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

C.O. AZEVEDO & C. WAICHERT

*Universidade Federal do Espírito Santo, Departamento de Biologia, Av. Marechal Campos 1468, Maruípe, 29.040-090 Vitória ES, Brasil. E-mail: bethylidae@gmail.com*

**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 on 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 situation, e.g., *Sierola elliingtoni* 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).