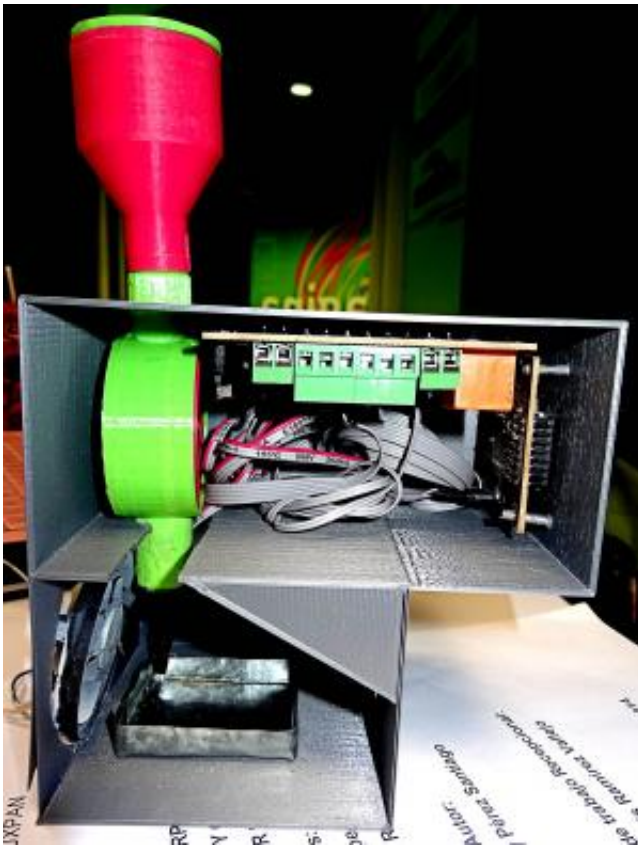


Entrepreneurs create effective method against bee harming pest

November 18 2014



A group of entrepreneurs in Veracruz have designed a "smart" system to contain larvae growth of the mite Varroa destructor among the bee population, which reduces the production of honey by as much as 50 percent when it invades the hives.

The technology involves the application of a formula based on thymol and other substances through an automated steam spray device that removes Varroa destructor larvae from the hives. This offers an integral solution to beekeepers, and thus to the entire food chain, since more than half of current agricultural products depend on pollination by bees.

According to the biologist Erik Leon Guevara, who has led this project for several years, the Varroa destructor pest severely affects the population of bees worldwide causing various types of diseases among insects. This led him to formulate a product to control the pest.

"The first thing we did was to develop a product based on thymol, a substance contained in natural products such as thyme, which has proved efficient in controlling the mite (Varroa)," says Leon Guevara.

He explained that the thymol pill was developed during his professional studies at the Universidad Veracruzana (UV), and now the formula is in the process of being patented.

However, one of the problems presented by beekeepers who used thymol is that inadequate dosing produced negative effects on bees, so the team of entrepreneurs developed an automated sprinkler steam system.



The system is a kind of container. At the top is a funnel where the thymol tablet is placed by the beekeeper; in its interior is a heating plate automatically controlled by a temperature sensor that evaporates the tablet. Finally, by means of a fan, the formula is dispersed into the hive.

The Mexican [entrepreneur](#) is currently working on product improvement, designing image-based software that automatically detects the presence of Varroa larvae inside the hive, which aims to fully automate the process of detecting and eliminating the pathogen.

Provided by Investigación y Desarrollo

Citation: Entrepreneurs create effective method against bee harming pest (2014, November 18)

retrieved 6 May 2024 from

<https://phys.org/news/2014-11-entrepreneurs-effective-method-bee-pest.html>

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