

Red Imported Fire Ant in North Carolina

Identification

Adult red imported fire ants are reddish to dark brown and occur in five forms: (1) minor workers, about $\frac{1}{8}$ inch long; (2) major workers, about $\frac{1}{4}$ inch long; (3) winged males and (4) males, each about $\frac{1}{3}$ inch long; and (5) queens, about $\frac{1}{3}$ inch long. Fire ant mounds vary in size but are usually in direct proportion to the size of the colony. If you break open an active fire ant mound, you typically find the "brood" - whitish rice grain-like larvae and pupae. These immature ants will eventually develop into workers or winged adults. Mounds are typically constructed in open sunny areas. Mounds constructed in clay soils are usually [symmetrical and dome-shaped](#) while mounds built in sandy soils are often irregularly shaped.



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Controlling Fire Ants

Controlling fire ants requires an Integrated Pest Management (IPM) approach. Fire ants prefer oily and greasy foods and other insects. You can reduce ant foraging around buildings by eliminating available food sources in these areas.

- Avoid leaving trash in outdoor trash cans overnight
- Keep shrubs pruned away from the building so that ants can't use them as a "bridge" to avoid treated areas.
- Inspect new landscape materials such as shrubs, sod and straw before purchase

Chemical Control

Insecticide can be applied to individual mounds or it can be broadcast over a wide area that is infested with fire ant colonies. Individual mound treatments are often more environmentally and ecologically acceptable because they use less insecticide and limit the amount of area treated. This approach also reduces the impact on non-target insects. The objective is to kill not only the workers but also the queen. Always follow the label directions when applying any fire ant insecticide.

Mound Treatments

Individual mounds may be treated with a liquid or dust insecticide formulation or with an insecticidal bait. To be effective, liquid drenches must penetrate throughout the mound.

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Best results are usually obtained in spring and fall when temperatures are between 70 and 85°F. In the summer, drenches are best done in the morning or evening.

Granular baits can be used to treat individual mounds. These baits are a mixture of an insecticide and a food that is attractive to fire ants. Worker ants carry particles of the bait back to the mound and feed them to the immature ants and the queen. It may take several weeks before the colony finally disappears. Baits are somewhat slow acting but easier to apply than mound drenches.

A "Two-Step Method" – can be used to place the bait out around a mound followed about 5-7 days later with a mound drench.

Products with spinosad (Come and Get It Fire Ant Bait by Fertilome, Entrust, Payback, Green Light Fire Ant Control with Conserve, Green Light Fire Ant Killer with Spinosad Mound Drench) are considered acceptable to organic growers. Follow label directions precisely. Repeat treatments usually required. Use fresh bait. May also be used around fruit and vegetable gardens.

Numerous products with **hydramethylnon*** e.g. Amdro Firestrike or other chemicals such as **acephate** (Orthene Fire Ant Killer), **carbaryl** (Sevin) and others are available at nurseries and big box stores. Always Follow label directions precisely.

Contact your county **Cooperative Extension** center or consult the **North Carolina Agricultural Chemicals Manual** for additional information on fire ant insecticides. **Always follow label directions.** Registered pesticide applicators should refer to the original article for chemical recommendations.

Hot Water and Mechanical Disruption

Hot water (near-boiling) and mechanical disruption have been used in many instances. Results of some preliminary evaluations at Texas A&M University have shown that these treatments will kill large numbers of ants; however, smaller satellite mounds formed by surviving ants frequently appear around the original mound. Thus, these methods can have a useful, but temporary impact on fire ant colonies in areas situations where pesticides of any type are considered unacceptable. Other non-chemical mechanical devices that disrupt colonies do not have scientifically-based test data to support their effectiveness. One potential downside to using hot water is that it can damage/kill vegetation in the general vicinity and can be hazardous to the person carrying hot/boiling water over uneven terrain.

Adapted from <https://content.ces.ncsu.edu/red-imported-fire-ant-in-north-carolina>

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