

WORK STUDY › OPPORTUNITIES FOR PROFIT

# FLYING INSECTS



DELIVERING HIGH QUALITY TRAINING

  
**Killgerm**<sup>®</sup>  
TRAINING

## PROBLEMS

Flying insects carry a wide range of dangerous disease-causing micro-organisms all over their bodies, in their saliva and excreta, including *E.coli*, *Salmonella*, *Klebsiella*, *Campylobacter* and many others. Even a tiny dose of these is enough to cause serious disease. At the very least, insect contamination reduces product quality making it unsaleable.

By law, food that is sold must be wholesome and free from contamination and it is a requirement that every precaution is taken against contamination from flying insect pests.

These pests are highly mobile and make no distinction between food that is prepared for human consumption and any other surface that they land on, walk over, defecate on or eat. Many insect species including flies and wasps have particularly unsavoury habits and therefore represent a high contamination risk to the spread of disease.

Flies are fluid feeders and need to liquidise the food before they can eat it. To do this they produce quantities of saliva, this may be contaminated with disease causing agents, which have been regurgitated, from the salivary glands or the guts of the insects during the feeding process.

## THE NEED FOR A PROGRAMME

The need to implement a fly control programme is growing. The increasing use of target specific pesticides, mean that fewer flying insect pests are being controlled by general spray programmes.

Pest Control surveys show that flying insects pose a greater risk to food premises than cockroaches, rats and mice combined. Regular inspections of commercial premises by experienced pest control technicians will highlight possible breeding areas of flying insects, which can then be treated or eliminated. A thorough knowledge of the biology of the pest species is essential in achieving effective control.

### CONTROL METHODS

In the food industry hygiene is of the utmost importance. Basic regular cleaning and disinfecting to reduce the number of breeding sites and therefore the risk of build-up of disease-causing micro-organisms is fundamentally important.

Dirt, mouldy food and general uncleanliness act as powerful attractants for flies and wasps. Denying these insects access to food and water is essential to control them effectively.



### PREVENTION OF ENTRY

Proofing any building against the entry of flying insects can be extremely effective. The use of door curtains, air curtains and window screens is a practical method, which should be considered. These methods require expertise and constant vigilance to make sure that they are not being propped open to encourage the free flow of air, thus defeating the purpose of them being in place.

### NON-CHEMICAL CONTROL

Since it is undesirable to spray insecticides in food handling areas, non-chemical means of control should be used.

Flying insects are attracted to fly control units, which use ultraviolet (UV) light as an attractant. It has been found that UV rays emitted around the 365-nanometer wavelength in the spectrum are the most effective.

#### There are two types of fly control units:

**Electronic Fly Killers** use an electrically charged high-voltage grid to kill the insects on contact. The dead insects fall into a catch tray suspended at the bottom of the machine.

**Sticky Trap units**, the insects land on the glue area of the board where they are held until they die. Boards should be changed at regular intervals and can be kept for insect identification or as record of 'due diligence'.

## BUSINESS OPPORTUNITIES

### PLANNING A PROGRAMME

**Identify your market** - Manufacturers and customers who are audited by regulatory bodies and their customers' require quality fly control programmes.

However, a profit can be made from supplying units to the smallest establishment, especially if a leasing or servicing contract is also provided.

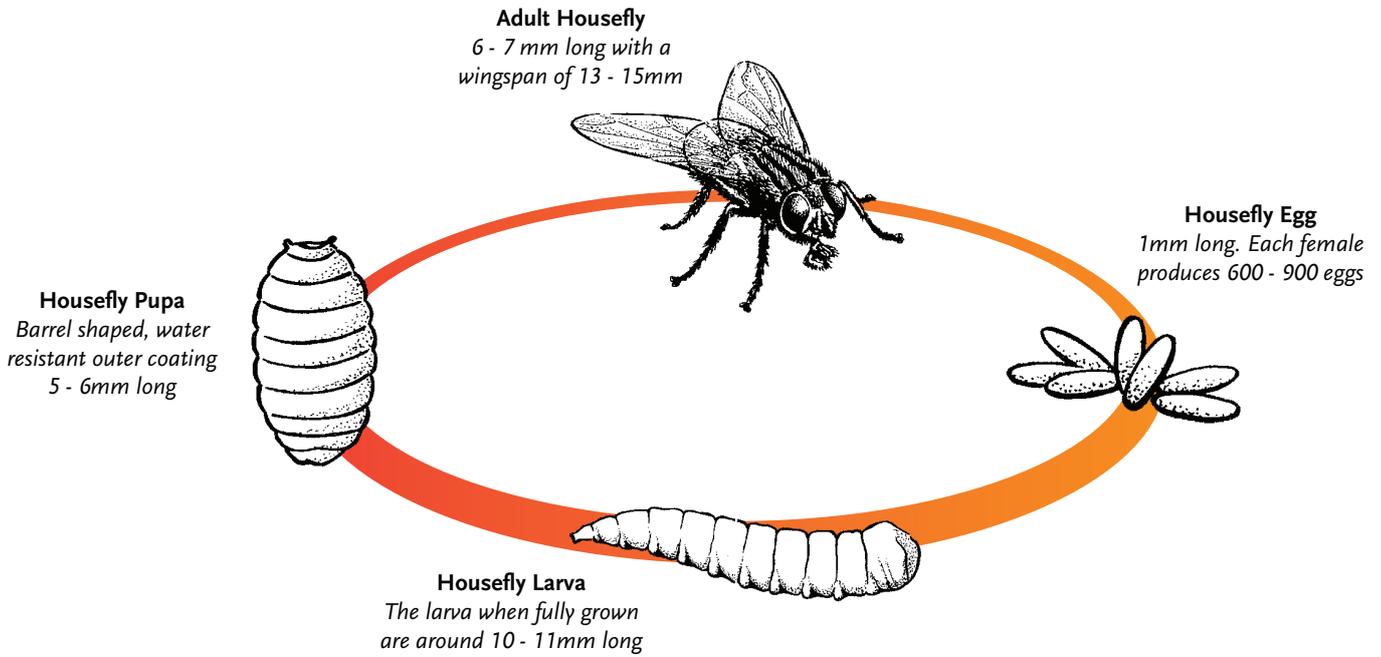
**The risk of contamination** - Educate your customers about the risks of contamination from different pest groups. In most cases, you will find that contamination from flying insects offers a higher risk than both rodents and crawling insects put together. Compare the actual risks of contamination. Your customer should realise that they should spend as much on flying insect control as on rodent and crawling insect control put together.

