

## Biocontrol big for flower growers

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More greenhouse growers are buying into biocontrol thanks largely to the work of a team of Vineland researchers.

Ask one of them, though, and she'll give credit elsewhere for an uptick in more ornamental flower growers using living organisms instead of chemicals to control pests and disease.



*Rose Buitenhuis, Vineland's biological control research scientist and Ashley Summerfeld, biological control research technician*

"I think it can be summarized in one word," said Rose Buitenhuis, Vineland's biological control research scientist. "Thrips."

Ninety-two per cent of floriculture growers who responded to Vineland's 2018 survey measuring the research centre's impact on finding and promoting effective biological agents said they use biocontrol.

That's up from 69 per cent just four years ago (Vineland's 2014 survey results). All the while, thrips, the most common pest threatening greenhouse grown ornamentals, have become increasingly resistant against chemical pesticides found

on the market. Thrips will damage flowers and cause leaf discolouration, making plants unmarketable.

“With some pests you don’t see the damage as much so they can be tolerated more, that’s not the case for thrips,” explained Ashley Summerfeld, Vineland’s biological control research technician who assisted with both the 2014 and 2018 surveys.

“Thrips are still the most common and challenging pest for growers.”

Recent findings validate Vineland’s work in biocontrol — one of the research centre’s flagship industry-driven programs.

Biocontrol, including predators, parasites and entomopathogens, which cause disease that suppress pests, are among several strategies growers can use to protect crops.

Pesticide resistance is the number one reason why growers use biocontrol against predators and disease.

“To grow a successful crop, you need to deal with pests and disease. There is the potential for crop losses, even up to total crop failure. In the case of western flower thrips, there is no good chemical control,” she explained.

Still, there are other reasons to switch to biocontrol.

“Growers are doing it out of concern for health and safety,” Buitenhuis said.

More growers are now using biocontrol against disease, too. Seventy per cent said they use biological agents to fight disease, not just pests, up from just 30 per cent four years ago.

In such cases, plant health is the reason more growers are turning to biocontrol, Summerfeld noted. Again, worker health and safety is a close second.

Still, Buitenhuis and Summerfeld discovered that, despite the high adoption rate of biocontrol, growers want more information on how to properly use and integrate biocontrol into their production practices. Others are curious about more efficient use of biocontrol to keep costs low.

The survey findings are more than a pat on the back for Vineland. Now that Buitenhuis and Summerfeld have a sense of what’s important to growers, they will use those numbers to determine biocontrol research priorities — thrips will likely stay at the top of the list — and how to effectively communicate their findings to growers.

“This is a snapshot of the whole industry and it’s moving in the right direction,” Buitenhuis said. “We’re feeling confident what we’re doing is hugely beneficial to the industry and survey results indicate growers are seeing the value and are getting on board.”

*This story appears in the 2018-2019 Vineland Innovation Report. [You can download the full report here.](#)*

<http://www.floraldaily.com/article/9031282/can-on-biocontrol-big-for-flower-growers/>