

Association of Insect Pests with Neem, *Azadirachta indica* with Special Reference to Biology of Ash Weevils, *Mylocerus* sp in Jaffna, Sri Lanka

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Abstract

In spite of remarkable spectrum of activity of neem, *Azadirachta indica* (Family: Meliaceae) against pests, does the tree itself not immune to them. Many insects such as ash weevils, tortricid moth, peacock moth, scale and thrips were found associated with this tree in Sri Lanka. The biology of ash weevils, *Mylocerus* sp., was studied as heavy defoliators. Four species of *Mylocerus* such as *M. viridis*, *M. discolor*, *M. subfaciatus* and *M. maculosus* were found damaging the leaves. Adults of *Mylocerus* sp were small and had a dense covering of greyish to green with black cuticular marks. Female weevils laid eggs in clusters of 35.16 ± 7.13 on muslin cloth covered the rearing chamber. Fecundity of weevil was 237.5 ± 30.4 eggs. The mean incubation period of egg was 4.57 ± 0.53 days at $28.9 \pm 1^\circ\text{C}$. The percent hatchability of egg was 68.12 ± 11.15 at $28.9 \pm 1^\circ\text{C}$. The neonate grubs were small, creamy white with brown head, but just prior to pupal formation they enlarged in size. They burrowed through the soil and fed on the rootlets of *Vernonia cinerea*. The mean grub period was 50.6 ± 1.51 days at $29.1 \pm 1^\circ\text{C}$. Pupation was observed in an earthen brown coloured puparium. Mean pupal period was 7.83 ± 0.75 days at $29.1 \pm 1^\circ\text{C}$. *V. cinerea* is the highly preferred weed hosts of *Mylocerus* sp. The dicot weed was served an identical breeding site there by facilitating the survival and development of weevils through out the year. Because the leaves of *V. cinerea* were fed by adult weevils whilst grubs fed on its rootlets.