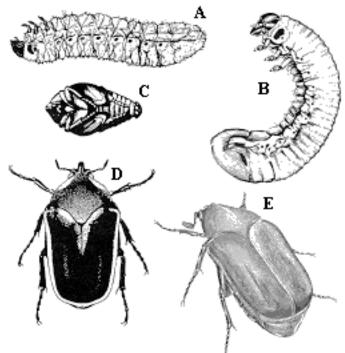
## Green June Beetle

Cotinis nitida (Linnaeus, Scarabaeidae, COLEOPTERA

## **DESCRIPTION**

**Adult** - Adults are large, thick-bodied, somewhat flattened, green beetles. Almost 25 mm long and about half as wide, they have bronze-to-yellow body margins.

**Egg** - Eggs are white, spherical and small (2 mm).



Green June beetle. A-B, Larvae. C, Pupa. D-E, Adults.

**Larva** - Larvae are large, full-bodied, dirty-white grubs with blackish-brown heads. They reach a length of about 48 mm when fully developed.

**Pupa** - Pupae more or less resemble the adult beetles in size and shape. Although white when first formed, pupae gradually darken to green before adult emergence.

## **BIOLOGY**

**Distribution** - The green June beetle is generally confined to the southern U.S., extending northward into New York and southern Illinois. In North Carolina, the larva is more common in sandy loam soils with high organic matter.

**Host Plants** - Adult green June beetles feed on the foliage of a number of trees and shrubs and a variety of fruits such as grapes and peaches. By burrowing, tunneling, and some actual feeding, grubs injure the roots of grasses, vegetable and ornamental plants, and tobacco seedlings in plant beds.

**Damage** - Grubs of the green June beetles are often serious pests of tobacco seedlings in plant beds. Becoming active when plants are in the 2- to 4-leaf stage, the grubs feed on organic matter in the soil, burrow through the soil (crawling on their backs) and injure tobacco seedlings by loosening the soil and uprooting plants. Due to this type of injury, damage is more severe during dry seasons. Injury rarely results from actual larval feeding on plant roots.

Adults may also damage foliage and fruits of other crops by direct feeding.

Life History - The green June beetle overwinters as a grub 20 to 60 cm (8 to 24 inches) deep in the soil. In spring the grubs burrow close to the surface where they tunnel on their backs and feed on decaying matter. Following a heavy rain or at night, they may come out of the soil, piling soil around the burrowing opening. There are three instars and in mid-spring the grubs pupate in earthen cells in the ground about 20 cm (8 inches) below the surface. Adults begin to emerge in June and are most abundant in July and August. Adult beetles feed on foliage and fruit of trees, shrubs, and fruit crops. Adults lay eggs about 7 or 8 cm (3 inches) deep in soils high in decaying organic matter. After 8 to 20 days, the eggs hatch and the young grubs burrow and feed on the decaying matter until cold weather. There is one generation per year.

## **CONTROL**

Green June beetle grubs may be controlled in tobacco seedbeds by applying an insecticide drench to infested areas. For specific chemical recommendations, consult the current <u>North</u> Carolina Agricultural Chemicals Manual.