

*Quality Ingredients  
Australian Made  
Family Owned*



**FERTILIZERS**

*Nutrient Solutions*

# **Maize Nutritional Guide**

*Understanding a crop's nutritional requirements is critical to success*

**[sltec.com.au](http://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 fertiliser 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](http://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 ag chemicals
- Labour savings and improved workplace safety



# SLTEC® 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 specialised 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.**



# SLTEC® Maize Program

Crop nutrient budgeting is critical to improving production efficiencies and to reduce any environmental impacts from the overuse of fertilisers. As part of SLTEC®'s maize program, we aim to assist growers to better understand the nutrient requirements of their crop and at which stages of growth the peak demand for nutrients occurs.

The program shown below is an example based on a 15t grain crop in Northern Victoria. In other regions, other nutrients such as Potassium may be required to achieve expected yields due to differing soil conditions.

The final fertiliser program and nutrient budgeting used on an individual crop in any region should be made in consultation with your agronomist after consideration of yield expectations and nutrient removal from previous crops. SLTEC® strongly recommends soil testing prior to planting along with plant tissue testing during the growing season.

## Maize Grain and Stover Nutrient Removal Charts

	kg per tonne						g per tonne					
	N	P	K	S	Mg	Ca	Cu	Mn	Zn	B	Fe	Mo*
Grain	10.24	2.33	3.17	1.22	0.51	0.21	7.64	10.42	16.67	36.81	22.92	1.00
Stover	7.50	1.16	15.22	1.17	3.33	2.17	4.86	125.00	25.00	4.86	41.67	0.1
Grain & Stover	17.74	3.49	18.39	2.39	3.84	2.38	12.50	135.42	41.67	41.67	64.59	1.1

Table adapted from: <http://www.agphd.com/resources/nutrient-removal-charts/corn-grain-and-stover-nutrient-removal-charts/>  
Removal is based on a 16.14 t/ha of grain crop.

\* Indicative only

Product Code	Product Name	Product Description	Application Method	Total L/kg Applied for Season
-	<b>DAP (Granular)</b>	Diammonium phosphate (18 - 20 - 0)	Banded/Broadcast	200 - 350
-	<b>Urea (Granular)</b>	Urea (46 - 0 - 0)	Banded/Broadcast	200 - 300
SG0041	<b>Tri-Culture™ (applied with Corn Popup™)</b>	Polymicrobial inoculant for optimising fertiliser use and promoting root growth.	Liquid Sowing	2
SS9016	<b>Corn Popup™</b>	Formulated to deliver a range of five nutrients required for strong germination, including boron and molybdenum.	Liquid Sowing	60
GG0066 GG0032	<b>UAS™ Urea 26™</b>	Urea 26 is perfect for water running long open system with no volatilization, while UAS is limited to a 400m water run, however contain sulphur at a 4:1 ratio.	Fertigated	400 - 600
GG0182	<b>Nature's K™</b>	Cost effective potassium with phosphorus and sulphur. Also contains 2.1% fulvic acid and 2.5% amino acids.	Fertigated	400 - 600
SNPK0054	<b>Mo 250P™ (applied with SS)</b>	25% molybdenum. Can be co-applied with SS 10:14:0 + Zn at sowing or foliar applied later in the season.	Foliar Applied	0.1
GG0009	<b>Baseline Plus™</b>	Baseline Plus has a complete and balanced NPK analysis suitable for fertigation and foliar application.	Foliar Applied	20
SNPK0053	<b>MoBo Complex™</b>	Foliar boron and molybdenum for foliar application. Can be applied with some ag-chem products.	Foliar Applied	2 - 4
SNPK0080	<b>High PZ™</b>	Highly crop available phosphorus, potassium and zinc pop-up. Can be used to encourage crop growth in unfavourable conditions.	Foliar Applied	3 - 5



Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
Week 0	Week 1 - 3	Week 4 - 6	Week 7 - 9	Week 10 - 12	Week 13 - 17
Sowing / Pre Plant	Emergence - V6	Shoulder High	Tasseling > Silking	Silking > Blister	Milk Line 3 Full Dent > Black Layer

Estimated proportion of annual crop nutrient demand for each crop stage

N	P	K	N	P	K	N	P	K	N	P	K	N	P	K	N	P	K
1%	1%	2%	20%	7%	28%	45%	28%	57%	27%	39%	13%	6%	22%	0%	1%	3%	0%

Suggested application timings, methods and rates (L/ha)  
Please consult your agronomist for specific information regarding your situation

200 - 350																	
200 - 300																	
1				1													
60																	
					100 - 200		100 - 200		100 - 200								
			100 - 200			100 - 200		100 - 200									
0.1																	
					15												
						2											
			3 - 5														

