

ECTOL Trial Results

Aim

To find out if Applying Ectol with other chemicals in a Mac One spraying program is a cost-effective way of increasing payable weight to the grower.

Method

A 5.4-hectare Mac One potato paddock was selected in the Wesley Vale area to conduct this trial. This whole paddock was sprayed with three applications of Ectol combined with other chemicals in a spray program with the exception of a 30-metre square in the middle of the paddock. This trial area had exactly the same chemicals applied as the rest of the paddock only without any Ectol.

Normally the recommended program would be 4 applications of 5 litres per hectare, 7-10 days apart starting pre tuber initiation.

In this situation three applications were applied as follows.

The crop was planted on the 05/11/2013

Date	Chemical used	Rate
15/12/13	Ectol	5.0 L/HA
"	" Nitro quad	10.0 L/HA
"	" Grow cal	1.5 L/HA
23/12/13	Ectol	5.0 L/HA
"	" Nitro quad	8.0 L/HA
"	" Grow cal	1.5 L/HA
"	" Amistar	0.5 L/HA
30/12/13	Ectol	6.0 L/HA
"	" Nitro quad	8.0 L/HA
"	" Zinc	0.5 L/HA
"	" Boron	2.0 L/HA

Result

Five-meter lengths of potato rows were dug up and weighed in both the treated and none treated areas. This was repeated four times in each area. The results are as follows below

No Ectol Trial Results

1 = 35 kg of payable weight in a five-metre row

2 = 35 kg of payable weight in a five-metre row

3 = 30 kg of payable weight in a five-metre row

4 = 29 kg of payable weight in a five-metre row

Total weight = 129 kg

Average payable weight per metre of row = 6.45 kg

Ectol Treated Trial Results

1 = 30 kg of payable weight in a five-metre row

2 = 41 kg of payable weight in a five-metre row

3 = 37 kg of payable weight in a five-metre row

4 = 35 kg of payable weight in a five-metre row

Total Weight = 143 kg

Average payable weight per metre of row = 7.15 kg per metre

The paddock used for the trial was 5.4 hectares in size. The length of the rows are 310 metres and there 182 rows in the paddock.

There were ten rows on each headland, each row being 155 metres long.

We know the average weight per metre on the Ectol treated potatoes is 7.15 kg and the none Ectol is 6.45 kg per metre.

Conclusion

With the whole paddock calculated at the none Ectol treated weight, the total tonnes equal 403.904 tonnes. Divide that by the area of the paddock 5.4 hectares equals 74.797 tonnes per hectare. Based on an average pay weight of \$260 per tonne this paddock would make \$19447.22 per hectare.

With the whole paddock calculated at the Ectol treated weight, the total tonnes equal 425,568. Divide that by the area of the paddock 5.4 hectares equals 78.809 tonnes per hectare. Based on an average pay weight of \$260 per tonne this paddock would make \$20,490.34 per hectare.

The difference in dollar value from using Ectol compared to not using Ectol is \$1043.12. The cost of Ectol per hectare in this trial was \$120 per hectare.

For every dollar spent on Ectol there was an \$8.70 return.

Summary: Ectol Potato Trial Roberts Limited 2014

- Treated 4 * 5L/ha Ectol starting preinitiation
- Untreated Nil
- Treated Yield:78.8T/ha Untreated Yield: 74.8T/ha
- Gain at \$260/Tonne = \$1043/ha
- Cost per hectare= \$120
- Return/ \$1 Ectol = \$8.70