Isolating genetically modified crops

After a recent setback to the export of Canadian flax, researchers within AFNS are perfecting an organic method of keeping genetically modified seeds within their intended borders.

Since the 2009 ruling by the European Union to suspend import of Canadian flax seed after traces of Triffid, a modified strain of the seed, were discovered in German cereal and bakery products, Canadian farmers have seen demand and prices for the commodity suffer to the tune of $320 million.

Although the market for flax is predicted to bounce back once the embargo is lifted, the current challenge lies in preventing similar incidents from taking place in the future. Dr. Linda Hall, with the Department of AFNS, has taken on the challenge of keeping genetically modified pollen and seeds from spreading to areas planted with their organic counterparts.

"We're working with researchers here to develop modified flax that has enhanced Omega-3 fatty acids," said Hall, "but prior to doing that work, we need to establish how we're going to confine it."

Hall's solution involves a simple strip of the plant, known as a "trap crop", planted on the borders of the field to attract pollen that would otherwise drift into adjacent areas.

"Basically you're putting up a bunch of biological sticky pads that catch the pollen as it moves past," said Hall. "Then the crop in the trap row is destroyed prior to the seed forming, which stops pollen moving in both directions."

The low cost, ease of implementation and effectiveness of this method means good news for farmers on both sides of the debate over genetically modified seeds.

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