



*Quality Ingredients
Australian Made
Family Owned*

FERTILIZERS

Nutrient Solutions

Table Grape Nutritional Guide

Crop nutrient budgeting is critical to improve production efficiency and to reduce environmental impacts. SLTEC's range of quality liquid fertilizers and microbial stimulants are supported by our comprehensive field agronomy service.

Our team of agronomists can assist you to maximise the factors that are within your control and help you to achieve your production goals, while saving time and money.

www.sltec.com.au

Why Choose SLTEC® Fertilizers?

SLTEC® Fertilizers is a leading manufacturer of fluid Fertilizers, based in Northern Victoria.

Our Promise

Quality

SLTEC® Fertilizers is committed to supplying consistently high quality products.

Investment

SLTEC® Fertilizers will ensure that your fertilizer inputs maximise the return on your investment.

Service

SLTEC® Fertilizers will provide professional, logistical and agronomic support to ensure a sustainable relationship.

Read our quality assurance policy online at sltec.com.au/quality

Why use Fluid Fertilizer?

- Efficient and highly plant available
- Can deliver many nutrients with a single application
- Small and frequent applications reduce leaching and runoff
- Foliar and Fertigation options allow flexible application timing unlike relying on broadcast application
- Consistency of product and uniform application across the soil
- Nutrients infiltrate to the root zone where maximum uptake is achieved
- Foliar application particularly of trace elements avoids tie up in the soil
- Can be mixed with a range of farm chemicals
- Labour savings and improved workplace safety



SLTEC's Commitment to Quality

Can your fertilizer supplier give you this sort of quality assurance?

SLTEC is committed to delivering quality products and services. We continue to put a tremendous effort into ensuring that our products meet the tightest quality parameters.

- We carefully select the ingredients we use in our formulations from suppliers all over the globe.
- We routinely seek independent laboratory testing to confirm the levels of all nutrients listed on our product labels. We also regularly test for heavy metals or other contamination.
- Our blends are developed by our formulation chemist, who has now developed over 400 different blends, some of which have been servicing very sensitive crops in hygienically clean glass house environments.
- We invest annually in formulation research and advanced chemistries for the fluid fertilizer and industrial water treatment sectors.
- Our team has specialized formulation software that aids the development of each blend, from basic chemistry building blocks into complex and sophisticated formulations for applications such as hydroponics, foliar fertilizer, fertigation, water treatment etc.
- Our batching and mixing systems are calibrated every 6 months by an external certifying body.
- Each batch must meet a variety of tests and quality specifications before being released for dispatch.
- Our labels state accurately the nutrient content of each blend and comply fully with state and federal legislation and the Fertilizer Australia Labelling Code of Practice.
- We retain samples of each and every blend made with a unique batch number, enabling traceability of batches.
- Our staff are qualified and thoroughly trained to ensure our products and services remain at the highest standards of excellence.

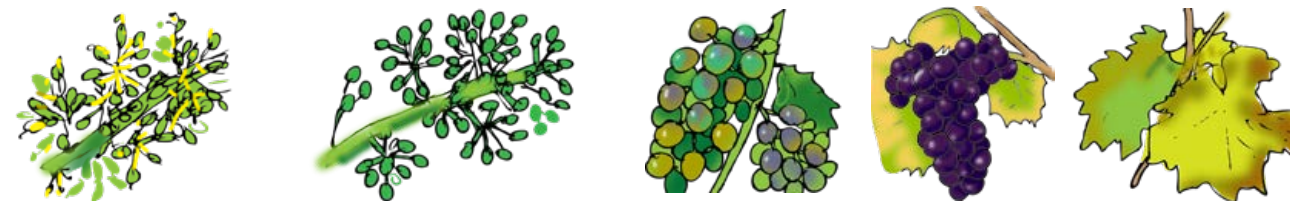
In summary, quality is an absolutely essential component of the culture and processes at SLTEC and we pride ourselves on it. Development, manufacture, storage, labelling and transport of our products is carried out in a manner that aims to provide our customers with the assurance that the products they receive are of the highest quality, ready to use and will deliver the outcomes desired.

Further information on our quality policy is available on our website.





Growth Timeline



2 Weeks After Flowering (complete Fruit Set -> 2 - 4 mm size fruit)		At or just prior to Bunch Closure		Veraison to 2 weeks prior to Harvest		Post Harvest	
							30
	20		10				
7	15	7	20				
6			8				
							30
	30		20		20		30
	10						
			10				10
	40		40				
	20		20	3 - 7			5
				2 - 5			
	20		10				25
			15				50

out of these interpretations and recommendations for any damage loss or injury of any nature and the user takes these interpretations and recommendations on these terms.

