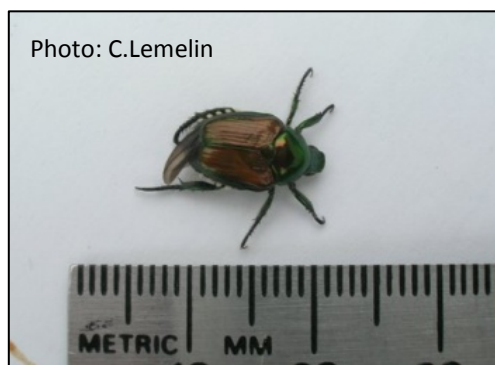


### **Japanese Beetle (*Popillia japonica*)**

The Japanese beetle is no stranger to our gardens in Rosemère. The over 300 species of perennials, annuals, trees and shrubs that can be found here are a veritable buffet for this ravenous pest. Among the beetle's favourite victims are vines, viburnum, hibiscus, dahlia and linden trees, to name a few.

The Japanese beetle is a species of scarab beetle that was introduced to eastern North America from Asia. Its life cycle is similar to that of a European chafer. The larvae of the Japanese beetle are also white grubs and can damage the roots of grass and other vegetation. The difference is that the adult beetle is particularly voracious, eating anything and everything in its path. Populations are still relatively limited in Quebec, but they have been growing steadily in recent years, which means they may eventually find their way into your yard.

There are many ways you can stave off a Japanese beetle infestation and help stop it from spreading. Since there is no one catch-all solution, and knowing that the beetle's presence in our town has been confirmed, we recommend that you use a combination of prevention and control methods.



First off, it is important to point out that the adult Japanese beetle (pictured above) emerges from the soil in early summer, around the beginning of July. You should therefore consider installing a trap that contains pheromones and a floral scent in late June. Make sure the trap is not near any of the beetle's favourite plants (to avoid having the opposite effect and attracting even greater numbers). For best results, remember to empty your traps weekly, all the way through until early September. Note that the traps can be reused from one year to the next. Simply add more pheromones at the beginning of the season.



Another way to prevent beetles from laying eggs in your lawn is to cut your grass longer, about 8 centimetres high, so it stays cooler and moister, making it less attractive for female beetles who tend to seek out areas with shorter, sparser patches of grass. Only water your lawn when you have to. The beetle larvae need water to grow. A dryer environment will therefore be less attractive to them.

You may also want to include clover in your grass seed mix. Larvae tend not to develop as well when they are contact with this plant. The added bonus is that your lawn will be more biodiverse and help pollinators do their job. What's more, clover does not turn yellow during a dry spell, unlike traditional grass.

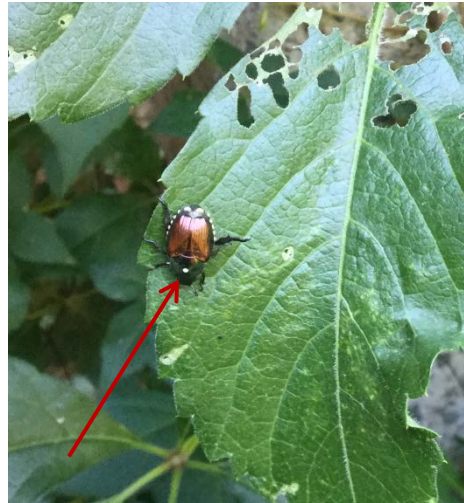
Nematode treatments may also be worth looking into. Note, however, that application can be tricky and must be done under the right conditions in order to be successful, for example between mid-August and mid-September when the weather is cooler. Frequent watering is also a must with nematodes. If you do decide to go this route, you will need to apply for a temporary watering permit from Public Works (valid for 14 days, requires proof of purchase of treatment). For more information on how nematodes work, be sure to visit the Space for Life website:

<http://m.espacepurlavie.ca/en/entomopathogenic-nematodes>

If Japanese beetles attack a young tree, the tree may still live on, with only a minimum of damage, especially if it has enough time and energy to grow new leaves. However, if the attack is particularly severe, i.e., if a tree loses almost all its leaves several years in a row, its growth will likely be stunted as a result. If you observe this situation, you may want to put up insect netting around the tree (around the entire crown) during peak beetle season (early July to mid-August).

This may be a particularly beneficial approach for the first few years after you plant your tree. But don't forget to remove the netting once the peak season is over.

Don't lose hope! In 2018, as this picture shows, we found Japanese beetles with small white spots on their thorax. These are the eggs of a small parasitic fly known as the winsome fly (*Istocheta aldrichi*). When the eggs hatch, the fly larvae penetrate the body of the beetle and consume it. The winsome fly is a natural predator of the Japanese beetle. If you spot any of these beetles in your home, and they happen to have the telltale signs of this parasitic infestation, it may be worthwhile to leave them on several plants to help the winsome fly population take hold and do their job. This will not wipe out the beetles altogether, but it will likely stay their growth. You can also plant several types of flowers to attract the fly, including umbelliferous plants (coriander, dill, parsley), crucifers (mustard) and asters (daisies, camomile).



If you have any other questions about pests and how to control them, don't hesitate to reach out to the Town of Rosemère's Public Works Department.

Further reading:

Lévesque, M. *Le Guide complet des pesticides à faible impact et autres solutions naturelles*. LaSalle: Isabelle Quentin Éditeur, 2005.\*

Renaud, V. *Parasites : les traitements bio*. Paris: Éditions Rustica/FLER, 2004.\*

Montréal Insectarium website:

<http://espacepourlavie.ca/en/insects-and-other-arthropods>

<http://www.inspection.gc.ca/plants/plant-pests-invasive-species/insects/japanese-beetle/jb-vancouver/fact-sheet/eng/1525800616809/1525800617075>

<http://www.inspection.gc.ca/plants/plant-pests-invasive-species/insects/japanese-beetle/fact-sheet/eng/1328165101975/1328165185309>