Drain Fly

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Identification

Adult drain flies, also called moth flies, are small, moth-like insects (Fig. 1). They typically measure 2-3 mm (about 0.1") in length. Adult drain flies are grayish or brownish in color. The wings and body are covered with hair, giving them a furry or fuzzy appearance. The wings are held roof-like over the abdomen. They are weak, erratic fliers, typically flying only a few feet at a time.

Diptera: Psychodidae, subfamily Psychodinae



Figure 1. An adult drain fly (Joseph Berger, Bugwood.org).

Habitat

Adult drain flies can be found resting on the walls of bathrooms, kitchens, or in basements. They are often seen on inside bathtubs and shower stalls during the day. They become more active at night, hovering over drains, sinks, and other breeding areas. Drain flies can also be found around any filters, drains, or condensation drip pans of dishwashers, refrigerators, air conditioning units, dehumidifiers, and similar appliances.

Drain flies are more likely to occur in infrequentlyused sinks, toilets, or drains. Homeowners returning from vacation may find that drain flies have developed in their home while they were away. They are perhaps the most common insect inhabitant of sewage treatment plants.

Life History

Drain flies have a complete life cycle consisting of egg, larval, pupal, and adult stages. They breed in the sludgy biofilm and standing water in drains, filters, and sewers.

In the house, adult drain flies lay their eggs in the gelatinous, sludgy organic material that accumulates on the sides of drains and overflow pipes. Drain fly larvae feed on the decaying organic matter and bacteria that occur there. The long, thin, worm-like larvae are not seen as often as the adult flies. Adults usually emerge in a week or two, although development may take longer during the colder months of the year.

Description of Damage

Adult drain flies do not bite but can be annoying, pesky flies in the house. Drain flies do not cause any damage to indoor plumbing.

Control

While adult drain flies can be easily killed by swatting them, eliminating the organic matter where they breed is the most effective method of controlling them.

The appearance of drain flies in the home usually indicates that there is a slow or clogged drain that needs to be cleaned. To detect where the flies may be emerging, place clear tape sticky side down over a suspect drain opening and leave overnight. Alternatively, apply a thin film of vegetable oil or petroleum jelly to a clear plastic cup and invert over the suspect drain overnight. Adult drain flies caught

on the sticky surface indicate that the drain needs to be cleaned.

A thorough mechanical cleaning will remove the accumulated material that attracts drain flies. The most effective cleaning method is to scrub the drain opening with a stiff brush, removing all the slime and sludge. Sometimes it may be necessary to remove and clean the plumbing trap in particularly clogged pipes. Clogs in showers due to soapy, trapped hair may require a plumber's snake to break the clog apart and remove it.

Pouring hot water down the drain provides shortterm control by killing the larvae on the surface of the organic material. Likewise, using a foaming drain cleaner may help flush some of the organic material away and maintain the pipe, but thick, accumulated material will require a physical cleaning with a stiff brush.

Pouring bleach or vinegar down a drain to control drain flies is not recommended because it's not very effective. The bleach or vinegar may kill a few larvae on the surface of the organic material, but it won't penetrate the material to kill all the larvae. Under no circumstances should ammonia be used in conjunction with bleach, as the chemical reaction between the two cleaners will release toxic gases. In addition, insecticides should never be poured down a drain to control drain flies.

Drain fly larvae are difficult to drown because, as aquatic insects, they are able to trap air bubbles and remain submerged for a day or more.

Revised

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2021 ENTO-414NP