



Fruit Fly

Drosophila melanogaster

Description

Adults: Adults are 3 mm (0.125 inches) long. Common fruit flies have red eyes. The thorax is brown/tan and the abdomen black.

Eggs: Eggs are 0.5 mm (0.02 inches) long. They are yellow in color and similar in shape to a grain of rice.

Larvae: The larvae (maggot) is 3-4mm (0.125 inches) long and is wormlike and pale white/yellow in color.

Pupae: Pupae are yellowish brown and 3 mm (0.125 inches) long.

Life Cycle

The reproductive potential of fruit flies is quite high. Females can lay upwards of 500 eggs in her lifetime and the entire lifecycle, from egg to adult, can be completed in about 7 days in warm temperatures. Eggs are laid directly on food sources and under average room temperature, the eggs hatch into larvae within a day or 2. The larva grows for about 4-5 days followed by a pupation period of about the same length.

Damage and Detection

Fruit flies feed primarily on moist, decaying, organic food items including fruits, vegetables, and other fermenting liquids. Infestations can be identified by numerous adult insects flying around a food source or from the maggots infesting decaying food. In heavy infestations, pupae can be found some distance from the food source when the larvae migrate away to find a dry, dark, and safe place to pupate. Fruit fly traps can be helpful in early detection and management of fruit fly populations.

Corresponding Products from Insects Limited

- 12x15 mL Bottles with Liquid Attractant (IL-1520)

QUICK SCAN

| | SIZE | / | LENGTH |
|-------|------------|---|----------|
| Adult | 0.125 inch | | (3 mm) |
| Eggs | 0.02 inch | | (0.5 mm) |

| COLOR RANGE | |
|-------------|---------------------------------|
| Adult | Brown/tan thorax, black abdomen |
| Eggs | Yellow |

| LIFE CYCLE | |
|--------------|-----------------------------|
| Females | Lay upwards of 500 eggs |
| Egg to Adult | 7 days in warm temperatures |

| FEEDING HABITS |
|--|
| Feed primarily on moist, decaying, organic food items. |

| INFESTATION SIGNS |
|---|
| Adult insects can be seen flying around a food source. Maggots infesting decaying food. |

Fruit Fly Monitoring Guidelines

Lure

Red liquid concentrates specifically tested and designed to attract adult Fruit Flies.

Lure Storage

Keep unopened bottles in cool storage less than 16°C (60°F) or place in freezer for extended storage. Lures can remain frozen for up to 24 months or at room temperature for 12 months to retain their full effectiveness for use afterwards.

Trap Designs Used with Lure

15 ml bottle with a screw on cap. Liquid is included with each bottle and the devices are ready to use.

Trap Placement Techniques

Liquid food attractants can be out placed year-round but are especially recommend during warmer months when temperatures exceed 12.5°C (55°F). Liquid food attractant traps like the GreenWay Fruit Fly Trap are most effective at capturing fruit flies. In areas such as a kitchen or home, place one or two traps per room. In commercial areas, such as warehouses or retail stores, place liquid food attractants 7.5–15 m (25–50 feet) apart to determine the presence or absence of fruit flies. Increase liquid food attractant density to 4.5–7.5 m (15 – 25 feet) apart to help locate source of fruit flies. Fruit fly liquid food attractants are best utilized in areas that store canned foods, fruit, vegetables, beverages, and areas that prepare food.

Trap and Lure Maintenance

Replace traps when bottle is filled with insects or dries out. Record date and number of catches to identify trending information.

Fun Facts

- Similar species include phorid flies (*Phoridae*) and fungus gnats (*Sciaroidea*)
- Fruit flies initiate flight at temperatures above 15°C (60°F).
- Fruit flies are one of the most studied organisms in regard to genetics, physiology, ecology, behavior, and developmental biology.