

Fruit flies fact sheet

Fruit flies are of concern both as nuisance pests and as serious contaminators of food. Large populations of these flies can very quickly build-up in restaurants, hotels, cafeterias, and similar food service establishments. Structures or areas in the vicinity of orchards, vineyards, truck crop acreages, etc., are frequently invaded. The ability of the adults to appear from "nowhere" when fruits are exposed and the fact that they seem to be "everywhere" are sources of amazement for most homeowners and individuals in the food industry.



These flies are variously referred to as vinegar flies, banana flies, sour flies, vinegar gnats, and lesser fruit flies. There are several species, which are similar in appearance. Adults may be dull yellowish, brownish yellow, or brownish black in colour and range from 1/10 to 1/5 inch long. Most species have red eyes. Larvae are very small (ranging from 1/10 to 1/5 inch long), dirty white, and maggot-shaped. They can be recognized by the stalked posterior spiracles on the last abdominal segment.

Life cycle

Female fruit flies lay their eggs on the surface of rotting fruits and vegetables. Each female may lay as many as 500 eggs. These eggs hatch into larvae, which moult twice before becoming fully-grown. The larvae feed on the yeast organisms and fungi growing in infested material, and through their feeding efforts, they soon turn their food into a semi-liquid "mess." When the full-grown larvae are ready to pupate, they leave the food material for dryer areas. Complete development from egg to adult under summer conditions may be completed in eight to ten days. Mating takes place soon after adult emergence, usually within a few hours, and egg laying begins about twenty four hours later.

Dealing with fruit flies

In warm weather, screen all openings to the outdoors with fine mesh screen or netting. Do not leave cut or spoiling fruit or vegetables, fruit salads, fruit juices, jams, jellies, pickles, etc., exposed in open containers. Do not keep whole raw fruit on hand in large quantities exposed to fruit fly infestations. Check vegetables such as potatoes and onions, which are frequently stored in large quantities. There could be one rotten vegetable in the bottom of the bag, which would be sufficient to support a sizable infestation. Whenever possible, keep susceptible foods in cold storage in order to retard development of larval fruit flies. Should fruit flies become abundant, the homeowner should make a careful search for the larval breeding areas. Removal of any overripe fruit or vegetable material should alleviate any recurrence of these insects.