

Chinch bugs

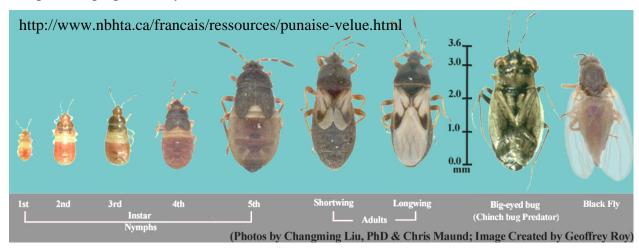


Also known as the hairy chinch bug, this tiny insect attacks your lawn, piercing every blade of grass to suck its sap, which then kills it. When there are many of these insects in your lawn, irregular yellow patches of varying sizes will appear.

Generally speaking, damage becomes visible by late June though the time it first appears can vary depending on the weather, and if the season has been wet or dry. Unfortunately, by the time visible damage is significant (late July or early August), it is often too late to act because, by then, the chinch bugs have already reached the adult stage.

In fact, to keep the problem from intensifying, it is important to act at the larval stage, which is when these pests do the greatest damage. Although the larvae are quite small (no larger than aphids), they are visible to the naked eye if you look closely. The reddish colour of the young larvae helps you identify them in the lawn.

The following photograph, taken from the website of the New Brunswick Horticultural Trades Association, shows the five different larval stages, from the evolution of colours to the appearance of white wings in adults. Note that the two insects at the far right are shown for comparative purposes only, and are not harmful.



When the presence of the insect is identified early in the season, it is possible to effectively reduce its population. In fact, if you treat the chinch bugs at the larval stage, they will not have time to grow into adults and lay eggs. Furthermore, at this stage, they are much more sensitive to the effects of the detergent than adults, which have a thin shell. If your property has been infested in the past, it is important to detect the presence of these insects early in the season (between late-May and mid-June) and, if needed, to apply a low impact control product.

You will find below the different products that can be used between early June and late July to fight cinch bugs. Regardless of the treatment selected, it must be repeated at least 3 times at 5 to 7-day intervals. Furthermore, if it rains within hours after the treatment has been applied, it will have to be repeated.



Remember that as the season progresses and the yellow patches grow, the effectiveness of the various treatments diminishes. At the adult stage (end of July, August), when the cinch bugs climb up foundation walls or the sides of the pool in quest of heat, a "Shop-Vac" type of vacuum cleaner can be used to eliminate as many of these pests as possible.

Various treatment options and their respective instructions:

Use the unit that connects to your watering hose and set the concentration level according to the product's instructions. Do not hesitate to ask your nurseryman for advice, as needed. Note that, for optimal results, depending on the thickness of the stubble, dethatching may be necessary before applying the treatment.

1- Lemon Sunlight liquid dishwashing detergent, in a 5% to 10% concentration (i.e. 50 to 100 ml per litre of water): apply abundantly in late afternoon, on a warm, sunny day, to effectively reach all insects.

OR

2- End-All or Trounce (pyrethrine) by Safer's: apply **very early** in the morning or at the end of the day, after 6 p.m., or on a cloudy day. **With End-All**: water the lawn a few hours before using a formula that contains vegetable oil.

OR

3- Neem: Use 8 ml of the product plus 2 tablespoons of dishwashing detergent per litre of water: water the lawn a few hours before applying the mix. Apply abundantly in late afternoon, on a warm, sunny day, to effectively reach all insects.

Regardless of the treatment you use, since dead grass will not grow again, you would do well to thicken your lawn at the end of the summer by spreading seeds containing *endophytes* (ex.: Herbionik or Vert Éternel).

The best solution to these problems remains prevention, through the adoption of good gardening methods, since chinch bugs are particularly fond of short, overly fertilized lawns. If you have problems identifying the chinch bugs or don't know what is causing the patches of dead grass on your lawn, contact the Town's eco-consultant, at 450 621-4640, ext. 3305.

For additional information:

- -Lévesque Micheline, 2008. *L'écopelouse Pour une pelouse vraiment écologique*. Bertrand Dumont Éditeur Inc. 192 pages.
- -Lévesque Micheline, 2005. Le guide complet des pesticides à faible impact et autres solutions naturelles. Isabelle Quentin Éditeur, Ville Lasalle, Qc. 214 pages.
- -Website of the Canadian Pest Management Regulatory Agency: www.pmra-arla.gc.ca/english/pdf/pnotes/chinch-e.pdf
- -Website of the ministère du Développement durable, de l'Environnement et des Parcs du Québec , document sur la toxicité des produits (document regarding the toxicity of products (in French): www.mddep.gouv.qc.ca/pesticides/commercial.pdf