

Do you have correct information on RIFA?

## What to do when stung by RIFA?

The reaction to the poison of fire ants and tropical fire ants greatly varies from person to person.

Even if you do not notice any change in your condition, make sure to cool the stung part of your body with a cool towel or a cooling agent and observe the body for 20 to 30 minutes. Keep someone nearby during that period.



### Common reactions in everyone

#### Scorching pain, itching, pus

The moment you get stung, you will feel a severe burning sensation. Then, a small reddish spot appears at the sting site. Next day, pus accumulates at the center of the spot. Some victims may feel slight itchiness. These skin conditions will gradually disappear.

### Reactions that may appear in people who are allergic to RIFA

#### Hives

Immediately after the sting, redness and swelling occur on and around the sting site with an itching sensation. In some cases, redness with itching sensation or welt (hives) of the whole body occurs. If hives or abnormal health conditions start to appear, seek treatment at a clinic or hospital immediately.

#### Difficulty breathing, low blood pressure, grogginess

Within 20 to 30 minutes after the sting, choking, hoarse voice, severe palpitations and dizziness, abdominal pain and other symptoms may occur. If these reactions develop, blood pressure may suddenly fall and the victim may lose consciousness. These conditions may be signs of anaphylactic shock due to strong allergic reaction, which can be fatal if not treated immediately. Call an ambulance if these reactions are observed.

Tell the medical crew about the ant sting and the possibility of anaphylactic shock to receive treatment immediately. Taking the dead ant that stung the victim may be helpful for diagnosis.

※Note: RIFA and some bees have the same substances in their poisons. People who are allergic to bee poison should be especially careful.

## If you think it's a Red Imported Fire Ant (RIFA) ...

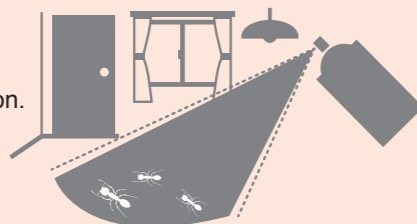
Website: "Basic information on RIFA"  
[https://www.env.go.jp/nature/intro/2outline/attention/02\\_general/index\\_en.html](https://www.env.go.jp/nature/intro/2outline/attention/02_general/index_en.html)



### If there are only a few ants:

**Kill them with spray insecticide**

- If you need to determine whether it's a RIFA, call your local government. Send a photo of the ants and follow the instructions (bring or mail the dead ant).
- Never touch the ant, even if it is dead.
- Wrap the dead ant in cotton for identification. Do not attach it to adhesive tape.



