

June Bug



The green June beetle is in the *Scarabaeidae* family and also referred to as white grubs. Unlike many of the other white grub pest of turf grass this species is unique in that it will come to the soil surface and crawl on the turf grass at night. Their larval tunneling activity can damage turf grass stands.

Identification

The adult green June beetle (*Cotinis nitida* L.) is usually 3/4" to 1" long, and 1/2" wide. The top side is forest green, with or without lengthwise tan stripes on the wings. The underside is metallic bright green or gold, bearing legs with stout spines to aid in digging. In the Mid-Atlantic region the names "June bug" and "June beetle" are commonly used for this insect. They're called "fig eater" in the southern part of their range. Do not confuse the green June beetle, however, with the familiar brown May or June beetles that are seen flying to lights on summer nights. The green June beetle adult flies only during the day.

The larvae are white grubs often called "Richworms" because they prefer "high" levels of organic matter for food. With three growth stages they develop and are similar to the other annual scarab species. Their body lengths reach 1/4", 3/4", and 2" respectively. The larvae have stiff abdominal bristles, short stubby legs, and wide body. One unique characteristic of this grub is that it crawls on its back by undulating and utilizing its abdominal bristles to gain traction. Other typical white grubs, like the Japanese beetle grub, are narrower, have longer legs, crawl right side up and when at rest assume a "C" shaped posture.

Life cycle

The green June beetle completes one generation each year. Adults begin flying in June and may continue sporadically into September. The peak occurrence of adults is during a two week period in mid-July in Maryland and Virginia. On warm sunny days, adults may swarm over open grassy areas. Their flight behavior and sounds resembles that of a bumble bee. At night they rest in trees or beneath the thatch.



The adult females shortly after emerging may fly to the lower limbs of trees and shrubs and release a pheromone that attracts large numbers of males. Frequently, males repeatedly fly low and erratic over the turf trying to locate emerging females. After mating, females burrow 2" to 8" into the soil to lay about twenty eggs at a time. The spherical eggs are white and almost 1/16" in diameter.

Most eggs hatch in late July and August. The first two instar stages feed at the soil thatch interface. By the end of September, most are third instar larvae and these large grubs tunnel into the thatch layer and construct a deep vertical burrow. The grubs may remain active into November in the Mid-Atlantic region. In the more southern states grubs may become active on warm nights throughout the winter. In colder areas they overwinter in burrows 8"-30" deep. The grubs resume feeding once the ground warms in the spring and pupate in late May or early June. The adults begin emerging about three weeks later.