

Case Study – Nursery in Heatherton, Victoria



Challenge

Nursery owner wants plant production over the colder months to be similar to the levels usually achieved in the warmer months. He also would like to grow certain plants not usually available in winter

Objective

Increase plant growth rate, improve disease resistance and grow herbs and decorative plants not usually available in winter

Details

Trial period: April – July 2021
 Plants: grown from plugs placed in plastic pots in a vertical garden setup
 Pot media: soil based potting mix
 Temperature: ambient - heating is not used throughout the nursery
 Control: plants treated with slow release fertilizer e.g. Osmocote
 Treatment schedule:

Products	Application	Frequency	Dose	Benefits
Geoxol granules	base of media	initial pot filling	3-4 granules	Adds organic matter, improves soil properties and water retention for better nutrient absorption
Geoxol liquid	drip irrigation	weekly	3ml/l	Adds organic matter, improves soil properties and water retention for better nutrient absorption
Silixol OSA	foliar spray	weekly	3ml/l	Optimises crop nutritional status and reduces abiotic and biotic stress
Nutrin	foliar spray	weekly	3ml/l	Essential micronutrients improves growth and yields

Results

Growing time reduced from an average of 11 weeks (control) to 8 weeks when treated with the above products which is approx. a 27% decrease. This is similar to average growth rates in summer. The shorter turnaround equates to an improvement in productivity from the normal 24,000 plants to approx. 30,000 plants over the 4-month period. Furthermore, plants not usually available in winter such as basil, ferns and coleus were successfully established and grown.

Below are images of a leather fern

Control



Treated



Key Observations

Apart from faster growth, the treated plants looked healthier, stronger and more vibrant than the controls. Aphids also more readily attacked the controls compared to the treated plants.

Outcome

The use of Geoxol, Silixol OSA and Nutrin significantly increased plant growth rate during the colder months and plants that are usually not available in winter were successfully grown.