

Managing Fire Ants in Vegetable Gardens

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The red imported fire ant, *Solenopsis invicta* Buren (Hymenoptera: Formicidae), can be a serious problem for anyone planting and caring for a garden in infested parts of Texas and the South. Fire ants are attracted to the abundant moisture, rich organic soil, and the wide variety of foods available to them in gardens.

Fire ants are social insects. Their colonies are usually found outdoors, although some have been found in homes and in other structures. Outdoors, their mounds can be up to 18 inches tall and several feet in diameter. Each colony may contain one or more queen ants and more than 200,000 worker ants. Each queen ant lays as many as 800 eggs per day.

Worker ants forage for food and love to eat greasy or oily materials (see *Fire Ant Biology*). In gardens, this includes oil-containing seeds, seed pods, and insects (pests and beneficial insects).

Options for Controlling Fire Ants In Vegetable Gardens

Type/Active Ingredient	Trade Names	Comments
Bait products ¹ :		
hydramethylnon	Amdro Fire Ant Bait/Amdro Fire Strike/ Amdro Yard Treatment	Not approved for use in vegetable gardens, but can be applied around and outside the borders of the garden so the worker ants inside and outside of the garden can gather the bait and take it back to their colonies.
abamectin	Clinch/Ascend/Varsity Award II, Enforcer Fire Ant Bait	
fenoxycarb	Award	
pyriproxyfen	Distance/Esteem	
s-methoprene + hydromethlynon	Extinguish Plus/Amdro Fire Strike Fire Ant Bait for Yard Treatment	
indoxacarb	Spectracide Fire Ant Killer Plus Preventer Bait Once & Done	
metaflumazone	Siesta	
s-methoprene	Extinguish Professional Fire Ant Bait	Approved for cropland (including vegetable gardens). Requires 6 to 8 weeks for effects to begin.
pyriproxifen	Esteem Ant Bait	
spinosad	FertiLome Come and Get It	Approved for vegetable gardens. *OMRI certified, approved for organic vegetable gardens.



"Organic" methods ² :		
pyrethrins + diatomaceous earth	Organic Solutions Multipurpose Fire Ant Killer/Diatect Results Fire Ant Killer	Effective mound drench at 4 tablespoons per gallon of water. Provides quick kill with short-term residues.
diatomaceous earth (DE)	N/A	Horticultural-type DE applied to mounds as a dust or water suspension may move ant colonies, but probably not eliminate them.
D-limonene	Orange Avenger*	*OMRI certified (see http://www.omri.org/manufactur- ers/94301/orange-avenger-llc, approved for organic vegetable gardens.
spinosad	Greenlight Lawn and Garden Spray/ Fertilome products, Monterey Garden Insect Spray, several Bonide products	Approved for vegetable gardens.
Pyrethoid insecticides: bifenthrin	Ortho Bug B Gone Max/Ortho Max Lawn and Garden Insect Killer for Lawns/Over N Out/Bayer Lawn and Garden	Some of these products are approved against soil insects in the garden, including fire ants, and may suppress foraging by ants. Other products can be used only in the lawn or on label-listed vegetables. Check the label for approved uses.
β-cyfluthrin		
Carbamate insecticide: carbaryl	Sevin, various products	Read product label to determine if the product is approved for fire ants in the vegetable garden. Formulated as liquids, dusts, or granules.
Organophosphates: acephate	Various, EX: Ortho Orthene Fire Ant Killer/Surrender Fire Ant Killer	Formulated as liquids, dusts, or granules. Read the label carefully to determine if the product is labeled for application in a vegetable garden. If not, they can be applied directly to mounds outside the garden.
Non-Chemical Methods ³ :		
Very-hot-to-boiling water	N/A	1 to 2 gallons of very hot to boiling water will kill <i>fresh</i> fire ant colonies in mounds 60 percent of the time. Be careful not to cook the plants.

¹See Broadcast Baits for Fire Ant Control

They have been reported to feed on okra pods and tunnel into potato tubers, particularly during periods of dry weather (see *What do fire ants eat?*). The following chart outlines options and strategies available to combat fire ants in vegetable gardens.

ACKNOWLEDGMENTS

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REFERENCES

Fire Ant Biology

www.extension.org/pages/60963/fire-ant-biology

What do fire ants eat?

www.extension.org/pages/60922/what-do-fire-ants-eat

Broadcast Baits for Fire Ant Control www.agrilifebookstore.org/product-p/e-628.htm

Natural, Organic, and Alternative Methods for Imported Fire Ant Management u.tamu.edu/ento-009

²See Natural, Organic, and Alternative Methods for Imported Fire Ant Management

³See Are there any home remedies that will kill fire ants?

Are there any home remedies that will kill fire ants?

www.extension.org/pages/34814/are-there-any-home-remedies-that-will-kill-fire-ants

Managing Red Imported Fire Ants in Urban Areas

www. extension. org/pages/11004/managing-imported-fire-ants-in-urban-areas-printable-version

Fire Ant Control: The Two-Step Method and Other Approaches

www.agrilifebookstore.org/product-p/ento-034.

For more information regarding fire ant management, see Extension publications Managing Red Imported Fire Ants in Urban Areas, Broadcast Baits for Fire Ant Control, or Fire Ant Control: The Two-Step Method and Other Approaches posted on http://AgriLifeBookstore.org.

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