

Stored Product Pests

Department of Entomology

SMALL FLIES

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DESCRIPTION

Many small flies (<1/4") are found in association with man. However, the five species of flies listed above are of concern because they are the most common of the small flies, often associated with food preparation areas and are capable of carrying disease-causing organisms.

Fruit Flies: 1/8", tan colored, red eyes

Phorid Flies: 1/8", thorax humpbacked, small head, no red eyes, wings have 2 thick veins at the leading edge

Moth Flies: 1/8", body and wings covered with tiny hairs, larvae have a darkened breathing tube

Sphaerocerid Flies: 1/8", first segment of tarsi on hind leg enlarged

Fungus Gnats: 1/16", very thin abdomen, very long legs, first segment of leg (coax) long and thin

Cheese Skippers: 1/8", shiny black with bronze tints on thorax, iridescent wings fold flat over abdomen

BREEDING SITES

Most of these pests feed and reproduce in moist organic matter. This includes but is not limited to rotting fruit and vegetables, garbage, soil contaminated with sewage and drains. Sphaerocerid flies are also found in manure; cheese skippers breed in meat, cheese and human cadavers; and fungus gnats can feed on fungus growing in wet soil.

INSPECTION TIPS

- Larvae only survive in organic matter that is moist.
- Rotting fruit/vegetables/plant materials
- Trash cans, compactors, dumpsters

- Where equipment legs meet the floor
- Discarded fruit juice and soda cans; recycle bins
- Drains
- Elevator pits
- Repack areas of warehouses
- Terrariums, soil in potted plants
- Mop buckets, mops
- Cadavers
- Grease or food trapped in cracks of equipment
- Leaks in or around cabinets that cause wood to stay moist
- Wet insulation in walls and ceilings.

CONTROL

The best method for eliminating an infestation is to find and remove all actual and potential breeding sites. Bleach and hot water WILL NOT eliminate breeding sites in drains. Drains must be cleaned with a brush and an industrial strength drain cleaner. If small flies are found in the soil, dry the soil out. Placing a 2" liter of sand over the dried soil will help prevent future infestations. If you have a phorid fly problem, remove sewage infested soil and replace with new soil. Clean and caulk cracks between equipment and floor. Dry out moist areas – remember larvae need a moist habitat to survive. Cheese skippers cannot infest meats and cheese if stored correctly. Stored cheese and meats at 30-36°F. After breeding sites have been identified and removed, ULV treatment with a non-residual will kill remaining adult flies. Light traps can also be used to attract fruit flies, phorid flies (males only), moth flies and fungus gnats.

Revised 11/2007

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