



## RESEARCH NOTE

### *Plautia crossota* (Dallas) (Pentatomidae: Hemiptera), a new pest reported from chilli

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**ABSTRACT:** This paper reports the occurrence of *Plautia crossota* (Dallas) (Pentatomidae: Hemiptera), a new pest on chilli from Odisha, India. Damage is caused by adults and nymphs feeding on leaves and tender fruits resulting brown discoloration and malformation of fruits. Incidence on chilli plants was observed in August -September months in Sambalpur, Odisha and bug population varied from 2 to 7 per plant.

**Keywords:** Chilli, new pest, *Plautia crossota*

India is world's largest producer and contributes 40% of world's total production (Devi et al., 2016). In India chilli is cultivated in states such as Andhra Pradesh, Karnataka, Odisha, West Bengal, Maharashtra, Gujarat and Tamil Nadu. It is one of the important ingredients in Indian cuisine. In Odisha, Sambalpur and Ganjam are the major chilli producing districts. Beside this sizeable number of farmers grow the crop in Jharsuguda,

Balangir, koraput and Puri districts (Pradhan, 2016). But chilli production is badly affected by the infestation of many insect pests mainly aphids (*Myzus persicae* Sulzer, *Aphis gossypii* Glover), mites (*Polyphagotarsonemus latus* Banks) and thrips (*Scirtothrips dorsalis* Hood) (Kandaswamy et al., 1990). It is reported that chilli is infested with more than 293 insects and mite species in the field as well as in storage (Anon., 1987).

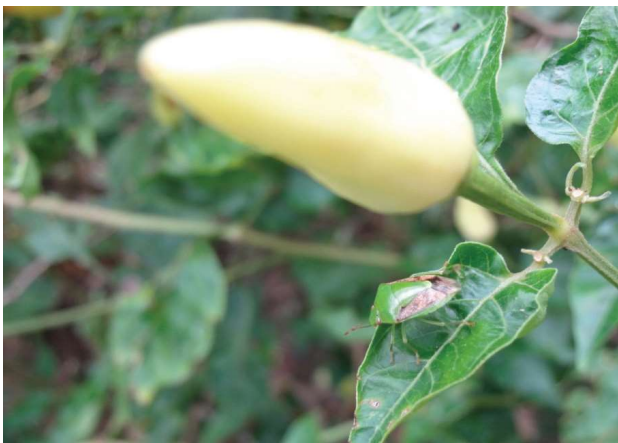


Fig 1. Images of *Plautia crossota* and damage fruit

The present study records the occurrence of pentatomid bug, *Plautia crossota* (Dallas) on chilli from Sambalpur, Odisha, India for the first time. Critical observations revealed that infestations started from the setting of tender fruits. Damage is caused by adults and nymphs feeding on leaves and tender fruits resulting brown discoloration on the fruits. Feeding activity can also open an access to fungi and bacteria that are responsible for rotten of the fruits. In case of severe infestations, shedding of premature fruits, stunted plant growth occurred. The affected fruits and leaves became malformed and smaller in size. Later, the affected fruits failed to fetch a higher market price. Suitable control measures should be initiated as and when the first incidence of this pest is observed on this valuable crop. Incidence on chilli plant was observed in August -September months in Sambalpur, Odisha and it was present 2-7 in numbers per unsprayed plant.

Insect was identified by the using keys and guidelines given by Salini and Viraktamath, (2015). Insect body is 8.50 -10.9 mm in length (Fig. 1). Head, pronotum and scutellum bright olive green, corium magenta or purplish red, abdomen ventrally light red, entire body with black punctures. Head: head lightly broader than long, narrowed and rounded at apex, eyes prominent, ocelli closer to compound eyes than to each other. Antennae slender and five segmented, basal 1/3<sup>rd</sup> portion pale greenish in colour whereas 2/3<sup>rd</sup> portion light brown in colour. Rostrum reaching the middle of the fourth segment, pale green in colour except apical 1/3<sup>rd</sup> of segment is black. Thorax: pronotum broader than long, Scutellum slightly longer than broad, punctured all over, except at the tip which is smooth and pale white in colour. All legs pale

green and distal half of tibiae light brown and apical half of claws is black in colour.

Although, *P. crossota* is polyphagous in nature infesting Pigeonpea, field bean, cowpea, cotton, and several other plants but infestation on chilli is the first time reported from here.

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