

Scuttle Flies



Scuttle fly. Photo courtesy of Charles Lewallen, from bugguide.net.

Scuttle flies, mostly in the genus *Megascelia*, are also known as hump-backed flies and coffin flies. The name scuttle fly refers to the jerky, flitting, running behavior typical of the adults. The name coffin fly derives from the habit of these flies feeding on remains in coffins sealed in crypts or buried. They are known to burrow as much as 6 feet down to reach buried carrion.

These are small, yellowish, brown and black flies, with a flattened, spiny head and highly reduced wing venation. Many species are wingless in at least the females. They are about the size of a *Drosophila* fruit fly, $\frac{1}{16}$ to $\frac{1}{4}$ inch long. Although they superficially resemble fruit flies, the flat spiny head and odd wings will distinguish them from fruit flies. They also lack the red eyes typical of fruit flies.

The biology of this group of flies is enormously diverse. There are predators, parasites, social insect nest inquilines and scavengers. Some species specialize as predators or parasites of earthworms, snails, spiders, millipedes, centipedes and insects, to name a few. Several species are parasites of wasps, bees and ants. Others breed in decaying organic matter, particularly carrion and

sewage contaminated soil. A few species breed in human corpses even under nearly anaerobic conditions, as can occur in deeply buried coffins or in sealed above ground crypts. Several species are pests of mushroom cultures.

Adult scuttle flies feed on nectar, honey dew, and fluid exuding from carrion and dung. Because they frequent microbe-laden, unsanitary places they can transport disease causing pathogens from the places where they breed and feed to food materials. They will breed wherever there is damp, high nutrient material available, including sewage-soaked soil, exposed garbage, carcasses, rotting fruit and vegetables, poorly stored meats, and organic deposits in drains.

Scuttle flies are serious pests in the food producing, food handling and food processing industries. They will feed on fermenting or decaying waste and may cause health problems by transporting pathogenic bacteria, such as *E. coli*, *Streptococcus* and *Staphylococcus* from these materials to food and food preparation surfaces. They can also be problems in health care facilities and dialysis clinics.

These flies are also good indicators of plumbing problems. The presence of scuttle flies in facilities or businesses where no food is available, or being processed, indicates the presence of leaking sewer lines near by. This seems to be a particular problem in strip malls in California. When they are found in homes their presence also indicates leaking plumbing or the presence of carrion.