

A Scientific Note on Occurrence and Infestation of Jewel Beetle *Belionota Prasina* (Coleoptera: Buprestidae) on Cashew (*Anacardium Occidentale*)

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Abstract The occurrence of Jewel beetle *Belionota prasina* (Thunberg, 1789) (Coleoptera: Buprestidae) infestation on cashew from Goa, India was reported in this communication. Most of the infested trees were previously attacked by stem borers. Semi-circular D-shaped exit bore holes measuring 7–10 mm in length and 4–7 mm in width were found along the main trunk and branches. Adult beetles were dark greenish blue in colour and measured about 21–28 mm in length. Grubs were fleshy, whitish yellow in colour and measured 9–50 mm in length. Various stages of grub were observed on the infested trees. Pre-pupa and pupa were yellowish white in colour and measures 26–32 mm and 20–23 mm in length, respectively. Maximum of 132 grubs, 8 pre-pupae, 22 pupae and 61 adults were collected from a single affected tree. An average of 55.8 grubs were found to be feeding on a single tree and could successfully complete the life cycle on a fresh cashew log. Thus, cashew could be a new host plant for grubs of this buprestid, *Belionota prasina*.

Keywords Cashew · Jewel beetle · Buprestid · Infestation · Host plants

Cashew (*Anacardium occidentale* L., Family: Anacardiaceae) is one of the economically important commercial plantation crops in India. Insect pest infestation is the major constraint in cashew production. The crop is known to host more than 50 species of insects pests in India [1].

The major pest being stem borers and tea mosquito bugs. The Jewel beetle, *Belionota prasina* (Thunberg, 1789) (Coleoptera: Buprestidae) is a polyphagous insect pest and widely distributed in India, China, Taiwan, Thailand, Malaysia, Indonesia, Borneo and Northern Australia. [2–5]. The damage caused by *B. prasina* grubs has been reported on *Ceiba pentandra*, *Delonix regia*, *Casuarina* spp and *Mangifera indica* [4, 6, 7]. A literature review indicated that the biology of the pest *B. prasina* has not been studied on cashew in India and elsewhere. Hence, the present study was undertaken to investigate the occurrence, biology and damage pattern of this buprestid on cashew.

Regular field survey was carried out to monitor the insect pests incidence on thirteen year old cashew plantations at ICAR-Central Coastal Agricultural Research Institute, Ela, Old Goa, Goa, India (15°29'N latitude; 73°55'E longitude). During the survey, dead or dying trees due to jewel beetles were examined and observations on the damage pattern and biology were recorded. Grubs from the dead trees were collected, brought to the laboratory and reared on fresh cashew logs until the pupation and adult emergence. Observations were recorded for the larval, pupal and adult development along with the behaviour of adults. The identity of the species was subsequently established as *Belionota prasina* (Coleoptera: Buprestidae) by Insect Identification Service, Division of Entomology, Indian Agricultural Research Institute, New Delhi and the voucher specimens were deposited at the centre.

Most of the infested trees were previously attacked by stem borers. Damaged cashew trees (Fig. 1a) exhibited the symptom i.e. semi-circular D-shaped exit bore holes (Fig 1b) measuring 7–10 mm in length and 4–7 mm in width along the main trunk and larger branches. The bore holes were not found in thinner and terminal branches. The

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