

Providing Leadership in Environmental Entomology

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CHIGGERS

Chiggers are not insects. They are actually a larval, or immature, mite. Chiggers are commonly known as red bugs because of their bright color. They may be orange, yellow, or straw colored. They are most known for the severe itching they can cause. Only the larval form of the mite bites humans.

Life Cycle. Adult female mites lay from one to five eggs per day in leaf litter, damp soil or overgrown weeds. After five to seven days, the chiggers hatch. They crawl over vegetation until they find a shaded area near the top of an object that is close to the ground, like a fallen leaf or a blade of grass. Chiggers then wait for a suitable host. They are attracted to the carbon dioxide exhaled by the host. Once on a host, chiggers usually crawl around on the body before settling down. On animals, chiggers are likely to attach themselves in areas without fur. On humans, chiggers tend to accumulate in areas where clothing is tight, such as a belt at the waist or socks around the ankle. The larvae pierce skin around hair follicles and release a skin dissolving saliva. Chiggers then feed on the resulting liquid. Contrary to popular belief, chiggers do not burrow into the skin nor do they feed on blood. The larva usually stays attached for about three days, but may remain longer. After it feeds, the larva will drop to the ground and bury itself. The larval form is quite small, only 1/128 inch, and has six legs.

After a week or ten days, the larvae molt into a nymph with eight legs. Nymphs are not a pest to humans. Instead they feed on the eggs and young of other small soil animals. After two weeks to one month, nymphs molt into an adult that also has eight legs, but is larger. Like the nymph, the adult is not a pest to humans.

In total, the life cycle of the chigger usually takes from 40-75 days, but can take up to ten months, depending on the environment.

Medical Importance and Treatment. Chigger feeding causes an intense itch that can last for several days or weeks. The itching is not felt until three or more hours after feeding occurs. If you have been attacked by



Chigger - actual size is 1/128th inch.

chiggers, there are several ways to remove them. One of these is to take a bath as soon as possible. Apply a thick lather of soap to the infected area, rinse, and repeat. This will kill most of the chiggers on you. Next, apply an antiseptic to the welts. This will kill remaining chiggers. Ask your pharmacist about products that may relieve the itching. Scratching may remove chiggers, but may result in mouthparts remaining at the feeding site. The mouthparts and the scratching can cause secondary infections that may require topical antibiotic treatment. Chiggers found in the United States are not known to transmit any diseases to humans, although, some species in the Orient and other countries in the Pacific do carry a disease called scrub typhus.

Prevention and Control. Prevention is the best way to avoid chigger bites. Spray exposed skin with an insect repellent. Read the repellent label carefully before applying to sensitive skin. Pay special attention to spots where chiggers can crawl onto the skin from clothing such as around socks, waistbands, cuffs and collars. Consider spraying clothing that will contact vegetation. Several products are available for application to cloth. Check the label for the appropriate application. Wearing long-pants tucked into boots or socks and long-sleeved, tight, cuffed shirts will add to your protection. Also be aware that chiggers can infest inanimate objects that touch the ground, like blankets or clothes.

If chiggers are a problem around the outside of a home, prevention should also be practiced. Removal of brush and weeds can help keep populations low. Yard treatments are usually not practical or recommended. However, in cases of severe populations, sprays can be applied. Always check the label, and follow directions carefully. Make sure you select a chemical that will not harm plants.

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