### **ASSOCIATED PRODUCTS**

Cimetrol Super EW is the next generation of product for the control of insect pests.





**K-OTHRINE PARTIX** A broad-spectrum suspension concentrate for use against a wide range of insects, including indoor control of crawling insects, cockroaches bedbugs, houseflies at rest and spiders, plus outdoor control of wasps in free hanging nests.

Vazor Provecta is a physical mode of action "sprayable entrapping" formulation for effective control of resistant populations of crawling and



#### **VAZOR® CYPERMAX PLUS:**



residual product that also gives quick knock-down of insect pests, formulated as a microemulsion

#### **VAZOR® CYPERMETHRIN 10:**

A residual, broad spectrum, cypermethrin-based 'oil in water emulsion' concentrate for surface





VAZOR® DE Powder contains amorphous silica vhich acts on the outer layer of the cuticle of any insect it contacts

**VAZOR® DE POWDER** 







For estimating and monitoring flea nfestations. The flea trap is supplied with a

### **INSPECTION & ASSESSMENT**

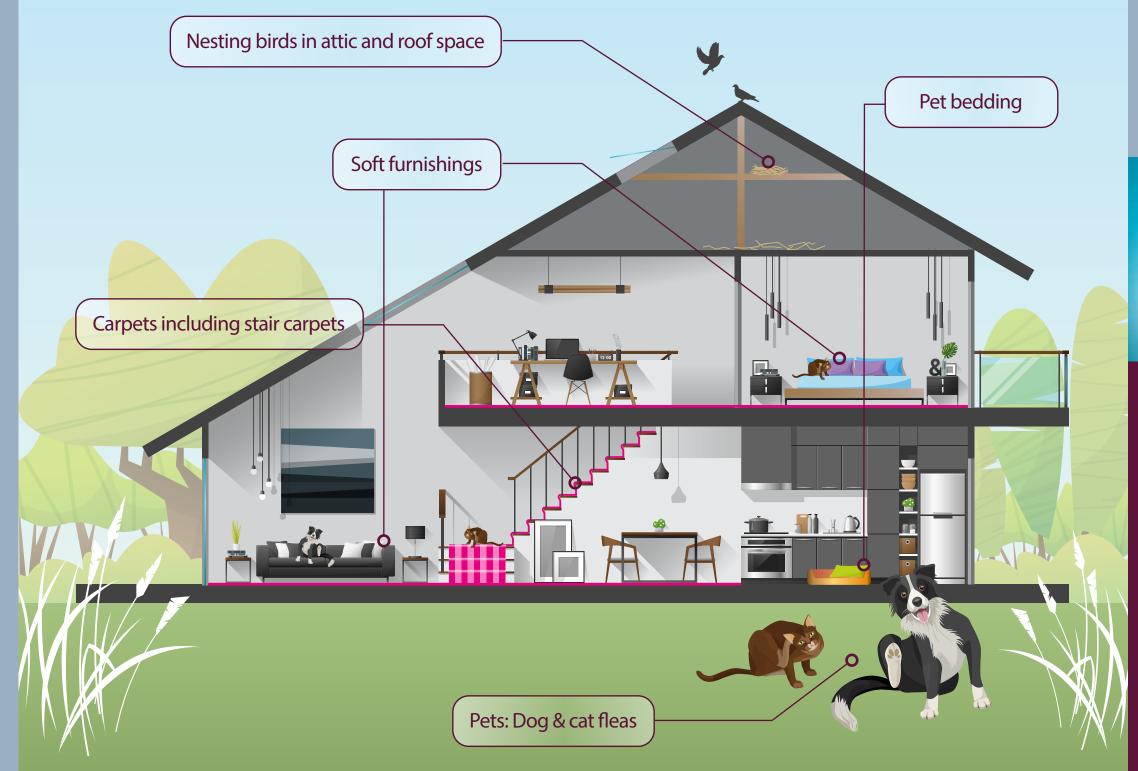
Inspect the property for flea activity, visually and by use of flea traps / monitors where necessary, in order to define the extent of the infestation. Also determine whether companion or other animals are involved as a source of flea activity. If companion animals are identified as a source of flea activity, advise the customer to initiate a veterinary treatment of the host animal. The homeowner should also be able to advise the typical areas frequented by the host animal, which will point towards the potential seat of the flea activity.

While most cases will be the cat flea Ctenocephalides felis, obtain an identification to species level from a qualified entomologist if another species may be suspected.

Vacuuming should be undertaken to remove physically fleas in all stages of their life cycle, while at the same time removing animal hair and debris to allow insecticide contact with clean surfaces. Vacuuming also removes larvae, eggs, adult faecal matter and detritus (food and skin particles) that the larvae feed on.

