Mitta Valley Landcare – funding experimental equipment Dr E Ingham – Identifying and sampling biological activity NECAM – Funding SWEP & soil tissue tests via Farmer Mentor Grant SWEP Laboratories – additional biological soil testing required Farm trial sites across the 10 farms Bactivate – for advice on trial set up

The Mitta Valley project report.

(2015-2020 / 14 Farms)







The Mitta Valley project was an independent study of the impact of the Bactivate program on pasture farm land in the Mitta Valley region. The study was conducted over 5 years (2015-2020) and 10 different farms were invovled. Led by Alan Rankin, Farmer for Mitta Valley Beef and the Soils Project Leader for Landcare in the region (awarded in 2019 for his valubale contribution to Landcare over many years), it was a major stepping stone for the Bactivate. It showed beyond a doubt that the Bactivate Bacteria products and program have a strong significant technical and output impact with good farm operators. This is a summary of that project and a full study overview is available from info@bactivate.com.au

Technical outputs:

Improved soil ph Increase in available nutrients Brix readings higher Improved bacteria count Improved feed value

*Versus control paddocks

Product and farm outputs:

Faster, longer pasture growth. More hay. Less fertiliser. Deeper roots. More worms. Better water utilisation. Observational livestock improvements. Reduced investment.

For more information:

See over page Contact: info@bactivate.com.au

National Sales Manager Shaune Amber shaune@bactivate.com.au

Key Findings:

1. Increase in Avg. Brix.

Average brix improved about 2 points in all paddocks versus controls across the year.

2. Improvement in pH.

pH improved across all trial paddocks versus controls an avg. of 0.18pH. This does not seem much but this is a log scale equivalent to 1 less tonne/ha of lime application.

3. Healthier soils & yield:

Better soil structure, denser root structure and elongation, more top soil, more worms, better water retention and a prolonged grass growing season.

4. Reduction in fertiliser:

The usual applications rate was cut from 200kg/Ha to 80kg/Ha without any visual difference in pasture growth.

5. Reduced input costs:

Savings of \$110.16 per 2 hectare application back when fertiliser was relatively cheap (\$459).



Time to begin soil farming.





Why Brix?

This is short hand measure of "nutrient density" in your soils. Higher brix actually = longer shelf life for produce and better nutrition for animals. Think about what that might mean for supermarkets and our produce benefits.

Why pH?

Different produce requires different pH levels. If it can be lifted to the correct range that can help improve yield and produce health.



The most dramatic increase was the changes in soil structure. 15mm in added top soil per application. More friable. Better root structures and nodulation. Evidence of better fungi activity. Worm activity increased significantly (breaking hard packed layers of soil). Water retention increased for an extended growth period post summer rain.

Roots under the Bactivate program had higher root mass, greater length and nodulation increasing their ability to access nutrients.

Bactivate

"From the trial we carried out it is evident that the soil properties have improved dramatically, particularly soil structure, topsoil depth, and available nutrients, which has produced healthy and vigorous grass growth, whilst significantly reducing the reliance on chemical fertilisers."

Alan Rankin - Lead Author / Project Manager



2019 Hay cutting. Balansa clover over four feet high in treated paddock.