



*Research Paper*

**DESTRUCTIVE STAGES OF *ANTHRENUS SCROPHULARIAE* LINN.  
(COLEOPTERA: DERMESTIDAE), THE COMMON CARPET BEETLE  
INFESTING STORED COCOONS**

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**ABSTRACT**

The biological features of *Anthrenus scrophulariae* Linn., commonly known as carpet beetle as well as its nature of damage on stored cocoons were documented at DMMMSU-SRDI filature of Region 1, Philippines. It is a holometabolous insect pest which completes its development in 126 to 205 days. The adult male and female beetles were observed to be active from 7 to 14 and 9 to 17 days, respectively. The female lays 20 to 88 eggs with hatchability ranging from 68 to 100 %. The eggs are usually laid in small batches on the surface of the cocoons. The eggs hatch after 15 days, the larvae undergo five moults, the developmental period spanning from 123 - 126 days during which they feed on silkworm pupae inside the cocoon. After sixth moult *i.e.*, pupal to adult stage, the body appears reddish brown, covered with many dark hairs and measure 5.20 – 9.21 mm long, while adult carpet beetles are oval in shape and vary from 1.0 to 3.50 mm in length. Stored cocoons are rendered unreelable due to numerous holes made by the dermestid larvae. Thus, the larval stage of the beetle causes an economic loss of 3.42 % per kilogram of cocoon amounting to P-13.68 during a storage period of 15 to 60 days. The findings are indicative of the remarkably destructive role played by *A. scrophulariae* Linn. in the silk production of Region 1, Philippines.

**Key words:** *Anthrenus scrophulariae*, filature, holometabolous, metamorphosis, unreelable cocoon.