UC IPM UNIVERSITY OF CALIFORNIA
STATEWIDE INTEGRATED PEST MANAGEMENT PROJECT

UC Pest Management Guidelines

MOSQUITOES

Home & Landscape

(Updated: 2/98)

IN THIS GUIDELINE:

There are more than 50 species of mosquitoes in California. They occur in a variety of habitats in the state, ranging from deserts at or below sea level to high mountain meadows at elevations of 10,000 feet or more. Many species of California mosquitoes are relatively uncommon and seldom pose a threat to the health or well-being of California citizens. However, there are several species that readily attack people, and some species are capable of transmitting microbial organisms that cause human diseases such as malaria and encephalitis. The mosquitoes of major concern in California belong to the genera *Culex*, *Aedes*, and *Anopheles*.

IDENTIFICATION

Mosquito adults are small, flying, midgelike insects. Female mosquitoes can be differentiated from similar insects by the presence of a long slender proboscis that is adapted for piercing skin and sucking blood, and long slender wings that are covered with small scales. Male mosquitoes have scale-covered wings, but their probosces, or beaks, are shorter and thicker than the females', and are adapted for sucking plant juices and other sources of sugar rather than blood. In the immature stages, called larvae or wigglers, mosquitoes are usually black or dark brown and occur in nonmoving or nearly still water. Most mosquito larvae have a distinctive siphon [59K] or air tube at the rear of their bodies. The next stage is the pupal stage; pupae, called tumblers, are also aquatic and are small, roundish forms, usually black in color.

LIFE CYCLE

The life cycles of mosquitoes vary widely from species to species. Some female mosquitoes lay single eggs on water surfaces; others lay single eggs on moist soil where later flooding is likely. Still other species lay batches of eggs, called rafts [34K], 100 or more at a time on water surfaces. Eggs deposited on water surfaces usually hatch within a day or so, but eggs laid on soil surfaces do not hatch until flooding occurs, which may be months or even years later. Larvae, which are nearly invisible to the naked eye, hatch from eggs. Larvae molt three times to become 4th-stage larvae. Several days later, this larval form molts again to become a pupa. Adult mosquitoes emerge from pupae 1 to 2 days after that, with male mosquitoes always emerging first. In summer the entire life cycle, from egg to adult, may be completed in a week or less.