Product Technical Information

Product Technical Analysis									Application Rates	
Product Code	Name	N% (w/v)	P% (w/v)	K% (w/v)	S% (w/v)	Ca% (w/v)	Specific Gravity (kg/L)	pH Range	Fertigation	Foliar Use 200 to 2,000 L/ha Water
SS9001	SS 11:16:0 N as NH ₄ 11.3%, P as PO ₄ 16.0%	11.3	16.0	-	-	-	1.29 - 1.30	6.0 - 7.0	20 - 100 L/ha	1 - 5 L/ha
GG0009	Baseline Plus N as NO ₃ 0.02%, N as Urea 11.7%, P as PO ₄ 4.9%, Mg 0.2%, Mn 0.01%, Zn 0.01%, Cu 0.005%, B 0.02%, Fe 0.01%, Mo 0.005%, Fulvic Acid 0.01%, Fish Emulsion 0.4%, Humic Acid 0.3%, Kelp 0.4%, Molasses 0.4%	11.7	4.9	13.6	2.0	0.01	1.29 - 1.32	8.0 - 9.0	10 - 80 L/ha	2 - 15 L/ha
GG0024	Cal Mag & Boron N as NO ₃ 12.2%, Mg 3.4%, B 0.2%	12.2	-	-	-	12.1	1.47 - 1.50	2.0 - 3.0	10 - 100 L/ha	5 - 10 L/ha
SNPK0046	TE 8 PLUS N as NO ₃ 2.6%, Mg 2.4%, Mn 3.2%, Zn 3.2%, Cu 0.5%, Mo 0.02%, B 0.2%, Fe 0.7%, Fulvic Acid 0.5%	2.6	-	0.1	4.2	-	1.28 - 1.29	1.0 - 2.0	10 - 25 L/ha	2 - 10 L/ha
GG0180	Spring Strength N as NO ₃ 11.3%, N as NH ₄ 5.5%, N as Urea 11.1%, Mg 0.4%, Mn 0.2%, Zn 0.5%, Cu 0.1%, B 0.1%	27.9	-	-	-	7.0	1.39 - 1.41	3.0 - 4.0	10 - 60 L/ha	5 - 10 L/ha
GG0068	High K P P as PO ₄ 12%	-	12.0	36.5	-	-	1.55	12.0 - 13.0	10 - 80 L/ha	1 - 5 L/ha
SNPK0057	Nitro Mag N as NO ₃ 9.8%, Mg 8.8%	8.3	-	-	-	-	1.45 - 1.47	< 2.0	12 - 25 L/ha	2 - 10 L/ha
SG0039	QuadSHOT® Fe 0.006%, C 5.2%, Fulvic Acid 0.3%, Fish Emulsion 8.0%, Humic Acid 6.6%, Kelp 8.0%, Molasses 8.0%	0.3	0.1	3.4	0.2	0.2	1.10 - 1.20	2.5 - 3.5	20 - 60 L/ha	1 - 5 L/ha
SG0017	BiologiCAL® PLUS N as NO ₃ 0.3%, P as PO ₄ 0.1%, Fulvic Acid 0.01%, Fish Emulsion 0.3%, Humic Acid 0.2%, Kelp 0.3%, Molasses 41.8%	0.3	0.1	2.0	1.8	6.3	1.27 - 1.30	8.0 - 10.0	20 - 60 L/ha	4 - 20 L/ha
SNPK0033	Z Chel N as NH ₄ 2.8%, Zn 6.5%	2.8	-	-	-	-	1.20	7.0 - 8.0	2 - 5 L/ha	400 mL - 1.5 L/ha
SNPK0050	Boron Complex N as amine 6%, B 15%	6.0	-	-	-	-	1.34 - 1.38	7.5 - 8.5	2 - 5 L/ha	1 - 3 L/ha
SNPK0060	Iron Chel N as NH ₄ 1.8%, Fe 6.0%	1.8	-	-	-	-	1.30 - 1.31	7.0 - 8.0	8 - 15 L/ha	1 - 3 L/ha
SNPK0013	Mag K Plus Mg 4.9%, Fulvic Acid 0.5%, Kelp 1%	-	-	9.5	7.7	0.01	1.30	5.5 - 6.5	10 - 80 L/ha	1 - 10 L/ha
SNPK0074	CellCAL PLUS Cu 0.25%, B 0.1%	-	-	-	-	5.9	1.13 - 1.14	6.0 - 7.0	10 - 100 L/ha	5 - 10 L/ha
GG0022	Calcium Nitrate N as NO ₃ 13.0%, Ca 18.5%	13.0	-	-	-	18.5	1.48	5.0 - 7.0	10 - 100 L/ha	5 - 10 L/ha
SNPK0071	K 300	-	-	30.0	-	-	1.44 - 1.45	6.5 - 7.5	N/A	2 - 10 L/ha
SNPK0055	Moly Complex Mo 23.7%	-	-	-	-	-	1.40	8.0 - 9.5	75 - 250 mL/ha	40 - 150 ml/ha

At last! A complete fluid nutrient solution



Baseline Plus™

Product Code: GG0009

Baseline Plus has a complete and balanced NPK analysis suitable for fertigation and foliar application across a wide range of crops. The analysis is perfect for plant establishment and maintained growth where a N : K ratio near 1 : 1 or a mid-season nutrient boost is required.

Benefits of Baseline Plus

- Chelated trace elements for rapid plant uptake and to drive the NPK metabolism.
- Contains SLTEC's QuadSHOT® - The ingredients stimulate soil biological activity; improving the cycling and availability of plant nutrients, plant uptake efficiencies and soil fertility and health.
- Baseline Plus has a high analysis compared to other liquid products and provides economic and efficient supply of nutrients and the capacity to reduce rates compared to common prilled complete fertilizers on the market.
- Efficiencies can be made with Baseline Plus in fertigation applications by placing the nutrients at the root mass where they will be taken up by the plant; reducing loss or waste of nutrients.

Also available with phosphonic acid – Baseline Phos Plus™

Baseline Plus™ with the additional benefits of phosphonic acid. The addition of phosphonic acid gives 125g of phosphonic acid per 1 L or 1.25 kg per 10 L application.

Guaranteed Analysis

Nitrogen (N)	11.8%
Phosphorus (P)	4.8%
Potassium (K)	13.6%
Sulphur (S)	2.0%
Carbon (C)	0.3%
Magnesium (Mg)	0.2%
Manganese (Mn)	0.006%
Zinc (Zn)	0.01%
Copper (Cu)	0.005%
Molybdenum (Mo)	0.005%
Boron (B)	0.02%
Iron (Fe)	0.01%
Fulvic Acid	0.01%
Humic Acid	0.3%
Fish Emulsion	0.4%
Kelp	0.4%
Molasses	0.4%
Specific Gravity	1.29 - 1.32 kg/L
pH	7.5 - 8.5

Typical Application Rates

Foliar:

2 to 15 L/ha
Horticulture use 200 to 2,000 L/ha water
Broadacre use at least 100 L/ha water

Fertigation:

10 to 80 L/ha

Contact:

T: 1800 768 224

E: enquiries@sltec.com.au

www.sltec.com.au

A Multitrace Solution to Maximize Crop Potential



TE 8 PLUS™

Product Code: SNPK0046

A foliar multi-trace element blend activated with fulvic acid (0.5%) to maximise uptake at lower rates than standard trace blends across a wide range of crops.

