Seed treatments more effective at pea leaf weevil control

Agriculture Canada researcher says spraying may not keep future generations of the pest at bay

Treating seed appears to be the best management practice to combat pea leaf weevil, according to researchers.

Hector Carcamo of Agriculture Canada told those at a June 12 crop walk organized by Farming Smarter that spraying isn’t likely to increase yields, even if pea leaf weevil infestations reach the economic threshold.

The threshold is generally considered to be the point where more than three in 10 pea seedlings show damage at the clam leaf, said Carcamo.

Spraying will kill the weevils, but they likely have already laid eggs by the time the threshold is reached, and more may be entering the field because the insect has more than one migration per season.

Foliar pesticide spraying is “a bit of a tricky gamble,” said Carcamo.

Producers who anticipate pea leaf weevil problems are better off using treated seed, he added

Older peas are less vulnerable, and damage concerns disappear altogether once the crop is past the fifth or sixth node.

The weevil nibbles leaf edges but does not kill plants. However, it impedes peas’ nitrogen fixation capability, which limits a key advantage of the pulse crop.

Carcamo is working with University of Alberta graduate student Amanda St. Onge to set pheromone traps for pea leaf weevils so that they can study them and attempt to devise predictive models for spring infestation.

St. Onge said pea leaf weevils were first found in southern Alberta in 1997. Adults feed on plants in the spring and females can lay up to 3,000 eggs, although a much smaller number actually become larvae. The larvae feed underground, destroying the rhizobium that fixes soil nitrogen.

St. Onge said the insect is expanding its range and is also a pest in fababeans.