

REPORT ON ADULT BEETLE *CELOSTERNA SCABRATOR* (FABRICIUS, 1781) (COLEOPTERA: CERAMBYCIDAE: LAMIINAE) FEEDING ON VEGETABLE PIGEONPEA

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Keywords: *Celosterna scabrator*, Cerambycidae, *Cajanus cajan*, vegetable pigeonpea

Introduction

Celosterna scabrator (Fabricius) is a longhorn beetle belongs to the subfamily Lamiinae under Cerambycidae. It is a polyphagous pest on many agriculturally important crops like, *Acacia arabica* (L.) Delile; *A. catechu* (L.) Willd., Oliv.; *Cassia siamea* Lam.; *Casuarina equisetifolia* L.; *Eucalyptus tereticornis* Sm.; *Mangifera sp.*; *Pithecolobium dulce* (Roxb.) Benth.; *Prosopis juliflora* (S. W.) DC.; *P. spicigera* L.; *Punica granatum* L.; *Shorea robusta* Roth; *Pyrus malus* L.; *Tectona grandis* L. f.; *Vitis vinifera* L and *Zizyphus jujuba* Mill. (Beeson and Bhatia, 1939; Beeson, 1941; Chatterjee and Singh, 1968; Duffy, 1968; Nair, 1968; Sivaramkrishnan, 1986; Naik *et al.*, 2011). It is widespread in many states of India such as Andhra Pradesh, Bihar, Chhattisgarh, Goa, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Odisha, Uttarakhand and Uttar Pradesh (Beeson and Bhatia, 1939; Duffy, 1968; Ranga Rao *et al.*, 1979; Majumder *et al.*, 2014; Mitra *et al.*, 2015; More and Prashanth, 2019;).

Adult beetles of *C. scabrator* feeding on *Cajanus cajan* (L.) varieties, ICP 7035, ICPL 87091, BRG-1 and BRG-3 were observed during the period of my PhD research work conducted at College of Horticulture, Bagalkot.

Material and methods

A field experiment was conducted at College of Horticulture, Bagalkot to study the seasonal incidence of insect pests on different varieties (BRG-1, BRG-3, ICP-7035, ICPL-87091) of vegetable pigeonpea during 2019-20. During the period of investigation, adults of *C. scabrator* feeding on upper portion of vegetable pigeonpea was noticed during the month of November, 2019. Thereafter, pigeonpea plants of different varieties were monitored regularly from morning (6 a.m.) to late evening hours (10 p.m.) till the harvest of green pods. Beetles feeding on shoots of pigeonpea plants were collected manually, pinned and examined. The collected insect specimens were identified to species level using the identification keys provided by Sangamesh (2015). The identity was later confirmed by sending the specimens to Sangamesh, R. H., Department of Agricultural Entomology, Kerala Agricultural University, Kerala.

Result and discussion

In general, Cerambycid beetles attack perennial plants, especially cultivated and forest trees. However, during the course of Ph.D research work, it has been noticed that the adults of *C. scabrator* were feeding on vegetable pigeonpea. The adults are nocturnal

in nature and they were settled on the shoots of vegetable pigeonpea during night time (6.00 p.m to 10.00 p.m.). In most cases, longhorn beetles act as internal feeders on their host plants as reported earlier (Sivaramakrishnan, 1986; More & Prashanth, 2019). However, adult beetles were found scraping the shoots of vegetable pigeonpea (Fig. 1) and scraped material was observed on the leaves and under the surface of the plants (Fig. 2). A similar feeding fashion by adults of *Aristobia reticulator* (Voet) on pigeonpea was also reported from Arunachal Pradesh (Kumawat *et al.*, 2017). The scraped plants became weak, turned brownish, and led to the terminal death of the affected plants. The adult beetles were more active during the evening and night hours. However, it was rarely observed during morning hours. It was also confirmed that grubs of *C. scabrator* were not noticed on the infected plants during the investigation. The incidence of *C. scabrator* on vegetable pigeonpea was recorded about 25.71 per cent during 2019-20.

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Fig.1



Fig.2



Fig.3

Fig. 1-3: Damaging behavior of *C. scabrator*

1. Adult beetle. 2. Scraped material on surface of leaf. 3. Damaged pigeonpea plant due to scraping of beetle.