



CURRENT RESEARCH & TRIAL RESULTS

AUSTRALIAN MADE
AUSTRALIAN OWNED



LIQUID KELP



Increasingly the focus amongst growers is to reduce the use of traditional chemical fertilisers and introduce organic liquids to not only improve crop yield but to restore health to the soils. Climatic stressors and shortages in water have affected production and supply, generating interest in liquid seaweed extracts. Why? Studies have shown they possess powerful plant growth enhancing properties through metabolic benefits, triggering disease response pathways and increasing stress tolerance. The current volatile climate has challenged historical growing methods, with crops not being able to withstand the harsh winters that bring with it frost and the sweltering summers that bring drought and brutal high temperatures. Liquid seaweed extracts significantly enhance crop gain and resistance to stress and disease.

Our Liquid Kelp product is processed from seaweed biomass using *Sargassum*, *Ascophyllum*, *Nodosum* & *Laminara* algae to achieve optimum plant growth.

It has been proven to:

- Enhance crop yield
- Improve root structures
- Improve plant development including flowering and fruiting
- Enhanced ability to tolerate plant disease
- Enhanced ability to combat climatic stressors like cold or drought
- Improves soil structure
- Increases soil water holding capacity
- Improves soil microbiology

Seaweed extracts are rich in plant growth regulators, including auxins, cytokinins, ethylene, gibberellins & abscisic.

Studies have shown:

- The presence of betaines and proline act as a buffer and osmoprotectant during times of increased stress on the plants
- Stimulation of root growth is supported by alginate and a diverse collection of polysaccharides, as well as the triggering defence mechanisms within the plant
- Enhanced nutrition of the plant is impacted by minerals and trace elements

Old Shiraz (6 acres):

- Plant & Soil Food (8 Litres per hectare) on the ground after harvest (as soon as leaves fall off before pruning) with boom spray
- Nitrogen Plus Foliar spray (8 Litre per hectare) before flowering
- NPK Foliar spray (8 Litre per hectare) after caps off
- NPK was mixed with Sulfur and MankozeB for the control of powdery and downy mildew

Shiraz 1654 clone (2.5 acres):

- Plant & Soil Food (8 Litres per hectare) on the ground after harvest (soon as leaves fall off before pruning) with boom spray
- Nitrogen Plus Foliar spray (8 Litre per hectare) before flowering
- NPK Foliar spray (8 Litre per hectare) after caps off
- NPK was mixed with Sulfur and MankozeB for the control of powdery and downy mildew

Grenache (2.5 acres):

- Plant & Soil Food (8 Litres per hectare) on the ground after harvest (soon as leaves fall off before pruning) with boom spray
- NPK Foliar spray (8 Litre per hectare) before flowering
- NPK Foliar spray (8 Litre per hectare) after caps off
- NPK was mixed with Sulfur and MankozeB for the control of powdery and downy mildew

Cabernet (3.5 acres):

- Plant & Soil Food (8 Litres per hectare) on the ground after harvest (soon as leaves fall off before pruning) with boom spray
- Nitrogen Plus Foliar spray (8 Litre per hectare) before flowering
- NPK Foliar spray (8 Litre per hectare) after caps off
- NPK was mixed with Sulfur and MankozeB for the control of powdery and downy mildew

Results:

- Plant & Soil Food reduced the nematode population within the soil
- NPK mixed well with no blockages

Schulz Vineyard has exclusively used Microtek products since 2005. The vines are known for their quality of grapes and are highly sought after throughout the region.



