

commercial feedback

Volume 3

- Wansbeck Farm
- Seamungus trials results
- Concordia Farm



Wansbeck Farm

Wansbeck farm, in Agterkliphoogte, Robertson, has been owned by the Erasmus family for over six generations. The farm has 200 hectares under cultivation - consisting of 150 hectares of vines, 40 hectares of apricots and peaches, with the balance being lucern.



Hannes Erasmus the current owner and manager, studied agriculture and winemaking at Elsenburg in Stellenbosch, and it was whilst at this famous institution that he first encountered the concept of biological farming. This laid the foundations for a biological farming strategy that he has been expanding year on year ever since. This has become the core component of how he runs his farming business. It was on a research trip to Australia that he first encountered Neutrog Fertilisers, and Neutrog products have been playing an important

role in his farming methods since 2001.

After 3 years of using Bounce Back, Hannes noted a major increase in growth and yield, as well as an increase in earthworm activity and better soil structure. He applies Bounce Back at a rate of 500kg/ha in August and again in March. **"Neutrog is easy to use, as it is only applied once during post harvest and once during Spring season due to its slow release factor"** says Hannes. After soil balancing and rectification, Neutrog is the only fertiliser that is applied.

Hannes has just bought his fourth farm for planting more vines and fruit as he wishes to expand the farm, "Neutrog is my organic component in my biological farming strategy." says Hannes.

Biological farming is a system that uses nature and science to build the quality of the soil with the understanding that healthy soil will be able to support healthy crops and livestock. It takes advantage of natural processes, which promote good soil, healthy crops, and healthy animals.

These natural processes include: crop rotations, best tillage methods, growing green manures, proper livestock manure use, reducing toxins, promoting soil life, and balancing the soil's minerals. These terms mean using natural systems to improve soil structure, control weeds, pests, and diseases, and improve crop quality. Soil that is healthy contains a balance between the organic particles that serve as plant food and the

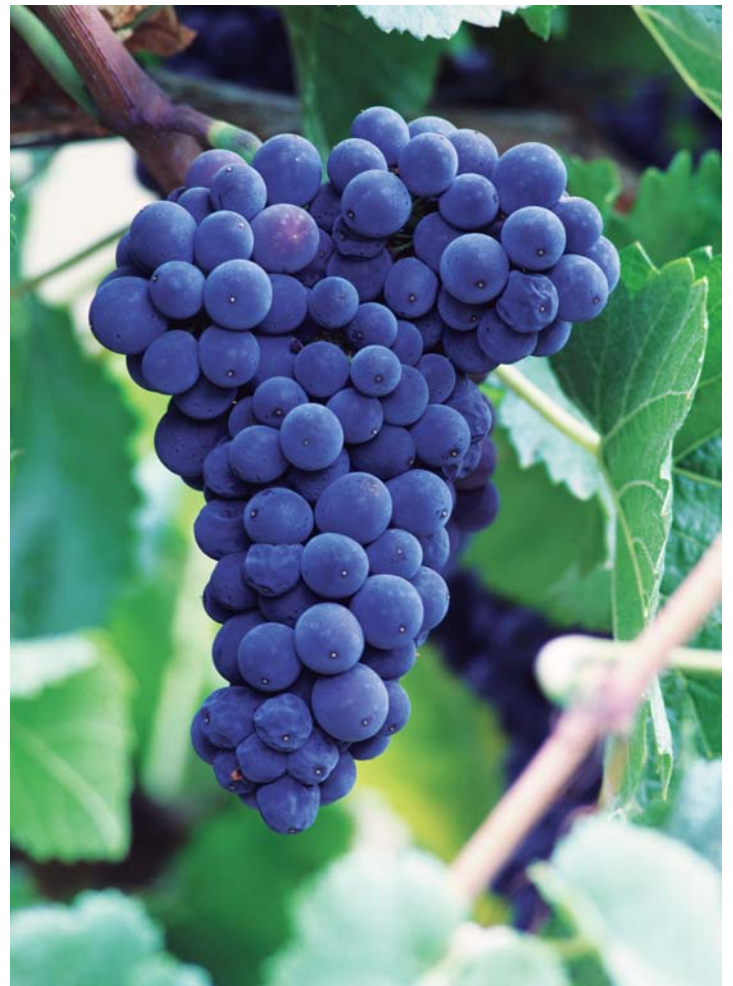
living micro-organisms like bacteria, fungi, algae and the larger ones like earthworms. These organisms process and decompose the inert mineral feeding the plants. An optimally productive soil contains a perfect balance of inorganic minerals, organic (carbon-based) materials, and living organisms. These are all contained within a physical structure which absorbs and holds water, to facilitate natural chemical reactions and feed plants perfectly.

