

# Chiggers

## What Are Chiggers?

Chiggers, or “red bugs,” are not insects. They are the larval stage of mites that belong to the family Trombiculidae. Mites belong to the Acari, the same group of organisms as ticks. The typical mite passes through four life stages: egg, larva, nymph, and adult.

Chiggers have six legs, are less than 1/50 inch long, and are a red-orange color. They feed on reptiles, amphibians, small mammals, and birds, which are their normal hosts. People are “accidental” hosts. Chiggers that attach to humans usually die within 24 to 72 hours because the human immune reaction to a bite prevents the chigger from obtaining adequate nourishment.

## Chigger Facts

- Chiggers do not burrow into the skin or suck blood. Rather, they suck tissue fluids with their mouthparts. A chigger attaches to its host, injects digestive enzymes into the bite wound, and then sucks up the digested tissue.
- After it has completed its meal, the chigger drops off the host and molts into an eight-legged nymph. If it is successful in finding food, the nymph molts into an adult mite. Both the nymphal and adult stages no longer depend on a host but feed on small insects and various arthropod eggs. The mite life cycle is typically 2 to 12

months. The female Trombiculid mite lays eggs singly or in small clusters.

- Chiggers do not move far from their hatching site. This is why people encounter “chigger patches” rather than one or two chiggers at a time. The chiggers that attach to humans are often encountered in two types of habitats: second-growth, brushy areas of shrubs and brambles and low-lying, damp areas of vegetation bordering marshes and swamps. These habitats are areas where chiggers’ preferred hosts (rodents and lizards) often live.

## Why Are Chiggers a Problem?

Chigger bites can cause terrible itching and weeping, red welts that can continue long after the mites have died. The itching may last up to 2 or 3 weeks and can be especially miserable if the person is suffering from numerous bites. Scratching and secondary bacterial infection can make it more difficult for bites to heal. Be sure to keep the bite wound clean and dry, and apply an antibacterial lotion if necessary.

## Why Do Chigger Bites Itch So Much?

The itching is the result of the human immune system responding to components in the chigger saliva that has been in-

jected into the skin. Some people may be overly sensitive to chigger bites and experience fever. However, chiggers are not known to transmit diseases to people in North America.

Chigger bites do not cause much discomfort in their normal hosts.

## What Can I Do To Prevent Chigger Bites?

In Alabama, the “chigger season” typically starts in mid- to late spring and lasts through late summer. The best means of protection is to avoid chigger habitats during this period. Unfortunately, this is not always practical.

If you will be in a chigger habitat, avoid brushing up against thickets and tall grass. Wear closed shoes, socks, long pants, and a long-sleeved shirt. Tuck your pant legs into your socks and your shirt into your pants. Use insect repellents that contain diethyl toluamide (DEET) around the tops of your socks, your waist, and your ankles to help keep chiggers from getting under your clothes. Chiggers tend to like areas where clothing is the most snug, such as around the ankles, the backs of the knees, the groin, the waistline, and the underarms. Repellents containing permethrin (0.5%) are excellent chigger deterrents but should be sprayed on clothing only. Never spray Permethrin directly on skin. Always follow the directions on the label. Repellents

containing permethrin and DEET can be found in camping or outdoor sections of most large stores.

If you have been in a chigger habitat, take a very warm bath or shower, preferably within the first 1 or 2 hours of being exposed. If chiggers have not yet attached, use a soapy wash cloth to help remove them. Signs of discomfort from chigger bites usually start within 6 to 12 hours.

### **What Can I Do To Relieve the Itching?**

To reduce discomfort, apply an anti-itch cream that contains hydrocortisone, benzyl benzoate, or calamine. Some people may be sensitive to these medications, so if you have questions, be sure to ask your health-care professional or pharmacist.

### **How Do I Control Chiggers?**

Controlling chiggers is difficult. Chiggers are found in areas where their normal hosts live. These areas can include or be near your lawn, picnic areas, and other recreational areas.

Chigger populations can best be reduced through vegetation management. Keep grass short. Sunlight that penetrates the grass will make the lawn drier and make it less favorable for chigger survival.

If possible, keep rodents and other small mammals that may serve as chigger hosts out of your yard. One thing that may help is to remove brush and wood

debris where potential mite hosts may live. If chiggers are a serious problem, you may want to put up a fence to keep animals away. Also, keep trash can lids secured to discourage wildlife from coming on your property.

Chemicals that contain permethrin, cyfluthrin, diazinon, and carbaryl (Sevin) can be used to treat outdoor areas that you use, such as the brush borders between the lawn and woods and along fences and paths. Broadcasting insecticides over large areas is discouraged. See Extension publication ANR-500B, *Alabama Pest Management Handbook—Volume 2*, for current chemical recommendations.



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**For more information**, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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