

Perennial pests

Have some of your perennials been ravaged by insects or disease? Before deciding on a treatment, you must first identify the source of the problem (What insect? What disease?) In many cases, you can reduce the presence of the destructive species without resorting to a low-impact pesticide. This will allow you to spare a large number of other insects, which are beneficial to your garden, including some natural predators. If a treatment is necessary, before heading to the store, you should first check the Botanical Garden's homemade formulas. The following sources provide very helpful ideas:

Montréal Insectarium insect information sheets:

www2.ville.montreal.qc.ca/insectarium/toile/nouveau/menu.php?s=info&p=fich

Montréal Botanical Garden's homemade alternatives to pesticides:

www2.ville.montreal.qc.ca/jardin/info_verte/fiches/pesticides_nat.htm

Here are a few tips for identifying the most common diseases or insects:

The lily leaf beetle

The lily leaf beetle is an insect that attacks mainly Asian lilies and varieties of European lilies. Introduced in North America in the 1940s in Montreal, it is easily recognized by its bright red colour and the many holes it leaves in your lilies.



You should keep a close eye on your lilies in early spring (early May) to eliminate adults that will lay eggs on your plants. The most effective and environmentally sound method is to remove the adults by hand before they can lay eggs and to either crush them or throw them in soapy water. Larvae then develop from May to early July, a critical period during which your lilies can be almost entirely devoured. As a last resort, if there are just too many beetles, you can sprinkle a rotenone-based powder on the lilies and their base in mid-May

Black spots on rose bushes

Black spots on rose bushes indicate a fungal disease (*diplocarpon rosea*) whose scope can vary from season to season, depending on the temperature and more importantly, the humidity. Some rose bushes are much more sensitive than others. Before buying, get information on the rose bush you are considering.

Rose bushes planted in a dry location with abundant sunlight will be less vulnerable than those in the shade with wet bases. Watering also has a considerable impact: avoid watering the foliage of your rose bushes, particularly in the sun.

Some low-impact fungicides can be used, but they must be applied as a preventive measure, i.e., shortly before the spots usually appear.



One formula calls for mixing horticultural dormant oil and liquid lime sulphur (both from the Terre Verte company), according to manufacturer's instructions and applying the mixture before buds emerge in the spring, when it is not raining and there is no risk of frost in the following hours.

N.B.: *Mixing these products together is sometimes inadvisable, depending on their intended use. Follow the instructions carefully when using dormant oil, since this product can be toxic to plants if not properly used.*

The rose chafer

The rose chafer belongs to the beetle family, like the ladybug and the chafer. The damage it causes is visible as of June, when adults start to feed on the leaves, buds and roses.

The rose chafer is more likely to be present where the soil is rather sandy, although it can be found elsewhere. Check your rose bushes as of mid-June and knock the little pests off into a bucket of soapy water.



Contact the Town of Rosemère's eco-consultant if you encounter a problem with rose chafers.

Powdery mildew



Powdery mildew or oidium is also a fungal disease. It is visible on the surface of the leaves of various plants, which take on a powdery white look, hence the name. This disease primarily affects the aesthetics of the plant and no treatment is necessary. Sometimes, the problem arises because the plant is simply not in the right location, making it more sensitive. For example, a lilac bush that is not in the sun will certainly develop this problem. First, ensure that your plant is in the right location or choose species that are not sensitive to this fungus. If your soil is moist and shaded, avoid planting lilacs, Oswego tea, peonies and phlox.

Possible treatment: to keep powdery mildew on your plants to an acceptable level, take **preventive** measures before symptoms appear. These treatments should be applied in the spring, at two-week intervals. Try the Botanical Garden's sodium acid carbonate, milk or horsetail infusion formulas.

Aphids

Aphids attack several types of plants, like the rose bushes, linden, and lupine, to name but a few. They can be of different colours: black, green, or red.

