

HOUSE FLIES

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INTRODUCTION

House flies, *Musca domestica*, are a major health hazard. They can carry germs and viruses that cause human diseases and parasites that affect domestic animals. House flies are found in houses and other kinds of buildings in Papua New Guinea.

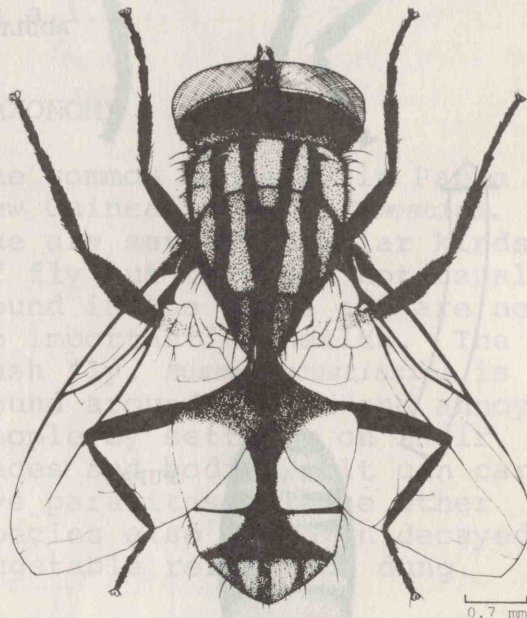
DESCRIPTION

House flies are small greyish black flies about 5 mm long, usually with yellow marks on the hind part of the body. The wings are clear. The flies are attracted to food, decaying vegetable matter and animal faeces (dung).

BIOLOGY

The adult female fly lays eggs in batches of 75-150 and may produce over 1000 in total. They are usually laid on either animal faeces or domestic refuse, such as vegetable waste, but they may also be laid on rotten meat. The eggs are white and hatch in a few days into larvae (early stages).

The larvae are white, pointed at the head end and blunt at the tail, and take one to two weeks to mature. When mature they form a puparium (resting stage), from which the adult hatches after a few days.

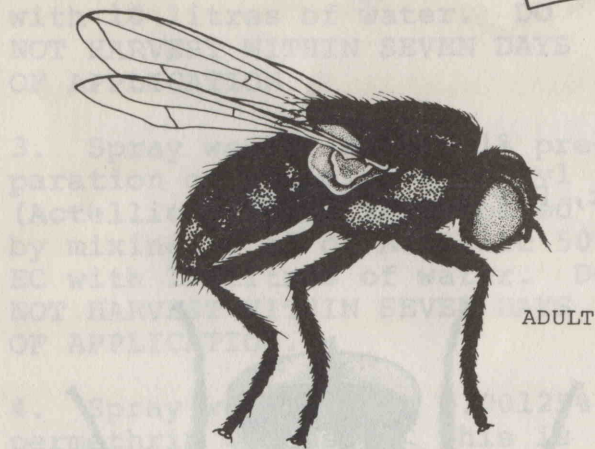


Adult house fly

The length of the life cycle depends on the temperature and the amount of water available. In cooler or drier conditions it takes longer, in warmer and wetter conditions it is quicker. That is why house flies are more common in the wet season. In Papua New Guinea the life cycle takes from 10 days to several weeks or longer.

ECONOMIC IMPORTANCE

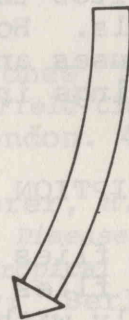
House flies are a major health hazard. They carry large numbers of germs, including those that cause cholera, tuberculosis, hepatitis and polio.



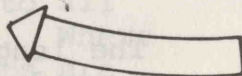
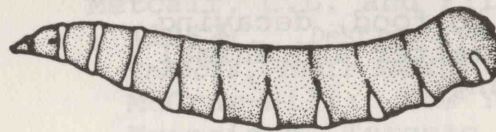
ADULT



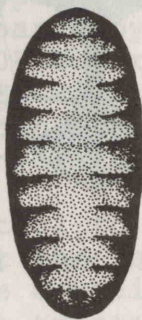
EGGS



LARVA



PUPA



The life cycle of the house fly

Usually flies carry diseases by landing or feeding on bad food or faeces, and then landing or feeding on human food. The germs are carried on their feet and tongue, or they eat germs and leave their own faeces, with the germs, on human food. The adult fly likes sweet things such as sugar and fruit.

Houseflies can also carry many parasites of hens, dogs, pigs and horses.

The dark spots flies leave on food are its faeces. Flies

cannot eat solid food, but they often vomit up their watery stomach contents onto solid food, like sugar and meat, and suck up the result.

House flies are found over all Papua New Guinea but are most common and troublesome in the warmer and wetter lowlands.

CONTROL

1. Good hygiene in the home and garden is the best method of control. Never leave food

scraps lying around the house or garden. If you live in a town keep your dustbin clean, away from the house, and put rubbish in plastic bags inside the closed dustbin. Empty it regularly. Fly screens will keep house flies out.

In the garden do not leave compost, waste or manure uncovered. Keep it in a bin and bury it at intervals or burn it if it is unwanted. Don't throw it in a hole and leave it as this provides the ideal conditions for house flies.

Keep the house and garden clean and tidy. Do not leave pools of water around animal houses and compost heaps.

2. House flies have predators and parasites which kill them but they cannot breed as fast as the flies. So if you have a lot of flies you must remove their breeding site - compost or manure - and kill the flies with insecticide.

3. Chemical control should be used as a last resort only. In houses and small buildings, use a proprietary household insecticide spray to control house flies. You can buy these at many supermarkets and trade-stores. Read the instructions carefully and follow them. Keep insecticides away from food.

The Department of Primary Industry does not recommend the use of proprietary fly strips or plastic blocks that contain dichlorvos, in houses. Long exposure to dichlorvos in enclosed spaces may damage your health.

To control bad infestations of houseflies in a large indoor

area, use Diazanone (Neocid) at 1% a.i. Spray 1 litre per 20 m x 20 m of surfaces where houseflies rest. The treatment lasts for 2-6 weeks depending on temperature and humidity. NOTE: This spray can stain.

For treatment of outdoor breeding sites, refuse tips and waste disposal areas, lindane as a wettable powder should be applied as a spray containing 2% a.i.

TAXONOMY

The common housefly in Papua New Guinea is *Musca domestica*. There are several similar kinds of fly but they are not usually found in the house and are not so important to health. The bush fly, *Musca vetustissima* is found around cattle and annoys people by settling on their faces and bodies. It can carry eye parasites. These other species also breed in decayed vegetable refuse and dung.

FURTHER INFORMATION

Further information about house flies and their control can be obtained from your nearest entomologist. They are at present located at: D.P.I., Konedobu; Agriculture Research Centre, Bubia, Lae; Kuk Agricultural Research Station, Mount Hagen; Dami Oil Palm Research Station, Kimbe; Lowlands Agriculture Research Station, Keravat.

Copies of this Entomology Bulletin are available from: The Publications Officer, Publications Section, D.P.I., P.O. Box 417, Konedobu.

(Illustrations: R.E. Sutherland)