

School & Home Integrated Pest Management (IPM) Newsletter – August 2018



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Editor: Shujuan (Lucy) Li, lisj@cals.arizona.edu

Beware of Fire Ant Stings

Authored by Shujuan Li, Dawn Gouge, Shaku Nair, Al Fournier and Kai Umeda. University of Arizona.

There are numerous (>29) known species of fire ants (*Solenopsis* spp.) in the United States, at least three of which are found in Arizona: the southern fire ant (*S. xyloni*) is the most commonly found, and two species of desert fire ant (*S. aurea* and *S. amblychila*).

This year, as in many others there have been a number of introductions of the red imported fire ant (RIFA, *Solenopsis invicta*), which first came to the United States around 1930. To date, the imported fire ants infest more than 367,000,000 acres in Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and Puerto Rico (USDA Aug 9, 2018). Cold temperatures may limit the northward spread of RIFA in the United States and drier conditions may limit the westward spread of RIFA.

The red imported fire ant has been regularly introduced into Arizona, and is also present in the bordering states of New Mexico and California. The drier climate in Arizona is a limitation for this species, however, as we irrigate more lawns, agricultural fields, and golf courses, we increase our chances of making RIFA flourish. RIFA invade via transported nursery stock, honeybee colonies, and on empty trailers and trucks. Areas with seasonal flooding are particularly vulnerable to RIFA invasion. Fire ant activity increases after rain events. Be on the lookout for colonies in new areas after rain.



Red imported fire ant colony floating in flood water. Photo: Bart Drees.
www.desertmuseum.org

Fire ants of all species bite and sting, and they can do both simultaneously. They are aggressive when stinging and inject venom, which causes a burning sensation. People vary greatly in their **sensitivity to fire ant stings**. Some people may experience mild discomfort, while others may be hypersensitive to venom or may have medical conditions (e.g., heart condition, diabetes) that can result in serious medical problems or even death resulting from a single sting. Individuals with a history of severe allergic reactions to insect bites or stings should consider carrying an epinephrine auto injector (**EpiPen**)



Fire ants bite and sting. Photo: Alexander Wild. <https://www.alexanderwild.com>

and should wear a medical identification bracelet or necklace stating their allergy.

Hypersensitivity reactions may lead to potentially life-threatening anaphylaxis. Anaphylaxis is a severe, potentially deadly allergic reaction. It can develop in under a minute, or within 30 minutes of being stung. During anaphylaxis your immune system triggers release of chemicals that cause the body to go into shock. Blood pressure drops suddenly (victims look pale, or collapse), airways through which you breath narrow or close (coughing, or breathing difficulties). Signs and symptoms include a rapid, weak pulse, a skin rash, nausea, and vomiting.

Anaphylaxis requires an injection of epinephrine (EpiPen) and a follow-up trip to an emergency room. If you don't have epinephrine, you need to go to an emergency room **immediately**. **Call 911.**

What should you do if you are stung?

All individuals (even individuals who are not known to react severely) should take the following steps if fire ants sting them:

1. **Move away** from the fire ants if you realize you are standing on ground housing colonies.
2. **Remove the stinging ants.** The best method is to rub off ants briskly by hand or using a cloth, as they will attach to the skin with their jaws.
3. **Over-the-counter antihistamines** like diphenhydramine (Benadryl or generic version) will help manage minor stinging incidents. Follow directions on packaging. Drowsiness may occur.
4. **Seek an emergency medical facility immediately** if a sting causes severe chest pain, nausea, severe sweating, shortness of breath, fainting, difficulty swallowing or breathing, serious swelling, or slurred speech. **Anaphylactic shock can lead to death.**



Red imported fire ants swarming boot after mound disturbance.
Photo: Bart Drees.
www.desertmuseum.org

Avoiding Fire Ant Stings

Prevent being stung is the best way to avoid medical emergencies associated with fire ants. Here are some tips to learn to recognize threatening situations:

- **Do not disturb ant nests.** Take care not to stand on or near them. Fire ants build nest mounds in sunny, open areas such as lawns, playgrounds, ball fields, parks, golf courses and along road shoulders.
 - Red imported fire ant mounds are often large and easy to spot. RIFA mounds are 4-24 inches above ground and have no visible surface entrance.

