URBAN ENTOMOLOGY FACT SHEET

Dark-winged Fungus Gnats

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Identification: These are fairly common flies in the family Sciaridae. Fungus gnats are normally small 1.5-2.5mm, but some species can be as large as 1cm in length. The adult flies are slender, long-legged, usually with smoke-colored wings, 16 segmented antennae, and tibial spurs.

Life Cycle and Habits: Very little is known about the biology of these flies. Fungus is the major source of food for fungus gnat larvae. Adult female gnats generally lay their eggs on or near fungus growing in soil or moist organic matter. The larvae most commonly feed on decaying plant material, animal feces, or fungus, but some feed in rotting wood. The larvae of some species migrate in snakelike formation over the ground. It is believed that the life cycle takes approximately 15-22 days from egg to adult.

Damage: These flies are nuisance pests in and around structures. They do not cause any structural damage or health risk to humans or their companion animals. Some species can be economic pests in greenhouses and commercial mushroom houses, while the larvae of another species bore into potatoes grown in low, moist areas of fields.

Control Measures: The key to controlling fungus gnats is finding and eliminating all egg laying sites. The presence of adults usually indicates that larvae are developing somewhere nearby. It is important to determine whether the source is indoors, or whether the gnats are simply developing outdoors and coming in through cracks, crevices, or open doors and windows. Indoors, fungus gnat infestations are almost always associated with the soil of over-watered potted plants and atriums. Also consider moisture problems in structural wood by looking for signs such as water stains, swelling, or peeling paint. Flat roofs are particularly susceptible to water leaks. Feces in bird cages may also be a source. Outdoors, mulched areas are most often the source. Other sources include old firewood piles, compost piles, and accumulations of dead leaves—especially in gutters.

Indoors, eliminate development sites by removing or drying out moist materials so they do not support fungal growth. Drying the top layer of soil in potted plants, or correcting other moisture problems can provide effective control of larvae indoors. Flying adults can be temporarily eliminated indoors using over-the-counter household insecticides or sticky traps suspended near lights. If development sites are not eliminated, repeated application is necessary when the flies appear.

If the infestation is originating outdoors, mulch beds should be examined for moisture problems. Turn mulch that is too moist and follow recommendations for mulch thickness (2-3”) around the home. Also check sprinkler systems to ensure they are not contributing to moisture problems and subsequent fungal growth in soil or mulch. A perimeter treatment of residual insecticide to the soil of infested areas may be needed until moisture problems are corrected.