



# VARMANT GUARD®

ENVIRONMENTAL  
SERVICES INC.



Residential Services ✧ Commercial Services ✧ Bird Solutions

Common Name: **Phorid flies / humpbacked flies / scuttle flies**  
Scientific Name: **Family Phoridae**

---

## PHORID FLIES

---



**Introduction.** The common name of humpbacked fly comes from their humpbacked profile when viewed from the side and is due to the small head and prominent pronotum (front, upper portion of the thorax). The name scuttle fly refers to these flies' habit of running about in an active erratic manner. Phorid flies are mainly nuisance pests but there are cases of larval infestation of wounds, intestines, and eyes of humans. Worldwide there are over 2,500 species known, while about 226 are currently recognized in the United States and Canada.

**Recognition.** Phorid flies are 1/16 to 1/8 inch long with a characteristic humpbacked appearance from the side. They may be black, brown or yellowish. The wings have strong, heavily pigmented veins in the front area, while the remaining veins are faint.

The mature larvae measure 1/8 to 1/4 inch long and are spindle-shaped with inconspicuous projections on the rear segments. They are whitish, yellowish-white or grayish in color.

**Similar Flies.** (1) Small fruit flies (*Drosophila* species) have eyes that are usually red and have equally prominent wing veins. (2) Darkwinged fungus gnats (Sciaridae) and fungus gnats (Mycetophilidae) are slender with long legs and long antennae.

[www.varmentguard.com](http://www.varmentguard.com) (800) 793-8169



Residential Services ✧ Commercial Services ✧ Bird Solutions

**Biology.** Female phorid flies lay their eggs either on, in, or close to the larval food, with 1 to 100 being laid at one time and up to 749 in their lifetime. There are 3 larval instars. The 3rd instar larva crawls to a drier area to pupate. The average developmental time (egg to adult) for two common phorid flies is about 11 days at 85°F and 28 days at 72°F.

**Habits.** Adult phorid flies can often be found at flowers or on larval food materials which consist of moist decaying organic matter. Because they frequent such unsanitary places, they may transport various disease-causing organisms to food materials. Several species breed in human corpses and are commonly referred to as coffin flies when they become problems in morgues, mortuaries, and mausoleums. Phorid flies are of great concern in healthcare facilities because of their unsanitary habits, and because larvae have been found in the open wounds of patients. Larvae breed in a wide variety of moist decaying organic matter such as dung, vertebrate and invertebrate carrion, fungi, and decaying plant material: Common food sources include • the moist residue in the bottom of trash receptacles, • the moist material found in the cracks of and under kitchen equipment, • in elevator pits, • in garbage disposals, • in rotting vegetables and meats, • dirty moist mop heads, • faulty septic systems, and • over-watered/rotting potted plants. In health-care facilities and mausoleums, fresh-cut flowers in vases are frequently the source. In homes, pet stores, and zoos, phorid flies can breed in the urine and excrement-soiled bedding materials and bottoms of the animal cages. A particularly difficult breeding source to locate and correct is when sewage pipes leak or break under concrete slabs and the flies breed in the released moist organic matter and saturated soil, and then enter the structure through stress cracks and utility penetrations in the slab. Phorids in mausoleums present a unique challenge because the breeding sources are typically the corpses that are legally protected, the hidden internal drainage system that transports and/or harbors the body fluids that drain from the corpses and coffins, and the many cut flowers brought in by friends and relatives. With corpses buried in the ground, phorids appear about one year after the time of burial. Some phorid flies are parasites of invertebrates including many insects and other arthropods.

**Cultural Control & Preventative Measures.** The key to phorid fly control is finding and eliminating all of the breeding sources. All potential sources must be inspected.

It should be noted that several commonly suggested control methods do NOT work. Among these are pouring bleach and/or boiling water down infested drains because it does not kill the larvae breeding in the film lining the pipe; the film must be removed either mechanically or with special drain cleaners. For leaking or broken sewage pipes under slabs, drilling the slab and injecting pesticide into the soil does not give lasting results. The slab must be opened, the pipe repaired, and all the contaminated soil must be removed and replaced. Residual pesticides are rarely if ever required for the control of phorid flies.

**Professional Control.** A Varmant Guard pest management professional will address phorid fly infestations by following the basic 5 steps of identification, inspection, sanitation, mechanical control/exclusion, and

[www.varmentguard.com](http://www.varmentguard.com) (800) 793-8169

insecticide application if required. Insect light traps (ILTs) are effective in harvesting adult flies and can be of particular value in mausoleums or as a temporary measure until the breeding source can be located and removed in commercial accounts. Similarly, food lure insect jar traps can reduce numbers of adult flies indoors, if placed strategically. An application of non-residual insecticide aerosol can be applied for a quick knock-down of adult flies. However, such aerosol treatments can leave oily residues on surfaces and can pose respiratory risks to unprotected persons who enter affected areas too soon following application. None of the adult-control measures mentioned here will actually resolve phorid fly infestations unless the breeding sources have been eliminated.



Phorid fly larva

Phorid fly pupa