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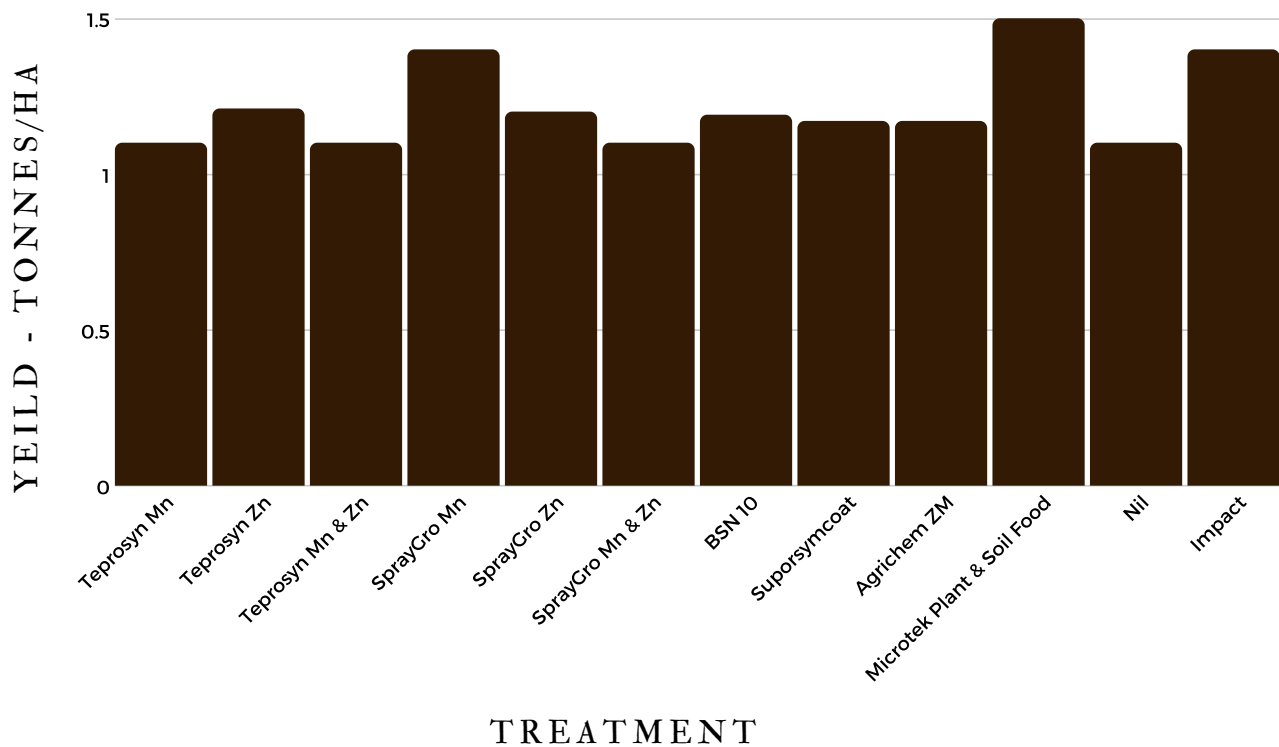
Image 1: Grange Clone grafted onto Shiraz. 12 months.

Image 2: Grange Clone Shiraz. 3 years.

IAMA TRIAL RESULTS



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- Trials conducted by IAMA at Lock, Central Eyre Peninsula, South Australia
- Plant & Soil Food was used in the trials
- It was applied at a rate of 4 Litres per tonne, just prior to sowing

Investment – \$1.40 per hectare

Return – \$50.00 per hectare

These replicated trials confirmed that Plant & Soil Food outperformed all other single & multi-nutrient products.

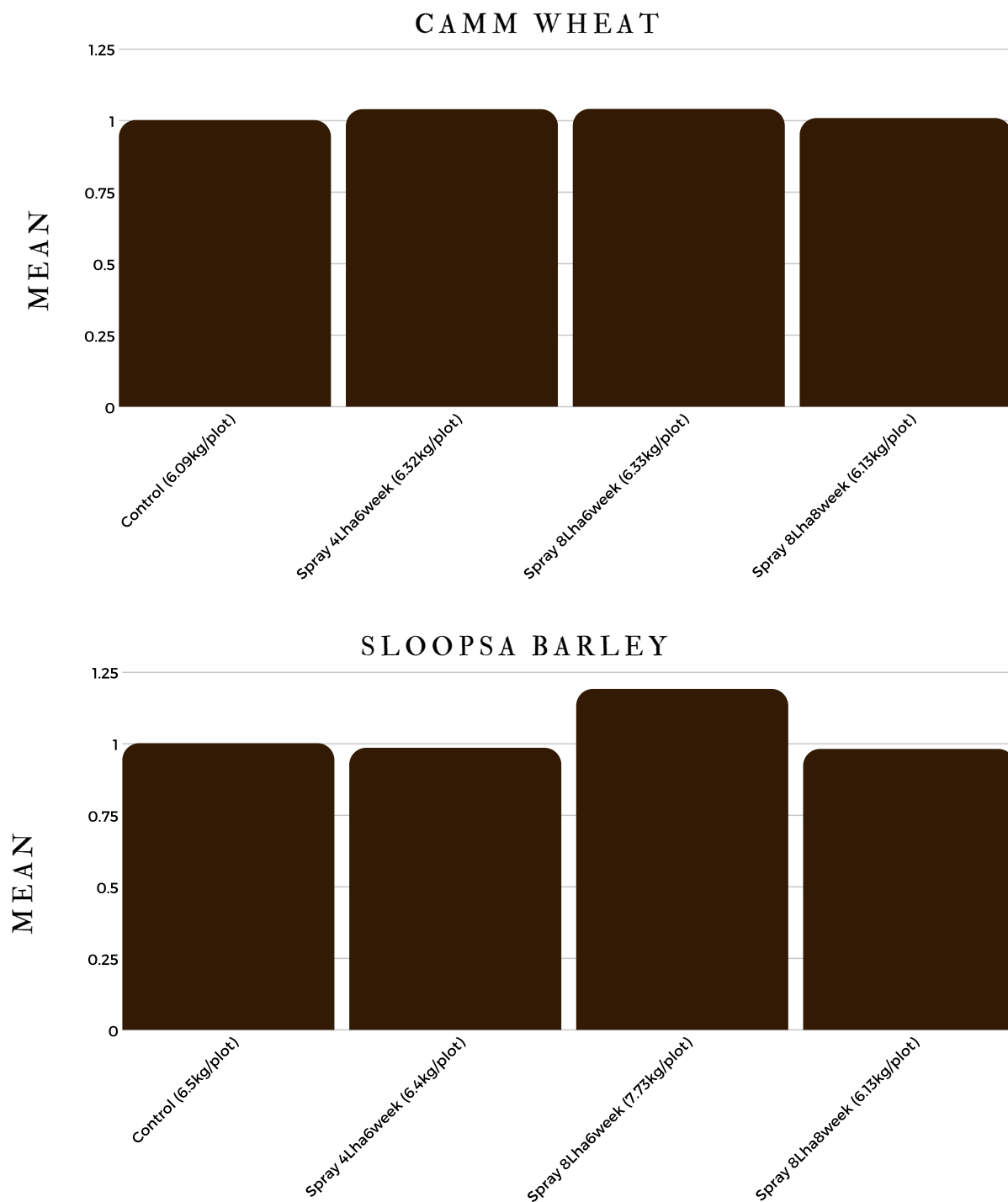
TURRETFIELD & HART TRIAL RESULTS



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- Trials were conducted by Rob Wheeler (SARDI) at Turretfield & Hart on Camm wheat & Sloopa barley
- Nitrogen Plus was used during the trials

Turretfield 10m plots:



TURRETFIELD & HART TRIAL RESULTS



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Hart 5m plots:



PRODUCT CHEMICAL ANALYSIS



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Plant & Soil Food:

Element	Amount	Units
Nitrogen (N)	500	mg/L
Phosphorous (P)	200	mg/L
Potassium (K)	985	mg/L
Calcium (Ca)	120	mg/L
Sulphur (S)	150	mg/L
Magnesium (Mg)	120	mg/L
Iron (Fe)	1.1	mg/L
Silica (Si)	28	mg/L
Copper (Cu)	0.4	mg/L
Boron (B)	1.9	mg/L
Zinc (Zn)	3	mg/L
CFU	12.7	million

Nitrogen Plus:

Element	Amount	Units
Nitrogen (N)	12%	w/v
Phosphorous (P)	200	mg/L
Potassium (K)	985	mg/L
Calcium (Ca)	120	mg/L
Sulphur (S)	150	mg/L
Magnesium (Mg)	120	mg/L
Boron (B)	1.9	mg/L

NPK:

Element	Amount	Units
Nitrogen (N)	6%	w/v
Phosphorous (P)	4%	w/v
Potassium (K)	6%	w/v
Calcium (Ca)	7610	mg/L
Sulphur (S)	2400	mg/L
Magnesium (Mg)	7700	mg/L
Iron (Fe)	334	mg/L



TESTIMONIALS

"Last season we sowed 211a of Schooner Malting Barley just west of Bordertown on medium sandy loam soil. Usually at early tilting we put on Urea to boost the yield. However, this season we trialled Nitrogen Plus as an alternative to Urea. Since we could apply this with a broad leaf herbicide this seemed like an ideal situation. We applied Nitrogen Plus at 4.7L/Ha. Throughout the growing period we noticed very healthy, strong plants in parts of the paddock, which suffer water logging. The colour was impressive, and the increase in yield was obvious. Surrounding grain growers also commented on the obvious quality of the crop and would be interested in the Microtek Organics products. We are more than satisfied that Nitrogen Plus is an effective product and we intend to use it again on the same paddock for next seasons wheat crop in a similar program." **Craig & Shaun Taylor - Bordertown**

"I was introduced to Microtek Organics foliar fertilisers in February 2001. At that time, I began to use Microtek products as additives to my fertilising program for growing Lucerne and Wallaroo oats for the horse trade. I have found the leaves of the Lucerne broader, the regrowth from the crown is very pleasing, and the soil has improved due to the micro organisms in Microtek fertilisers. The Wallaroo oats were sprayed at the four leaf stage. The fertiliser boosted bale production by 28 bales per hectare. I have been using both Microtek Complete and Microtek Nitrogen Plus with very pleasing results. I have found the proprietors and the staff very helpful in assisting with my farming fertilising program." **Jim Williams - Mallala**

"I run an irrigated dairy farm at Myponga, South Australia. I have used organic based liquid fertiliser on clover and rye-grass pasture as well as barley and vetch for hay production. I have used it in extreme winter conditions and found the plant responded where other fertilisers do not. The best result that I found was the promotion of good bugs to combat against red mite and Lucerne flea. In my opinion this product has had a beneficial result in our fertiliser program." **David Clarke - Myponga**

"We have been using Microtek liquid fertilisers solely since July 2001. WE are milking 220 (predominately Jersey) cows on 71 Hectares. Permanently irrigating 31 hectares, starter irrigation 10 hectares, balance dry land. 2001-2001 we increased cow numbers from 200 head to 220 head, and have increased milk yield from 1,000,000L to 2,000,000L (estimated) without losing solids content. Our pastures are more balanced and palatable than before, tending to be less grass dominant. We have had an excellent Spring and now we are in Summer, the signs seem to be promising as well. Cows do graze much lower and we are mulching less. We have been spraying Complete at 8L per hectare and Nitrogen at 4L per hectare per grazing. Also Booster at 8L per hectare six monthly. WE are now experimenting at higher rates and are looking forward to seeing the results." **Barry & Merridie Clarke - Myponga**

ONGOING TRIALS ARE BEING
COMPLETED BY
- SCHULZ VINEYARD
- NURIOOTPA HIGH SCHOOL WINE
& AGRICULTURE PROGRAM
- PETER DOECKE BROADACRE
TRIALS

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