



Bed Bugs

Roger Gold and Harry Howell*

Bed bugs, generally called "chinces" in Texas, feed on blood, principally that of humans, by piercing the skin with their elongated beaks. Although they inflict misery on their victims, it has never been proven that bed bugs carry disease-causing pathogens in the United States. Bed bugs are spread chiefly by the clothing and baggage of travelers, secondhand beds, bedding, furniture and laundry.

Identification

A mature bed bug is a dark brown, wingless insect. Its size and color depend on the amount of blood that the body contains. An unfed bed bug is between 1/4 and 3/8 inch long. The upper surface of the body has a flimsy, crinkly appearance. When engorged with blood, the body becomes elongated and swollen, and the color changes from brown to dull red.

Bed bug eggs are white and about 1/32 inch long. Newly hatched bugs are translucent and nearly colorless, but similar in shape to the adults. As they grow, they molt (shed their skins). After each

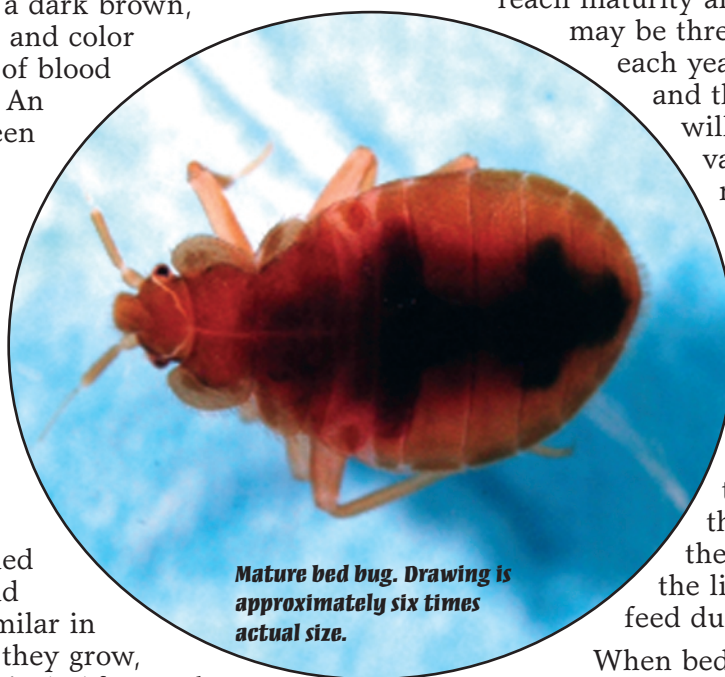
molt they are pale in color, then become brownish as the exoskeleton hardens.

Biology and Habits

Under favorable temperatures (above 70 degrees F) and with regular feeding, a female bed bug will lay about 200 eggs during her lifetime three or four per day. Eggs are coated with a sticky substance that adheres them to objects on which they are deposited. The eggs hatch in 6 to 17 days, and the nymphs find a host and begin to feed on blood immediately. Bed bugs reach maturity after five molts. There may be three or more generations each year. Environmental factors and the availability of food will cause considerable variation in the development rate of all stages of growth. Bed bugs may live for several weeks to several months without feeding, depending upon the temperature.

Bed bugs feed mostly at night by piercing the skin of people while they sleep. However, if they are very hungry and if the light is dim, they will feed during the day.

When bed bugs bite, they inject a fluid into a person's skin that enables the insect to withdraw blood. Often the fluid causes the skin to become irritated, inflamed and itchy. The bite produces elongated, spindle-shaped welts. If the bites are on the limbs (arms or legs), these welts will be aligned with the long axis of



Mature bed bug. Drawing is approximately six times actual size.

*Professor and Chair, Urban Entomology, Texas Cooperative Extension, The Texas A&M University System; Associate Research Scientist, Texas Cooperative Extension, The Texas A&M University System.

the limb. This elongated, spindle shape distinguishes the welts from those from mosquito or flea bites.

If its feeding is undisturbed, a full-grown bed bug becomes engorged with blood in 3 to 5 minutes. It then crawls to its hiding place, where it remains for several days digesting its meal. When hungry, the bug emerges from hiding and seeks another host for a blood meal.

Bed bug hiding places are evident by black or brown spots of dried excrement on surfaces where the bugs rest. Eggs, egg shells and cast skins also may be seen near these places. There usually is a distinctive odor in rooms where bed bugs are numerous.

At the beginning of an infestation in a room, bed bugs are likely to be found only in the tufts, seams, and folds of mattresses and covers. Later they spread to crevices in the bedsteads. If allowed to multiply, they establish themselves behind baseboards, window and door casings, pictures and picture moldings, and in furniture, loosened wallpaper, cracks in plaster and partitions.

Control

To control bed bugs in homes, locate their hiding places and improve sanitation by vacuuming or removing the bugs by hand. As necessary, you may need to treat with an insecticide approved

for this use. Select a product whose label includes specific directions for bed bug control. Spray or dust bed slats, springs, and frame and other hiding places in the room.

Do not use any insecticide on a mattress unless the product label specifically gives directions for this use. Apply a light application to the entire surface of the mattress and in cracks and crevices, along seams, tufts, and folds. Allow 1 to 2 hours for treated surfaces to dry prior to use. Plastic mattress covers may also help to prevent bed bug infestations.

Because it is impossible to penetrate all hiding places, control is usually not immediate. A few living bugs may be seen for a week to 10 days after application. After 10 days, apply a second treatment to kill the just-hatching nymphs. The pesticides used for bed bug control have a short residual life, and so this second application is always needed. For heavily infected areas, it is recommended that a commercial pest control operator be consulted to control the infestation.

Insecticide label clearances are subject to change, and changes may have occurred since this publication was printed. The pesticide user is always responsible for the effects of pesticides on his own plants or household goods as well as problems cause by drift from his property to other properties or plants. Always read and follow carefully the instructions on the container label.

Produced by AgriLife Communications and Marketing, The Texas A&M University System
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Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Chester P. Fehlis, Deputy Director, Texas Cooperative Extension, The Texas A&M University System.