

Potato Demonstration Trial: Longford Tasmania 2017/2018

Potato Variety: Ranger Russet for Simplot Australia Pty Ltd

Overview: A field trial was conducted by Toni-Lee Faulkner to measure the effect on potato yields and quality from the adoption of an <u>ECTOL STARTER</u> Protocol vs the Standard Protocol used in this region of Tasmania.

Location of trial and paddock description: The trial was undertaken on typical sandy loam podzolic soil. The crop was planted into soil that had been grazed for many years and the trial paddock was selected due to its lack of variation or natural hazards over the area. The paddock was divided in half with 10 hectares as a single trial plot and 10 hectares as the control.

Both Trial and Control plots we treated in the same manner with respect to land preparation, handling of the potatoes, pest and disease treatment and harvesting. The only difference was the fertiliser protocols.

Trial Fertiliser Protocol	Control Fertiliser Protocol
Fert at Planting NPK (9.10.25+1) 1.2T	1.6 T
Ectol -STARTER 20L at planting	
Ectol -STARTER 40L as side dressing	
Ectol- PROTECT AND GROW 20Lts split	
Cal Nitrate 150Kg	150Kg
Urea 125Kg	125Kg
Urea/SOP 150Kg/75Kg	150Kg/75Kg
Total Fertiliser cost per hectare: \$1,750	\$1,589

Results	
Trial (10Ha)	Control (10Ha)
Ave Yields: 81.83T/ha	Ave Yields: 50.50T/ha
Size Distribution: 57.3% (75-240gms)	Size Distribution: 61.2% (75-240gms)
Bruise Fee: 94.98%	Bruise Free: 94.14%

Conclusion: This trial yield of 81Tonnes/Ha is difficult to explain, yet all truck loads and Simplot dockets were verified. A production yield of 54Tonnes/Ha is considered 'good' in these soils and conditions, yet averaging the yields over the two plots, still achieved 66Tonnes/Ha, and was considered <u>very</u> good.



<u>ECTOL Protect & Grow</u> is a growth protectant and promotant and is widely used on commercial potato crops at a rate of 20L/Ha, <u>ECTOL STARTER</u> is a 14.12.2+TE protected liquid fertiliser that may be planted with the seed and foliar/soil applied as split applications. The cost of these products is offset by a small modification to the preplant fertilisers.

J.H McKay (2018)