

First record of ambrosia beetle (*Euplatypus parallelus*) infestation on cashew from Goa, India

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Received: 21 September 2012 / Accepted: 25 July 2013 / Published online: 24 August 2013
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Abstract The occurrence of ambrosia beetle *Euplatypus parallelus* (Fabricius) (Coleoptera: Curculioninae: Platypodinae) infestation on cashew (*Anacardium occidentale* L.) is reported for the first time from Goa, India. Most of the infested trees were either previously attacked by cashew stem and root borer *Plocaederus ferrugineus* (Coleoptera: Cerambycidae) or were pruned trees. The visible symptoms of attack include appearance of numerous round bore holes on the tree trunk and branches, and extrusion of fibrous dust frass on the tree trunk and in loose piles at the base of the tree. Large numbers of larvae, pupae and adults were observed in the galleries of the affected trees. Adult beetles measure 4.0–4.3 mm in length and are brown in color, having long and slender bodies with yellow hairs. They have a characteristic feature of absence of pores on the pronotum. Male and female insects were identified based on the elytral declivity.

Keywords *Anacardium occidentale* L · Bark beetles · Pin-hole borers · Platypodinae

Ambrosia beetles, also known as pin-hole borers, are wood-boring insects that live in symbiosis with fungi. Several species with the ambrosia beetle habit can be found in two sub families of Curculionidae-Scolytinae

and Platypodinae; the latter can be distinguished by the elongated body form and short abdomen (Atkinson 1989). The Platypodinae contains over 1400 species (Beaver & Shih 2003), and are abundant in the tropics where they are responsible for severe economic damage to timber and the wood industry. They usually attack weakened, dying, and recently cut or killed trees, but some species can attack living trees, especially if the tree is stressed or unhealthy (Bumrungsri *et al.* 2008). Species like *Platypus quercivorus* and *P. koryoensis* act as vectors for wilt diseases in Fagaceae especially oaks (*Quercus*) (Hong *et al.* 2006; Kobayashi & Ueda 2005). One such important species is *Euplatypus parallelus* (F.) and considered the most destructive Platypodinae in the world (Wood & Bright 1992). *E. parallelus*, a Neotropical in origin, is widely distributed in North America, South America, Central America, Africa, Madagascar, Australia, Caribbean, Japan and Southeast Asia (Beaver 1999; Ohno *et al.* 1986; Wood & Bright 1992). It is a polyphagous insect which can breed in live trees, although it is normally associated with trees stressed by drought, disease or by recently cut wounds. The insects feed on a fungus which they bring to the tree (Bumrungsri *et al.* 2008). It has a broad host range and is recorded in 21 families of plants in the tropical region and in parts of other regions, which include both broad-leaved and coniferous trees (Schedl 1965; Zancunio *et al.* 2002, 2005).

Cashew is a very important crop of India earning foreign exchange. Here we report *E. parallelus* for the first time from Ponda (15°24'N latitude; 74°01'E longitude) on currently pruned cashew plantations and

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