

Getting to know ...

House Flies

The Most Dangerous Animal On Earth!

This is one apt description given to the common house fly. One moment it might be standing and feeding on a pile of cow dung and the next, it can do the same on your sandwiches!

Many of us see the house fly as an unbearable nuisance pest when we should really be regarding it as a vector (*i.e. it transmits pathogens that cause diseases*). It has been known to carry as many as 500 million organisms on the surface of its body at one time. Many of these are capable of causing diseases such as cholera, conjunctivitis, diarrhoea, dysentery, tuberculosis, typhoid, and yaws.

The house fly (*Musca domestica*) belongs to the insect order Diptera, which means 2 wings. On closer examination you will find another pair of vestigial hind wings that look like 2 short organs known as halteres, which serve to balance the fly during flight. It is called house fly because its presence is felt most in the home.

Given the favourable climate in Singapore, it speeds through the 4 stages in its life cycle (*Complete Metamorphosis*) consisting of egg, larva, pupa and adult within only 7 days.

Although the female is usually larger than the male, it is the space between the eyes that readily identifies the sexes, which in females is almost twice as broad as in males. The males tend to be more excitable and their wings are often torn or broken, believed to be caused by the powerful blows of the middle legs of the females fending off the males.

The female lays between 800 to 1,000 eggs during her lifetime. These are white in colour and difficult to detect with our naked eyes. They are laid singly but piled up on moist organic waste (*e.g. grass clippings, fermenting refuse, kitchen garbage, and excreta including dog and cat droppings*), which is food for the larvae that emerge within 1 day.

The larvae appear as white legless maggots and they immediately start feeding until they become greasy, cream-coloured. They undergo 3 instars and at the end of 3 days they migrate to pupate as brown capsules in a dry, cool place (*e.g. underneath stones and boards*). At the end of another 3 days, they emerge as the next generation of adult house flies.

The adult fly is 4 to 7 mm in length and the actual size is largely

dependent on the availability of food during the larval stage. The head is dominated by 2 large red-brown compound eyes, which are surrounded by a light gold stripe. Its thorax bears 4 narrow black strips and this distinguishes it from its larger 3-stripped cousin, the flesh fly (*Sarcophaga spp.*).

The house fly is recorded to travel 32 km but most stay within 3 km of its breeding site. Capable of attaining a speed of 7 km per hour, it is not surprising that they seem to suddenly appear out of no where when food is served, guided by their extremely sensitive antennae.

The adult feeds on liquids but can eat solid food by regurgitating digestive tract fluids onto it, stamp them in for good measure and after a few seconds of tenderising, it siphons them back with its sponging mouthparts. In addition to transmitting pathogens physically on its body and by regurgitation, the house fly also defecates when it is feeding – which all adds up to some real disgusting feeding habits!



The infamous house fly in all its glory.

HOW TO CONTROL HOUSE FLIES?

The most important measure to control the house fly is to eliminate its breeding sites. Garbage bins must be cleaned at least weekly and any 'caking' at the bottom removed. All organic waste must be stored in covered containers and disposed daily in airtight bags.



This bin can do with a good scrub.

If the larval breeding sites are removed, insecticide applications need only be targeted at the adults. Where practical self-closing doors, screening and air curtains should be considered to proof the premises, especially a food establishment.

The installation of Ultra-violet Light (UVL) Traps is a helpful method to monitor the level of infestation and also to control house flies in confined areas.

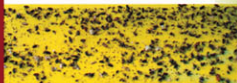
If you need any help in controlling house flies, please contact Aardwolf Pestkare (Tel: 2681771 for our 24-hour service). Our Surveyors will be very happy to offer you advice.



Aardwolf Fly-Catcher looks like a designer light.



It uses 2 UVL tubes to attract the house flies.



But its glue trap is deadly. There is no escape.