Oregon Insect Pest Alert

Red Imported Fire Ant

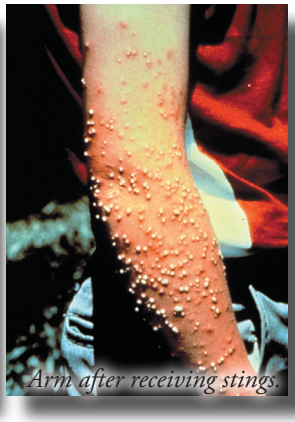
Imported fire ants (IFA) have been an agricultural and health problem in the US for at least 80 years. These ants have a potent venomous sting causing intense pain, characteristic white pustules, and rarely even shock or death. They also attack livestock, pets, and wildlife and displace native ants. They directly damage crops and trees, and their mounds interfere with or damage agricultural equipment. IFA frequently infest electrical equipment, causing short circuits, fires, and other damage. Establishment of fire ants in Oregon would cause major agricultural, ecological, economic, and health consequences. Formerly only infesting the southeastern states, IFA are established in southern California and New Mexico. The threat of an Oregon infestation is greater than ever before.

How Did IFA Reach the United States and Where Has IFA Spread?

IFA are native to South America. First hitchhiking to the U.S. on ships docked at Mobile, Alabama as early as 1918, the black imported fire ant, *Solenopsis richteri*, established in Alabama and has since spread to Mississippi and Tennessee. The red imported fire ant, *S. invicta*, was likely introduced around 1930 by ship in soil used as ballast or as dunnage. RIFA has since spread to all or parts of Alabama, Arkansas, California, Florida, Georgia, Louisiana, Missouri, Mississippi, New Mexico, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, and Virginia.

Red imported fire ants

Red imported fire ant mound



Arm after receiving stings.

How does IFA Spread within the United States?

RIFA colonies can migrate up to several hundred feet, requiring as little as a single queen and a few workers to start anew. During floods or heavy irrigation, IFA colonies form rafts of workers to protect the queen(s) and brood within and may establish a new infestation wherever they are deposited. Following mating flights, queens typically fly up to 1/2 mile from their original nest, although these flights can exceed 12 miles on occasion.

RIFA spreads most rapidly with the aid of commerce and travel. IFA colonies have been found within the walls, floors, and/or trunks of trucks, trains, cars, and recreation vehicles. IFA-infested cargo has included such items as soil, firewood, sod, building materials, cotton seed, nursery stock, roof tiles, paint, and honeybee hives. Mating flights from these transported colonies could occur from about May through September. Within hours these transported colonies can split or move from these sites to establish new infestations in new areas.

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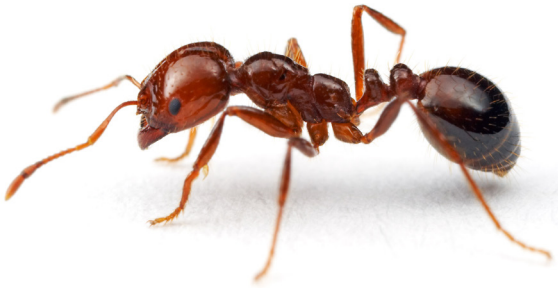
IFA Biology

Like other ants, IFA form colonies. Winged males and queens make mating flights following warm weather rains. A fertilized queen then sheds her wings and digs a chamber to begin a new colony. Colonies can form difficult to see mounds or mounds as high as 18 inches. Obscure colonies are often hidden under sidewalks, next to buildings or trees, or in mowed grass. Unlike many ants, the mounds generally lack visible openings, except when the winged individuals emerge to mate. In contrast to many ants, IFA do not extensively forage above ground. Most workers travel through a network of shallow, subterranean tunnels. Consequently, IFA may not be noticeable until they are numerous. A colony can be a single mound or, in some cases, hundreds of mounds extending over several acres and having thousands of queens. The average colony contains 100,000 - 500,000 workers. Colonies can begin producing new queens within six months of founding. IFA are omnivorous and eat a wide variety of plant and animal materials. They largely feed on insects and other invertebrates and oil-rich seeds and may eat agricultural crops and other plants.

Recognizing IFA

Both red and black IFA are small ants, mostly about 1/8-inch long. Males and queens are larger. Black IFA are all dark-brown to black, while red IFA have a reddish-brown forebody and dark-brown to black abdomen. Red IFA is the species most likely to be introduced to Oregon, since it has the largest distribution in the U.S. and is the species infesting California. Many ants in Oregon look similar to IFA. Microscopic examination by an entomologist is necessary to confirm the identity of suspected IFA.

Two other aggressive mound-building ants in Oregon are harvester ants and thatch ants. Harvester ants are found in eastern Oregon in areas that are too dry for IFA, which require sources of water. Thatch ants are found in western Oregon, but they are larger than IFA. Both ants have mounds with visible entrances. A common non-aggressive mound building ant in western Oregon is the mud ant, which makes somewhat columnar mounds in seasonally wet areas.



Red imported fire ant
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What Can You Do to Help?

- If traveling through or visiting an area known to have IFA, don't bring back any nursery stock, plants, sod, firewood, hay or straw, or other items in which IFA could hitchhike. Inspect all vehicles, including cars, RVs, and trucks (and containers), to ensure no IFA are inside.
- Observe federal quarantines (CFR Title 7, Section 301.81-1 through 301.10) and make sure that any trucks, trailers, machinery, equipment, supplies, products, or cargo are free of soil and ants BEFORE you return.
- Follow Oregon's firewood restrictions OAR 603-052-1080, it's the law.
- Report any suspected fire ant colonies or suspected fire ant stings to the Oregon Department of Agriculture and note the exact location where the ants were observed.

For further information please contact:

Oregon Department of Agriculture
Plant Division
635 Capitol St. NE
Salem, OR 97301-2532
503-986-4636 or 1-800-525-0137
www.oregon.gov/ODA/PLANT

Photos: Fire Ant, Fire Ants on Boot, Rafting RIFA, and Fire Ant Bites on Arm courtesy of Texas A&M University. All other photos courtesy of CDFA and USDA.

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