

Two new species and a new record of *Bactrocera* Macquart (Diptera: Tephritidae: Dacinae: Dacini) from India

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Abstract

Two new species of *Bactrocera* Macquart, namely *Bactrocera* (*Calodacus*) *harrietensis* Ramani & David, **sp. nov.** and *Bactrocera* (*Calodacus*) *chettalli* David & Ranganath, **sp. nov.**, are described from the Andaman and Nicobar Islands and Karnataka, India, respectively. *Bactrocera* (*Zeugodacus*) *semongokensis* Drew & Romig is recorded for the first time from India.

Key words: *Calodacus*, Anacardiaceae, Andaman and Nicobar Islands, *Zeugodacus*

Introduction

Bactrocera Macquart is the most speciose genus of the tribe Dacini with 423 species distributed across the Indomalayan, Australasian and Oceanian regions of the world. Sixty-eight species are recorded from India (Agarwal & Sueyoshi 2005; David & Ramani 2011; Drew & Romig 2013). The genus is characterised by an oval abdomen, separate abdominal tergites and a triangular shaped scutellum (Drew & Romig 2013). Thirty subgenera have been identified in *Bactrocera*, inclusive of the recent addition *Calodacus* Hancock (Drew & Romig 2013; Hancock 2015; Hancock & Drew 2015). Two distinct lineages exist within *Bactrocera* (Drew 1989; Hancock & Drew 2015) – (1) the *Bactrocera* and *Queenslandacus* Drew groups of subgenera, characterised by a deep posterior emargination of male sternite V (apomorphy) and (2) the *Melanodacus* Perkins and *Zeugodacus* Hendel groups of subgenera, characterised by a shallow emargination of male sternite V (plesiomorphy). The subgenus *Calodacus* belongs to the first group; it was erected by Hancock (2015) to accommodate six Indo-Australian species previously placed in the Afrotropical subgenus *Gymnodacus* Munro. Members of the subgenus *Calodacus* as defined by Hancock (2015) possess short posterior lobe of surstylus, deep posterior emargination of sternite V, males without pecten of cilia on tergite III, cell bcu with short extension and shining spots (ceromata) on tergite V. Males of the subgenus *Calodacus* are non responsive to male parapheromones, as are those in the apparently related subgenus *Bulladacus* Drew & Hancock. Of the six species placed in *Calodacus*, *Bactrocera calophylli* Perkins & May was the only species previously known from India (Ranganath & Veenakumari 1999). Two new species belonging to this subgenus, *Bactrocera* (*Calodacus*) *harrietensis* Ramani & David, **sp. nov.**, from the Andaman and Nicobar Islands, India and *Bactrocera* (*Calodacus*) *chettalli* David & Ranganath, **sp. nov.**, from Karnataka, India, are described and illustrated here.

The subgenus *Zeugodacus* Hendel belongs to the second group of subgenera and is defined based on the long posterior lobe of the male surstylus, shallow posterior emargination of male sternite V, presence of pecten of cilia on male abdominal tergite III, postsutural supra-alar seta, prescutellar seta and two pairs of scutellar setae (Drew and Romig 2013). Of the 120 species classified in *Zeugodacus*, nineteen species are so far known from India (Agarwal & Sueyoshi 2005; Drew & Romig 2013; Hancock & Drew 2015). *Bactrocera* (*Zeugodacus*)