



Click Beetle, *Alaus Sordidus*: A Potential Predator of Sal Heartwood Borer

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ABSTRACT

The present article reports the occurrence of click beetle, *Alaus sordidus* Le Conte (Coleoptera : Elateridae), in sal borer affected logs assembled at Shahpur Timber Depot, Dindori Forest Division, Madhya Pradesh during the month of May-June, 2014 and Chilpi Timber Depot, Kabirdham Forest Division, Chhattisgarh, during the month of July-August, 2015. This click beetle is a potential predator of heartwood borer, *Hoplocerambyx spinicornis* Newman (Coleoptera: Cerambycidae) in sal forest areas. The information about this predator insect is highlighted.

Key words: Insect predator, *Alaus sordidus*, sal borer, *Hoplocerambyx spinicornis*

Introduction

Sal heartwood borer, *Hoplocerambyx spinicornis* Newman (Coleoptera : Cerambycidae), commonly known as sal borer, is responsible for large scale damage of sal (*Shorea robusta* Gaertn. f.) forests in India (Stebbing, 1914; Beeson, 1941; Mathur, 1962; Roonwal, 1978; Tewari, 1995; Thakur, 2000; Bhandari and Rawat, 2001; Roychoudhury et al., 2004, 2018; Joshi et al., 2006, Joshi, 2009, Roychoudhury, 2015, 2016).

The natural enemy complex of sal heartwood borer, information is scanty, apparently, there are not many (Nair, 2007). However, natural enemies consisting of parasitoids, predators and pathogens play an important role to influence the population of sal borer (Roychoudhury et al., 2013). Roychoudhury (2016) have recorded a total of seven natural enemies of sal borer in sal forests and timber depots, out of which one species is larval-pupal parasitoid and six species are predators. Larval parasitoids, such as *Disophrys dehraensis*, *Exobracon maculipennis* and *Iphiaulax immsi* (Hymenoptera : Braconidae), *Ichneumon* sp. (Hymenoptera : Ichneumonidae) and *Bothrioderes* sp. (Coleoptera : Colydiidae) have been reported to regulate the population of sal borer (Stebbing, 1914; Beeson, 1941; Chatterjee and Misra, 1974; Bhandari and Rawat, 2001). The insectivorous birds like wood peckers, jungle crow and insect predator, *Alaus sordidus* (Coleoptera : Elateridae), feed on the larvae of the sal borer (Beeson, 1941; Anon, 1998a,b; Joshi et al, 2002). The present article deals with *A. sordidus* recorded in sal borer affected logs assembled at Shahpur Timber Depot, Dindori Forest Division, Madhya Pradesh during the month of May-June, 2014 and Chilpi Timber Depot, Kabirdham Forest Division, Chhattisgarh, during the month of July-August, 2015.

Alaus sordidus Le Conte (Coleoptera : Elateridae)

A. sordidus is commonly known as click beetle. This elaterid beetle, *A. sordidus* is recorded as a potential predator of *H. spinicornis* and other cerambycid borers of some other trees (Beeson, 1941, Browne, 1968. Anon, 1998a,b, Thakur, 2000, Joshi *et al.*, 2002; Yousuf and Joshi, 2007, Roychoudhury *et al.*, 2013; Sharma and Choubey, 2013; Roychoudhury, 2016, 2017).



Fig.1: Grubs and adults of click beetle, *Alaus sordidus*

The adult, *A. sordidus* emerges with the onset of monsoon and lays eggs on the bark of trees attacked by the sal borer. The predacious larvae attack the sal borer larvae between the bark and sapwood, older larvae enter the larval tunnels and pupal chambers of the sal borer. One *A. sordidus* larva can destroy up to 10 sal borer larvae/pupae. The predator is not abundant initially but during sal borer epidemics its population builds-up steadily. Up to 10–15% vacant sal borer pupal chambers have been found occupied by *A. sordidus* (Beeson, 1941). It has been reported that predator, *A. sordidus*, alone can destroy 20-30% of the larval population of sal borer (Anon, 1997). Thus, there is a wide scope for research on this click beetle, *A. sordidus*, a potential predator of sal heartwood borer, *H. spinicornis*, a major insect pest of forestry importance.

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