# Treatment Protocol for the Little Fire Ant

The little fire ant (*Wasmannia auropunctata*) appears on the IUCN (International Union for Conservation of Nature) list of the one hundred most problematic invasive species in the world. In Israel, the little fire ant was discovered in late 2005; it subsequently spread throughout the country. In contrast to local ant species, the sting of the little fire ant is very painful and may leave a welt.

The presence of the ant in the field prevents us from spending time in the yard, on the lawn or in the garden; the ant may also get into bedclothes, beds and cupboards, and it loves humidity, getting into toilets and showers and stinging swimmers in public swimming pools. In addition to bothering humans, the little fire ant has a great impact on ecosystems. For more details

The ant was discovered at Ramat Hanadiv in 2017 (mainly in the irrigated areas of the Memorial Gardens); localized treatment was performed using granular preparations. About a year later, extensive monitoring was conducted to determine the extent of infection in the Memorial Gardens and their surroundings; treatment was performed by a professional exterminator. Final report (in Hebrew)

## **Detection and routine monitoring:**

The ant can be detected easily by a visual test or by spreading peanut butter.

**Visual test** – it's easy to discern the ant procession, mainly where the wall meets the floor, and on dripper hoses, flowerbed edges and paths. The ant nests can be on the ground or on trees.

### What does the fire ant look like?

The ant is 1.5 mm in length, and uniformly orange-brown in colour; in other words, there is no difference in colour between the front and back parts of its body. The ants move relatively slowly. Sometimes it's possible to see the queen ant, which may reach up to 4 mm in size.

**Spreading peanut butter** – fire ants are attracted to the smell of peanut butter; a little bit of it can be spread in places where the ant may be present.

Marking tape can be stuck at the site of the peanut butter to make it easier to find where it was spread when returning to check for ants.

Other options include placing a colourful pop stick with peanut butter spread on it or piping a little peanut butter with a large syringe.

After applying the peanut butter in the field, return to check the extent of infection after 30-120 minutes. A pop stick completely covered by ants indicates severe infection that requires treatment by a professional exterminator.

#### **Treatment**

Regarding low-level infection of the house, granular or gel preparations, available in many shops, may be used. These preparations generally serve as bait which is designed to reach the queen ant. It is important to use a preparation compatible with the little fire ant.

The preparation should be distributed **according to the instructions on the label**; do not make any changes to the substance applied. Application of granular preparations will be done only in places that are **out of reach of children and/or animals**. Fish are particularly sensitive to these substances, thus any fish ponds in the yard should be covered.

To ensure effective treatment, granular preparations should be applied in dry weather conditions, i.e., two to three days after and before watering in a regularly watered garden.

The recommended application time is immediately after the appearance of the first ants, which begins in April. The most effective treatment and monitoring time is the late morning and afternoon.

The activity and presence of the ants usually diminishes as winter approaches.

In most cases, the ant cannot be eradicated completely; therefore, there may be a need to repeat the treatment several times during the season to keep the ant population at low numbers. Moreover, it's important to prevent the arrival of additional ants to the area (see below: prevention).

#### Prevention

Ants usually reach gardens via pot plants, potting mixture and ground cover; therefore, it's important to check with the nursery at the time of purchase whether treatment or prevention has been applied. It's also recommended to check the inside of the plant pot by removing the seedling and checking for the presence of ants (in any case, this is a good way to check the root system of the plant we are purchasing).

Potting mixture and ground cover can be checked by the peanut butter method, as described above.

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