



Article

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A new species of the mole cricket genus *Gryllotalpa* (Orthoptera: Gryllotalpidae; Gryllotalpinae) from India

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Abstract

Gryllotalpa krishnani new species (type locality: Tiruchirappalli, India) (Orthoptera: Gryllotalpidae) is described from male, female adults and nymphs. This species is found in the wet soil (10-15cm depth) near to kitchen waste dumping area.

Keywords: mole cricket, new species, India

Introduction

The Mole cricket genus *Gryllotalpa* belongs to subfamily of Gryllotalpinae and their distinguishing characters are: fore tibiae with four dactyls; tympana covered and opening in form of a slit; basal spur of fore leg arising from femur; veins in lateral field of fore wings pointing towards wing tips. In total, 65 species of *Gryllotalpa* have been recorded (Ma & Zhang 2010). In India, five species of *Gryllotalpa* (*G. africana*, *G. hirusta*, *G. minuta*, *G. orientalis* and *G. ornata*) are known (Chandra et al. 2011). No additional studies on the Indian *Gryllotalpa* have been made since Chopard (1969). However, the present study describes a mole cricket species from Tiruchirappalli, Tamil Nadu.

Study area. Tiruchirappalli: It is one of the oldest inhabited cities in Tamil Nadu, situated on the banks of Kaveri River (latitude: 10.8050°N; longitude: 78.6856°E; elevation: 88m). The city spread over an area of 146.7 square kilometres is situated on the plains between the Shevaroy hills to the north and the Palni hills to the south and south-west. The maximum temperature goes up to 41°C during daytime in the summer (April and May). In the winter season (December) the day temperature ranges from 21 to 29°C. The rainfall regime is erratic. This area comes under dissymmetric rainfall regime with the bulk of the rains during the retreating northeast monsoon (October–November). Some rain is also received during the southwest monsoon (June–August).

Materials and methods

The specimens were collected in wet soil with near to a kitchen waste area in K.K. Nagar of Tiruchirappalli, Tamil Nadu, India. In this location, the soil was buried up to 10-15 cm depth by a digger and a colony of this species was found beneath the soil. The adults of male and female and nymph were collected from this colony. The characters description, figures and measurements were done with help of Moticam 1000R (1.3M Pixels) digital camera (CCD) and Motic-images plus 2 software. The whole body was photographed with a Sony (12 M Pixels) camera. Type materials are deposited in the Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India.