Pet bedding should be washed or disposed of to eliminate a further source of fleas.

### **AREAS OF ACTIVITY**





You know when you're in safe hands!





### **Fleas**

This guide brings together tips, solutions, facts and products to help you and your customers keep these pests at bay.



You know when you're in safe hands!







Use biocides safely. Always read the label and product information before use.



## **TREATMENT METHODS**

Many flea infestations can be traced to companion animals. If no pets are present, it can help to identify the species present. Control measures must be directed at all stages of the fleas lifecycle.

Regular cleaning is important in flea control as it denies them their breeding sites. Infested clothing and bedding should be destroyed or thoroughly cleaned and accumulated debris should be removed from cracks and crevices such as the gaps between floorboards.

Insecticides can be applied to infested premises and hosts/pets can be treated with veterinary products. If rodents are the cause, they should be controlled.

## **AFTER TREATMENT**

Advise the occupier that fleas may be observed after treatment as they hatch from eggs or emerge from pupae and so elimination should not be expected for at least ten days.

Make sure vaccum contents are disposed of securely in an outside bin.

Monitor for further flea activity and retreat as necessary.

Leave insecticide deposits undisturbed as long as possible, to ensure highest residual effect.





### **FLEA BIOLOGY**



**FLEA EGGS** 



**FLEA LARVA** 



**FLEA PUPA** 



**ADULT FLEA** 





### **USEFUL FACTS**

Fleas are ectoparasites that belong to the order Siphonaptera. There are around 2,600 species distributed across the globe, but only around 60 species occur in Britain. In their adult form, all fleas are parasitic on warm blooded animals, particularly mammals but birds can be attacked also.

Flea bites are identified as a tiny dark red spot surrounded by a reddened area. The bite persists for a couple of days and can be very irritating.

In Europe, fleas are not normally responsible for transmitting diseases. However they are disliked because of the bites they inflict and there is a deeprooted stigma attached to fleas.

Fleas tend to show a degree of host preference but will attack a variety of animals in the absence of the normal host. They are flattened laterally so that they can move among the hairs and feathers of the hosts. They are also capable of jumping very large distances in relation to their size which allows them to evade the attentions of their hosts and to disperse.

Fleas can be vectors of disease or can spread parasitic worms. The most serious infection they can spread is bubonic plague which is transmitted to man by the tropical rat flea (Xenopsylla cheopis) which carry the causative bacillus from infected rats. The Black Death in Europe and Asia in the 14th and 17th centuries were serious epidemics of the disease that rodent fleas were responsible for.

Fleas may also carry murine typhus and are probably the major vectors of the disease because of their readiness to attack humans as well as rats. Dog fleas are an intermediate host of the dog tapeworm and can occasionally be transmitted to man.



# ASSOCIATED LAWS & LEGAL REQUIREMENTS

- Biocidal Products Regulations on labels
- Control of Substances Hazardous to Health Regulations 2002 (COSHH). Undertake a COSHH assessment when using a substance hazardous to health.
- Remember it is illegal to administer an insecticide treatment when no insects are present, so confirm presence of fleas by inspection / monitoring.

## **FLEA** (Siphonaptera): Species Characteristics

#### **Human Flea**

(Pulex irritans)

Human Flea (*Pulex irritans*) Adults, 2-3.5mm long; no pronotal or genal comb; basal section of legs equipped with stout spines. Host/habitat: especially man, but will also breed on pigs, hedgehogs, foxes and badgers; found in homes, usually in bedrooms.



### Dog Flea

(Ctenocephalides canis)

Dog Flea (*Ctenocephalides canis*) Adults, 2-3.25mm long; forepart of head as long as it is high; prominent pronotal and genal combs (first teeth of genal comb only about half as long as second); basal section of legs equipped with stout spines. Host/habitat: especially members of Canidae family, also domestic animals and man; found particularly in host bedding.



### **Cat Flea**

(Ctenocephalides felis)

Cat Flea (*Ctenocephalides felis*) Adults, 2-3.25mm long; forepart of head longer than it is high; prominent pronotal and genal combs (first teeth of genal comb nearly as long as second); basal section of legs equipped with stout spines. Host/habitat: especially members of Felidae family, also dogs, other animals and man; found particularly in host bedding. Many infestations in commercial and institutional premises derive from feral cats.



#### **Mole Flea**

(Hystrichopsylla talpae)

Mole Flea (*Hystrichopsylla talpae*) Adults 3.5-6mm long; genal comb of 9-12 spines; pronotal comb of 42-58 spines. Host/habitat: associated with moles; also found in gardens and outbuildings.

