



ENTFACT-630

### CHIGGERS

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Chiggers feed on an animal or human host during one of a progression of stages that takes them from a tiny egg to an adult. While the irritating, microscopic larval stage is invisible to the naked eye, the bright red eight-legged adult, sometimes called a harvest mite, can be seen crawling over the ground. The parasitic nymphs feed on an animal or human host. Adults eat small invertebrates, their eggs, and organic matter.

The larval chigger is an active creature that moves to the tip of grasses and fallen leaves to wait for and grab onto a passing meal. Rodents are a common host but chiggers can attack a variety of other animals and humans. Chiggers move to a feeding spot (ears of rodents, around the eyes of birds, or where clothing is tight on humans) and attach themselves tightly to the skin. After secreting digestive enzymes, they suck up liquefied host tissues. They neither suck blood nor burrow into the skin. The rash and intense itching associated with chiggers is an allergic reaction to the mite's salivary secretions.

Chiggers most frequently occur in overgrown brush or grassy areas, especially where small rodents are abundant. Females lay eggs on the ground in groups of up to 400, picking damp but well drained sites. They may be particularly abundant near stream banks, under trees, orchards, or berry thickets. There is one generation each year with chiggers most abundant during July, August, and early September.

#### Personal Protection

€ Avoid walking through uncut fields, brush, and other overgrown areas, especially during July through early September. Instead, walk in the center of mowed trails to avoid brushing up against vegetation where chiggers congregate.

€ When hiking or camping in chigger-infested areas, wear long pants tucked into boots or socks. This will keep chiggers on the outside of your clothing.

€ Consider applying an insect or tick repellent to shoes, cuffs, socks, and pant legs. Products containing diethyl toluamide (DEET) or permethrin are most effective. Be sure to read and follow directions for use on the container.

€ Showering or bathing immediately after coming indoors effectively removes chiggers which have not yet attached.

#### Controlling Chiggers Outdoors

Chiggers are sometimes in yards, parks, camps, picnic sites, and other recreational areas. They can be reduced in these areas by vegetation management. This includes regular mowing and brush removal to create a less favorable habitat for chiggers and their wild hosts. Wood, brush piles, and other accumulated debris should also be removed. Short grass will promote allow penetration of sunlight and will promote drying. This conditions are less suitable for chiggers and provide a more long term solution.

Insecticide sprays may provide some temporary reduction of chiggers. They are most effective when directed into areas where chiggers and their animal hosts are likely to frequent. Pay particular attention to borders and fences between wooded or brush areas and the lawn, around ornamental plantings, beside foot paths, and the dog house. Products containing carbaryl (Sevin), chlorpyrifos (Dursban), and diazinon are effective, as are permethrin, cyfluthrin (Tempo), and other synthetic pyrethroid insecticides. A single application during late-April or May is often all that is required, although treatment may need to be repeated in June.

The ground and vegetation up to a height of about three feet should be thoroughly wetted with the insecticide and applied according to label instructions. Children and pets should be kept off treated areas until the vegetation is completely dry. Treating the entire lawn is of little benefit since chiggers avoid direct sunlight and normally will not infest areas which are well maintained.