



Morphological characterization of some representative species of the genus *Loxoblemmus* (Orthoptera: Gryllidae; Gryllinae; Gryllini) from India

JHABAR MAL, RAJENDRA NAGAR & R. SWAMINATHAN

ICAR, Network Project on Insect Biosystematics, Department of Entomology, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan- 313001 India.

E-mail: udaiswami57@gmail.com, jhabarmal.c@rediffmail.com

Abstract

Morphological characterization of some common species of the genus *Loxoblemmus* (Gryllidae: Gryllinae) from India is presented. In all, 5 species were identified that included two, *Loxoblemmus equestris* Saussure and *Loxoblemmus haani* Saussure, from the sub-humid regions of Rajasthan (South West India) and Madhya Pradesh (Central India); while three species, *Loxoblemmus taicoun* Saussure, *Loxoblemmus jacobsoni* Chopard and *Loxoblemmus intermedius* Chopard from the humid hilly regions of Meghalaya and Assam (North East India). Of the 5 reported species, based on the comparative linear measurements, *L. haani* is relatively larger than the other species encountered.

Key words: Orthoptera, Gryllidae, Gryllinae, *Loxoblemmus*, India

Introduction

Crickets of the sub-family Gryllinae are distributed almost throughout the world, especially in the tropical and sub-tropical regions including India. Many resemble the genus *Gryllus* L. in general characters; but do have striking morphological differences to be grouped in separate genera. Chopard (1969) worked on the fauna of India and adjacent countries, and separated this group from Gryllides on the basis of the reduced tegmina in both sexes. *Loxoblemmus* (Orthoptera: Gryllidae) was proposed in 1877 by Saussure. The males often exhibit typical facial structures with characteristic projections which are conspicuously sexually dimorphic. The check-list for Indian Orthoptera fauna includes 14 species of the cricket genus *Loxoblemmus*. Earlier, Shishodia and Tandon (1993) have reported and described 6 species of *Loxoblemmus*; wherein, *L. detectus* and *L. equestris* were collected from different parts of India (North West, North East and South); whereas, *L. hamulifer*, *L. macrocephalus* and *L. nigriceps* only from the North East part of India. The present work is part of the study on the cricket fauna of India collected during field trips under the Network Project on Insect Biosystematics.

Material and methods

The specimens were collected from the states of Rajasthan (South West India), Madhya Pradesh (Central India), Assam and Meghalaya (North East India) during field trips. The conventional sweep net technique and hand picking was employed to make the collections that were processed and later identified with the help of Chopard (1969) and other specific literature. The genitalia were dissected using the standard procedure advocated by Dirsh (1956) and Rattanlal and Baldev Prasad (1959) for the study of male genitalia. These were then washed with tap water and dissected out under Stemi 2000-C stereozoom binocular in the same media. Illustrations of the body parts were made with the help of a drawing tube attached to the stereozoom binocular (Nikon SMZ 1500).