

Insects in Your Stored Canola?

Insects in stored canola will not feed on sound, healthy seed but moisture-loving fungus feeders such as foreign grain beetles, psocids and mites, may be found in canola if it is in poor condition. Primary stored product insects such as rusty grain beetle, red flour beetle and saw-toothed grain beetle, can occasionally be found cereal grain or weed seeds are mixed in with stored canola.

Prevent insect infestations

Taking the correct steps to prevent insects from getting into your canola is important.

- Growers should make sure the bin is free of chaff, seeds, and foreign material.
- Combine settings should be set to harvest sound seed and minimize chaff and weed seeds.
- Bins must be well sealed to prevent moisture infiltration and totally insecticide-free.
- It is important to keep canola cool and dry in the bin. For long-term storage, temperatures should be kept at less than 15 °C and grain moisture levels below 8%.

A registered diatomaceous earth product can be used to treat empty bins prior to storing canola, but should not be used directly on canola as the product will not be effective.

Never use malathion on bins that will be used to store canola. Bins that have been treated with malathion should not be used to store canola for at least 6 months.

Or control them later!

If you do find insects in your stored canola, take appropriate measures to control the infestation as soon as possible. The presence of secondary insects such as fungus feeders may be an indication that your canola is not being stored properly and steps to condition your canola such as drying or aeration may also be necessary. You have three main options for controlling insects in your stored canola:

Heat

- Exposure to a grain temperature of 50°C to 55°C for about 15 minutes will kill insects. If your grain requires drying, this may be an effective option.

Cold

- Prolonged exposure to cold temperatures will kill most insects. Grain bins over 6 metres (20 feet) in diameter will not cool sufficiently on their own to control some insects. Aerate or turn the grain while the temperature is low to ensure the entire volume gets cooled.
- The time required to kill insects depends on the grain temperature. For example, at a grain temperature of -5°C it takes about 12 weeks to kill most insects, at -10°C it takes about 8 weeks, at -15°C about 4 weeks are required and at -20°C about 1 week is required.

Impact

- Physical impact from traveling through a pneumatic conveyor will control most mites and insects in your canola.

Never use malathion to control insects in your canola seed.



For more contact information

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Or look up:

Pre-Harvest Bin Preparation References

- Winnipeg Cereal Research Centre:
http://res2.agr.ca/winnipeg/storage/pages/princ_e.htm
- Stored Food and Grain, Department of Entomology, Purdue University, USA:
<http://www.entm.purdue.edu/Entomology/ext/targets/e-series/EseriesPDF/E-66.htm>
- Saskatchewan Agriculture and Food:
http://www.agr.gov.sk.ca/docs/programs_services/SAFFAQs.asp
where you can find FAQ – Grain Storage Considerations and FAQ – Grain Drying

Grain Drying Resources

- [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/cer1204](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/cer1204)
- [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex4509?opendocument](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex4509?opendocument)
- <http://www.ext.nodak.edu/extpubs/plantsci/smgrains/ae701-1.htm>
- <http://www.gov.mb.ca/agriculture/crops/cropproduction/faa05s00.html>
- <http://www.saskenergy.com/business/graindrying.asp>
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- http://grainscanada.gc.ca/Entomology/insect_infestations-e.htm
- http://www.canola-council.org/pub_manual.html

