

15.13 HOUSE FLY

Scientific Name: *Musca domestica* Linnaeus
Family: Muscidae
Order: Diptera

Status: Most prevalent pest of highly medical importance.

Distribution: No house free from its population and distributed world-wide. Its population becomes alarming in hot and humid climates.

Food: It is commonest pest and found wherever there is human habitation and wherever unhygienic conditions prevail.

DESCRIPTION OF STAGES

Adult: The adults are 6-7 mm long and 13-15 mm across the wings. It has a dull colour, a plumose arista on the antenna, pale grey wings with a yellow base, greyish dorsum of the thorax with 4 equally broad longitudinal lines, and abdomen is marked yellowish on sides except posterior segment which is brownish-black.

Egg: The eggs are whitish, elongated, about 1 mm long. Their dorsal surface has two curved rib-like thickenings.

Maggot: Maggot is tapering in shape and creamy white in colour.

Puparium: It is seed-like and barrel-shaped with dark brown colour.



Musca domestica Linnaeus
(Muscidae: Diptera)

LIFE HISTORY

House fly over-winters as larvae or pupae in Puparium. Spring is its breeding season.

House fly lays about 500 to 600 eggs in clusters of 100 to 150 eggs. Incubation period is 12 hours to 12 days depending on the prevailing temperature. The maggots crawl to the margins of the breeding material and feed upon micro-organisms which cause fermentation. They live only in moist places. These larvae become 10 to 12 mm in 3 to 7 days and form Puparium after 3rd larval moult. Before Puparium, the larvae migrate to margins or drier parts of substances on which they feed. Pupal period ends in 3 to 6 days.

Adult flies live for 20-30 days. Life cycle under favourable conditions of hot and moist weather is completed in 12 to 14 days. It is prolonged in winter. There are 10-12 generations in one summer.

DAMAGE

1. House fly is highly nuisance for human beings.
2. It is highly important in transmitting a large number of infectious diseases to human beings such as diarrhoea, dysentery, cholera, typhoid and other enteric fevers. It is carrier of over 100 species of pathogens. The larval stage developing in faeces becomes infected with pathogenic bacteria which may persist in pupal and adult stage. The adult flies feed on any edible matter even human faeces and also on food of man and animals which results in polluting their bodies with filth (disease organism) and then contamination of food.
3. They also transmit diseases to certain mammals and birds of agricultural importance.

NON-CHEMICAL CONTROL

1. Proper sanitary conditions such as proper disposal of manures, garbage, sewage, food waste, human excrement, dead animals, and other organic materials are helpful in keeping the pest multiplication within ceilings.
2. Screening of windows and doors.
3. Fly-swatters can be used to kill flies.

CHEMICAL CONTROL

1. Poison baits and sticky paper strips can be used to kill flies.
2. The spray of malathion 2 % or trichlorfon 0.5 % is quite helpful for the control of this pest inside the houses. Spray deposits on the walls continue to be effective.
3. Aerosol sprays containing pyrethroids is effective in giving a complete control of house fly.
4. With a paint brush smear the surface of doors and windows where the flies rest with malathion 3 %.

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