Two new species of the genus *Igerna* (Hemiptera: Cicadellidae: Megophthalmae) from India

NARESH M. MESHRAM1,2, N.S. CHANDRA BOSE R. & SHAMA PARVEEN

1Division of Entomology, Indian Agricultural Research Institute, New Delhi 110012, INDIA
2Corresponding author. E-mail: nmmeshram@gmail.com

Abstract

Two new megophthalmine species of leafhoppers, *Igerna kolasibensis* sp. nov. and *I. shillongensis* sp. nov., are described from India, Mizoram and Meghalaya, respectively. Detailed morphological descriptions, illustrations and photographs are provided. An updated key to the species and taxonomic notes on the genus are provided.

Key words: Leafhoppers, Agalliini, Key, Distribution

Introduction

The genus *Igerna* was established by Kirkaldy (1903), with type species *Pachynus bimaculicolis* Stål (1866), as a replacement name for *Pachynus* Stål (1866). Viraktamath (2011), in his monograph of the Oriental and Australian Agalliini, revised this genus with 14 species, provided a checklist, and a key to its Oriental species. Later, in the revision of Agalliini from China, Viraktamath *et al.* (2012) described another new species. Li *et al.* (2012) recorded this genus for China, with description of another new species. Recently, Viraktamath and Gonçalves (2013) revised the Madagascaran Agalliini, which led to the addition of three species to the genus. Some members of *Igerna* were reported to feed on *Coffea robusta* Linn., *Justicia betonica* Linn. and *Achyranthes aspera* Linn. (Viraktamath, 2011). To date, 18 species have been reported in this genus, including 14 from the Indian subcontinent.

The genus is widely distributed in India, and the Oriental region. These leafhoppers are small to medium size, wedge shaped and belong to the tribe Agalliini. *Igerna* can be distinguished from all the other Agalliini genera by the combination of the following characters: aedeagus with base ventrally produced, often sunken into dorsal apodeme basally, usually symmetrical; dorsal apodemes well developed; anal collar simple (except in *Igerna violacea*); face somewhat polished, slightly curved from frons to clypellus; and ocelli located in relatively shallow pits (Viraktamath, 2011).

Recent explorations under the Indian Council of Agricultural Research, Network Project on Insect Biosystematics, from the North-Eastern hills of Meghalaya and Mizoram led to collection of a series of specimens of *Igerna* representing two new species. DNA barcodes (partial mtCOI sequences) were generated for these species.

Material and methods

Line diagrams were drawn using a drawing tube attached to a Leica DM500 phase contrast compound microscope. Photographs were taken with a Leica DFC 425C digital camera on the Leica M205FA stereozoom automontage microscope. Male genitalia dissections were carried out as described by Oman (1949) and Knight (1965). Type material is deposited in the National Pusa Collection, Division of Entomology, Indian Agricultural Research Institute, New Delhi, India (NPC).

For mtCOI analysis, the DNA was extracted from a single whole specimen according to the manufacturer.
Acknowledgements

The authors are grateful to Prof. C. A. Viraktamath for guidance on the leafhoppers. The work was carried out through the Network Project on Insect Biosystematics funded by the Indian Council of Agricultural Research, New Delhi.

References


http://dx.doi.org/10.1653/024.095.0424


http://dx.doi.org/10.1093/molbev/mst197


http://dx.doi.org/10.11646/zootaxa.3616.1.1