Fungus Gnats

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Description: Fungus gnats are flies that are greenhouse pests as well as common household pests. The adults are slender, mosquito-like, and delicate with long legs and one pair of clear wings. They are about bout 1/8 inch (3-4mm) long and grayish to black. The larvae are slender pale worm like maggots in the soil with a dark head. They can be up to ½ inch long. Fungus gnats are in the order Diptera and family Sciaridae.

Habitat: They are noticed in greenhouses as plants are moved and large numbers of them fly out from under leaves and from the surface of the potting medium. In houses they are usually seen flying at windows and around houseplants. Homeowners may notice these small flies when watering potted plants. The also occur in commercial greenhouses where they can damage the roots of containerized plants. Fungus gnats also live outside in mulch and come indoor via windows and doors.

Life Cycle: The larvae of fungus gnats live in moist soil and feed on decaying organic matter within ½ inch of the surface. These conditions are abundant outside in the fall season and nearly year round in potted plants.

Type of Damage: Although the larvae rarely attack healthy plant roots, they may nibble at a few roots and reduce the vitality of houseplants.



Fungus gnat. David Cappaert. Michigan State University. Bugwood.org.

Chemical Control: For severe cases, consider using a soil drench of an insecticide labeled for use on houseplants or greenhouses. Chemical control needs to be combined with proper moisture management that addresses overwatering to successfully obtain control.

Cultural Control: Control of fungus gnats in the house is relatively simple. Adult fungus gnats are attracted to moist, organically rich soil. Examine all houseplants for "over-watered soil." Allowing the soil to dry out for several days, or until the top ½ inch of soil dries, is probably the best control of these pests. The larvae live in the top layer of soil. If the top layer of soil becomes dry, the larvae will die and the adults will not have a place to lay their eggs.

Interesting Facts: Larvae feed on highly organic soils and can damage the roots of bedding plants, African violets, carnations, poinsettias and foliage plants.

Replaces: 3104-1579