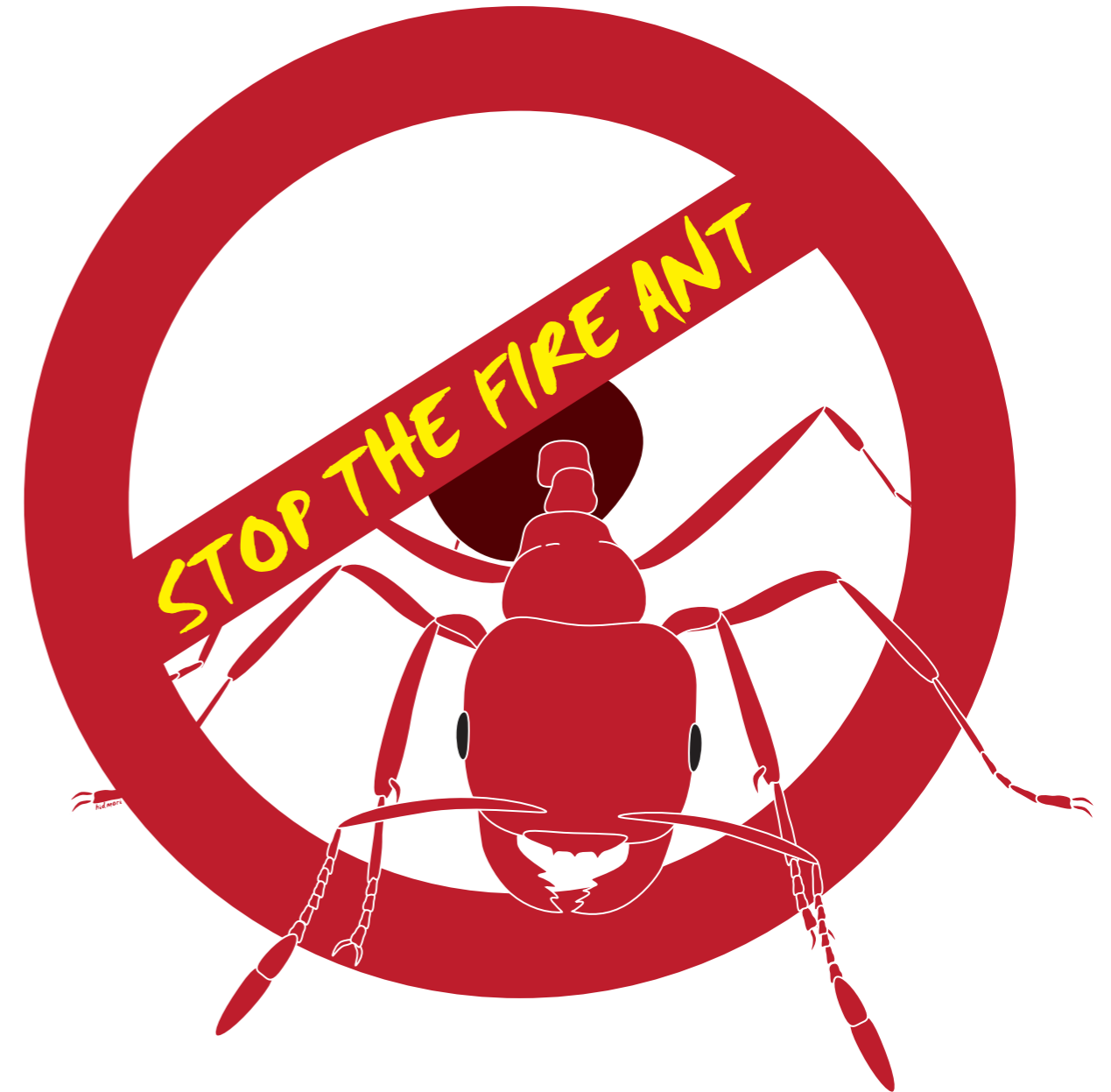
### If you find an ant colony or nest:

**Never disturb them. Contact local government immediately.**

- Do not poke or step on the ants or nest. Do not spray insecticide or pour hot water over them.
- Consult a specialist for proper extermination depending on the conditions.
- Do not use poison bait until the ant is identified as RIFA. The poison would kill native ants and other species, changing the environment and making it easier for RIFA to establish themselves.



# STOP the Fire Ant



## How did Red Imported Fire Ants get to Japan?

RIFA were first observed in June 2017. RIFA is an ant native to the central part of South America.

RIFA have invaded the United States and Caribbean islands as stowaways in containers and cargo carried by ships and planes since the 1940s, and by the 2000s had spread far from its origin to Australia, New Zealand, China and Taiwan. Similarly, the ant has invaded Japan from abroad.

RIFA have been found in the following places:



## Once they have bred and spread, RIFA are hard to eradicate!

In countries where RIFA have become established, huge amounts are spent on eradication. Nonetheless, no country has successfully eradicated the species except for New Zealand. The success of New Zealand is thanks to strict controls at the initial stage of RIFA settlement. Even after eradication, officials remain alert to stop RIFA re-entering.

In Japan, the national government, in cooperation with other organizations, regularly investigates the state of RIFA invasion at major ports and other sites. If an invasion is detected, emergency extermination and monitoring (continuous observation) are conducted. It is crucial to reduce the invasion and prevent the ants from becoming established.



## Areas where RIFA have established nests in other countries

RIFA's favorite areas for establishing nests

RIFA like sunny and open areas for their nesting. The following are examples of native origin and countries where RIFA are established.



RIFA build large mounds.

The mounds spread deep and wide underground with tunnels extending radially to a dozen meters away.

In a multitude of chambers spread out like a labyrinth, the queen ant and thousands to hundreds of thousands of workers live in groups.

**Up to 60 centimeters!**

**Caution!**

The mounds of RIFA are not easily visible in the first 2 to 3 years. While a mound is being established, RIFA greatly increase in number and range. Eradication becomes more difficult as time goes by. Thus, it is important to detect and eradicate RIFA before their mounds get large, instead of trying to find RIFA by looking for large mounds.

