EXECUTE RESEARCH AND EXTENSION

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Problem: Chiggers (Eutrombicula alfreddugesi)



Hosts: Indiscriminate, including humans

Description: Adults are brilliant red, about 1/20-inch long, and may be seen moving slowly about on the soil even on warm winter days. Egg laying begins when soil surface temperatures are regularly above 60°F, and "chigger season" is soon underway. After hatching, chigger larvae climb onto grass blades, twigs, or other objects from which they can more readily snag a passing host. After feeding for two to four days, the larvae drop from the host, undergo a molting process, and become nymphs. Nymphs and adults are not parasitic. They are predators on small insects, other mites and their eggs. A complete life cycle requires from 7 to 10 weeks, but from April to cold fall weather there are always some of the bothersome larvae around.

Chiggers usually do not produce much itching if they are on the body for less than an hour. But some people report itching within minutes of entering chigger-infested sites, although no bite marks are visible until later.

Itching begins three to six hours after the chigger starts biting. Redness and slight swelling occur around the bite. At 10 to 16 hours, red, "pimple-like" eruptions appear. Itching continues and intensifies for up to a day and a half.

Recommendations: When possible, avoid areas of tall grass or weeds where little sunlight penetrates to the soil. Such areas harbor the most chiggers. Avoid sitting or lying in such areas or in shaded areas even with short grass or thatch.

Although chigger larvae can penetrate many types of clothing, high boots and trousers of tightly woven fabric, tucked into stockings or boots, help deter them. Repellents applied to shoes, stockings, and pant cuffs further deter chiggers. If entering taller vegetation, apply a repellent to waist, zippered or buttoned fly, collar and cuffs. Check local retail outlets for available repellents registered for use against chiggers. Read and explicitly follow labeled instructions when using them.

After returning from chigger-infested areas, shower thoroughly with several soapings and rinsings. Wash infested garments before wearing them again.

Protection from chiggers uses two approaches. The use of a repellent can discourage chiggers from attacking. The most effective repellents are Deet and permethrin. Both are applied to clothing. The second approach seeks to reduce chigger populations. Keeping the lawn mowed regularly can help, but large populations may require the use of an acaricide.

Effective products include bifenthrin (Bug B Gon Lawn Insect Killer, Hi-Yield Bug Blaster II Granules and Hi-Yield Bug Blaster Bifenthrin) and cyfluthrin (Tempo 20, BioAdvanced Complete Insect Killer for Soil and Turf).

References:

1. <u>Chiggers</u>, Pests that Affect Human Health, K-State Research and Extension, Entomology Publication MF2107 2. Turfgrass Insects of the United States and Canada, Cornell University Press, pg. 40 - 55

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