



## A NEW RECORD OF ACRIDIDAE (ORTHOPTERA) FROM JHARKHAND, INDIA

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### INTRODUCTION

Jharkhand is a state in eastern India. Jharkhand shares its border with the states of Bihar to the north, Uttar Pradesh and Chhattisgarh to the west, Orissa to the south, and West Bengal to the east. It is situated between 23.3500° N Latitude and 85.3300° E Longitude. The Jharkhand state is very rich in biodiversity and is the part of the Chhotanagpur plateau, province of the peninsula biogeographic zone. The recorded forest area is 2.36 million hectares, which constitutes 29.61% of the geographical area of the state. Reserve forests constitute 18.59%, protected forests 81.27% and unclassed forest a mere 0.14%. there are three types of forest viz., Tropical moist deciduous, Tropical dry deciduous and Subtropical broad leaved hill forests, Sal (*Shorea robusta*) being the major forest tree species. Soil content of Jharkhand state mainly consist of soil formed from disintegration of rocks and stones, and soil composition is further divided into Red Soil, found mostly in the Damodar valley and Rajmahal area; Micacious soil (containing particles of mica), found in Koderma, Jhumeritilaiya, Barkagaon and areas around the Mandar hill; Sandy soil, generally found in Hazaribagh and Dhanbad; Black soil, found in Rajmahal area and finally Laterite soil, found in western part of Ranchi, Palamu, and parts of Santhal Parganas and Singbhum.

The present communication is based on a

survey conducted by the author in June-July, 2014, from Barkhela, Kolhan Forest Range, Chaibasa district of Jharkhand. The order Orthoptera is divided into two suborders namely Caelifera and Ensifera. The suborder Caelifera includes short-horned grasshoppers, locusts and grouse locusts, however Ensifera includes long-horned grasshoppers, katydids, crickets and mole crickets. The suborder Caelifera is represented by 518 species under 214 genera and 11 families from India. Among Acrididae 285 species and 134 genera were recorded from India (Kailash Chandra *et al.*, 2010). A notable taxonomical work on Acrididae was made by Kirby (1914) in the series 'Fauna of British India' and he divided the family Acrididae into eight subfamilies. Uvarov (1921, 1924, 1927, 1942) studied in detail Indian Acrididae. Dirsh (1965, 1975), Tandon (1976), Shishodia (1987, 1997, 1999), Tandon & Shishodia (1969-1989), Usmani & Shafee (1980-1990), Kumar & Virktamath (1991), Julka *et al.* (1982), Shishodia & Hazra (1986) and Hazra *et al.* (1993), Dey & Hazra (2003), Kulkarni & Shishodia (2004, 2005), Usmani (2005), Mandal & Yadav(2007) and Gupta(2008) have contributed works on the taxonomy of this group. More recently Nayeem and Usmani (2012) studied extensively of Grasshopper fauna of state of Jharkhand comprising 41 species belonging to 28 genera of 10 subfamilies, 3 families and 4 tribes. The species namely- *Choroedocus illustris*

(Walker, 1870) (Orthoptera: Acrididae) have been newly recorded from the state of Jharkhand. Identification of specimens is followed after Eades, *et al.*, 2014.

### SYSTEMATIC ACCOUNT

Order ORTHOPTERA

Suborder CAELIFERA

Infraorder ACRIDIDEA

Superfamily ACRIDOIDEA Macleay, 1821

Family ACRIDIDAE Macleay, 1821

Subfamily CATANTOPINAE Brunner von Wattenwyl, 1893

#### 1. *Choroedocus illustris* (Walker, 1870)



Fig. 1. *Choroedocus illustris* (Walker, 1870)

1870. *Heteracris illustris* Walker Catalogue of the Specimens of Dermaptera, Saltatoria in the Collection of the British Museum, 4: 663.
1910. *Heteracris illustris* Kirby, A Synonymic Catalogue of Orthoptera (Orthoptera Saltatoria, Locustidae vel Acridiidae), 3(2): 555.
1921. *Choroedocus illustris* Uvarov, *Trans. Ent. Soc. London*, 69(1&2): 109.
1984. *Choroedocus illustris* Bhowmik & Halder, *Rec. Zool. Survey India*, 81(1-2): 182.
2007. *Choroedocus illustris* Mandal & Yadav, *Fauna of Andhra Pradesh., State Fauna Series*, 5(3): 211.

2008. *Choroedocus illustris* Gupta, New records of two short-horned grasshoppers from Central India, *Bionotes*, 10(3): 89

2012. *Choroedocus illustris* Ahmad, & Nabi, *Italian Journal of Zoology*, 79(4): 598-606.

*Material examined:* Barkhela, Kolhan Forest Range, Chaibasa distt., Jharkhand, 21.vi.2014, Coll. G. P. Mandal, 3 exs., altitude: 348 meters, co-ordinates, Latitude: 22°33'2.4'' N and Longitude: 85°40'3.5'' E, habitat: under grass field & thick vegetation.

*Diagnosis:* Tegmina with small scattered brownish dots through disc excluding costal anal area; subgenital plate conical and upcurved in male.

*Distribution:* INDIA (Jharkhand, Andhra Pradesh, Tamil Nadu, Madhya Pradesh, Uttar Pradesh, Maharashtra, Himachal Pradesh); SRILANKA

*Remarks:* This large brightly coloured species is specialized for life on leaves of thick tropical vegetation. First time recorded from the state of Jharkhand.

### SUMMARY

The present paper is first report of *Choroedocus illustris* (Walker, 1870) (Orthoptera: Acrididae) from Kolhan Forest Range, Chaibasa district of Jharkhand.

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