

A new species of *Apenesia* (Hymenoptera, Bethylidae) from India, a parasitoid of coffee white stem borer *Xylotrechus quadripes* (Coleoptera, Cerambycidae)

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Abstract

Apenesia sahyadrica sp. nov. is described and illustrated based on specimens from Arabic coffee infested with the white stem borer *Xylotrechus quadripes* Chevrolat. The new species is endemic to Western India and is under laboratory rearing in Coffee Research Station Chikmagalur for biocontrol of this pest. The new species is compared with other related species of Oriental *Apenesia*.

Key words: *Apenesia*, Bethylidae, Oriental region, Taxonomy, coffee borer, Cerambycidae

Introduction

The coffee white stem borer *Xylotrechus quadripes* Chevrolat (Coleoptera, Cerambycidae) is a serious pest of Arabic coffee in tropical regions (Zhou *et al.* 2002) and attacks many commercial coffee plantations in Asia (Rhainds *et al.* 2001). Damage caused to coffee stems by the wood-feeding larvae causes mortality of plants or reduction in fruit production. Each larva cuts the wood into powder with its mandibles, feeding on some of it, packing the remainder, along with faecal pellets, into the tunnel behind the direction of movement (Siddegowda *et al.* 1991). Because larvae live inside coffee stems they are difficult to control (Rhainds *et al.* 2001). Management strategies, such as the use of a specific parasitoid can be efficient in order to control this pest.

H. G. Seetharama sent us seven couples of *Apenesia* Westwood, which represents an undescribed species extracted from tunnels infested by the coffee white stem borer. Bethylids have been reported as ectoparasitoids of many important pests, which occur under cryptic situations, e.g., *Sierola ellingtoni* Gordh and *Goniozus pakmanus* Gordh, which attack cotton moth larvae *Pectinophora gossypiella* (Saunders) in Western Australia (Gordh 1998, Gordh & Medved 1986), and *G. sensorius* Gordh which attacks *Diaphania indica* (Saunders) (Gordh 1988).