Benefits of TE 8 PLUS™

- A focus on magnesium, manganese, zinc and copper – the key drivers of photosynthesis, healthy leaves & plants; resulting in reduced disease pressure.
- Additional nitrogen to promote plant response and rapid plant uptake.
- Molybdenum and boron to enhance assimilation and transport in the plant
- Fully soluble nutrients in plant available forms.
- Fulvic acid provides an efficient chelating agent with only small amounts required to benefit plant permeability to a range of nutrients.
- TE 8 PLUS™ is physically compatible with a wide range of herbicides, insecticides and fungicides. Please contact SLTEC® for more information.
- TE 8 PLUS™ will help ensure you utilise all your fertilizer inputs as the trace elements work in synergy with your macro applications.

TE 8 PLUS™ is versatile across a range of crops from broadacre cereals and vegetables to pre-bloom and post harvest application in vineyards and orchards where it is often combined with SLTEC® Nitro QUAD 3™ or Lo Biuret Urea to improve bud nutrient levels to drive early spring growth.

Guaranteed Analysis

Nitrogen (N)	2.6%
Potassium (K)	0.1%
Sulphur (S)	4.2%
Magnesium (Mg)	2.4%
Manganese (Mn)	3.1%
Zinc (Zn)	3.1%
Copper (Cu)	0.5%
Molybdenum (Mo)	0.02%
Boron (B)	0.2%
Iron (Fe)	0.7%
Fulvic Acid	0.5%
Specific Gravity	1.30 kg/L
pH	1.0 - 2.0

Typical Application Rates

Foliar

2 to 10 L/ha
Horticulture use 200 to 2,000 L/ha water
Broadacre use at least 100 L/ha water

Fertigation

10 to 25 L/ha

Contact:

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E: enquiries@sltec.com.au

www.sltec.com.au



Improve Fruit Firmness and Skin Strength



CellCAL PLUS™

Product Code: SNPK0074

CellCAL PLUS has been formulated with the support of industry leaders to improve calcium uptake the skin quality in;

- Apples
- Table grapes
- Almonds
- Citrus
- Cherries

The three nutrients in CellCAL PLUS (calcium, copper & boron) work in a symbiotic relationship assisting in the overall health and strength of the cell walls within the fruit which produces fruit firmness and skin strength.

Both boron and copper are important during rapid fruit growth in cherries to assist in calcium uptake into cell walls and to reduce the occurrence of splitting.

Please also consider using CellCAL PLUS in combination with either;

PhosCAL PLUS™

Designed to enhance firmness and colour in pome and stone fruit.

15.0% Phosphorus, 4.1% Calcium

Apply at 5 - 10 L/ha at 7 - 10 day intervals from early fruit set. For colour enhancement in Apples apply 2 - 3 sprays beginning at early pigment development and running up to 2-3 weeks before anticipated harvest.

FirmBright P™

Designed to drive rapid cell growth sugar production and colour.

19.2% Phosphorus, 6.1% Potassium, 6.1% Magnesium

Suggested application rates for Apples and Stone fruit are 5 - 10 L/ha for two to four sprays from early fruit set at 7 to 14 day intervals.

Both are compatible with CellCAL PLUS with a minimum of 500L of water

Guaranteed Analysis

Calcium (Ca)	5.9%
Copper (Cu)	0.25%
Boron (B)	0.1%
Specific Gravity	1.13 - 1.14 kg/L
pH	6.0 - 7.0

Typical Application Rates

Foliar

5 to 10 L/ha

Horticulture use 200 to 2,000 L/ha water

For crop specific rates, please contact your SLTEC® representative



Contact:

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E: enquiries@sltec.com.au

www.sltec.com.au

Nutrient Technical Information

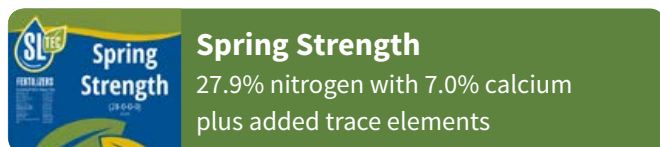
Macro Nutrients

Nitrogen

Nitrogen is an essential element for all living things and the mineral element needed in the largest amounts in most plants. It is a key component of enzymes vitamins, chlorophyll and other cell constituents.

Nitrogen availability can be enhanced by, increasing organic matter and by promoting better soil biology. As soil organic matter increase so does the level of naturally available nitrogen.

Soil nitrate and plant sap nitrate tests have a quick turn-around and can give a good indication of current nitrogen status at the time of testing.

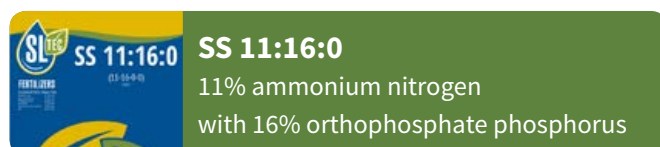


Phosphorus

While immobile in soils, phosphorus is mobile in the plants and is essential to photosynthesis, respiration, and many metabolic processes. Phosphorus is also involved in energy transfer, root development and has a direct effect on yield. The application of phosphorus increases the beneficial translocation of other nutrients, such as magnesium from the roots to the shoots of phosphorus deficient plants.

Phosphate uptake is dependent on pH and declines quickly with increasing pH. Plant uptake of phosphorus is increased in the presence of Mycorrhiza sp in many crops. Phosphorus availability and root growth are reduced during cool and wet soil conditions in spring and this can lead to reduced flower viability.

Greater available nitrogen, particularly ammonium nitrogen is known to enhance phosphorus uptake by plants. The addition of organic matter, humates and improvements in soil biology are keys to unlocking soil nutrition and in particular fixed phosphorus.



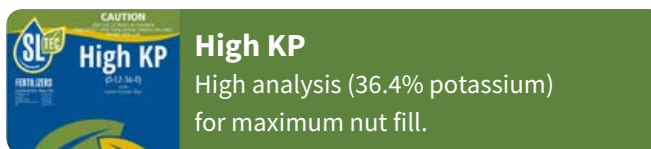
Potassium

Potassium is involved in the active translocation of sugars throughout the plant. Potassium is also involved in the osmotic potential of cells as well as the turgor of the guard cells that open and close stomata.

