Andalusian STORIES

Electronic sensors to know the causes of the extinction of bees

LOCATION: Córdoba
DURATION: 1'28"

SUMMARY: Climate change, the action of man, viruses, mites and the most dangerous of all, a parasite called varroa, are causing the extinction of bees. To give a solution to this problem, researchers of the Apiculture Unit at the ceiA3 Agro-Food International Excellence Campus have developed a new electronic system based in sensors that permits monitoring temperature and humidity inside the hive. Their aim is using this device to get to know how meteorological changes affect the hive and the possible causes of the disappearance of bees.

VTR:

Climate change, viruses, the use of pesticides and a very dangerous parasite called varroa are causing a decrease in bee population. To fight this problem, researchers of the University of Córdoba have developed a pioneer electronic system based in free hardware technology.

**José Manuel Flores
Researcher at University
of Córdoba**

"We have developed a sensors system that permits us knowing temperature and humidity changes occurred inside the hive related with changes produced outside the hive."

**Juan Luna
Teacher at the University
of Córdoba**

"The circuit in charge of recording those data in a memory, controlling time, etc., has been specifically developed for this application."

The information obtained with these sensors will permit understanding why the number of bees affected by disease is increasing and how climate change affects them, knowing this way the possible causes of their extinction.

**José Manuel Flores
Researcher at University
of Córdoba**

"And our intention is to keep adding to the system we have developed other type of sensor which allow us monitoring other factors that may be influencing in the inside of the hive, or how bees are reacting to those changes produced in climate."

According to the latest census in 2006 there are around two million and a half hives in Spain. This kind of research will help us knowing the causes of their disappearance.