

CHIGGERS

Lee Townsend and Mike Potter, Extension Entomologists

Chiggers, the immature stage of certain mite species, most frequently occur in overgrown brushy or grassy areas, especially where small rodents are abundant. Also, they may be congregated in shady, humid areas near stream banks, under or around trees, or in berry thickets.

The body's reaction to digestive enzymes that chiggers use to liquefy skin cells causes the rash, intense itching, and misery that begins a few hours after they have fed. Chiggers tend to attach where the skin is thin, tender, or wrinkled, or where clothing is tight. They do not burrow into the skin, do not feed on blood, and do not carry diseases. If undisturbed, these mites may stay attached and feed for three or four days.

Personal Protection

- Avoid walking through unmowed fields, brush, and other overgrown areas. Instead, walk in the center of mowed trails to avoid brushing up against vegetation where chiggers congregate.
- When hiking or camping in potentially chigger-infested areas, wear long pants that are tucked into boots or socks and long sleeve shirts. Clothing made of tightly woven fabrics will tend to keep chiggers from reaching the skin as easily.
- Apply an insect or tick repellent. Products containing diethyl toluamide (DEET) or permethrin (clothing treatment only) 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. If that is not possible, thoroughly and briskly rubbing your skin with a dry towel may remove many chiggers before they are able to attach and feed.

Reducing Discomfort from Bites

- Apply over the counter anti-itch medication (hydrocortisone, Calamine lotion, etc.)
- Physicians may recommend oral Benadryl or a prescription strength steroid cream

Life Cycle

Chigger mites spend the winter in the soil as adults. Females lay clusters of eggs on the ground in damp but well-drained sites. After egg hatch, immature mites move to the tip of grasses or other vegetation and wait

to grab onto a passing animal or human. Rodents are common hosts but chiggers can attack a variety of other animals and humans. Adults are predators of small insects and other arthropods.

Controlling Chiggers Outdoors

While most common in wild overgrowth, chiggers may become established in yards, parks, camps, picnic sites, and recreation areas. Effective vegetation management can make these locations less suitable for chiggers and may greatly reduce infestations. Pruning of trees and bushes and closer mowing allows more sunlight into an area and lowers humidity. Removal of scrub brush piles and accumulated debris reduces protection for small mammals and other animals that are important hosts for chiggers. These environmental modifications produce conditions that are less suitable for chiggers and can provide a more long term solution. Insecticide sprays may temporarily reduce chiggers but, used alone, are not a long term solution. They are most effective when directed into "hot spots" where chiggers and their animal hosts are known to be abundant. 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 bifenthrin (Ortho Home Defense MAX), carbaryl (Sevin), cyhalothrin (Spectracide Bug Stop Indoor + Outdoor Insecticide), and permethrin (various brands) can be effective. A single application during late-April or May is often all that is required, although in severe infestations, 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.

Revised 6/08