Potassium is required in surprisingly large amounts for normal growth and development but it does not form a stable structural part of the plant.

Potassium is essential in the process of transporting water and assimilates in the phloem and xylem that cell pH and anion balance are controlled by. Potassium is essential in cell division, the formation of starches, sugars and their effect on the thickness of cell walls (fullness of seeds) and additionally, subsequent cell stability including a plants vigour, and rigidity (osmotic regulation of cells), disease and pest resistance and frost tolerance.

It is important to maintain the ratios of K : Ca : Mg. Although potassium demand rises as fruits ripen and sugars accumulate, an excess amount of potassium can induce the deficiency of magnesium or calcium and result in potential fruit disorders.



Sulphur

Sulphur is essential to the production of chlorophyll and thus photosynthesis. Sulphur is a structural component of amino acids (cysteine and methionine) and therefore plant proteins as well as sulpho-lipids, hormones and vitamins such as thiamine and biotin.

Sulphur is important for seed production and during the vegetative stages; it is actively involved in growth, resilience to stress and disease resistance.

Sulphur uptake through the roots, under certain conditions, may inhibit phosphate and nitrate.


Sulphur is easily leached and as such, it is common to see low sulphur in soil analysis, particularly on coarse or sandy loam soils and in low pH soils. Adding organic matter and animal manures can help to improve sulphur levels.



Calcium

Calcium is a key component of cell walls maintaining membrane structure and nutrient uptake. It has a significant role in fruit quality, colour and aroma. Good calcium levels aid in stress and drought tolerance. Low calcium can result in leaky cell membranes resulting in a loss of integrity and production efficiency. As the plant grows we understand that calcium is therefore critical to plant vigour, pollen germination and seed formation.


A high proportion of exchangeable Ca^{2+} ions is usually associated with a better-structured soil. When exchangeable sodium is replaced with calcium in a sodic soil the Calcium improves aggregate stability. The soil Ca : Mg ratio is particularly important in determining physical properties of the soil and hence the availability of other nutrient cations.



BiologiCAL® PLUS
Plant available calcium with
a balanced mix of biostimulants.

Magnesium

Magnesium is an essential component of chlorophyll and is needed for many processes including the transfer of energy and protein synthesis and cell structure. It is also responsible for the activation of many enzymes in photosynthesis, respiration and the formation of DNA and RNA. After harvest, vines accumulate a significant amount of magnesium, which is stored in the roots, shoots and woody components of the trunk. Magnesium accumulation continues to leaf fall with most being stored in the roots and leaves; however, no magnesium is actively absorbed during leaf drop.




Cal Mag & Boron
Maintains plant Ca : Mg ratios with
boron to assist calcium mobility.

Micro Nutrients

Manganese

Manganese is directly involved in photosynthesis where it functions in chloroplasts, accelerating germination and seedling growth. Manganese deficiency is not uncommon particularly when soils are cool and wet or when a soil pH is over 7.0. In contrast, manganese toxicity can occur on coarse-textured soils when the soil is very acid (pH below 5.0).

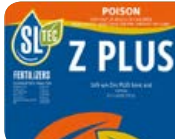


TE 8 PLUS
A foliar multi-trace element blend
for rapid plant response.

Zinc

Zinc is actively taken up by the plant. This takes place in greater amounts than copper and less than manganese. Zinc absorption is greatly reduced in low temperatures and by inhibition from other elements. Copper and phosphorus are strong competitors for the same carrier sites, while magnesium, iron, and manganese can all depress the uptake of zinc. The pronounced effect of zinc deficiency on growth, especially internode length, is a consequence of its importance in the synthesis of tryptophan – a precursor to auxin indole acetic acid (IAA) which is essential for the normal enlargement of cells in stems and seed development. Along with potassium, zinc has a regulatory role in the uptake and transportation of water within the plant. Zinc is also required for chlorophyll production and nucleotide synthesis.


Zinc deficiencies can occur in both acid, leached soils or in calcareous, high pH soils.



Z PLUS
15.9% zinc plus fulvic acid
for maximum uptake.

Copper

Copper is actively taken up by plants and is able to displace other ions from root exchange sites. Copper is an integral component of chloroplasts and hence is vitally important for root metabolism, cell wall and pollen formation and fertilization.



TE 8 PLUS
A foliar multi-trace element blend
for rapid plant response.



Boron

Boron is only required by plants in very small amounts, however, is directly related to cell division and calcium assimilation. It is necessary for the germination and viability of pollen and flowering.

Without boron, the plant struggles to utilise essential nutrients like calcium, magnesium, nitrogen, and phosphorus, with a subsequent reduction in new tissue development. Death of terminal buds, poor fruit set and fruit breakdown disorders such as internal cork are often associated with boron deficiency. Deficiencies are found in acid soils, heavily weathered and coarsely textured soils. Boron is easily leached below the root zone.

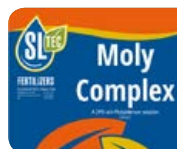


Boron Complex

15% boron to load up buds for maximum set at flowering.

Molybdenum

Molybdenum is involved in two major enzymes; nitrate reductase and nitrogenase, and as such is also involved in nitrogen fixation by legumes along with iron and cobalt. Molybdenum uptake is inhibited by high copper and especially manganese and aluminium in acid pH soils and highly weathered soils. Deficiency has been noted in fruit trees as yellow / orange spotting on leaves and premature leaf fall – the latter most likely associated with poor nitrogen assimilation, however, molybdenum is directly related to cell division and calcium assimilation. It is necessary for the germination and viability of pollen and flowering.



Moly Complex

24% molybdenum solution.

Iron

The main function of iron within plants is in the production of chlorophyll. Lime-induced chlorosis may occur as the soil pH rises over 7, or in heavily-limed soils when iron becomes unavailable to plants. Iron deficiency causes interveinal chlorosis of new terminal leaves. As the condition becomes more severe, the whole leaf becomes pale yellow.



Iron Chel

6% iron chelate.

