididae: Hemiacridinae) is reported for the first time from the Patgaon of Maharashtra state, a region of North Western Ghats.

Key Words: Hemiacridinae, North Western Ghats ecoregion

RESUMEN

Se informa por primera vez la presencia de *Clonacris kirbyi* Finot (Orthoptera: Acrididae: Hemiacridinae) en Patgaon en el estado de Maharashtra, una región en el Noroeste de Ghats.

Palabras Clave: Hemiacridinae, Noroeste de Ghats, eco-región

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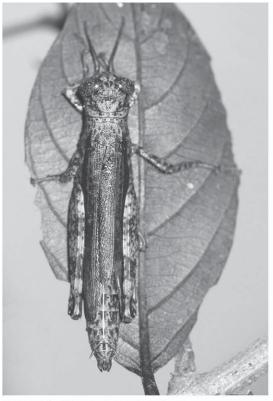


Image 1. *Clonacris kirbyi* Finot Dorsal view (Male)



Image 2. Clonacris kirbyi Finot Ventral view

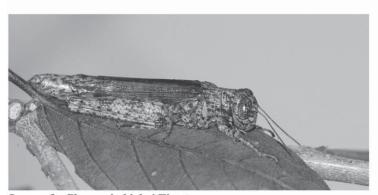


Image 3. *Clonacris kirbyi* Finot Lateral view



Image 4. *Clonacris kirbyi* Finot Dorsal view of head

Fig. 1. $Clonacris\ kirbyi\ Finot\ collected\ at\ Patgaon,\ Taluka\ Chandgad,\ Dist.,\ Kolhapur\ [N\ 16^{\circ}\ 07'\ 40.66"\ E\ 73^{\circ}\ 56'\ 04.15",\ 2098\ ft\ (639.5\ m)\ asl],\ northwestern\ Ghats,\ Maharashtra,\ India.$

REERENCES CITED

CHANDRA, K., AND GUPTA, S. K. 2012. Insecta: Orthoptera. Fauna of Maharashtra. State Fauna Series Zool. Survey India. 20(2): 429- 436.

CHANDRA, K., GUPTA, S. K., AND SHISHODIA, M. S. 2007. A Checklist of Orthoptera of Madhya Pradesh and Chhattisgarh. Zoo's Print J. 22(5): 2683-2687. FINOT PAR. A. 1903. Sur Le Genre Euthymia de la Tribu des Acridiidae, Famille des Acridioidea, Order des Insectes Orthoperes. Ann. Soc. Entomol. France.71: 629.

GUPTA, S. K, AND CHANDRA, K. 2009. Orthoptera of Madhav National Park, Shipuri, Madhya Pradesh, India. Uttar Pradesh J. Zool. 29(1): 79-89.

KIRBY, W. F. 1914. The fauna of British India including Ceylon and Burma, Orthoptera Vol I. pp.1-269.

- REHN, J. A. G. 1944. A review of the old world Euthymiae (Orthoptera, Acrididae, Cyrtacanthacridinae). Proc. Acad. Natural Science. Philadelphia 96: 1-135. SHISHODIA, M. S., CHANDRA, K., AND GUPTA, S. K. 2010. An annotated checklist of Orthoptera (Insecta) from India. Zoological Survey of India. Occasional Paper No. 314: 1-366.
- TANDON, S. K. 1976. A Checklist of the Acridoidea (Orthoptera) of India Part- I Acrididae. Rec. Zool. Survey India. Occasional Paper No. 3. 1-48.
- UVAROV, B. P. 1943. African genera of the group Oxyrrhepes. Ann. Mag. Nat. Hist. (II) 10: 384-389.