

July 1, 2023

The Truth About Chiggers

With summertime activities often come chiggers. They certainly can spoil outdoor activities. Information about their preferred habits, life cycle, and some management tips are provided in this article.

Chiggers are actually immature mites. They induce an aggravating rash and intense, itchy feeling when they feed on the skin of animals and humans according to Dr. Jonathan Larson, Extension Entomologist. They are so tiny that usually they are not seen in the landscape and on your body. Under the microscope, we can see that it has six legs and is reddish in color.

Chiggers, that attack people, are the immature form of a predatory mite when it is an adult. As the immature larval stage, the chiggers are parasites that digest skin cells and use this for food. They pierce the skin with their tube-like mouthpart, inject "saliva" which destroys the skin cells, and consume the digested material. They can continue this process over 2 to 4 days. A misconception is that the chigger goes into the skin or burrows into it, but this is not correct. They stay as an external parasite on top of the skin.

Chiggers usually feed in areas where the skin is thinner or where the area is constricted by clothing. This is why common areas where they feed are the ankles, behind the knees, the groin area, the waistband area, in armpits, and around bra lines according to Dr. Larson.

It may be 12 to 24 hours after the chigger feeds before we notice the bitten area. This inflamed area becomes reddish in color. At the center of this area, it may be sunken with a red dot, and possibly a pustule forms acting like a blister when popped.

What is the life cycle of a chigger? The adult stage spends the winter in the soil. When the soil temperature reaches around 60 degrees F, the adults emerge and mate. The female lays her eggs in the soil in areas that are overgrown. The eggs hatch and the chiggers, which attack humans and pets, crawl up the grass or on other plants and wait for a host. When finished feeding, the chigger drops off and molts. There are multiple generations of chiggers with populations peaking in the spring and late summer.

How can we protect ourselves from chiggers? It is best to avoid unmown areas or areas that are overgrown. Try to stick to trails that have been managed. When needing to work in overgrown areas, wear long pants and tuck them into socks or shoes. Also, wear long sleeves. When finished and coming inside from working outside, wipe down your legs with a paper towel or take a shower and especially scrub your legs and ankles.

If you want to use an insect repellent on your skin, those include DEET, picaridin, IR-3535, and oil of eucalyptus. These would also be used to repel ticks and mosquitoes. Multiple applications may be needed depending on the product. Consult the label for more information on how the product can be used.

Another option is to treat your clothes with permethrin. Use this product according to the label. It is only to treat clothing before the clothing is worn, because it is a true insecticide and should not be placed on the skin. Always read and follow label directions for safe use of the pesticide. Chiggers, ticks, and other pests will die when they climb onto the permethrin treated clothes.

Chigger bites can be treated with over-the-counter medications such as hydrocortisone or calamine lotion. Consult a medical professional for more help.

To discourage habitats for chiggers, remove brush, mow, and manage the landscape. An increase in light and a reduction in humidity decreases the attraction of the area to the chiggers.

If there is a hot spot of chiggers, this area could be treated with permethrin, bifenthrin, or carbaryl for about 1 to 2 weeks of control depending on weather conditions and the product. Follow the label directions. This is certainly not a long-term solution. Treatment needs to start in April or May. Serious infestation may need another application in June.

For more information about chiggers and how to manage them, contact the Daviess County Cooperative Extension Service Office at 270-685-8480 or annette.heisdorffer@uky.edu. Annette's Tip:

Adult Japanese beetles are feeding on plants. For small plants, shake the insects off into a bucket of soapy water to kill them early in the morning when they are sluggish. Sevin (carbaryl), malathion, and insecticidal soap are effective against adult Japanese beetles. Sevin provides residual protection.

Upcoming Event:

The 2023 Extension Master Gardener program will be offered this fall. An application is required. This 14-week program will be held on Fridays, from 9:00 a.m. to noon starting September 8. This is a volunteer program with a requirement of 40 hours given back to the program through approved Cooperative Extension Service programs. The training includes presentations, quizzes, and an open book test. Trained Extension Master Gardeners help the University of Kentucky Martin-Gatton College of Agriculture, Food and Environment Cooperative Extension Service by educating the public with science based horticultural information to protect the environment as well as to use proper techniques to manage plants for the landscape and food production. The cost is \$85 with a possible needs based scholarship available from the Green River Area Extension Master Garden Association. Applications will be available by July 11 and must be returned to the office by August 4. Contact the Daviess County Extension Office if interested in completing this volunteer program.

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