

# Integrated pest management efforts to curb LINDEN APHID INFESTATIONS



Integrated pest management efforts to curb linden aphid infestations are ongoing, even though the pilot project put forward in 2016 by the public works department (roads and parks division) has ended.

A number of lindens have been infested with aphids. We suggest a simple and effective approach that uses natural means to practice short-, mediumand long-term control of this insect.



## How to identify

#### **AN INFESTED TREE**

When a linden tree "runs" during the months of June, July, August and September, chances are it can be attributed to the presence of aphids.

Aphids secrete sap from the leaves and stalks of a plant. Once the sap is digested, the aphids excrete a sticky substance rich in sugar and amino acids called honeydew.

In addition to attracting insects such as ants, honeydew promotes the development of a fungus called sooty mould (Fumago salicina), which forms a grey-black coating. This fungus does not endanger the plant, but it can delay its development and weaken the plant by reducing photosynthesis if the sooty mould covers large surfaces.

Although they don't cause any real harm to the trees they infest, the aphids are an inconvenience to residents once summer arrives because they secrete honeydew, a sugary liquid that makes everything it covers sticky: cars, tiles, patios, stairs, flower beds, and so forth.



#### **Simple GESTURES**

Citizens can carry out simple actions to reduce aphid populations in trees and thus help mitigate the problems posed by honeydew.



#### ANTS, THE APHID'S ALLIES

Common ants tend to protect and promote the development of aphid populations, since they benefit from the sap aphids secrete for nourishment. Keeping ants away from the aphids is an indirect but effective method of ecological pest control.

All year round, spread some spent coffee (filtered coffee residue) at the base of the tree. Ants are deterred by the smell of coffee and will tend to pull away.

The presence of natural predators (beetles, lacewings, flower flies, etc.) that feed on aphids can be promoted by diversifying the habitats and increasing the likelihood of caches during winter. The presence of these predators is essential to keeping aphid populations down so they don't pose an inconvenience to citizens. In order to achieve this, you can:

- Diversify your perennial plants, as they attract beneficial insects and are perfectly adapted to growing here.
- Use vegetation on your property with the objective of diversifying the plant strata present and therefore creating microhabitats for these insects in their different stages of development (egg, larva and adult). In order to do so, make sure you select plants that are adapted to the conditions beneath the tree (e.g., sunshine, soil type, etc.).
- If possible, keep dead leaves on the ground when winter sets in; this will give these natural predators temporary shelter, thus inciting them to stay.

### Les actions DE NOS ÉQUIPES

As soon as the leaves appear, our arboriculturists will take the following actions:

- Spray the leaves in selected areas using a powerful water jet in order to dislodge the aphids from the leaves. This imitates the action of strong summer rains, which also remove aphids from leaves. This action will effectively reduce the amount of honeydew falling on infrastructures (stairs, balconies, etc.) or cars.
- A subsequent treatment will be scheduled in the middle of summer, between mid-July and mid-August, during which the crowns of the same trees identified will be sprayed a second time.



