

The biofungicide Mycostop® effectively controlled root diseases and reduced the share of small and dead plants on poinsettia.



## CONTEXT

Poinsettia can be infected by several fungal pathogens, like *Pythium*, *Rhizoctonia*, *Phytophthora* and *Fusarium*, which weaken the growth of roots. Mycostop contains the ray bacterium *Streptomyces* K61, which provides long-lasting protection against a broad spectrum of fungal diseases. Mycostop also promotes root growth. For the best control effect, dip the plants into the Mycostop solution before potting or drench them soon after potting. Mycostop improves the quality of poinsettias in an integrated program as well.

## OBJECTIVE

To study the effect of Mycostop in controlling root diseases and promoting growth on poinsettia.

## MATERIALS AND METHODS



### LOCATION AND DATE

Commercial greenhouses, Finland  
September–December/2019 and 2020



### CULTIVARS

‘Christmas Feelings Red’, ‘Christmas Glory’ and ‘Virgo’



### CULTIVATION

The trial was conducted with poinsettias in size S, which were potted in August. Irrigation and fertilizing were done by overhead watering or a subirrigation system.



### TREATMENTS

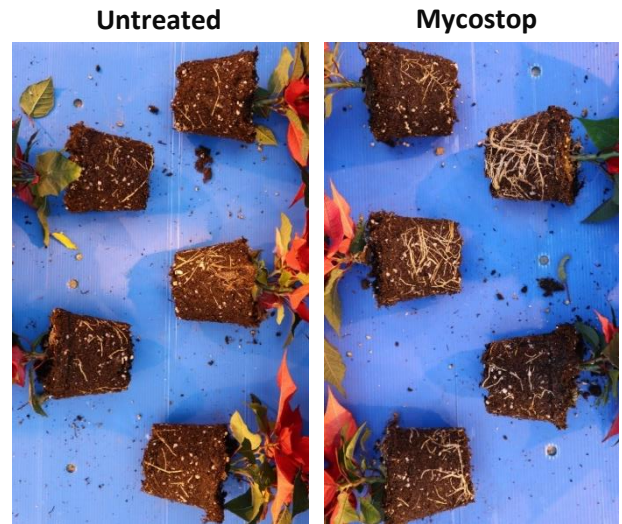
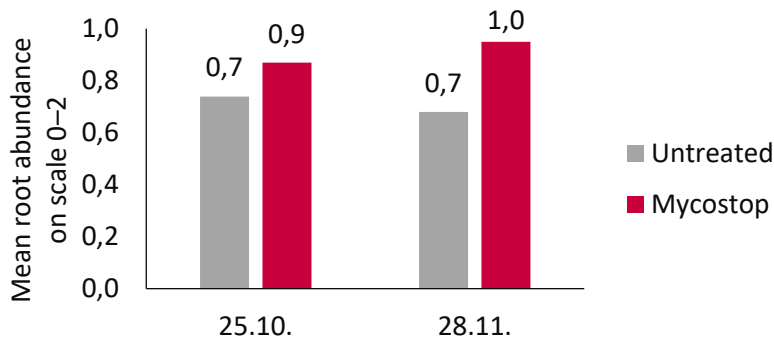
#### Trial with biofungicide

- 1) Untreated control
- 2) Mycostop drench (8 g/1000 plants) soon after potting and 2 additional treatments every 4–6 weeks.

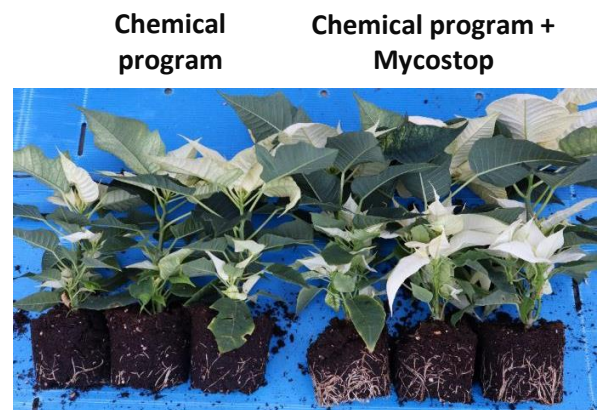
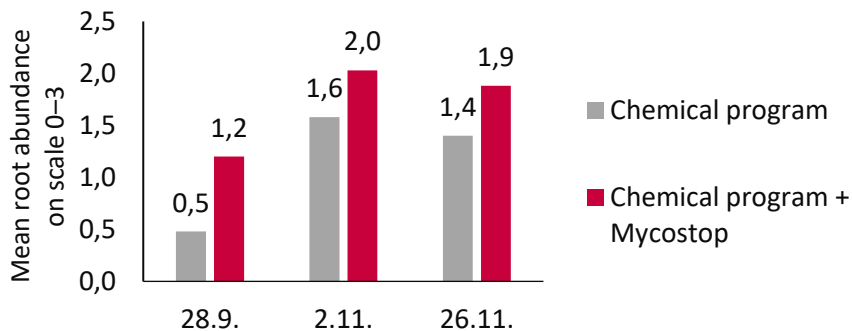
#### Trial with integrated control program