You can detect an infestation of aphids by an increase in ant activity near the plant or, in the case of a severe infestation, by the presence of ladybug larvae.

Aphids have no shell, which can make them easier to control. On the other hand, they reproduce very quickly, which means that you have to act immediately. Nurseries carry a number of low-impact products for this purpose, but several homemade formulas can also reduce their population. Check out the Botanical Garden's homemade formulas or purchase an insecticidal soap. Regardless of the treatment you choose, it should be repeated often at the beginning, in order to destroy the largest number of pests. If you have opted for an insecticidal soap containing pyrethrine, avoid using it in the sun.



Slugs (and snails)

Slugs hide during the day and are active at night. They favour moist areas with vegetation debris under which they can hide. The damage they do (like holes in hosta leaves) is more apparent than they are.



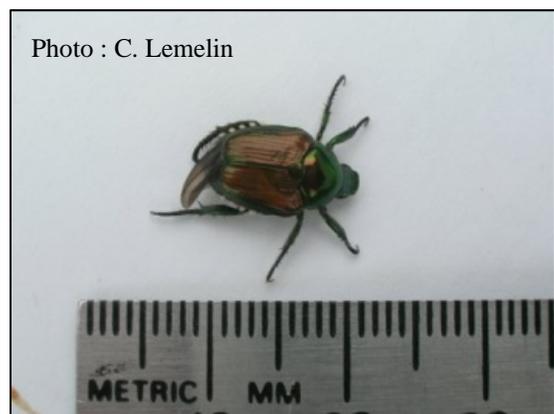
Ideally, you have to maintain an environment that is not conducive to slugs. Therefore, you should avoid watering close to flowerbeds at night and not leave too much vegetation debris under the plants. You can also raise the flowerbed to improve drainage, especially if the soil is heavy. To keep slugs at bay, you can **regularly** place pieces of eggshell or ash at the base of the plants. Different types of slug traps are available, but if you are squeamish about handling the slugs, you won't like emptying the traps!

As a last resort only, you can use a low-impact iron phosphate-based pesticide. Should you have other questions about pests and diseases that could ravage your garden or on the products to use, do not hesitate to contact the Town of Rosemère's Public Works Department.

The Japanese Beetle

The Japanese beetle (*Popillia japonica*) attacks a large number of plant species (approx. 300!), from perennials and annuals to shrubs and trees. It attacks vines, *hibiscuses*, *malvas*, viburnums, *dahlias*, and polygonums, to name but a few.

This insect is a beetle, which originated in Asia and is quite similar to the European chafer. Its larvae, which are also white worms, can damage grass roots and



other vegetation, but the key difference with the chafer lies is the fact that the adult beetle is quite voracious, devouring plants in its path. While this beetle has not been observed as much here as it has in other parts of Québec, you could well encounter it in your yard at some point, since its proliferation has been constant in recent years.

To limit the damage it could potentially cause in our area, you should be aware that the adult (see photo) emerges from the soil at the start of summer, around early July. This is the best time to install a trap containing pheromones as well as a floral fragrance, which can be purchased from most good nurseries. This trap must be installed far from vegetation favoured by the Japanese beetle (to avoid attracting more beetles to these plants), as of the end of June.

To better control this insect, remember to empty your traps weekly until early September.

Should you have other questions about pests and diseases that could ravage your garden or on the products to use, do not hesitate to contact the Town's eco-consultant, at 450 621-3500, ext. 3305.

Info:

Lévesque, M. 2005. *Le Guide complet des pesticides à faible impact et autres solutions naturelles*. Isabelle Quentin Éditeur, Ville Lasalle, Qc. 214 pages.

Renaud, V. 2004. *Parasites : les traitements bio*. Éditions Rustica\ FLER, Paris, France. 80 pages.

www2.ville.montreal.qc.ca/insectarium/toile/nouveau/menu.php?s=info&p=fich

www2.ville.montreal.qc.ca/jardin/info_verte/fiches/pesticides_nat.htm