WALNUT CATERPILLAR,

Datana integerrima Grote and Robinson

Importance. - The walnut caterpillar feeds only on black walnut, pecan, hickory, and butternut. Defoliation may weaken the tree and make it susceptible to damage by wood borers. Tree mortality is rare, but may occur after 2 years of heavy defoliation.

Identifying the Insect. - Eggs are spherical and pale green with white caps. They are laid in clusters of 120 to 800 on the underside of leaves. All larvae have black heads. Newly hatched larvae are light green and change to reddish brown with white stripes. Fully grown larvae are nearly black with white hairs. They are 1 to 2 inches (25 to 50 mm) long.

Pupae are 3/4 inch (20 mm) long and shiny, dark, reddish brown. The wing-span of moths is about 1 3/4 inches (45 mm). The front wings are dark tan with four rust colored lines. The hind wings are light tan.

Larva.

Identifying the Injury. - Young larvae skeletonize the upper leaf surface. As they grow, they feed on the entire leaf except the petiole. Individual branches, entire trees, or groups of trees may be completely

defoliated.

Biology. - Moths emerge in May and lay eggs. Eggs hatch in 8 to 10 days, and larvae feed until mature and pupate in the soil. Adults emerge in July and begin the second generation, which is the largest and most destructive. Larvae cluster together on tree branches or trunks and molt simultaneously, leaving a large mass of hairy cast skins adhering to the bark.

Control. - Parasites, predators, and diseases are major factors influencing population levels. Cultural controls are: clipping foliage to destroy egg masses and larvae, removing clustered larvae as they gather to molt, and destroying pupae by shallowly disking the soil after larvae have pupated. Chemical control is usually not necessary because tree mortality is rare.