Inputs that Stimulate Soil Biology

Kelp

Bio Kelp (22% Kelp)

Kelp extracts contain amino acids such as glycine and plant hormones including auxins, betaines and cytokinins which in combination stimulate plant growth. They should not be regarded as fertilizers as the nutrient levels are typically too low to have any direct value. Kelp extracts do have strong effects on soil microbes and in particular stimulate the activity of photosynthetic bacteria and actinomycetes which can help provide protection against soil-borne pathogens.

Fish Emulsion

Fish Emulsion (100% Fish Emulsion)

Fish Emulsions are a source of readily available organic nitrogen and can be especially useful when this is needed to improve the C : N ratio in the soil. They are also beneficial in stimulating growth and activity of many micro-organisms. The net effect is an increase in the potential for nitrogen cycling and also a somewhat reduced requirement for nitrogen inputs to some crops and pasture. Lower application rates (2 L/ha) appear to stimulate fungi and cellulose utilisers that do not respond well to high Nitrogen. Higher rates (10 L/ha) appear to promote photosynthetic bacteria and actinomycetes and suppress lactic acid bacteria.

Humate

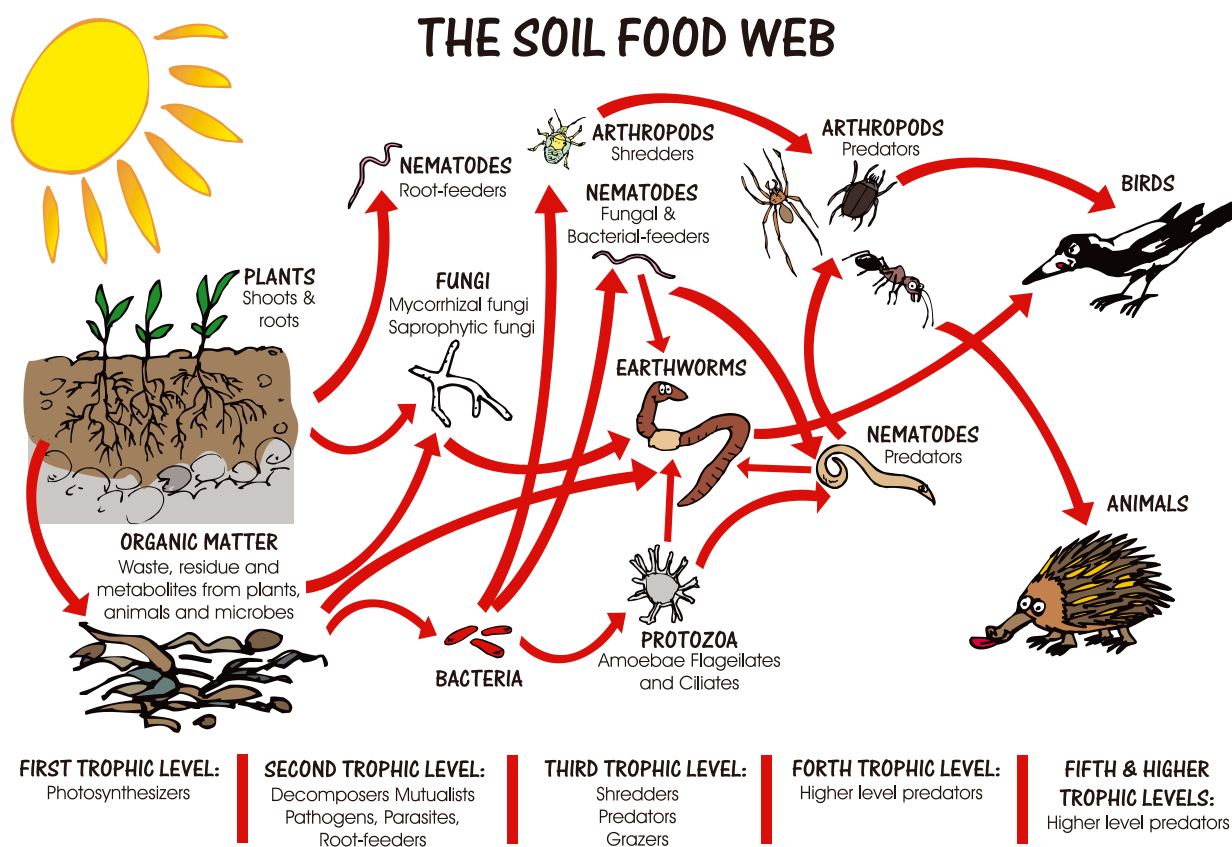
Humic K 26 (25% Humic Acid)

Humates are soil conditioners with high carbon content. They are useful materials where adjustment of the C : N ratio is required. Humates are also important in releasing bound nutrients into plant available forms and helping to improve soil structure at relatively low application rates. These materials produce significant biological effects with a strong suppression of lactic acid bacteria and stimulation of fungi, especially cellulose utilisers, which as the name suggests are important in the breakdown of cellulose and certain other resistant materials, thus increasing the formation of humus and helping to improve soil structure.

Molasses

Molasses (100% Molasses)

Molasses provides a readily metabolisable carbon and energy source that can be utilised by most organisms. Low rates (2 L/ha) can be effective in stimulating most groups of microbes and in particular fermenters like lactic acid bacteria and yeasts. However, being quickly utilised, it will provide only a short-term benefit unless other actions have been taken to improve the soil environment.



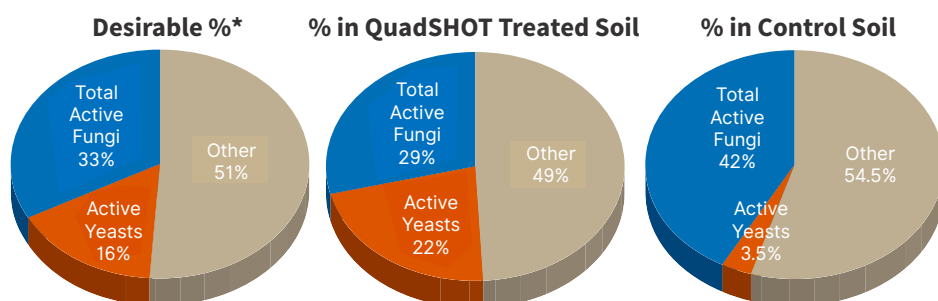
QuadSHOT® Trials – 14/15

As a part of SLTEC's commitment to R&D, we have initiated a range of bio efficiency trials in major Almond growing areas. Our aim is to ensure that we are not only delivering cost effective liquid fertilizer options; but also inputs and advice that assist you to improve and maintain the productivity and sustainability of your soil.

QuadSHOT® is a unique organic soil conditioner made from Kelp, Fish Emulsion, Molasses, and Humic acids. The ingredients of QuadSHOT® are combined with the aim of stimulating soil biology, improving soil health, nutrient cycling and the subsequent uptake of applied nutrients. Generally, organic/biological inputs will help to stimulate long term changes in nutrient uptake efficiency and

subsequent plant health and product quality, rather than simply providing immediate increases in crop yield. Therefore it is often a challenge to prove short term results arising from applications of these types of organic inputs.

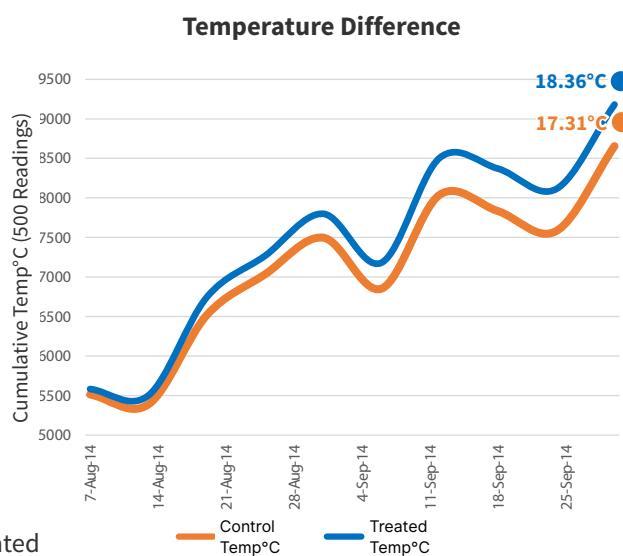
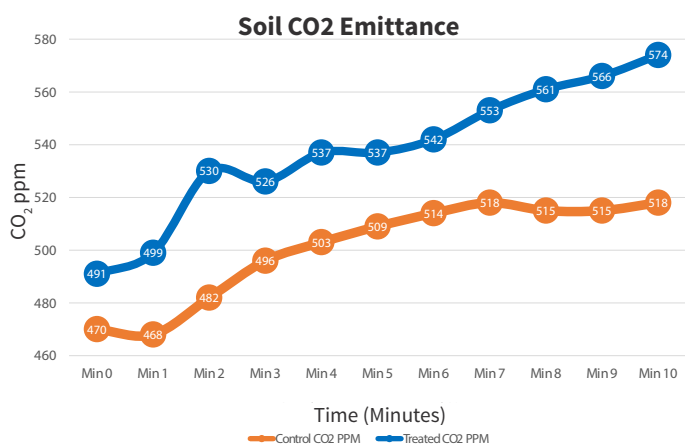
During SLTEC's recent trials (Robinvale VIC), QuadSHOT® fertigated at 30 L/ha has stimulated an increase in soil microbial activity in the Almond tree root zone. We were able to measure this as a function of emissions of soil CO₂ from the beginning of the growing season and importantly a consistently warmer soil in the QuadSHOT® treatments. This was an average of 0.7°C higher than the control over the 56 day testing period.



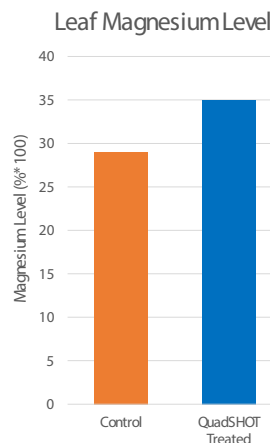
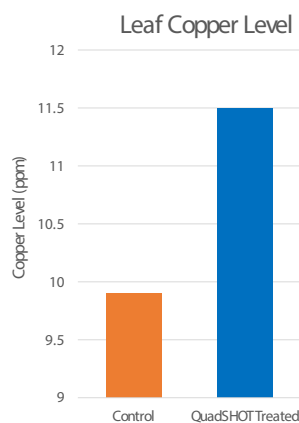
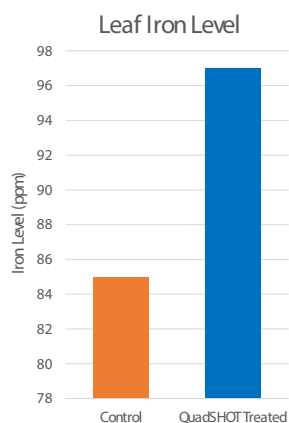
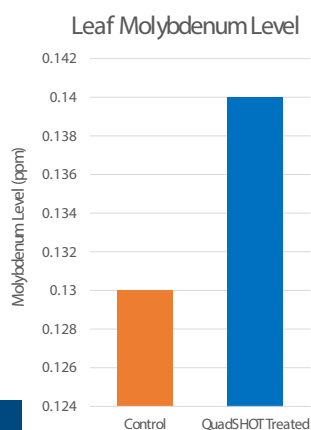
During our trials, application of QuadSHOT® resulted in an increase of soil temperature consistent with a rise in soil microbial activity.

This effect on improved soil temperature in the rootzone during the early August flowering period is seen to be advantageous for early root development and nutrient uptake (Almond Board Fact Sheet 02, March 2008)

*Reference: Mikhail, E - SWEPT Pty Ltd Analytical Laboratories



Tissue analysis of Almond leaves from the trial sites has also indicated improvement in many nutrient levels where QuadSHOT® has been applied.



