



Play it by year: IPM challenges and changes

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Purpose and methodology

The grower survey provides a snapshot of biocontrol use and pest and disease challenges faced by Canadian greenhouse growers. We have conducted surveys in 2014, 2018 and most recently in 2022.

Growers were contacted by email and telephone to complete our voluntary online survey between December 2021 and March 2022. The link for the survey was advertised in the Greenhouse Canada magazine and the ONFloriculture blog. Survey data was anonymized and is presented here in an aggregate format.

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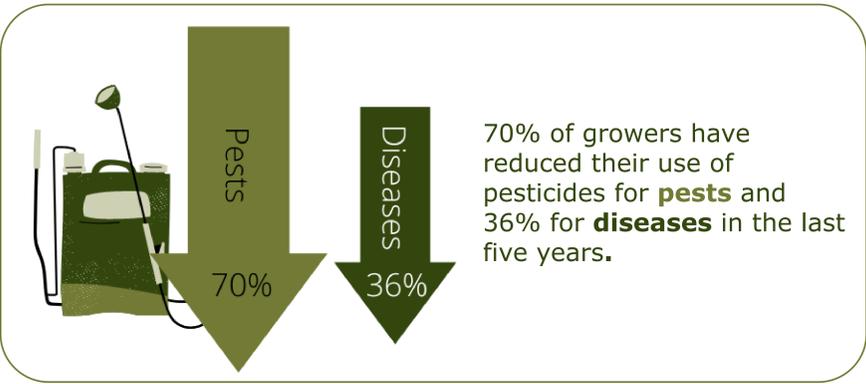
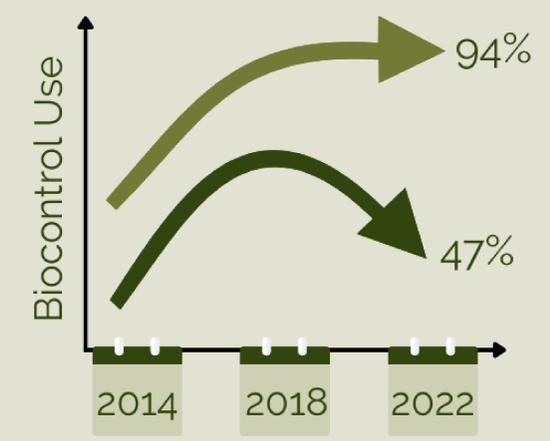
Who responded?

We received responses from 47 ornamental growers from four provinces (ON, BC, AB and NB), growing 50 different types of crops with the most common types being potted flowering plants, spring bedding plants and tropicals.

Biocontrol use is consistently high for **pests** while fluctuating for **diseases**

Pests: Biocontrol adoption by Canadian ornamental growers is high; nearly all are using some level of biocontrol for pests in their operations. Additionally, most growers using biocontrol do so 50% of the time or more in their pest control programs.

Disease: Over the last eight years, many growers tried biocontrol for disease but chose not to continue using it.



57% of respondents experienced more **frequent or severe thrips** outbreaks in the last five years
Some of these outbreaks might be due to new thrips species that are emerging as problem greenhouse pests (e.g. *Thrips parvispinus* and onion thrips).



IPM program satisfaction wanes for **thrips** but not **Botrytis**

Thrips: Only 40% of growers were happy with their IPM program for thrips in 2022, compared to 70% in 2018.

Botrytis: Nearly 80% of growers were happy with their IPM program for Botrytis, which is relatively unchanged compared to 2018.



Thrips, *Botrytis* and powdery mildew continue to be common **pest** and **disease** challenges for Canadian growers

Pests: Thrips were the most common pest for 42% of growers and caused the most crop losses for one third of growers (average 6.4% crop loss).

Disease: 30% of growers said a fungal leaf spot/blight (such as *Botrytis*) was their most common disease and 26% listed powdery mildew as having caused the most crop losses (average 5.7% crop loss).

We would like to thank: Ashley Summerfield and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) for the use of their photos, Ana Pastrana León, Sarah Jandricic and Chevonne Dayboll for their helpful suggestions on the survey and the growers for their participation.

Looking for data on vegetable greenhouses?
Scan the QR code to access our Vegetable Growers' Survey:

