Cooperative Extension

College of Agriculture and Life Sciences, University of Guam, UOG Station, Mangilao, GU 9692





Adult

Common Name:

Scientific Name:

Mango Shoot Caterpillar Penicillaria jocosatrix Guenee (Lepidoptera: Noctuidae)

Eggs are laid singly near new growth on twigs, bud scales, new leaves, and old leaves. Initially, eggs are green but turn brown on the second day. The eggs hatch in two to three days into tiny green caterpillars. Older caterpillars are green and occasionally may have tiny red spots on them. Just prior to pupation the larvae develop a reddish-purple coloration. Larval feeding is complete in six days and there are five instars. Larvae feed on the new leaves of mango until they are about two weeks old. The larvae pupate in cracks in the bark, among roots of epiphytes on trees, in decomposing organic matter on trees, or on the ground in litter or soil. The pupal stage lasts about two weeks. The adult is a black moth with white patches on the hind wings. Mango, siniguelas and cashew are the crops affected.

The Mango Shoot Caterpillar is distributed throughout Guam, Hawai'i, Southeast Asia, the Philippines and south into Australia, and is also present on most of the Caroline Islands.

The larvae consume the new leaves, tender shoots, flowers and occasionally the mango fruit itself. On Guam, new growth may be completely defoliated. Caterpillar feeding can seriously retard the growth of trees and prevent or reduce flowering. Consumption of flowers can prevent fruit production on trees which do flower. This caterpillar is one of the main reasons for poor fruit production of mango on Guam.

Control: The parasites Blepharella lateralis and Euplectrus sp. were introduced from India to Guam in 1986 and seem to be controlling caterpillar numbers most of the time. Consult an Agricultural Extension Agent for information on chemical controls. Bacillus thuringiensis, an insecticide, may provide some control if applied to flowers and new growth. An agent can be reached by calling 734-2575, 734-2579, 734-2518 or 734-4753.

Prepared by Donald Nafus, Ph.D., Associate Professor of Entomology CES Publication # PS 88-4

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