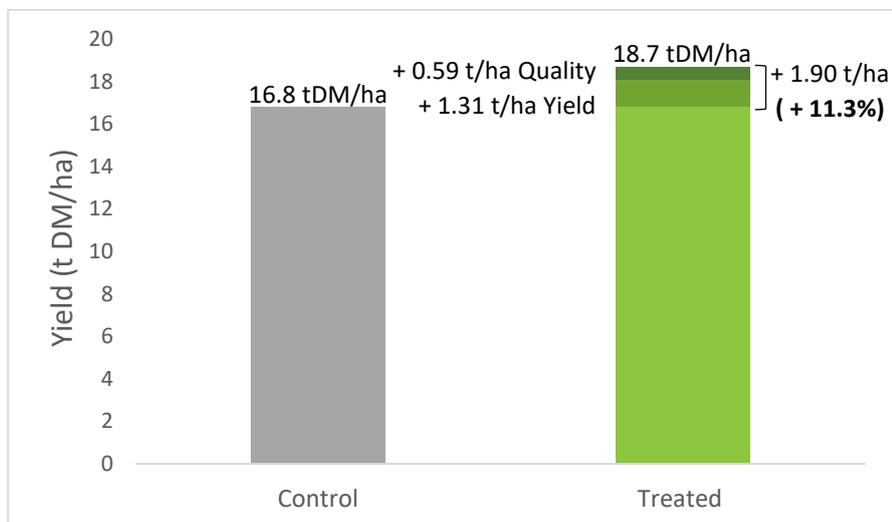


Commercial Trial, Taranaki, New Zealand

- Aim:** To evaluate the impact of Great Land (GL) on maize silage yield and quality parameters.
- Design:** Two paddock comparison, each with same soil type, aspect, fertiliser history. Non-irrigated. Treated paddock area 19 ha. Untreated control paddock area 15 ha. Both paddocks sown 31 October 2016, with Pioneer Seeds variety P9241.
- Treatment:** The treated paddock received 80 litres of Great Land per ha, applied with a boom spray directly after sowing. The control paddock had no treatment. Same fertiliser program across both paddocks: base of 240 kg/ha DAP and MOP; sowing: Starter 200 kg/ha DAP; 300 kg/ha YarraMila (12:10:10); Side dress in December 150 kg/ha Sustain.
- Assessments:** Silage yield, period of maturity to harvest, fodder quality parameters (ME, digestibility, crude protein). Harvested 31 March 2017.
- Conditions:** Wet and cold conditions were experienced in NZ through the season - poor conditions for growing maize.
- Results:** The treated block yielded an extra 4.5 t silage (wet weight) per ha than the control block. DM% were similar at nearly 28%, resulting in a yield gain of 1.31 tDM/ha. This gain was further enhanced by superior quality (ME and digestibility), equivalent to 0.59 tDM/ha when modelled with 'Udder Model'. Overall, a gain of 1.90 tDM/ha (11.3%) over the control block.



Extrapolating 1.90 t/ha extra silage to milk solids (MS) value:

- 158 kgMS/ha @ 5.50/kgMS
- Incremental value \$870/ha
- Over 4 times return on cost



- Observations:** Positive differences were observed in the treated crop at many stages of the growth cycle – crop height, general health, NDVI images indicating maturity, cob fill and kernel milk line. Differences in cob maturities indicated the treated crop was ready for harvest some 3-4 weeks prior to the control crop. However, the control crop's maize plant had already shut down and dried, therefore had to be harvested at the same time as the treated crop, to prevent loss of quality.
- Conclusion:** Great Land has had a material positive influence on performance of maize silage yield and quality, translating directly to additional milk production using well established conversion factors.

