



Some representative species of the tribe Holochlorini (Orthoptera: Tettigoniidae: Phaneropterinae) and the description of two new species from India

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Abstract

In the present paper two new species of the genus *Holochlora* (Phaneropterinae: Holochlorini) have been described viz., *Holochlora umranensis* sp. nov., collected from Meghalaya, the North-eastern province, India (Ri bhoi 90°55'15 to 91°16' latitude and 25°40' to 25°21' longitude, 993 MSL) and *Holochlora alsigarhensis* sp. nov., collected from South-eastern-western, Rajasthan, (Udaipur N 24 34'17 to E 73 41' 30" and Latitude 24.5713, Longitude 73.6915, 582 MSL), as additions to the previously known species of the genus that were earlier collected from the southern parts of India. Among these, four species are being reported for the first time from India including: *H. brevifissa*, *H. fruhstorferi*, *H. japonica* and *Rectimarginalis profunda* Liu & Kang. The key morphological characters of the head, pronotum, tenth abdominal tergite, subgenital plate, cerci, titillator and the ovipositor have been illustrated with suitable line drawings to distinguish the known, reported and new species, along with a key to the genera and species.

Key words: Orthoptera, Tettigoniidae, Phaneropterinae, new species, new record, India

Introduction

The tribe Holochlorini Brunner von Wattenwyl, 1878 was erected by Bei-Bienko (1954), for the genus *Holochlora* Stal (1873) with two type species, *Holochlora fatidica* Stal, 1873 and *Holochlora venosa* Stal, 1873. The first species was removed and used as type for the genus *Arantia* Stal, 1874. The latter species was later designated as the type of *Holochlora* by Kirby (1906). Many authors (Stal 1874; Brunner von Wattenwyl 1878, 1891, 1893; Rehn 1909; Carl 1914; Hebard 1922; Karny 1923, 1926a, b, 1927, 1931; Ingrisch 1987, 1990; Liu et al. 1991; Panhwar et al., 2014) described many new species and subspecies from the Oriental region and only the species, *H. biloba* Stal 1874, was described from Madagascar. Several new synonymies were given by various workers (Kirby 1906; Karny 1926a; Liu & Jin 1999; Liu & Kang 2006, 2007a, b). In the latest online catalogue (Eades et al., 2016), 54 species and 4 subspecies are listed under the genus *Holochlora*; but recently, *Holochlora voluptaria* Carl, 1914 was transferred into *Sinochlora* Tinkham, 1945 by Liu & Kang (2007a), and three species of “an ensis group” proposed by Karny (1926) and Ingrisch & Shishodia (1998, 2000) were removed from *Holochlora* to a new genus *Rectimarginalis* Liu & Kang, 2007b. Bei-Bienko (1954) indicated that species of *Holochlora* probably live on leaf-bearing trees and bushes and are attracted by light in the dark. Detailed descriptions of egg morphology, that of nymphs and adults of *Holochlora bilobata* (Karny 1926a), together with descriptions of hosts, annual life history, oviposition, and natural enemies were provided by Lu & Jin (2000). The checklist of Orthoptera (Insecta) of India consists of only nine known species (Shishodia et al., 2010). Ingrisch and Shishodia (1998, 2000) described some new species of *Holochlora* from India to which addition of two new species is being proposed in this paper, both having been collected from north India.

Material and methods

The specimens studied were field collected during survey and collection trips conducted in the states of Kerala;