

# Dangerous Ants on the Move

by Kathleen Curthoys, Fairfax Master Gardener

Species of invasive, dangerous ants are spreading in Virginia, through the Southeast U.S. and in other states, making news headlines this spring and summer with cautions about Asian Needle Ants and imported fire ants, particularly the Red Imported Fire Ant.

The potentially deadly Asian Needle Ants are considered to be widespread on the East Coast, documented in states from Florida to Connecticut, including Virginia. Their painful sting can cause people to have life-threatening reactions such as anaphylactic shock. Virginia Cooperative Extension advises people who are allergic to bee stings to seek immediate medical attention if they have breathing problems or other allergic reactions after being stung by Asian Needle Ants.



photo: Jessica Louque, Smithers Viscient, Bugwood.org

Asian Needle Ants

Red Imported Fire Ants can be aggressive and can bite and sting people multiple times as they jab their victim repeatedly. Reactions to fire ant venom can be intense, and for a few people who are sensitive to it, can include nausea, chest pain, shock and rarely, death.

As imported fire ants are spreading, on May 27 the Virginia Imported Fire Ant Quarantine area was expanded to include 18 counties and 15 independent cities in Virginia, according to the Virginia Department of Agriculture and Consumer Services (VDACS). The quarantine area includes locations where the imported fire ants have become established. VDACS then focuses treatment on new infestations in areas outside the quarantine area. For now, the quarantine is in the southern part of Virginia and the northernmost county is Chesterfield. This is the third expansion of the quarantine area since 2009.

The quarantine area “does not include all the localities in Virginia known to have imported fire ants and will likely be expanded in the future,” according to Virginia Cooperative Extension. If fire ants are found outside the quarantine area, contact VDACS at 804-786-3515, and if possible, submit a sample of the ants to a local Virginia Cooperative Extension office.

## Asian Needle Ant

*Brachyponera chinensis* are native to China, Japan and Korea. They are small, usually shorter than a quarter of an inch (6 mm), and can be hard to spot. They typically don't line up in long columns the way fire ants do. The ants may be dark brown to black, and lighter brown on their antennal tips, legs, mouthparts and stinger.

They are scavengers typically found in damp spots under rocks, mulch, rotting logs, in wood piles and on lawns. During the summer, both the winged ants, both male and female, will fly in swarms and mate. Colonies may have multiple queen ants and multiple nests.



photo: Joe Boggs, Ohio State University Extension

The Asian Needle Ants are not aggressive, unlike fire ants, and usually try to flee from contact with people. But they may still have a defensive response when pressured or encroached upon, such as when people accidentally put their hands on ants or nests. It's advisable to wear thick gloves, long sleeves, long pants and closed shoes when handling mulch, moving yard debris or putting your hands in dark places where the ants may be present.

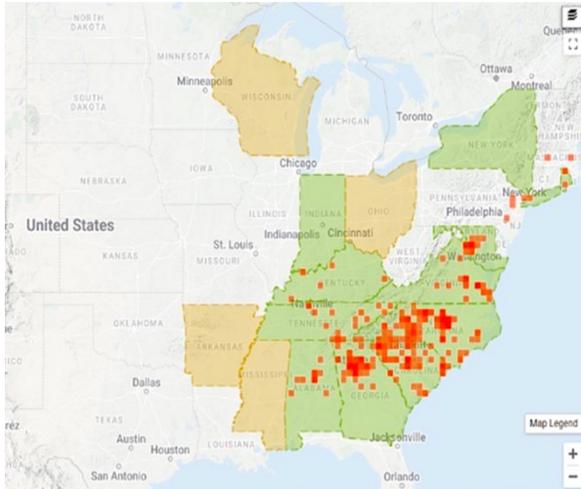


image: iNaturalist Canada

Distribution of Asian Needle Ants in eastern US

They eat mostly termites, springtails and other invertebrates. The ants may seek food and trash bins and get into buildings. They have a particular taste for sources of sugar.