# Product Technical Information

Product Technical Information											
Product Code	Name	N% (w/v)	P% (w/v)	K% (w/v)	S% (w/v)	Ca% (w/v)	Specific Gravity (kg/L)	pH Range	Typical Application Rates		
									Fertigation	Foliar Use at least 200 L/ha water	Liquid Injection
SG0041	<b>Tri-Culture™</b> Plant Growth Promoting Rhizobacteria 20%, Bacillus licheniformis 1×10 <sup>8</sup> cfu/ml, Bacillus methylotrophicus 2×10 <sup>8</sup> cfu/ml, Bacillus subtilis 2×10 <sup>8</sup> cfu/ml, Water Based Culture Medium 80%						1.130	5.6 - 6.8	N/A	1.2 L/ha	2 L/ha as a popup
SS9016	<b>Corn Popup™</b> N as NH <sub>4</sub> 8.8%, P as PO <sub>4</sub> 11.1%, Zn 1.9%, Mo 0.004%, B 0.04%	8.8	11.1	-	-	-	1.263	6.0 - 7.0	Up to 200 L/ha	10 - 30 L/ha	30 - 60 L/ha
GG0066	<b>UAS™ (Water Run)</b> N as NH <sub>4</sub> 5.7%, N as urea 20.9%	26.6	-	-	6.7	-	1.235	4.0 - 7.0	50 - 200 L/ha	20 L/ha	N/A
GG0032	<b>Urea 26 (Water Run)™</b> N as urea 26.0%	26.0	-	-	-	-	1.140	6.0 - 8.0	50 - 200 L/ha	20 L/ha	N/A
GG0182	<b>Nature's K™</b> P as PO <sub>4</sub> 1.5%, C 0.6%, Amino Acids 2.8%, Fulvic Acid 2.1%	0.6	1.8	10.0	2.6	-	1.160	8.5 - 10.0	40 - 300 L/ha	5 - 10 L/ha	N/A
SNPK0054	<b>Mo 250P™ (applied with SS)</b> P as PO <sub>4</sub> 11.0%, Mo 25.0%	-	11.0	-	-	-	1.578	3.5 - 4.5	Up to 500 mL/ha	100 - 200 mL/ha	100 - 200 mL/ha
GG0009	<b>Baseline Plus™</b> N as urea 11.7%, P as PO <sub>4</sub> 4.9%, Mg 0.2%, Mn 0.006%, Zn 0.01%, Cu 0.005%, Mo 0.005%, B 0.02%, Fe 0.01%, C 0.3%, Fulvic Acid 0.01%, Fish Hydrolysate 0.4%, Humic Acid 0.3%, Kelp 0.4%, Molasses 0.4%	11.7	4.9	13.6	2.0	-	1.304	7.5 - 8.5	Up to 100 L/ha	10 - 15 L/ha	N/A
SNPK0053	<b>MoBo Complex™</b> Mo 0.3%, B 14.7%	6.0	-	-	-	-	1.387	7.0 - 8.0	2 - 10 L/ha	3 - 5 L/ha	N/A
SNPK0080	<b>High PZ™</b> P as PO <sub>4</sub> 18.0%, Zn 14.0%	-	18.0	2.0	-	-	1.447	1.0 - 2.0	N/A	5 L/ha	N/A

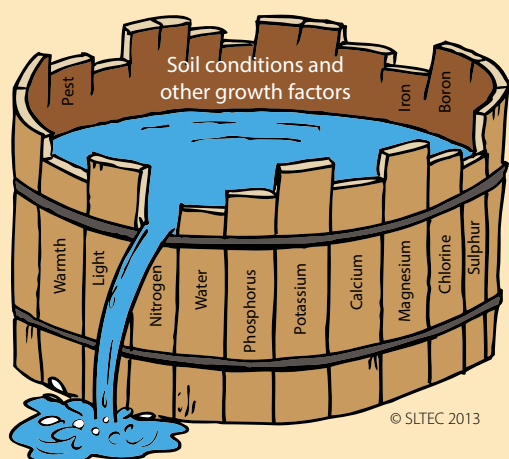
More products are available from [sltec.com.au](http://sltec.com.au)

## The Law of the Minimum

States that plant growth is determined by the scarcest, "limiting" nutrient; if even one of the many required nutrients is deficient, the plant will not grow and produce at its optimum.

Conventional fertiliser programs focus on macronutrients such as nitrogen, phosphorus and potassium (NPK), and occasionally sulphur. However, plants require a total of sixteen nutrient elements for optimal growth, with each required in different amounts. Therefore, if one of the essential trace elements – zinc, copper, boron, manganese, molybdenum, etc – is deficient from the soil, the plant will not perform at its optimum capacity and yield, and reproduction and immune function will diminish.

