

EUROPEAN FIRE ANTS

What are European fire ants (EFA)?

European fire ants (*Myrmica rubra*), are small reddish brown ants. The workers are about a ½ cm long and queens are a little larger. These ants are only distantly related to the “true” fire ant species (red imported fire ant) found in the Southern U.S.A. and Latin America.

First recorded in British Columbia in 2010, European fire ants are found throughout Metro Vancouver, including Vancouver, District of North Vancouver, Burnaby, Coquitlam, Delta, Maple Ridge, Richmond and Surrey, as well as Chilliwack and Vancouver Island. Native to Europe and Asia, the species was first introduced to eastern North America in the 1900s.

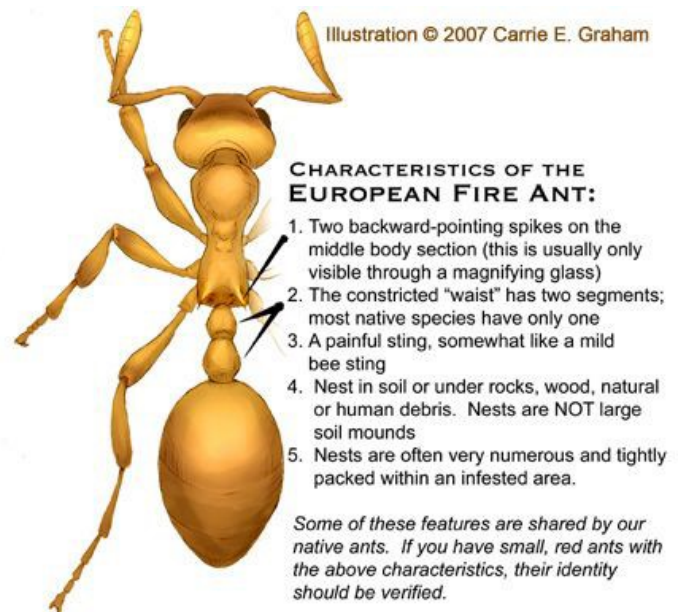
EFA's prefer moist environments, such as irrigated lawns and gardens on BC's West Coast. Unlike ants with obvious mounded nests, EFA nests can be difficult to spot. Nests vary from a few hundred to a few thousand workers, usually with multiple egg-laying queens (20 queens per nest on average). Each nest consists of a series of popcorn-sized chambers along a vertical shaft, barely 15 cm wide and no more than 20 cm below ground. They are found in soil or mulch, in lawns, in moss, along roots, in decaying wood, under rocks, wood or other debris.

Why are they a problem?

This aggressive, swarming ant can deliver a painful sting when disturbed, rarely leading to an allergic reaction requiring medical treatment. Colonies can reach densities of four nests per square metre, rendering gardens, lawns and parks unusable for normal activities because of repeated stings. European fire ants also displace native ants and may impact agricultural crops.

How do they spread?

The most likely way is through the movement of infested garden material such as soil, mulch and plants. Once established, colonies spread naturally through "colony budding," where one or more queens and a group of workers leave to establish a new colony, often less than a metre from the original.



What you should know

European fire ants aggressively defend their territory and sting humans and pets that move slowly or rest near a nest. When in an area where they are suspected, keep moving! Wear rubber boots with pants tucked in to deter ants from crawling up your legs. If you come in contact with ants, swipe them away and do not attempt to crush them. This will only provoke them to sting.

Reaction to a sting varies from one individual to another. The ant injects venom under the skin that initially burns (30 minutes to 2 hours) then itches for a few days to a week. Stings usually result in an inflamed red area from 1-4 inches in diameter, sometimes with a raised white area in the center.

If you are stung or uncover what appears to be an EFA colony, please notify the City of Vancouver IPM Coordinator at 604.257.8589. If possible, collect some ants in a sealed container. We will identify them and discuss the appropriate next actions. Please note there are many species of ants in our region, including red ones. Do not assume that any red ant you see is a European fire ant.



If you experience a stronger reaction than minor swelling, redness, discomfort or itching, call HealthLinkBC at 8-1-1 for symptom advice, open 24 hours-a-day. An extreme allergic (anaphylactic) reaction can be life-threatening and requires emergency care. To date, there have been no reported cases of anaphylaxis associated with European fire ant stings.

To prevent the spread of the EFA, avoid sharing soil, mulch or plants with others. Check newly purchased plants and soil before introducing them to your garden. Educate neighbours and friends.

What control options are available?

Discovered at VanDusen Botanical Garden in 2013, VanDusen staff have been working with the City of Vancouver, the Invasive Species Council of Metro Vancouver and Dr. Robert Higgins, Myrmecologist at Thompson Rivers University, to further our knowledge of this invasive ant species and explore control options.

While there are limited treatment options available for control of the European fire ant, particularly on a larger scale, successful control on a small scale may be achieved. Depending on local conditions and the nature of the infested site, control options may include burning or freezing infested soil, the use of traps and low-risk or no-risk insecticides.