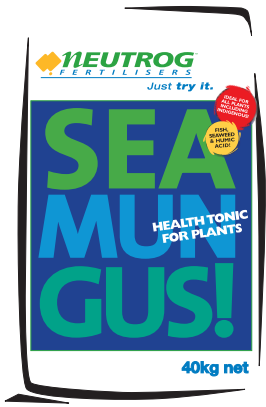
The biological approach to farming yields soil that is healthy and able to support healthy crops. These crops are nutrient dense - meaning that they contain higher concentrations of plant sugars, minerals and amino

acids and therefore have a higher nutritional value. They also exhibit other beneficial traits such as a longer shelf life.

Biological farming is by no means the easiest method of farming but the results are worth it and following a biological approach means that Nature will always be there to lend a hand.

Hannes has already ordered his next hundred tons of Neutrog Bounce Back for post harvest fertilising, to continue with his Biological farming strategy.





Seamungus is a soil and plant conditioner in pellet form, manufactured by composting seaweed, fish, humic acid and manure. It undergoes a unique composting process, specifically developed to stabilise nutrients, maximise nutrient availability and to ensure the product is free of any parasites, pathogens and weed seeds. Most importantly, the resultant product retains the microbiology necessary for a 'living' product. Seamungus is also certified by the Biological Farmers Association.

The benefits of applying organic materials such as seaweed and humic acid are well documented – in particular, seaweed contains naturally occurring growth stimulants along with a wide range of other essential elements, ideal for promoting plant growth and health.

Many farmers have been using Seamungus on crops ranging from grapes through to fruit and vegetables, and are seeing amazing results, whether it's used as an alternative base manure or as an additional input to their existing fertiliser programs with measured returns on investment.

Vic Szabo from Sustainable Horticultural Crop Management Services is an independent consultant agronomist, who recently established a number of controlled trials in the Virginia area of South Australia. These trials were carried out on potatoes, spinach, carrots and almonds. The purpose of these

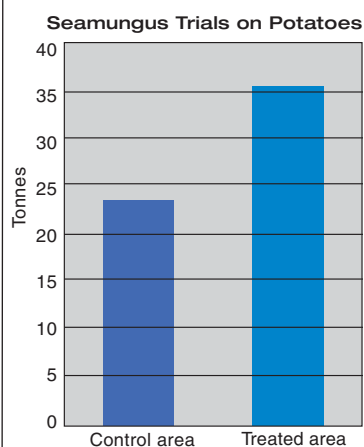
Australian Seamungus trials results

trials was to apply 1 tonne per hectare of Seamungus to gauge and measure the effect on crop yields, any quality and nutritional benefits, plus the residual effect on soil organic matter and nutrient levels – from which the cost/benefit analysis of the Seamungus application could be calculated.

The potato trial demonstrated significant benefits from the Seamungus application – not only in terms of a huge yield increase, whilst maintaining similar tuber nutrient levels, but most importantly in improving the quality of the tubers – similar results to those achieved in our other potato trials, reported in our previous newsletter.

Vic reported that the skin quality of tubers was vastly different between the treated and untreated – the treated tubers were smooth-skinned, whereas a high percentage of the untreated tubers had rough and cracked skin. Also, the tuber size was more even in the treated, whereas the untreated tubers were very uneven.

The Seamungus treated plots yielded 35.4t per hectare of potatoes against the untreated plots yield of 22.7t per hectare – a yield increase of 55.9% (see graph following).



Unfortunately these potatoes were not graded and as such no pack outs were recorded.