Four Key Plant & Soil Microbial Stimulants Now Organically Certified

QuadSHOT®

Product Code: SG0039

QuadSHOT® contains a carefully selected range of organic additives and biological stimulants. These ingredients stimulate soil biological activity, thereby improving the cycling and availability of plant nutrients and soil fertility and health. Together with management practices that enhance organic matter and soil structure development, this product assists in mobilizing available nutrients and improving plant uptake efficiencies.

Humic acid – increases nutrient holding capacity of the soil

Kelp – enhances plant and root growth development

Fish Emulsion – stimulates nitrogen cycling

Molasses – promotes beneficial soil biology

Each of these stimulants are also available as individual products

Benefits of QuadSHOT®

- Improves saline and sodic soils
- Improves the moisture holding capacity of soils
- Enhances nutrient cycling and availability
- QuadSHOT® can be used to soften a range of foliar fertilizers, allowing higher use rates without the potential for phytotoxic burn - e.g. Nitro QUAD 3™ and UAS QUAD 3™
- QuadSHOT® is designed to aid in the soils mineralisation and nutrient availability. It also increases the plants uptake efficiency of essential minerals.
- Improves overall soil health and vitality.

Guaranteed Analysis

Fish Emulsion	8.0%
Kelp	8.0%
Molasses	8.0%
Humic Acid	6.6%
Fulvic Acid	0.3%
Nitrogen (N)	0.3%
Phosphorus (P)	0.1%
Potassium (K)	3.4%
Sulphur (S)	0.2%
Carbon (C)	5.2%
Calcium (Ca)	0.2%
Iron (Fe)	0.006%
Specific Gravity	1.15 - 1.16 kg/L
pH	10.0 - 11.0

Typical Application Rates

Foliar

1 to 5 L/ha
Broadacre use at least 100 L/ha water
Horticulture use 200 to 2,000 L/ha water

Fertigation

20 to 60 L/ha through sprinkler, traveller or drip systems

Pop-Up, At Planting, Directed Soil Spray

Banded with Seed: 4 to 7 L/ha

Banded to the Side: 5 to 15 L/ha
- with 10 to 100 L/ha of water

20 - 60 L/ha as a directed soil spray, prior to planting or banded under canopy, with 200 - 800 L/ha water

Dipping Rates

Tree Age	Young	Established
Fertigation	40 L/ha	80 L/ha
Pre-Plant Dip	10 - 30 L/ha (Per 100L Water)	

Contact:

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Highly Available, Activated Calcium + Organic Boost

BiologiCAL® PLUS

Product Code: SG0017

Plants require calcium in relatively large amounts for many functions including cell division & strength, root system and leaf development. Calcium is also an essential element required for healthy soils, influencing both the physical, chemical and biological aspects.

Benefits of BiologiCAL® PLUS

- Aids in maintaining a high pH to control club root
- Improves nitrogen efficiency; compatible with a wide range of nitrogen-based products.
- Helps to displace sodium and magnesium in difficult soils
- Improves soil structure and friability
- Improving moisture penetration/infiltration
- A unique form of activated calcium that stimulates plant uptake
- Built-in soil and plant stimulants to enhance soil fertility and plant health
- Assists in the reduction of soil nematodes that inhibit root growth and plant productivity.
- Provides plant available calcium without extra nitrogen
- Improves plant resistance to disease and overall resilience
- Improves cell wall strength, plant durability and stress tolerance.

Guaranteed Analysis

Calcium (Ca)	6.3%
Nitrogen (N)	0.3%
Phosphorus (P)	0.1%
Potassium (K)	2.0%
Sulphur (S)	1.8%
Molasses	41.9%
Carbon (C)	20.0%
Fish Emulsion	0.3%
Kelp	0.3%
Humic Acid	0.2%
Specific Gravity	1.27 - 1.30 kg/L
pH	8.0 - 10.0

BiologiCAL® PLUS TE

All the Benefits of BiologiCAL® PLUS with an additional 5 trace Elements;
Zn 0.6%, Mn 0.3%, Cu 0.15%,
Mo 0.005% & B 0.05%



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pH, Soil Acidity, Lime & Gypsum

Applying lime to a soil reduces its acidity by raising the pH. It also supplies calcium. Increasing soil acidity affects plant nutrient availability, reduces the activity of beneficial bacteria that decompose organic matter and heavy metals such as aluminium and iron become more soluble, tying up phosphorus into forms unavailable to plants, and may build up to toxic levels.

Soil should always be sampled before establishing a new planting. If lime and/or gypsum are required, incorporate it during soil preparation. It is often useful to dig a pit and to sample the subsoil to understand any potential limitations to tree growth further down the profile.

A soil sample every 3 years taken from the same locations within a block is recommended to monitor nutrient levels and to check that the pH remains satisfactory. This allows time for program changes to take effect. If lime is required apply in the Autumn.

The preferred pH before establishing a new vineyard is generally 5.5 to 6.8 depending on the soil type. Sandy or lighter soils tend to require pH toward the higher end. As a rule of thumb - apply lime to established vineyards when the pH falls below 5.5.

Use dolomitic lime (high in magnesium) on soils that are low in magnesium.

Gypsum is usually recommended on sodic and magnesian soils when pH is high and exchangeable calcium is low. High magnesium soils are often massive and hard setting (when exchangeable magnesium is greater than 15%). High sodium soils tend to be dispersive when wet and form a crust when dry (when exchangeable Sodium is greater than 5%).

