

Danish university researchers are to develop a drone that drops ladybirds and mites, as part of an environmentally friendly new approach to combating pests.

With their tanks filled with ladybirds, predatory mites and parasitic wasps, the drones will fly over fields and spread the insects precisely where pests are ravaging crops.

The challenge, taken on by the University of Southern Denmark (SDU), is to develop a method of spreading insects without destroying them.

Associate professor Søren Wiatr Borg from the Institute of Technology and Innovation is well underway with developing the drone's spreader to ensure the insects land safely.

Working with living insects, however, is not easy.

"Predatory mites will eat each other if they do not have anywhere to hide, so we cover them in vermiculite, which is natural soil improving agent, so that they have a place to hide," Borg said.

Biological plant protection is being used to great success in many nurseries, where different insects are used to fight pests.

However, the EcoDrone project, led by SDU and the company Ecobotix, will make it possible to use nature's own weapons outside of greenhouses.

"It's about new thinking and developing technical tools that make it easier to avoid pesticides in the future," said SDU centre leader Brad Beach.

"One of our ambitions is for the ecodrone to make it easier to grow organic food products. It will mean lower prices on organic food and also that we can better keep up with the growing international demand for organic products."

A release from the university also highlighted the drone could be an important tool in reaching political targets for reducing the use of pesticides and promoting organic production.

"Previously, it has been difficult and far too expensive to use nature's own pest control methods on large areas, but by using the drones it is now possible," Borg said.

"First and foremost, it will be strawberry fields, fruit plantations and Christmas trees we will concentrate our project on, because there is a large yield in a small area, but in the long-

term it is quite conceivable that the drones could fight pests in large cornfields."

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