Vic concluded that "Even with the unfavourable growing conditions, the trial has shown the remarkable benefits of Seamungus as an additional application on potatoes. However, this being a nonreplicated demonstration trial, similar trials should be repeated in the same region, at least twice more". These additional trials are currently underway.

The spinach trial produced similar results from the Seamungus application. Vic reported the following "The treated plants developed a deeper green colour from the control plants which were a paler green even at harvest. The treated spinach produced approximately 20% higher marketable yield." Vic concluded "Even though the conditions were not favourable to growing any crop during the spring and early summer period, the trial certainly showed benefits in the application of Seamungus in spinach, such as a more robust root system, better colour and more marketable yield.

The almond trial was the only trial that did not produce a significant economic benefit over and above the cost of the Seamungus application - 'having said this there were some very good indicators and there is some positive thought that the true benefit of the Seamungus application will be seen in the second year.

Vic reported "In almonds, kernels are graded according to size, the larger the kernel, the better the return to the grower. In the small sample collected, the treated plot produced 22% "18-20" size (the largest), 60% "22-24" and

18% smalls. The untreated plot did not produce any 18-20's, just 62% "22-24" and 38% smalls. The yield in both the treated and untreated plots returned the same yield of 2600kg per hectare.

The kernel analysis showed better nutritional levels in the treated almonds, particularly zinc and calcium."

Vic concluded "The overall results of the Seamungus application in almonds have shown 3 distinct advantages:

1. Better early shoot growth
2. Significantly better kernel size.
3. Higher nutrient levels in the kernels at harvest.

Unfortunately in the first year the significantly better kernel size does not return the economic benefit required to justify the cost of the Seamungus application.

The 22% large almond kernels represent 572kg of almonds per hectare, giving an added return of approximately 7 cents per kg or \$40 per hectare.

This trial will continue for a second year to gauge any additional returns.

Unfortunately the carrot trial was not completed and a new trial has recently commenced.

Given the extremely positive results of these Seamungus trials further controlled trials are being established on many other crops including grapevines, citrus and olives.



Concordia Farm



quality. During Spring, as well as post harvest, Danie applies 1/2 ton of Neutrog fertiliser per hectare to the soil in the vineyards, along with chemical fertilisers.

The ease of application is also a big draw card for Danie, together with Neutrog he has developed a bucket system, which one attaches to the back of a tractor - this allows for the Neutrog pellets to be distributed evenly and accurately.

Concordia Farm is situated in Bonnievale just outside of Robertson, in the Western Cape. The farm has been owned by the du Toit family for the last three generations having been purchased in the early 1900's by Danie du Toit's great grandfather. Being a family owned business, all the traditions and insights have passed down from generation to generation, with Danie's son Dirk, next in line to continue with the family tradition.

Concordia Farm consists mainly of vineyards and fruit

trees, 45 hectares of vines and 25 hectares of fruit trees. Plums are the order of the day at Concordia, with a few other citrus varieties also farmed - all of the fruit is exported and is of top grade quality. The grapes from the vineyards are sold to the local Bonnievale Winery, which is growing in popularity each year.

Danie du Toit has had a long relationship with Neutrog Fertilisers, having used it consistently for the past 4 years and always seeing impressive results. Danie uses Neutrog's Rapid Raiser

when planting; applying 500g per tree and 500g of Bounce Back per tree as a soil conditioner, about 10 weeks after.

"Neutrog Fertilisers provide just the right amount of organic matter to the soil, after all it is very important to put something back into to the soil" says

Danie du Toit. Danie has found that due to adding Neutrog to his chemical regime, he has achieved a better soil structure and a wider range of soil nutrients. This in turn leads to a better balance of the micro nutrients and ultimately a firmer and better fruit

Danie has recently purchased 30 hectares from a neighbouring plot which he hopes to develop further. Being unfarmed soil, Danie is eager to put down Neutrog, as the soil will need the nutrients that Neutrog Fertilisers will provide.

We hope to return to Concordia in the near future to see the produce cultivated from this new land and to see the impact Neutrog Fertiliser has made to the soil.