Desirable Soil Exchangeable Cation Balance

Element	Balance (%)
Calcium	60 - 70
Magnesium	12 - 15
Potassium	3 - 5
ESP	< 5
Hydrogen	< 20
Ca : Mg ratio	2 - 4

Typical Cation Exchange Values for Various Soil Textures

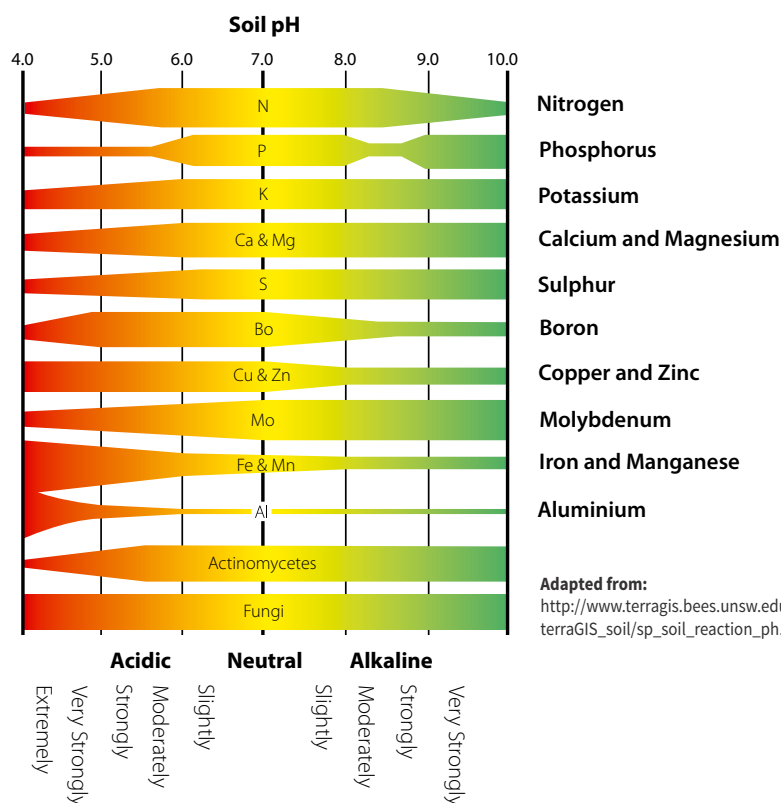
(preferred level >10 meq/100g)

Texture	Typical CEC
Sand	< 5 meq / 100g
Sandy Loam	5 - 10 meq / 100g
Clay Loam	10 - 25 meq / 100g
Light Clay	25 - 30 meq / 100g
Medium Clay	30 - 35 meq / 100g
Heavy Clay	> 35 meq / 100g

(Based on Clay content only - eg: a high organic matter clay may have a CEC over 50 meq/100g)

Recommended Soil pH Level for Vineyards

Optimum pH Range	
Upper	6.8 to 7.5
Optimum	6.0 to 6.5
Lower	5.5 to 5.8



Colour Enhancement

Enhance KP

Maximum Phosphorus and Potassium analysis (0-12-36) in the convenience of a liquid.

Benefits of Enhance KP:

- Low use rates
- Well suited to horticultural crops with high Potassium demand such as Tomatoes and Berries
- Ideal P : K ratios for fruit fill

Guaranteed Analysis

Potassium (K):	36.0% w/v
Phosphorus (P):	12.0% w/v
Specific Gravity:	1.56 kg/L
pH:	12.0 to 13.0

Typical Application Rates

Foliar:

8 L/ha with 2,500 L/ha of water
One or two applications during the early stage of Veraison (colouring).



10% Colour

30% Colour

50% Colour

Full Colour

Best timing for 2 applications

Best timing for 1 application

Trial Review 2013/14

The location for the trials was Euston NSW and the variety of grape being tested was Crimson. The trial consisted of two replications, both returning identical results.

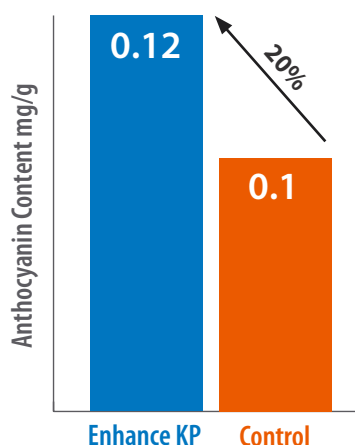
Enhance KP was applied in two foliar applications, two weeks apart. The first application at the beginning of colouring and the second two weeks after.

Independent analytical lab testing of anthocyanin content revealed a 20% increase when compared to the control (untreated).

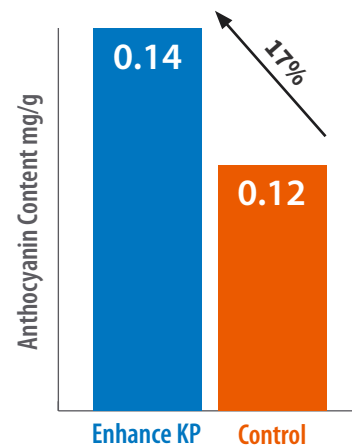
Analysis of Results

As seen below in the results from the trial, Enhance KP was shown to increase the Anthocyanin (various soluble glycoside pigments producing colour) content of grapes in both instances.

Replicate Block 1 Euston NSW



Replicate Block 2 Euston NSW



Delivering Quality Produce



Cal Mag & BoronTM

Product Code: GG0024

The N : Ca ratio of 1 : 1 is perfect for plant establishment and during rapid cell division phases or periods of stress where both growth and cell strength needs to be maintained.

Magnesium maintains plant colour as it is a key component of chlorophyll production.

Both Magnesium and Boron aid in the translocation of Calcium to growing points. Boron is essential for the germination and viability of pollen.

Benefits of Cal Mag & Boron

- Soluble nutrients provide hassle free injection (no insoluble blockages) and rapid plant uptake
- High analysis provides for economic and efficient supply of nutrients and the capacity to reduce rates
- Maintains plant Ca : Mg ratios
- Boron to assist Calcium mobility
- Improves plant cell wall strength and fruit firmness
- Chloride free

Guaranteed Analysis

Nitrogen (N)	12.4%
Calcium (Ca)	12.3%
Magnesium (Mg)	3.4%
Boron (B)	0.2%
Specific Gravity	1.47 - 1.50 kg/L
pH	2.0 - 3.0

Typical Application Rates

General Foliar:

5 to 10 L/ha
Horticulture use 200 to 2,000 L/ha water
Broadacre use at least 100 L/ha water

Fertigation:

10 to 100 L/ha

“ SLTEC® Cal Mag and Boron is a perfect fit for our premium lettuce programs.
John Frisina - Landmark VIC



“ Cal Mag & Boron driving quality strawberry production.
Peter Morrison - Roberts Ruralco, TAS

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