Control of the ants can be done with bait, particularly bait based on protein. This control may take time to be effective because these ants apparently do not leave pheromone trails that for other species can lure ants to food sources and bait. Instead, the ants may carry other ants to the food, meaning a slower response from the group.

If you are considering applying pesticide, consult the current version of the Pest Management Guide for Home Grounds and Animals and look for recommendations in the section on outdoor ants.

## Red Imported Fire Ant

The invasive *Solenopsis invicta* is the most widespread of the four fire ant species in the U.S., displacing the other invasive species, the black imported fire ant, in some areas and eliminating the two native species in most areas where they are present.

Interbreeding of the red and black fire ants has led to the *S. invicta* x *S. richteri* hybrid in a few states such as Georgia and Tennessee, but only the red ant is found in Virginia.

Red Imported Fire Ants can range in size from 1/16th to 1/4th of an inch (1 to 6 mm) long. Both queen ants and workers have a reddish-brown head and thorax, with black rear segment, called the gaster, which has the stinger. Male fire ant swarmers are completely black.



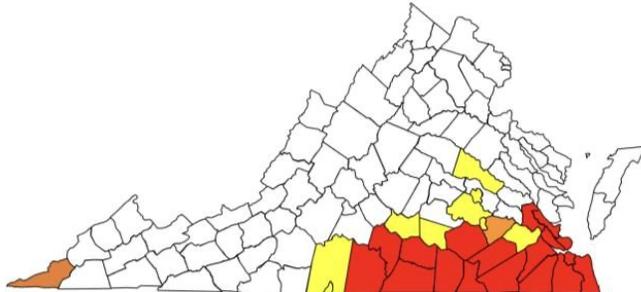
photo: Virginia Tech News

Red Imported Fire Ants

The fire ants eat nearly any plant or animal, alive or dead. They will attack nests of other insects, eggs of reptiles and birds, nesting birds and adult reptiles, rodents, amphibians and birds.

They are found in mounds in open, sunny areas, often cultivated fields or pastures, parks, playing fields and yards. They will also build colonies in the walls of buildings and other structures such as vehicles, junction boxes and heat pumps. They are drawn to electrical currents and may cause fires by chewing on electrical wiring. They damage crops, forage on seeds and flower buds, and threaten livestock, with particular harm to animals that may not be able to escape, such as calves born outdoors which can be repeatedly stung and even blinded. The ants are also troublesome in urban areas where mounds can spread if not treated, and if not properly treated, the mounds can split apart and spread to create more mounds.

image: Virginia Cooperative Extension



*Distribution of imported fire ants in Virginia, May 2024*

The ants sting by holding on to the victim with their jaws and then jabbing the skin while moving around in a circle. The ants aggressively respond to threats to their nest or food. They do not usually nest indoors, and if that happens, VCE advises you to call a professional pest control service immediately.

Eradicating fire ant colonies can be difficult and the ants can return to infested areas. It is recommended to focus efforts on areas where Red Imported Fire

Ants are a safety risk for people and animals. Regularly check your property for signs of fire ants. Also use sanitary practices in food areas in homes and yards, and close points of entry into buildings where possible. If the ants are found around your home, see recommendations for strategies in the Pest Management Guide for Home Grounds and Animals.

If using bait in the landscape, experts say it should be placed around the nest but not in it, to avoid prompting the ants to move. Indoors, baits should be placed in the track or path of the ants so they may return to the nest with deadly food. Other types of ants in Virginia will build mounds and can be mistaken for Red Imported Fire Ants. Contact your local Cooperative Extension office to have ants identified.

#### References

- [Pest Management Guide for Home Grounds and Animals](#), Virginia Cooperative Extension
- [Red Imported Fire Ant](#), Dini Miller and Hamilton Allen, Virginia Cooperative Extension
- [Hybrid Fire Ants in Virginia](#), Theresa A. Dellinger, Eric Day, and Amy Byington, Virginia Cooperative Extension
- [Asian Needle Ant](#), T. Michael Likins and Eric Day, Virginia Cooperative Extension
- [Asian Needle Ant](#), North Carolina State Extension