POTATO TUBERWORM

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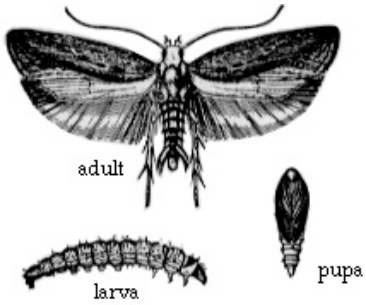

Life stages of the Potato Tuberworm (USDA)

DESCRIPTION: Pinkish white, brown head, up to 1/2 inch long.

COMMON HOST PLANT(S): Potato. Also found on eggplant, tomatoes and pepper.

DAMAGE: Tunnels in stems, leaves, and tubers. Shoots wilt and die.

DISTRIBUTION: Some southern states and California; infestations localized.

LIFECYCLE: Larvae or pupae overwinter in tubers or in the soil. Moths appear in spring and may be seen at dawn or dusk when they are normally active or when plants are disturbed. Females lay 60-200 eggs, singly, on plants in as little as four days. Usually eggs are deposited in the tuber eyes or on the underside of potato foliage. Larvae emerge in 3-6 days. Larvae often enter potato tubers through the eyes, leaving frass around the eye. Larvae may feed near the tuber surface or tunnel deeply into the tuber, leaving a trail of excrement along their path. During the summer larvae mature in 7-10 days and pupate in soil or plant debris around potato plants. Second generation moths emerge in approximately a week. Multiple generations occur annually in Virginia.

CULTURAL CONTROL: Protective measures for controlling the potato tuberworm include the following: 1) plant only seed pieces that are not infested, 2) cultivate so as to hill the soil against the plants - keeping at least 2 inches of soil over the developing tubers, 3) harvest as soon as the crop is mature. During harvest, do not leave the dug potatoes in the field overnight, and do not cover piles of potatoes with potato tops, 4) destroy all culled or infected potatoes as soon as possible, 5) store tubers at temperatures below 52 degrees F is possible and practical. Use either new or thoroughly cleaned bags or baskets when storing. The storage area should be screened or enclosed in such a way that moth cannot get in. Without such an enclosed storage area, moths can still fly in and still become a problem even though the storage area was clean and potatoes insect-free when stored.

ORGANIC/BIOLOGICAL CONTROL: Natural enemies of the potato tuberworm include two braconid wasps (*Orgilus lepidus* Muesebeck and *Bracon gelechiae* Ashmead), which parasitize the larvae.

CHEMICAL CONTROL: There is no known chemical control for this insect in stored potatoes.