- Southern fire ant nest mounds are usually much smaller or in patches of loose soil near moisture. Flattened, irregular craters with one to many openings are located usually in warm, sunny areas.



Red imported fire ants produce mounds that rise high above ground.
Photo: Bart Drees.



Southern fire ant nests have fine-grained low mounds with many openings.

- **Control ants** where they occur in areas used frequently by people and pets. Use an EPA-registered bait or other product that is labeled for fire ants.
- **Use quick defensive reaction.** Remove the ants that climb up on your body as quickly as possible.
- **Wear protective clothing** when engaging in outdoor activities near fire ant colonies. Wear boots or tuck pant legs into socks.
- **Use insect repellents** on clothing or footwear. Check this guide to choose a repellent: <https://www.epa.gov/insect-repellents>.
- **Education and Communication.** Teach children about fire ant hazards. Inform visitors to your landscape that fire ants may be present.
- **Watch for foraging ants** (ants looking for food or water). Edges of water bodies, trash cans and areas with spilled food or sugary drinks become areas where large numbers of foraging worker ants congregate.
- **Maintain a healthy lawn.** Proper cutting/mowing, watering, fertilizing, and aerating can keep your lawn healthy.
- **Sometimes fire ants invade indoors.** This is particularly common when conditions outdoors become very hot and dry or when flooding occurs in the immediate landscape. Pest-proof homes and buildings and practice proper cleaning and waste disposal to make indoor environments less accessible and attractive to foraging ants. Learn more about how to pest-proofing your home or buildings: <https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1677-2015.pdf>.

Sources, further information

For more information about fire ants and other stinging pest first aid, please visit the CDC website at <http://www.cdc.gov/niosh/topics/insects/#overview>

Imported Fire Ants, USDA, last modified: Aug 9, 2018
https://www.aphis.usda.gov/aphis/ourfocus/planthealth/sa_domestic_pests_and_diseases/sa_pests_and_diseases/sa_insects/sa_fire_ants/ct_imported_fire_ants

For more information about fire ant stings and how to treat them, read [Fire Ant Stings](#) on [eXtension](#).

To learn more about treating anaphylactic shock and first aid in an emergency situation click [here](#).

Webinars and Events

Please join in for the [2018 All Bugs Good and Bad Webinar Series](#). This webinar series provides information about good and bad insects. Webinars are free and open to everyone. Webinars will be on the **first Friday of each month at 2 p.m. Eastern time**.

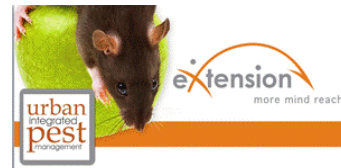
Upcoming webinars include:

1. Winterizing Your Home to Keep Out Pests - September 7, 2018
<https://learn.extension.org/events/3259>
2. Structural Misidentified Pests – October 5, 2018
<https://learn.extension.org/events/3262>
3. Lice, Scabies, and Mites – November 2, 2018
<https://learn.extension.org/events/3263>
4. Pantry Pests – December 1, 2018
<https://learn.extension.org/events/3264>

For more information about upcoming and past School IPM webinars:
<http://articles.extension.org/pages/74590/2018-all-bugs-good-and-bad-webinar-series>

For more information about the EPA Schools program, visit:
<http://www.epa.gov/schools/>

For more information about Community IPM, visit:
<http://www.extension.org/pages/23359/urban-integrated-pest-management-community-page>



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Arizona Pest Management Center

Shujuan (Lucy) Li, Assistant in Extension - Public Health IPM. Editor. Email: lisj@cals.arizona.edu

Shaku Nair, Assistant in Extension - Community IPM. Email: nairs@email.arizona.edu

Dawn H. Gouge, Public Health IPM Expert. Email: dhgouge@cals.arizona.edu

Al Fournier, IPM Assessment. Email: fournier@cals.arizona.edu

Ursula Schuch, Environmental Horticulture. Email: ukschuch@ag.arizona.edu

Kai Umeda, Extension Agent, Turf. Email: kumeda@cals.arizona.edu; <http://turf.arizona.edu>

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<https://cals.arizona.edu/apmc/public-health-IPM.html#newsletter>

<https://cals.arizona.edu/apmc/westernschoolIPM.html#newsletter>

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