



New predatory mite combats thrips

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Nesidiocoris expected to respond on supplementary feeding

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Tuta absoluta under control

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Limonicus large-scale predator of thrips and whitefly

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Kendrick Westerhoff (middle) surveys his crop together with David Neal and Kelly Saj. He praises the total approach developed by Koppert.

## 'No drama in the greenhouse'

Kendrick Westerhoff, owner and general director of Cedarway Floral Inc., is a happy man. Together with the specialists at Koppert Canada, he successfully managed to get major, alarming outbreaks of whitefly and leaf miners under control in his cut Gerbera greenhouse facility. A powerful biological programme, based largely on weekly introductions, is responsible for this success. "It is fantastic to walk into the greenhouse and see strong and beautiful crops," Westerhoff says. As far as he's concerned, Koppert is a part of Cedarway Floral's future.

Cedarway Floral Inc. is a 30,000 square metre production farm specialising in Gerberas. Based in Beamsville, located in the Niagara region of Ontario, Canada this company cultivates approximately 60 varieties in both standard and mini types. Day in and day out, over 30 employees work on the high quality that the customers - wholesalers and supermarkets - demand from Cedarway Floral. A significant percentage of the flowers grown here are used by the company in assembling customised bouquets.

### A rigorous approach

The crop has been affected by a variety of pests: whitefly, leaf miner, thrips, spider

mites, broad mite and aphids. Powdery mildew also sometimes rears its head. Recently, Cedarway Floral struggled with huge outbreaks of whitefly and leaf miners. After this, Westerhoff, his own plant protection specialist Kelly Saj, and consultant David Neal of Koppert Canada developed an extremely rigorous approach to tackle the problem.

Whitefly was dealt with using large quantities of different types of plant protection products, specifically: Encarsia formosa, Eretmocerus eremicus, Amblyseius swirskii and the beetle Delphastus pusillis. The biological insecticide Botanigard was also used. "With the strengths of one beneficial,

we were able to compensate for the weaknesses in another. On balance, this gives us access to a powerful army that was able to beat the whitefly," consultant David Neal of Koppert Canada says.

### Infestation levels do not play a role

Enermix (Encarsia formosa and Eretmocerus eremicus) played the starring role. For four weeks, the very high introductions per square metre were applied each week. "After the crop had been cleaned, it also stayed clean," David says, "thanks to continued introductions of Enermix in lower but still aggressive rates, despite the whitefly infestation level." The same approach was chosen for the leaf miners. A consistent, weekly introduction of Diglyphus isaea beneficials per square metre ensured that larger dosages of this beneficial will never be necessary.

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Cedarway Floral Inc. offers clients the highest quality and achieves record production levels in the meantime.



### **Increased production**

David Neal: "In the past, we would either skip an introduction or base one solely on the infestation level we had observed. This method results in a weak degree of prevention, holes can develop and there can be an unexpected outbreak of pests, after which massive introductions become necessary. Consistent releases, which, in most cases means on a weekly basis, is the key to success, as far as we are concerned."

This success has since been proven: the crop is and remains clean, and Cedarway Floral is showing significant increases in production.

### **Part of the plan**

Kendrick Westerhoff is extremely satisfied with the total approach they have developed. "It is fantastic to walk into the greenhouse and see strong and beautiful crops. However, this is no reason to get complacent. We will continue to face the expected challenges, of course. We must remain alert, and continue to focus on results and success." His staff (production manager Rob Halkes, cultivation managers Jan Chechalk and Thomas Wullums, and IPM specialist Kelly Saj) work hard to produce the best quality Gerberas and to achieve the highest possible production rates. "Without a first-class biological programme, it would not be possible to achieve these objectives", Kendrick knowingly remarks. In his opinion, Koppert is inextricably linked to Cedarway Floral's future. "No drama in the greenhouse: this is, in short, our plan for now and for later. We want to manage infestations in a sustainable manner, biologically. After all, our customers expect and deserve the very best quality. Koppert is part of this plan." ■