At SLTEC®, we have developed a range of trace elements that respond to the nutrient needs of your crops. Specific consideration is given to high plant availability and physical compatibility with a range of other fertilisers.



© SLTEC 2013

# Growth Stage Considerations

## Sowing / Pre Plant - Period 1

This first stage, including the preparation of the field, involves the application of a large amount of nitrogen, phosphorus and in some cases, potassium, prior to planting. Soil testing is essential before any decision on fertiliser is made.

Irrigating early in the season generally results in a reduction in soil temperature which can negatively impact the emergence of the maize seed.

Nutrients applied in liquid form at sowing assists in both the uniform and quick emergence of the germinated seed.

Applying **Corn Popup™** is an effective way to supply seeds with efficient plant-available nutrients. Both can be applied with insecticides. Contact SLTEC® for specific compatibility data.

## Emergence – V6 - Period 2 (Planting - Week 3)

At this stage, the maize crop is established and will take up approximately 20% of the overall crop needs of nitrogen, 7% phosphorus and 28% of the potassium needs. At this stage, any trace element deficiencies must be remedied to achieve optimal yields. The crop should also receive top-up nitrogen which can be effectively applied to the crop via irrigation water. Tissue testing is highly recommended to ensure yield targets are achieved.

**UAS™** (27% nitrogen, 7% sulphur) – water run with irrigation water to save labour and damage to the crop.

**High PZ™** (18.0% phosphorus, 14.1% zinc) to assist in cold starts. Can be co-applied with some herbicides.

**MoBo Complex™** (15% boron, 0.3% molybdenum) to ensure essential trace elements are not limiting. Can be co-applied with insecticides.

## Shoulder High - Period 3 (Week 4 - 6)

Once the crop reaches this stage, in-crop applications are challenging due to the size of the crop canopy. This stage has the highest uptake of nutrients, with a significant amount of the crop's total nutrient requirements being utilised during this stage; 45% of overall nitrogen, 28% of overall phosphorus and 57% of overall potassium.

Adequate nitrogen and limiting water stress are essential to crop growth and future development. At this stage, extra nitrogen and sulphur can be added to the program if the crop potential is higher than initially expected.

**UAS™** (27% nitrogen, 7% sulphur) – water run with irrigation water to save labour and damage to the crop.

**Nature's K™** (1 - 2 - 10 + 2.6S) – apply via fertigation or Y drop. Compatible with Urea 26™ to co-apply.

## Tasseling / Silking - Period 4 (Week 7 - 9)

During the tasseling and silking stage, it is essential that the crop is not placed under any water stress. Any stress may affect pollen production and subsequently affect grain set in future stages. Nitrogen uptake is 27%, phosphorus 39% and potassium 13%.

**UAS™** (27% nitrogen, 7% sulphur) – water run with irrigation water to save labour and damage to the crop

## Silking / Blister - Period 5 (Week 10 - 12)

At this stage, the crop changes from the vegetative stage to the reproductive stage. Nutrient uptake is reduced, and the plant now converts stored nutrients into ear and grain production.

## Milk Line / Black Layer - Period 6 (Week 13 - 17)

In the final stage, very little nutrients are taken from the field, and water requirements are reduced with the crop only needing approximately 11% of the overall water requirements. Throughout this stage, the grains are filled, and a stressed crop will result in reduced kernel size.

*Data and information in this booklet has been adapted from HSR Seeds, Pioneer Seeds and Pacific Seeds.*



Example of a "header tank" for water running Urea 26.

# Maximise Return From Fertiliser Applications



## Tri-Culture™

Product Code: SG0041

Tri-Culture™ is a mixture of highly effective proprietary strains of PGPR (*Plant Growth Promoting Rhizobacteria*) that provide multiple modes of action for enhanced plant growth, yield potential, and harvest quality.

### Benefits of Tri-Culture™

- Nutrient solubilization and cycling improving nutrient availability – macronutrients and micronutrients.
- Root growth promotion – improved production of root hairs and root tips for increased water and nutrient uptake.
- Compatible with a wide range of fertilisers and common chemical actives.
- Improves the solubilisation, cycling, and plant uptake of nutrients both from applied fertiliser and in the soil bank. Phosphorus uptake is enhanced by greater root volume and phosphorus solubilising enzymes. Iron uptake and metal acquisition are improved by the production of natural chelating agents (siderophores).