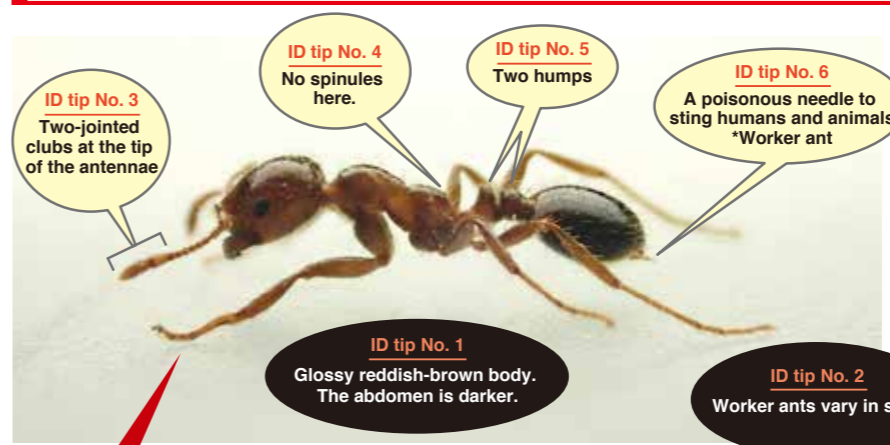
Once something inside a nest seems unusual, the queen escapes through tunnels and builds a new nest in another place.

Queens live for 6–7 years and can produce up to 250,000 eggs each year.

In a colony, many worker ants look after the eggs and larvae.

## What kind of ant is RIFA?

The Red Imported Fire Ant (RIFA) is designated as an Invasive Alien Species (IAS) based on the Invasive Alien Species Act.



Japanese common name: Hiari (Aka hiari)  
English common name: Red Imported Fire Ant  
Scientific name: *Solenopsis invicta*



Worker ants:	Queen:	Males:
Body length: approx. 2.5–6 mm.	Body length: approx. 2.5–6 mm.	Body length: approx. 5–6 mm.
Most numerous. Stinging ants.	Most numerous. Stinging ants.	Blackish body with wings. They leave their nest for nuptial flights and then die within a few days.

### Similar-looking species

Japanese common name: Akakami-ari English common name: Tropical Fire Ant  
Scientific name: *Solenopsis geminate* Tropical fire ants look similar to RIFA. Although they are not as poisonous as RIFA, tropical fire ants are also a designated Invasive Alien Species and must be closely monitored.



### What is a designated Invasive Alien Species?

alien species designated by Cabinet Order based on the Invasive Alien Species Act that will cause or is likely to cause adverse impacts on ecosystems, human life and body, and agriculture. Breeding and raising, planting, storing, and carrying of these species are regulated.

## Species easily mistaken for RIFA

### No.1 Queen of Kiroshiriage-ari (*Crematogaster osakensis*)



Around September, orange-colored queens leave their nests to establish new colonies. As they are noticeable, there are many inquiries as to whether they are RIFA.

### No.2 Ant-mimicking spiders



Arigumo (*Myrmarachne japonica*)

Small (5–7 mm in length) spiders

If you look closely, it has eight legs, and its antennae resemble its forefeet, so it is mistaken as a sort of unfamiliar ant.

Yagata-arigumo (*Myrmarachne elongate*)



## If RIFA become established in Japan, they will have various adverse effects

### Health damage to humans and pets

The sting causes a burning sensation and may cause a strong allergic reaction (anaphylactic shock) for some people. Dogs, cats and other pets may have similarly serious reactions when stung.



### Disruption to daily life

It may become impossible to safely enjoy leisure events in a park or at a riverbank, such as cherry-blossom viewing, picnics, BBQs and fireworks. It would become hard to grow flowers and vegetables in your garden.



### Damage to electric equipment and infrastructure

RIFA sometimes build nests inside electric equipment (inside a switchboard, transformer or machine) and disrupt traffic signals and landing lights at airports. They also chew through electric wires which may cause a power outage or a fire due to a short-circuit.



### Damage to agriculture and impact on industries

RIFA may eat agricultural products, reducing quality and yield, and will attack livestock. In some countries, farmers are increasingly abandoning their farms and agriculture after being stung by RIFA too often. If RIFA are found in imported products, logistic systems will face huge problems.



### Damage to ecosystems

RIFA can drive out ant species native to Japan or prey on small animals, decimating their populations and destroying the ecosystem balance. Overseas, some rare species have been affected.

