



"At the end of the day, we've done a lot more hectares than we would normally do without MagrowTec".

Bharat Bhana

Overview

Hira Bhana & Co. Ltd. is a family-oriented business based in Pukekohe, New Zealand. They crop 1,500 acres of land, growing potatoes, onions, carrots, brassica, lettuce, pumpkins and watermelon.

Hira Bhana was looking for technologies to improve coverage and reduce the risk of diseases. Amongst the several technology choices available, the MagrowTec technology attracted Hira Bhana and Vantage New Zealand's attention because the simplicity of it – "It's truly a set-and-forget type of technology". says Russell Van de Laak, Precision Agriculture Technician at Vantage New Zealand.

In the initial trials with MagrowTec, in addition to the drift reduction, Hira Bhana experienced 23% better coverage and much of that in the lower canopy.

"We are getting less drift, which means there's more spray going down onto the plant, where it should be. We achieved less water rate. At the end of the day, we've got a lot more work done, so it would normally take some 2 days to spray 200 hectares of onions. We can do it in a day and a half. We've saved some fuel and spray, we've got less drift and also saved some water, so that must be good for the environment." he says.



Watch Bharat's Video



GROWER Bharat Bhana

LOCATION North Island

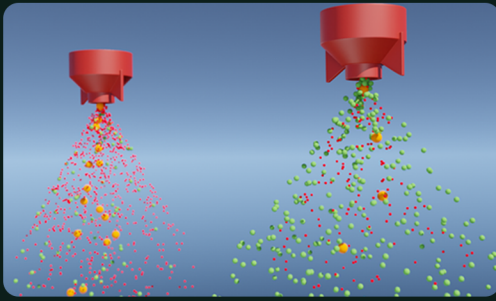
CROP Potatoes

Key Results

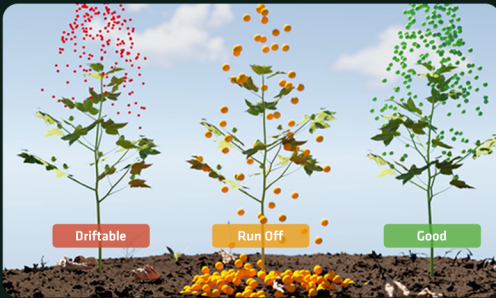
- ✓ Improved spraying productivity by 1/3
- ✓ Increased coverage by 34% in the lower crop canopy
- ✓ Reduced water rate by 35%
- ✓ Improved drift control



MagrowTec Installed on Bharat's Sprayer



70% of all conventional spray does not reach the target crop and results in drift and run off, wasting money.



Optimum performance spray makes sure the chemical both reaches and adheres to the target.

MagrowTec Spray Optimization



MagrowTec is an accredited

97.5%

drift reduction technology

Source: TCT DRT List (Netherlands), October 2020

The Field trial

The MagrowTec Crop Science team ran a side-by-side study with a conventional sprayer alongside the sprayer fitted with MagrowTec, to compare the difference in spray coverage between MagrowTec versus conventional using water-sensitive paper.

The trial demonstrated that the MagrowTec system achieved the highest increased mean coverage% value of 34.07% using 267.20 L/ha with a reduced application rate of 83% compared to the conventional system.

Since installing MagrowTec, Bharat Bhana has greatly reduced drift, increased coverage, saved water, and increased the productivity of his spraying applications. The MagrowTec system allowed Bharat Bhana to spray more acres in a day, increasing productivity by 1/3.

Bharat Bhana commented "The MagrowTec was getting a lot better coverage than the conventional was and what really made us think about it was the coverage at the 260 rate was still better than we were getting on a conventional sprayer at 360.

- The information in this flyer is an independent opinion provided by the grower with no compensation from MagGrow.

Why MagrowTec?

The MagrowTec system helps by creating more of the optimum-sized spray – ensuring that more of the spray goes onto the weeds, crop canopy, buds, flowers, stalk, fruit or vegetable product itself or soil, giving better coverage and more protection.

MagrowTec helps improve crop protection, lower risk to the financial investment in the crop, increase the chance of higher crop quality and yield and reduce wastage of expensive resources like chemical inputs, water, time and money.

