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CLUSTER FLY (*Pollenia rudis*)

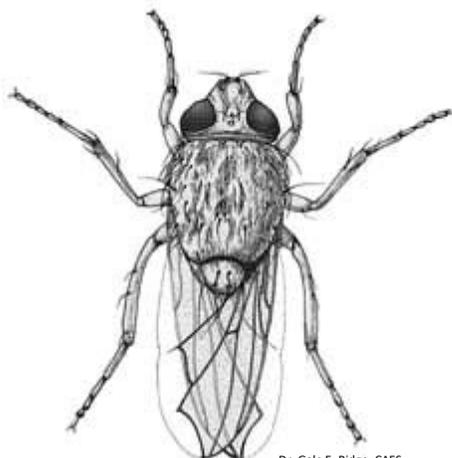


Fig. 1: Cluster fly

Description

Adult cluster flies, *Pollenia rudis* (Fabricius) have the habit of aggregating in buildings during late summer and fall to overwinter (hibernate). They are considered a household nuisance. The name is derived from the tight "clusters" made by hibernating individuals in wall voids or attics. They are also sometimes called "attic flies". They are found throughout Europe, Canada, and most of the United States. As larvae, these insects are parasites of several species of earthworm in the genus *Allolobophora*.

The adult cluster fly looks like a very large house fly (Fig. 1). The difference is that at rest, the fly overlaps its wing tips over the abdomen, like a pair of scissors, while the

house fly does not. The cluster fly is dark gray to almost black with a checkered grayish abdomen. There are numerous short crinkly golden hairs on the sides of the thorax. In old specimens, these can be rubbed off. The fly is a sluggish flyer, buzzing loudly while flying aimlessly in concentric circles in buildings. If crushed, the odor emitted, resembles "buckwheat honey."

Biology

In the spring, adult female cluster flies lay eggs singly in soil cracks near to earthworms. Three days later, the eggs hatch, and the maggots seek out earthworm hosts. The maggots enter at almost any point along the earthworm's body and begin to feed. The feeding lasts 13 to 22 days. The fully-grown maggots then leave their hosts and pupate in the soil. Pupation lasts 11 to 14 days. The complete life cycle from egg to adult is about 27 to 39 days. During summer months, adults feed on the juices of fruits and the nectar of flowers. There are usually four generations per year.

Beginning in mid-August, as daylight hours shorten, adult cluster flies of both sexes seek protected locations to overwinter. They prefer the warm sunny sides of light-colored buildings to land on. As temperatures drop in late afternoon, they crawl upwards, and enter

buildings through cracks and small openings. Gaps under eaves and sidings are common entrance points. Buildings located on open hilltops, near large lawns or meadows are more attractive to the fly. Structures surrounded by large trees rarely have infestations.

Once inside a building, flies will "cluster" in wall voids and attics to overwinter. As temperatures drop, they go into hibernation. The flies can become active during the winter if surrounding temperatures rise above 54° F. They will fly to sunny windows and lights. Once spring arrives, cluster flies will leave overwintering shelters to breed and so reappear, reversing the fall dispersal movement. Cluster flies do not breed or "nest" in buildings. They are usually not attracted to food and cause no structural damage. Typically, the same buildings become overwintering sites, year after year.

Control

Closing entrance points around a building to prevent cluster flies from entering can facilitate control. Fill in cracks around windows, doors, utility entrance points, air-conditioners, louvers, air vents, chimneys, eave trim, rooflines, soffits, gaps in the siding, basement walls, and holes with caulking compounds. Pay particular attention to the sunny side and upper areas of a building. Make sure screening is in good condition and use yellow, non-attractive insect lights outside at night.

If the flies are found inside, vacuum them up or sweep them up with a dustpan and brush and discard. Using insect fogs or sprays inside a building provides limited control because it will not reach flies hidden in the wall voids. If there is a light infestation, spraying into wall voids using a household aerosol spray may be effective to reduce populations. Large numbers of dead flies can

attract rodents, larder or carpet beetles and lead to secondary infestations. Flypaper, bug zappers and sticky traps are of little use, since cluster flies are not usually active flyers in buildings.

Aerosol sprays are available for indoor use by homeowners. Those that contain pyrethrin and resmethrin are effective. Read the manufacturers' recommendations carefully before treating for cluster flies. In heavy infestations, consider consulting with a professionally licensed pest management professional. They can apply treatments under eaves, attic areas, around windows, doors and other possible openings to prevent cluster fly entry.

Summary

Adult cluster flies, *Pollenia rudis* (Fabricius) have the habit of aggregating in buildings during late summer and fall to overwinter (hibernate). They are considered a household nuisance. The name is derived from tight "clusters" made by hibernating individuals in wall voids or attics. They are sometimes called "attic flies." They are found throughout Europe, Canada, and most of the United States. As larvae, these insects are parasites of several species of earthworm in the genus *Allolobophora*.