**Position and installation** - Install units where they will least compete with alternative light sources but in areas that will actively attract flies. Install as many units as required to provide adequate coverage. Both sticky traps and electronic fly killers should be used in a control programme and units, which can be wallmounted and ceiling suspended.

**Servicing contracts** - If possible try not to sell the units directly. Try to negotiate a lease with a servicing contract. This will bind your client to you for his other pest control needs and provide a higher profit ratio than one time sale alone. As part of your servicing contract you can ensure that the units are serviced correctly and regularly:

- Emptying of catch tray
- Changing sticky board
- Regular cleaning of units
- Changing of UV tubes
- Catch tray analysis

LIFE CYCLE



If possible, treatment of flying insects should concentrate on identifying and clearing the breeding sites of the insect, together with adult fly control through prevention of entry and trapping.

THE RIGHT UNITS

Killgerm supply a comprehensive range of PestWest® manufactured units, suitable for almost every budget and every situation. This includes shatter-proof, draught-proof, splash-proof and explosion-proof options, supplied with full technical backup of the Killgerm Group of companies.

Units, which are quick and easy to service, will always be cheaper to maintain. This will benefit the pest control company, but will also benefit the customer because the quicker the units are to service, the less disruption and down time there is in production. This is the reason why food companies prefer the installation of PestWest® units.

- Units should be of good quality - these are the most cost effective when a contract is sold.
- Machines should be kept clean and serviced regularly. Tubes should be changed ideally every 6 months, but at least every 12 months.
- When sticky traps are installed, glue boards should be changed regularly and can be kept as evidence of 'due diligence'.
- Units should be quick and easy to service, without the need for tools.

Install units where they will least compete with alternative light sources but in areas that will actively attract flies. Install as many units as required to provide adequate coverage.



A UVA Meter can quickly and clearly show the condition and quality of the UV output of existing tubes in a fly trap, showing whether they are working at peak performance, in need of replacement or beyond useful life.

KILLGERM OFFER AN ELECTRONIC FLY KILLER FOR EVERY SITUATION. HERE IS A SMALL SELECTION OF UNITS AVAILABLE:



### Chameleon® 1x2

Attractive, slim, wall-mounted (free standing bracket available), compact and unobtrusive, this unit is ideal for use in food preparation areas.



### Chameleon® 2x2

Designed to be ceiling-suspended, this model provides 360° attraction and is ideal for industrial and commercial food premises.



### Chameleon® Vega

Its revolutionary design is based on new slimline technology making the Vega a stylish, powerful and economical fly trap



### Nemesis® Quattro

This all-metal electronic fly killer combines robustness and power with energy-efficient and environmentally responsible technology making it the ideal choice for large open industrial areas.



### Titan® 300

Titan 300 offers 360° protection. It is ideal for larger kitchens, shops, cafés and all commercial uses. It can be adapted to operate as a cluster fly unit by removing the tray.



### Titan® Alpha

This powerful yet compact model is ideal for shops, kitchens, cafés, take-away outlets and even domestic use.



### Chameleon® Sirius

Discreet, stylish and environmentally responsible, the Chameleon Sirius is ideal for hotels, restaurants, bars, and retail shops.



### Sunburst® Naturale

Unique, decorative and discreet sticky board fly trap made of bamboo. This unit is suitable for most front-of-house situations.



### Chameleon® EXG

This custom-designed unit has been exclusively engineered to allow protection in ATEX areas where a high concentration of gas / vapour is present in the atmosphere such as: distilleries and in the petrochemical and pharmaceutical industries.

DELIVERING HIGH QUALITY TRAINING

  
**Killgerm**<sup>®</sup>  
TRAINING

**KILLGERM CHEMICALS LIMITED**  
PO Box 2, Ossett, West Yorkshire, WF5 9NA  
TELEPHONE: 01924 268 400  
FAX: 01924 264 757  
EMAIL: [info@killgerm.com](mailto:info@killgerm.com)

[www.killgerm.com](http://www.killgerm.com)