Biostart®N and Mycorrcin® Pasture Trial

Bay of Plenty, 2015 – 2016

This is an independent trial conducted for BioStart by Bay of Plenty Farm and Pastoral Research Limited. The trial site consists of a mature permanent perennial ryegrass/white clover pasture and is located on a commercial dairy farm in Rerewhakaaitu in Bay of Plenty. The trial showed that the co-application of Biostart®N, a live nitrogen-fixing soil bacteria, and Mycorrcin®, a soil microbial activator, increased pasture production by 13.4% over a five month period.

Application & trial design

- Trial design: A 7 block randomised design comparing an untreated control to Biostart®N and Mycorrcin®.
- Application rate: Biostart®N 10 mL/ha and Mycorrcin® 2 L/ha was applied on 10th September 2015.
- Pasture cuts were made at 3-weekly intervals and DM yield determined. This trial is ongoing.

Results

- The treatment of Biostart®N and Mycorrcin® produced a 13.4% increase in Dry Matter Yield relative to the untreated control over the period 30 September 2015 to 2 February 2016. See Figure 1 opposite.
- Once the Biostart®N microbe effect was established there was a consistent and persistent increase in pasture yield including in early summer: a time when pasture does not normally respond to the application of nitrogen fertilisers.
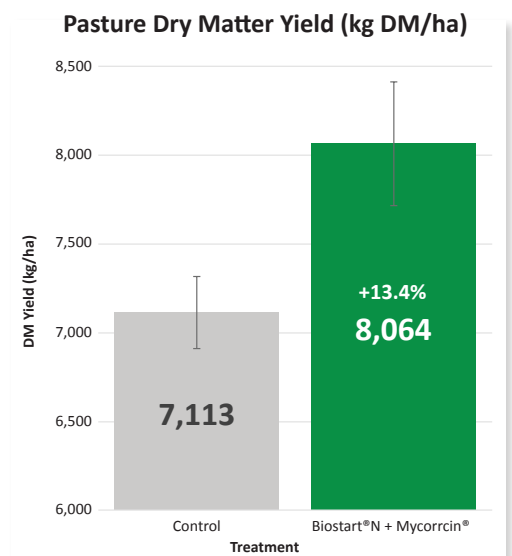- The increase in DM yield ranged from 10 to 23% per cut. See Figure 2 below.

Pasture Dry Matter Yield (kg DM/ha)

Figure 1

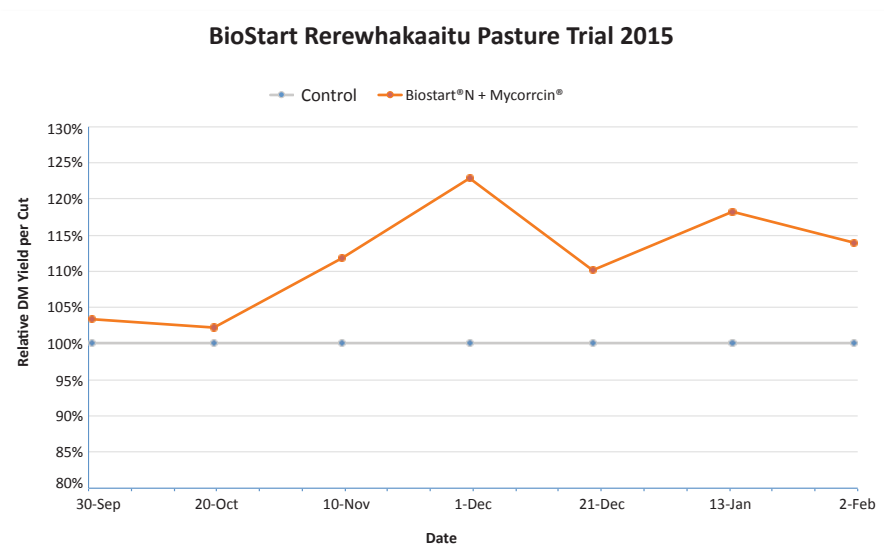### BioStart Rerewhakaaitu Pasture Trial 2015

Figure 2

Application Note:

It takes time for the population of nitrogen-fixing bacteria to establish in the soil, but once this is achieved nitrogen is produced at a consistent rate for use by the plant for growth.

Biostart®N and Mycorrcin® should therefore be applied directly to the soil two months prior to when an increase in pasture production is required. As soils and climatic conditions will differ results may vary. For more detailed application instructions contact BioStart.