Entomologist seeks virus to control bulb flies

By Joelle Harms | May 24, 2016



Narcissus bulb fly Photo: Foter

A team of researchers at the University of Massachusetts Amherst are searching for a possible bio-control remedy to combat the large narcissus bulb fly (*Merodon equestris*), a pest that destroys thousands of narcissus bulbs in the United States each year.

The adults feed on pollen and nectar from flowers of the plant genus *Lilium* and *Narcissus*, but the larvae of the flies are pests who feed on the bulbs of those flowers, which is where the names bulb fly and narcissus fly comes from. Most other members of the family prey on aphids.

Researchers from the Stockbridge School of Agriculture and its microbiology department are investigating a naturally occurring virus for the flies, which resemble bumble bees. The salivary gland hypertrophy virus can disable the pest's reproductive system and could possibly be useful for controlling the fly.

The virus, first reported in France in 1957, was found in adult insects, but the microorganism has not been seen since and has never been reported in the United States, entomologist John Stoffolano told the university.

"So there is a missing virus, who cares? But it happens to be one of three in a whole new group of viruses just discovered, and now a number of people around the world are trying to isolate it," he says. "Among the most interesting details is that it is found in tsetse flies and in house flies. We need some good detective work now to find the virus and sequence its genome so that one day it might be used to control the fly in nurseries where it destroys so many bulbs each year."

In late 2015, Stoffolano was given bulbs infested with the fly's larvae that could have the virus. He planted the bulbs and is now waiting for adult flies to emerge.

Stoffolano and his colleagues are asking the public to watch for these flies around daffodils this spring, and to contact him at 413-545-1046 or stoff@umass.edu.

This article is tagged with <u>bulb fly</u>, <u>Merodon equestris</u>, <u>narcissus bulb fly</u> and posted in <u>Crawling</u> <u>the Web</u>, <u>Flies</u>

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