

Case Study Growing Potatoes using Talborne Organics Vita Fertilizer

Tel: 013 933-3172 / 061 454-9632 or Cell: 079 896 5814

Email: info@talborne.co.za
www.talborne.co.za

Potato farming is big business in South Africa. While it is possible to make good money growing potatoes, due to the high input costs, it's unfortunately very easy to "lose the farm" when things go wrong.

Common problems include :

- Diseases such as Blight, Mosaic virus, Leaf roll & Scab
- Insect attack
- Plant parasitic nematodes
- Poor quality, high volume of undersize, issues like hollow heart etc.
- Poor yields
- Extreme temperatures, drought & flooding.

Although it is never possible to remove the risk in farming, our experience tells us that healthy soils are the foundation for minimizing risks. Moreover, healthy, well-nourished plants will provide better yields, better quality, and require less input costs, leading to greater profits and lower stress levels for the farmer.

Farmer's experiences using Talborne Vita Fertilizers

A farmer in the Weenen region used Talborne fertilizers in conjunction with advice from a consultant, where the focus was to ensure the plants had no nutritional deficiencies. This was done by using soil and sap analysis to have a real time understanding of the condition of the plants.

The typical yield for the farm was 40 – 45 ton / ha, but with this approach he harvested 61 tons / ha, a ~40% increase in yield. Apart from the improvement in yields, no fungicides, herbicides or nematicides were used, which presented a huge saving in input costs. Although there were some weeds, they were allowed to grow and didn't present a major problem.

Another interesting observation took place, there was a brief insect infestation that took hold of the crop. The temptation was to spray pesticides, but instead of treating the symptom, the farmer and consultant looked for a root cause. The sap analysis indicated that there were some micro nutrient deficiencies. These



More and thicker stolons are a sign of ample nutrition



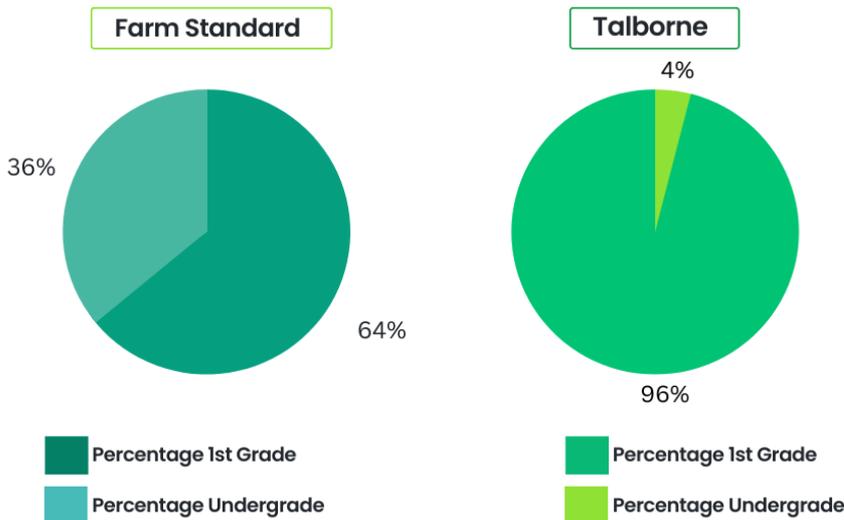
High levels of Calcium lead to increased density, quality, and shelf life. Hollow heart is greatly reduced or eliminated.

Healthy Soil = Healthy Plants = Healthy People

were rectified using foliar sprays. Within 2 days, the insects had moved off and only an insignificant amount remained on a handful of weaker plants.

Another farmer based near Greytown conducted a comparison between Talborne's Vita Grow 2:3:2 (16) Organic fertiliser versus the Farm Standard fertiliser, which was a commonly used, blended NPK synthetic chemical fertiliser. Aside from this, both plots received the same management.

Products	Farm Standard	Talborne 2:3:2 (16)
Yield/ha (t)	66.8	67.1
Yield% 1st Grade / Undergrade	74% / 26%	96% / 4%
Specific Gravity	104	107



In this trial, there wasn't a major difference in yield, but there was a significant improvement in quality, with only 4% of the yield considered Undergrade. There was also a visible calcium deposit around the edges which is key to improving shelf life, giving farmers some flexibility to store products until the market prices are optimal. The nutrient density of the potatoes was evident, the one farmer joked: "Are these stones or potatoes?"

A farmer close to Harrismith provided some interesting feedback about the resilience of his potatoes when there was an extreme rainfall event in 2022. A small stream separated two fields, on the one side of the stream the crop was under a "soil health program" that made extensive use of compost, compost tea and Talborne fertilisers. On the other side was a conventionally managed field. After the heavy rainfall, both sides of the stream were completely submerged in water for 3 days.

The conventional field was completely lost, whereas the "soil health" side made a complete recovery. This is real world evidence of the resilience of healthy plants in healthy soil, and it proves how this approach minimizes risks and provides peace of mind for farmers.



Good phosphate levels result in well-developed roots.



Organic Potato Field: Plants are strong and healthy resulting in resistance to pest and disease pressure, and resilience during periods of extreme weather.



Superior quality first grade potatoes (Calcium evident) provide healthy, nutrient dense food to the market and better prices to the farmer. Health Soil = Healthy Plants = Healthy People

Sales Enquiries

Tel: 013 933-3172 / 061 454-9632 or Cell: 079 896 5814. Email: info@talborne.co.za

