

Dairy case study

Type of Farming System

The farm was managed utilising conventional farming systems for more than 50 years. In recent years Hillcrest Farms has converted to biological farming methods to arrest soil degradation.

Products used in trial

Bactivate

**Bactivate
BioBoost+**

**Bactivate
SeaweedSolution**

BactivatePlus

Background

Over many years of conventional dairy farming, the owner witnessed the slow decline in the health and fertility of soils which in turn was reflected in deterioration in animal health and production. The owner has spent the past 30 years using urea and NPK based fertilisers to grow his pastures. After researching options, the farmer began working with soil biology and carbon inputs to reverse the trend and restore soil health without the use of conventional fertilisers.

A key driver was to reduce all input costs involved in dairy (grain feed). To maintain the healthiest herd possible, the highest quality pasture crop feed without the use of super, urea or other conventional chemical fertilisers needed to be provided. To achieve these outcomes inoculated custom blend compost has been used as bio-fertiliser to replace traditional chemical inputs.

The beef farm switched from using Ca-Mg-P at 250Kg per Ha. Previously, they had used 4 in 1 at around 300Kg per Ha. Two ton of cheap lime per Ha annually was applied. This was changed to 125Kg Bactivate Plus per Ha with 2 applications of BioBoost+ at 2.5L per Ha per annum with a top up of 1.5L Seaweed solution 2-3 times per year.

The farmer adopted the Bactivate Program as it fitted with his desire to improve performance, soil and animal health, through enhancement of the biological system now in place on the farm.



Conventional treatment 5 weeks post cutting for silage

Bactivate Program 5 weeks post cutting for silage

Farmer's Name: Jim Sawyer

Business Name: Hillcrest Farms

Crops grown: Pastures including clovers, grasses, and chicory

Farm Data

Location: Yarra Glen, Victoria

Area: 200 Ha



"I have never seen anything like this in such a short space of time." Jim Sawyer



Pre-program 20/02/12



Post application 28/03/12

Paddocks using the Bactivate Program have recovered much more quickly following cutting for silage. The farmer supported this observation and commented that the paddocks using his standard treatment lagged behind in performance with the treated paddocks on the farm.

Outcomes and Benefits

The Bactivate Program commenced with a soil biological and chemical analysis and the development of a Soil Health Plan. The decision was made not to use chemical fertilisers and Bactivate products were used.

Following the adoption of the Bactivate Program on one of his worst performing paddocks significant improvement in soil condition and health was observed:

- Improvement in soil structure reducing soil compaction and improved drainage;
- Increased pasture and clover growth with faster recovery following grazing; and
- Improved germination of sown seeds.