Growers warned to scout canola for flea beetles
Treatments depend on which species are found

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Flea beetles are feeding on canola crops in some regions of the Prairies this spring, and growers are being advised to scout for the pests.

Whether they take action will depend on number, level of damage and crop stage, but the type of flea beetle involved is also important.

Crucifer flea beetles, which are solid black in colour, are the most common and can be managed with neonicotinoids.

However, if the striped flea beetle is the culprit, neonics are not as effective, said Agriculture Canada researcher and entomologist Hector Carcamo.

He told those at a Farming Smarter field event June 9 that he’d had recent reports of major canola damage in the Edmonton area from striped flea beetles.

That type of flea beetle seems to be increasing its range, said Carcamo.

“This is kind of important for a couple of reasons. From a biological point of view, the striped flea beetle is an earlier species in terms of when it comes out of overwintering. It will wake up early and it will be hungry and start feeding right away.”

The crucifer type is more common in southern Alberta and other drier regions, while striped is generally more of a problem in humid, wetter areas.

However, recent counts show more striped flea beetles are being found in the south as well.

In-crop insecticide is the main solution in the absence of effective seed treatments for striped flea beetles.
Threshold for spraying is generally considered to be the point where 25 percent of leaf area is damaged.

“For now, people are having to spray a lot of insecticide and it’s a bit unfortunate because (flea beetles) are going to potentially develop resistance to foliar insecticides and (farmers are) also going to be getting into this vicious treadmill of killing the natural enemies and having to rely on insecticides,” Carcamo said.

He said research into gene silencing technology and development of hairy canola to deter beetles is underway.

Until those solutions are proven and become readily available, “the answer is to continue doing more integrated pest management,” said Carcamo.

“I think in the long term we should try to rely less on insecticides in the future and make an attempt to incorporate as many of the tools that we can find to manage insect pests. Things like crop rotations, diversifying our cropping system so we do something that in the long term will reduce populations of this insect pest.”

Biological controls for flea beetles provide incremental protection. Carabid beetles and daddy long legs are two examples.

“Unfortunately, some insects like flea beetles, they have the tendency to explode in numbers in some years and these natural enemies that are in the field are not able to keep them below those pest levels,” said Carcamo.

Nor have researchers been able to find a key natural enemy for flea beetles in Europe, where they originated.