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Pest Check

Watch Out For the Chiggers

As the summer air warms, the chiggers are beginning to become more numerous. There are two species of chiggers that affect humans and other animals. One species lives in fields, grass and weed areas, while the other species likes moist habitats such as in swamps, rotten logs and stumps.

Chiggers develop in four life stages: egg, larva, nymph and adult. Eggs hatch into six-legged larvae. The larvae climb up onto vegetation, so they can crawl onto a passing host. This is the only stage that feeds on humans and animals. Chigger larvae prefer to bite people in places where clothing fits tightly over the skin such as around the waistline, under socks, or where the skin is thin or creased such as around the ankles or the back of knees. Chigger larvae insert their mouthparts into a skin pore or hair follicle, and then inject a digestive fluid to dissolve skin cells. This results in itchy, reddish welts on the skin. It is the dissolved skin cells, not blood that chiggers ingest as food. The tiny larval chigger mites do not present a real medical health concern, but they can make outdoor events an unpleasant experience.

After feeding, the larvae drop off of the host to molt into eight-legged nymphs which then molt into adults. Chigger nymphs and adults feed on eggs of springtails, isopods, and mosquitoes. Adult chigger mites are about 1/20 inch long, bright red, and have hairy bodies. The adult chiggers will overwinter in protected places and then become active in the spring. Under favorable conditions, most chigger species complete their development from egg to adult in 40 to 70 days.

Suggestions for Prevention:

Clear away brush and weeds, mow grass close to the ground, and remove conditions that may attract small animals that can serve as chigger hosts. This will reduce the amount of chiggers found in your area, since chiggers usually do not survive in areas that are well attended.

Wear tightly woven socks, long pants, long sleeved shirts, and high shoes when entering a potentially chigger infested area. Also tuck pant legs inside boots and button cuffs and collars as tightly as possible to prevent chiggers from climbing inside your clothes.

Avoid sitting on the ground when camping, picnicking, or working outdoors.

Apply repellents such as DEET or permethrin to both the skin and clothing, such as hands, legs, and waistband. Powdered sulphur is another repellent that can be dusted around the opening of your pants, socks, and boots or rubbed on skin such as over legs, arms and waist.

Suggestions for Use of Insecticides:

Chiggers sometimes become a problem in home lawns, so chemical control may be desirable. Insecticide sprays may provide some temporary reduction of chiggers and they are effective when applied in areas where chiggers and their animal hosts are living and/or roaming. Insecticides containing carbaryl, permethrin, cyfluthrin are some suggestions for control. Sprays should be made on grass, shrubs and the soil. Be sure to follow label directions for any insecticides used.

Suggestions for relief after exposure:

Wash field clothes in hot, soapy water to kill chigger larvae. Take a hot bath or shower and soap repeatedly after chigger exposure. If you bathe quickly after exposure, then you can wash crawling chiggers off your body before they bite.

Apply creams or ointments such as hydrocortisone or calamine lotion to relieve itching temporarily.



Photo of a chigger, *Trombicula* spp. Photo by: Department of Entomology and Plant Pathology, Auburn University.

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