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Short note

Incidence of *Chrysocoris purpureus* Westwood (Hemiptera: Scutelleridae) on *Dalbergia sissoo* in Jharkhand

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Abstract *Chrysocoris purpureus* Westwood was observed to cause severe damage by sucking the sap of tender shoot and leaf to *Dalbergia sissoo* in Jharkhand. The present findings document a new record of host plant *(Dalbergia sissoo)* of this bug from Jharkhand. This new record in Jharkhand is extremely important for *Dalbergia sissoo* as a timber yielding tree and the damage potential of *Chrysocoris purpureus*.

Keywords *Chrysocoris purpureus*, Infestation, *Dalbergia sissoo*, New record.

Introduction

Chrysocoris purpureus Westwood (Hemiptera: Scutelleridae) is a polyphagous insect pest feed on juices from a variety of tree species in India and the infestation and damage potentiality of this species was recorded on *Populus deltoides* (Roychoudhury

et al. 1994), Acacia aureculoformis (Meshram et al. 1992), Acacia nelotica (Jana et al. 2014), Eucalyptus sp.(Roychoudhury et al. 2013), Emblica officinalis (Shanthi et al. 2009), Casuarina equisitifolia (Sasidharan et al. 2014), Ziziphus jujuba (Kavita et al. 2002) and Malus domestica (Gupta and Pathania 2017). Ambika et al. (2007) recorded this insect on Jatropha. Members of this species are called jewel bugs or metallic shield bugs due to shining colored targal body shield. They are also known as shieldbacked bugs due to the enlargement of the thoracic scutellum into a continuous shield over the dorsal body and wings. In the present finding, an endeavor has been made to record Chrysocoris purpureus Westwood as one of the leaf damaging insect pest in shisham nursery and plantation.

Materials and Methods

Periodical investigations were carried out to know the insect pests of shisham (Dalbergia sissoo) in the campus nursery and plantation of Faculty of Forestry, Birsa Agricultural University, Ranchi (23.18° N, 85.19° E; alt 625 MSL), Jharkhand. During the course of survey, quite a good number of greenish bugs were noticed to suck sap from tender shoots and leaves of shisham seedlings and saplings during April- July, 2018. Those insects were collected with the help of long handles insect catching net, pinned properly and later identified as Chrysocoris purpureus Westwood (Fig. 1) with the help of available literature (Roychoudhury et al. 1994, Meshram et al. 1992, Praveen et al. 2013).

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Fig. 1. Chrysocoris purpureus on shisham leaf.

Results and Discussion

Incidence of adult bugs on the shisham seedlings saplings were noticed during last week of April to 1st week of July, 2018 and they were found to suck the sap from tender shoots and leaves resulting dried appearance of apical leaves. The bugs were 14 – 17 mm long, metallic green with golden tinge in color and with 5 and 7 black spot on pronotum and scutellum respectively and characterized by unmarked head, acute lateral pronotal angles, ventrally convexed abdomen and extended scutellum over hemelytra. These bugs were observed on the ventral surface of the leaves in aggregated form conforming Roychoudhury et al.

(1994). As there is no information of *Chrysocoris* purpureus in existing literature on the insect pests of *Dalbergia sissoo* Roxb. in Jharkhand (Kumar 2017), this jewel bug is the new record as an insect pest on shisham in Jharkhand State of India.

References

- Ambika S, Monoharan T, Stanley J, Preetha G (2007) Scutellerid pests of Jatropha and their management. Ann Pl Prot Sci 15 (2): 971—973.
- Gupta R, Pathania PC (2017) Report on Hemipteran pest density on apple plantation (*Malus domestica* Borkh) in Jammu and Kashmir State of India. Rec Zool Surv Ind 117 (4): 356—366.
- Jana D, Tamili DK, Chakraborty SK (2014) Diversity of Hemipteran insects in the coastal and noncoastal environment of Midnapore (East), West Bengal, India. Sci & Cult 80 (5-6): 173—178.
- Kavita Z, Savithri P, Vijayaragavan (2002) Insect pest of ber, Ziziphus jujuba inTirupati region. Insect Environ 7 (4):157

 —158.
- Kumar A (2017) The study of insect pests of *Dalbergia sissoo* Roxb. and their seasonal incidence in Jharkhand, India. Am J Agric For 5 (5): 137—144.
- Meshram PB, Pathak SC, Jamaluddin (1992) A new report of *Chrysocoris purpureus* Westwood (Hemiptera: Scutelleridae) as a pest on *Acacia auriculiformis*. Ind For 118 (2): 169.
- Praveen S, Ramamurthy VV, Usmani K, Khokhar S (2013) Revision of the genus *Chrysocoris* Hahn (Hemiptera : Scutelleridae) from India. The Bioscan 8 (1) : 219—232.
- Roychoudhury N, Chandra S, Singh RB, Barve SK, Das AK (2013) New record of insect pests on seedlings of Eucalyptus. Ind J For 38 (2): 117—124.
- Roychoudhury N, Joshi KC, Rawat PS (1994) A new record of *Chrysocoris purpureus* Westwood (Heteroptera :Scutelleridae) on poplar, *Populus deltoides* Bartr. ex Marsh. Ind For 120 (12): 1126—1127.
- Sasidharan KR, Nicodemus A, Varma RV, Ramesh G (2014) Insect pests of *Casuarina equisitifolia* in Tamil Nadu, India and their management. In: *Casuarina* improvement for rural livelihood, pp 179—188.
- Shanthi M, Rajavel DC, Baskaran RKM, Nalini R (2009) New record of *Chrysocoris purpureus* Westwood (Heteroptera: Scutelleridae) on *Emblica officinalis* Gaertn from India. Entomon 34 (3): 205—206.