

COMMON BED BUGS (cimex lectularius)

Characteristics

Bed bugs are flat, oval insects, with very short functionless forewings. The hind wings are absent. Their mouth-parts are used for both piercing and sucking and are normally held under the body. They feed exclusively on blood.

The adult bed bugs are approximately 5mm long, reddish brown in colour, becoming purple after feeding. They have well developed antennae, prominent simple eyes and clawed feet which enable them to climb rough but not smooth surfaces.

Significance

The close association of bed bugs with man means that they can cause substantial nuisance through their blood feeding habits. They feed during the night on human blood as people are sleeping. The bites are often recognisable as raised reddened swellings, similar to flea bites, although with no central red dot.

However the nuisance and itching caused by the bites and the possibility of secondary infection are more common concerns.

Bed Bugs are not regarded as disease carriers but their blood feeding can cause severe irritation in some people, resulting in loss of sleep, lack of energy and listlessness, particularly in children. Individuals react differently to bites, some gaining immunity.

In the modern world, many factors are helping to sustain existing bed bug populations. Modern building techniques and the increased use of central heating, wall to wall carpets, loft and cavity insulation are all responsible for maintaining the required temperatures the bugs need to stay active and continue breeding during the winter months.

In addition the movement of second hand furniture and other items, which has increased due to the popularity of car boot sales and the increased chances of bugs, or their eggs, being brought back following long haul holidays to third world countries are all factors that help to maintain population levels.

Biology

Female bed bugs lay eggs throughout their life, an unusual feature in insects. They generally produce 2-3 eggs a day, which are cemented to the surfaces of the harbourages. The nymphs, which emerge from the eggs between 10-20 days later are just over 1mm long and appear very similar to the adults except in size and colour. The speed of development from egg to adult and the duration of adult life vary according to temperatures and availability of food (blood).

With frequent feeding, at normal room temperatures (18-20oc), adults live for 9-18 months, with egg incubation taking 10-20 days and the cycle complete in 9-18 weeks. Under optimum conditions, nymphs feed at about 10 day intervals and the adults weekly.

BED BUGS - (Control)

To eradicate an infestation of Bed Bugs is very difficult and should be left in the hands of professional pest controllers, but this can sometimes involve a considerable cost.

That said, there are always going to be people who prefer to attempt the treatment themselves.

Two of the reasons for bugs being hard to control are their ability to survive for long periods without food, under cool conditions (13. degrees c.) starved adults can survive for as long as a year. Another reason is that due to their flat body shape they can crawl into very small cracks and crevices into almost any item within the room be it furniture, beds, electrical equipment, phones, sockets, behind loose wallpaper, under the edges of carpets, behind items hung on walls, inside cases and bags etc. etc.

Before starting any treatment make sure you are wearing suitable gloves and have an insecticide ready to hand, as once disturbed the bugs will quickly crawl away and hide. Start by applying the insecticide (following manufacturers recommendations) to the perimeter of the room around the skirting board areas just in case any bugs try to hide or move out of the room.

If the bed has a headboard this should be carefully removed and any bugs sprayed immediately to prevent them dispersing. The wooden forks holding the headboard to the bed is a typical hiding place with often large numbers being found there.

The bedding itself should be placed in plastic bags whilst transferring it directly to the washing machine, where a (60. degree) wash would be preferable (if the label allows). All edges of the mattress should be checked and treated, the mattress then being stood up out of the way to dry whilst you continue. The base of the bed should be thoroughly checked for bugs or their signs. If it has drawers they should be removed checked and treated, a torch should then be used to check the inside framework of the base whilst looking for any small dark coloured blood spots that the bugs leave when crawling into small cracks. If clusters of these spots are observed then the surrounding area will have to be thoroughly treated.

If the bed is in two sections then it should be separated and the internal edges checked and treated, also pay attention to the area around the feet or casters on the bed and treat around those areas also. The base of the bed should then be stood up out of the way to give you more room to work. If the bed does not have drawers and you cannot see the internal framework then it would be advisable to remove the cover from the base and check and treat all the interior framework

It's now time to pull back the edges of the carpet and check for bugs. If present they should immediately be sprayed. If no bugs are observed and the area is clean and free from dust and debris then you can either apply a band of spray around the edges and under the skirting, alternatively use insect powder (ant powder), which is longer lasting. However, if the area is dusty it should be vacuumed prior to application. Bedside cabinets, wall rails, wardrobes, and all other items should now be checked, even the plug socket holes. Obviously electrical equipment can't be sprayed with a liquid insecticide but it may be possible to treat some of the bottoms of the outer

casings or the surface of the area upon which the equipment sits. Light dustings of insect powder can sometimes be applied to some of these sensitive areas.(The bugs do not fly or jump so they have to walk to the bed or walk onto it from something it is in contact with).

Once you are sure you have treated all areas and the insecticide is dry then the room can be put back in order. Over the following days and weeks it would be advisable to regularly check the bed and re-apply insecticide about once a week as the residual activity has only a limited life (check the product label)

(Note, affected bedrooms have to be used following treatment otherwise the bugs will not appear from their hiding places and therefore **not** contact the insecticide).

It would also be beneficial if the affected rooms temperature could be increased, as this would speed up the development of any eggs that had already been laid. Newly hatched bugs would then consequently contact the residual insecticide whilst it is still at its strongest.

At a room temperature of 13 degrees centigrade it will take the eggs 49 days to hatch. But at 27 degrees it should only take 5-6 days