

Canada seeks to breed a better honey bee

June 29 2011



A Palestinian farmer checks a honey bee comb in a farm in the West Bank village of Yabab on June 6. Following a massive bee die-off in parts of the world, two Canadian universities on Wednesday launched an effort to breed honey bees resistant to pests and diseases.

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Led by the universities of Guelph and Manitoba, the program will try to breed a better bee through [genetic selection](#).

It will also screen new products for pest and disease control, and try to come up with new ways of managing pollination colonies that face risks that include parasites, bacterial infections and pesticides resulting from the impact of human activities on the environment.

Ottawa is providing \$244,000 to the Ontario Beekeepers' Association to participate in the project.

The goal is to "help beekeepers secure sustainable honey [harvests](#) and provide essential pollination services to the fruit and vegetable industry," the government said in a statement.

[Honey bee colony](#) declines in recent years have reached 10 to 30 percent in Europe, 30 percent in the United States, and up to 85 percent in Middle East, according to a United Nations report on the issue released earlier this year.

Honey [bees](#) are critical to [global agriculture](#). They pollinate more than 100 different crops, representing up to \$83 billion in crop value world wide each year and roughly one-third of the human diet.

"We're looking for bees (for the breeding program) that are resistant to mites and with a greater tolerance to viruses because these appear to be the two main factors behind colony loss," Rob Currie, entomology professor at the University of Manitoba in Winnipeg, told AFP.

"Hopefully we can keep our bees going by making them stronger."

Currie said the university has had success so far in keeping bee losses down to 40 percent in tests exposing them to diseases, down from 75 percent.

"It's not a total success, but it's a significant improvement and that makes quite a lot of economic difference," he added.

In Ontario, beekeepers' association spokesman Les Eccles said that as part of the research his group would vary the kinds and amounts of food given to bees, as well as the way bees are transported to farms across

Canada for pollination, to study how best to care for them.

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Citation: Canada seeks to breed a better honey bee (2011, June 29) retrieved 22 May 2024 from <https://phys.org/news/2011-06-canada-honey-bee.html>

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