



Avoiding Fire Ant Stings

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Introduction

Imported fire ants (*Solenopsis invicta*) are an increasing concern for homeowners and farming operations as fire ants expand their range in Virginia.

Identifying Fire Ants

Adult imported fire ants have a two-node gaster and antennae with 10 segments, including a two-segmented club at the tip (Fig. 1). They are reddish brown with a visible stinger at the tip of the darker, shiny abdomen. Other ants in Virginia, such as the Allegheny mound ant and the Asian needle ant also have painful bites and stings. Contact your local Cooperative Extension office to have ants identified.



Figure 1. Fire ant worker (April Noble, Antweb.org, Bugwood.org).

Fire Ant Stings

Imported fire ants are quick to defend their colony by mass attack. Each ant firmly bites the skin with its strong jaws and stings multiple times as it pivots in a semicircle. Fire ant stings induce a brief but intense burning sensation, followed by the formation of fluid-filled lesions or blisters that become pustules about a day later (Fig. 2). These pustules

contain yellowish fluid and resemble pimples that typically drain and scab over in a few days (Fig. 3). Fire ant venom contains toxins that produce the characteristic pustule formation as well as allergenic proteins that cause swelling and itching.



Figure 2. A badly stung arm (Murray S. Blum, University of Georgia, Bugwood.org).

Fire ant stings can be treated much in the same way as bee stings, with cold compresses and over-the-counter products for the associated pain and itchiness. Care should be taken to avoid scratching the stings and protect against secondary bacterial infection in the pustules.

People who are very sensitive to insect venom may experience wide-spread reactions after being stung by fire ants, including anaphylactic shock. People who are allergic to bee stings should seek immediate medical attention if they begin to experience breathing problems or other allergic reactions after being stung by fire ants.



Figure 3. Fluid-filled pustules form at the sites of fire ant stings (Daniel Wojcik, Bugwood.org).

Avoiding Fire Ant Stings

- Be aware of any fire ant activity in the area.
- Know how to recognize fire ants and signs of fire ants.
- Wear closed toe shoes with socks in areas known to have fire ants.
- Tuck pant legs into socks. Do not leave skin exposed on lower legs.
- Use insect repellents on footwear and clothing.
- Avoid stepping on mounds.
- Leave the area as soon as fire ants are seen or if you are stung.
- If stung, seek prompt medical attention if you experience whole body reactions such as hives, shortness of breath, swelling, and other symptoms of anaphylaxis.
- If you are allergic to insect stings, carry an injectable epinephrine pen with you.

Virginia Fire Ant Quarantine

The Virginia Department of Agriculture and Consumer Services (VDACS) and the US Department of Agriculture (USDA) cooperatively expanded the Federal Fire Ant Quarantine (FFAQ)

to include additional counties in southern Virginia in 2019 (Fig. 4). In addition, fire ants have been found in the counties of Halifax, Charlotte, Dinwiddie, Lee, Lunenburg, and Prince George, but these counties are not under the FFAQ as of November 2021. Imported fire ant management within the FFAQ is designated the responsibility of those living and working there, while VDACS manages fire ant colonies found outside the quarantine area. If you find fire ants outside of the FFAQ, please contact VDACS at 804-786-3515.

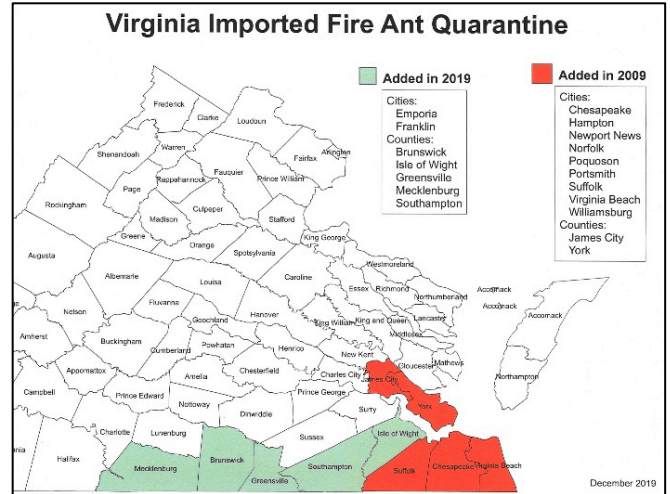


Figure 4. The current imported fire ant quarantine in eastern and southern Virginia set by the Virginia Department of Agriculture and Consumer Services in 2019.

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