

Research Article

Redescription of a predatory stink bug, *Amyotea malabarica* (Fabricius, 1775) (Hemiptera: Pentatomidae: Asopinae)

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ABSTRACT: The genus *Amyotea* Ellenrieder, 1862 (Hemiptera: Pentatomidae: Asopinae), along with the species *Amyotea malabarica* (Fabricius, 1775) is redescribed. The male and female genitalia of the same is described and illustrated. A slightly modified procedure for the dissection of male genitalia is also given.

KEY WORDS: *Amyotea* Ellenrieder, male genitalia, female genitalia, eggs, variability

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INTRODUCTION

Amyotea Ellenrieder, 1862 is a predaceous stink bug belonging to the subfamily Asopinae. The monophyly of Asopinae was confirmed by Gapon and Konstantinov (2006) based on examination of various types of aedeagal structure of different representatives of this taxon. Asopinae are represented by eight genera in south India (Salini and Viraktamath, 2015) and 16 genera in India (Atkinson, 1888; Distant, 1902, 1908 and 1918; Chatterjee, 1934; Thomas, 1994; Kaur *et al.*, 2012). Thomas (1994) gave a taxonomic synopsis of old world genera of Asopinae. Eight species are known for the genus *Amyotea* from the world (Rider, 2016). Of these, *Amyotea malabarica* (Fabricius) is the only species known to occur in India. Azim and Shafee (1982) described a new species *Asopus rufus*, which was later synonymized with *A. malabarica* by Thomas (1994). Ahmad and Rana (1992) redescribed *A. malabarica* from Bihar, India and illustrated only the female genitalia. Rider and Zheng (2002) gave distributional records and synonymy notes for *A. malabarica* in their checklist of Chinese Pentatomidae. Zhao *et al.* (2011) dealt with the genus *Amyotea* from China with description of a new species *A. lata* and gave distribution of *A. malabarica* within China.

The Asopinae are easily diagnosed by their incrassate labium, especially the first segment of labium is markedly thickened and free, base of labium attached directly to the apex of head; bucculae form a labial groove, not reaching the posterior margin of head; labium generally extending

beyond the midcoxae, but not surpassing base of venter; anterior tibiae with short, acute spine on the lower surface (De Clercq, 2000). Like other members of the subfamily Asopinae, the members of the genus *Amyotea* are brilliantly coloured and often collected with difficulty as single or a few individuals. Though the species was found to feed on larvae of soft bodied insects like Lepidoptera, their prey are not well known.

The species *A. malabarica* is a bright red coloured bug with black spots. Even though the species is generally distributed all over India, a detailed description and notes on colour variation for this species is lacking for the region. An illustration of the male and female genitalia is also lacking except a partial illustration by Datta *et al.* (1985). The present paper aims at redescribing the species *A. malabarica* with emphasis on the male and female genitalia.

MATERIAL AND METHODS

Photographs were made using Leica DFC 420 camera mounted on a Leica M205A stereozoom microscope and by using the software Automontage® (LAS). Photographs were edited using Adobe Photoshop CS (Version 8.0). The procedure to dissect male genitalia as detailed by Ahmad (1986) was followed. But the procedure was slightly improvised as follows. The whole specimen (after removing the labels) with pins in inserted position was boiled for 3–5 minutes and transferred to distilled water for the dissection of male genitalia. After removing the insect pin, the genital