- 1) Chemical program (Previcur and DonQ)
- 2) Mycostop drench (8 g/1000 plants) soon after potting and 2 additional treatments every 4–6 weeks. Additionally, a chemical program (Previcur and DonQ) via the subirrigation system.

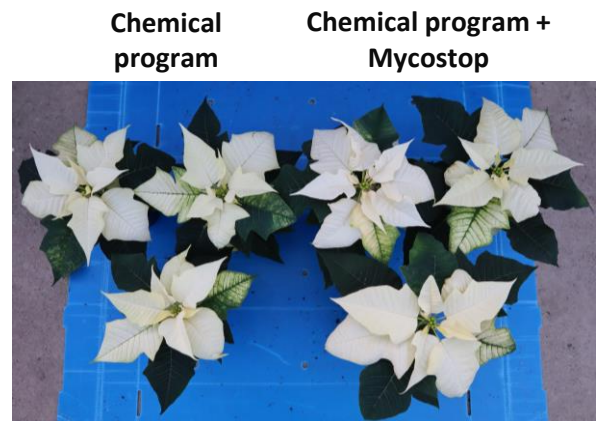
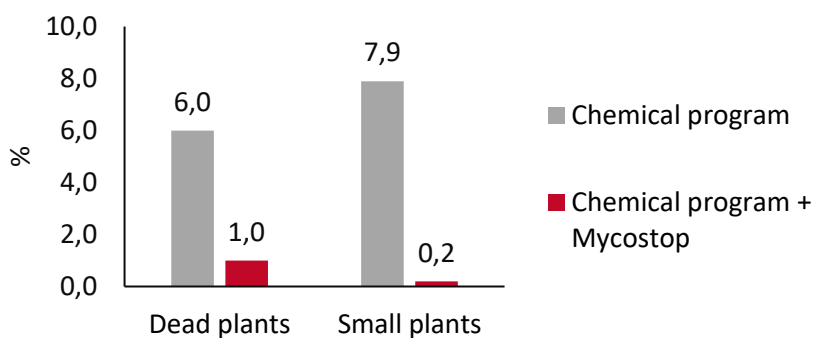
- **Mycostop increased the root abundance on 'Christmas Feelings Red'. The fungus *Fusarium* was isolated from the roots of the trial plants.**



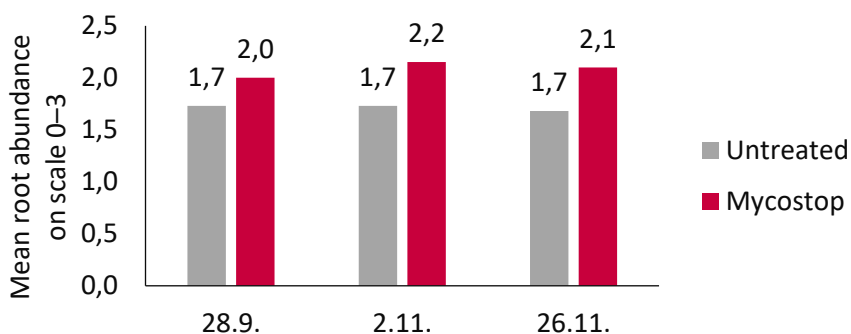
- **Mycostop increased the root abundance on 'Virgo' in an integrated control program. The fungi *Fusarium* and *Pythium* were isolated from the roots of the trial plants.**



- **Adding Mycostop to the integrated program reduced the share of dead and small poinsettias and increased the mean size of plants. Cultivar 'Virgo', observations at the end of the trial.**



- **Mycostop increased the root abundance on 'Christmas Glory'. The fungi *Fusarium* and *Pythium* were isolated from the roots of the trial plants.**



In all root observations:  
40 plants/treatment/observation date