

Abstract

BIOLOGY AND MANAGEMENT OF *Amaranthus* STEM BORER (*Hypolixus truncatulus*) (COLEOPTERA: CURCULIONIDAE)

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ABSTRACT

Amaranthus stem borer, *Hypolixus truncatulus*(F.) (Coleoptera: Curculionidae) has become a major problem in *Amaranthus* cultivations in Mannar and Kilinochchi districts compelling farmers to abandon cultivations. This study was carried out to record its damage symptoms on *Amaranthus* and economical and safer methods for its management. The important damage was holes on the stems and fecal materials and different larval stages along the stem. Its biology was studied in insect-proof caged plants and plastic containers. Field experiments were conducted in Mannar to determine an efficient method to manage *H. truncatulus*. Total life cycle of this pest completed in 42.3 ± 0.7 days with five larval instars. Egg period, larval period, and pupa period was determined as 3-5 days, 29-32 days, 9-10 days, respectively. Experiment plots treated with boiled Neem seed extract (5% w/v) and *Coleus aromaticus* leaf extract (20% w/v) recorded significantly lower stem borer populations (0.5 - 0.4 stem borers/ m²) as compared to the untreated control (9.06 stem borers/ m²).

Key words: *Amaranthus*, *Coleus aromaticus*, Stem Borer, *Hypolixu struncatulus*, Neem.