### Guaranteed Analysis (w/v)

#### ACTIVE INGREDIENTS

Plant Growth Promoting Rhizobacteria	20%
<i>Bacillus licheniformis</i>	1×10 <sup>8</sup> cfu/ml
<i>Bacillus methylotrophicus</i>	2×10 <sup>8</sup> cfu/ml
<i>Bacillus subtilis</i>	2×10 <sup>8</sup> cfu/ml

#### INERT INGREDIENTS

Water Based Culture Medium	80%
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### Typical Application Rates

**Maize:** 1.2 to 2 L/ha as liquid inject at sowing with a further 1.2 L/ha applied as a foliar between week 4-6 after emergence.



# 2018/19 Summer Trial

## 2018/19 Summer Tri-Culture Trial

Steve Lanyon

**Location:** Boort, Victoria

**Crop:** Maize (Grain)

**Rate:** 2 L/ha with SLTEC® Corn Popu™ at 100 L/ha via furrow jets at sowing

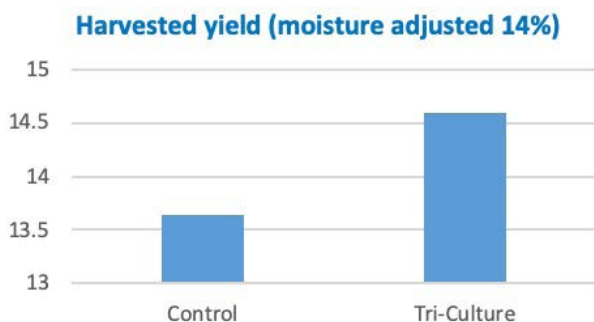
**Comparison:** SLTEC® Corn Popu™ at 100 L/ha via furrow jets at sowing

### Results

	Control	Tri-Culture
Area (ha)	0.1	0.1
Yield (t/ha)	13.64	14.60

Trial was conducted as a side-by-side.

Yield difference is 0.96 t/ha



### Return on investment:

The addition of SLTEC® Tri-Culture had a ROI of 1 : 5

An additional income of \$364 / ha

\*Maize price at \$450/t on farm price

## 2018/19 Summer Tri-Culture Trial

Ian Hamano

**Location:** Byrneside, Victoria

**Crop:** Maize (Grain)

**Rate:** 2 L/ha with SLTEC® SS 10:14:0 + Zn 80 L/ha at sowing

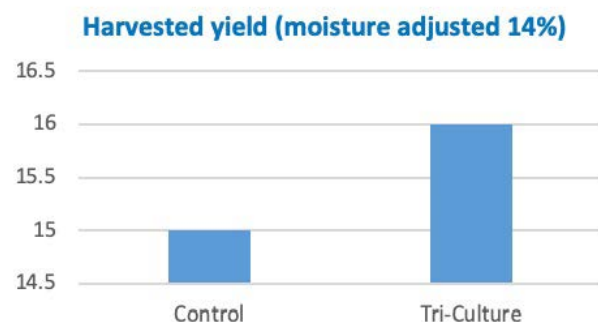
**Comparison:** SLTEC® SS 10:14:0 + Zn - 80 L/ha at sowing

### Results

	Control	Tri-Culture
Area (ha)	5	5
Yield (t/ha)	15.00	16.00

Trial was conducted as a side-by-side.

Yield difference is 1 t/ha\*



### Additional Notes:

Yield monitor data has showed an increase of grain yield of at least 1 t/ha over the untreated paddock.

\*Ian predicts that the yield monitor showed an increase of at least 1.1 t/ha more than the untreated.

The treated area showed more biomass, and stayed green for longer.

# Maximise Your Crop's Early Potential



## Corn PopUp™

Product Code: SS9016

**Corn PopUp™** is a specifically designed product that is a combination of highly plant available orthophosphate, ammonium nitrogen, EDTA zinc chelate, molybdenum and boron.

**Corn PopUp™** is ideally suited to ensuring early and strong germination.

### Benefits of Corn PopUp™

- Readily crop available nutrients, suitable for immediate crop uptake.
- Balance of five essential nutrients to aid strong crop establishment and growth.
- Compatible with a range of agricultural chemicals and other fertilisers, allowing several application to take place in the single pass.  
\*please consult with your SLTEC representative for further compatibility information

### Guaranteed Analysis (w/v)

Nitrogen (N)	8.8%
N as ammonium	8.8%
Phosphorus (P)	11.1%
Zinc (Zn)	1.9%
Molybdenum (Mo)	0.004%
Boron (B)	0.04%
Specific Gravity	1.263 kg/L
pH Range	6.0 - 7.0

### Typical Application Rates

#### Foliar:

**Maize:**  
20 L/ha with water to 200 L/ha applied

#### Fertigation

**Maize:**  
Up to 100 L/ha per application

#### Pop-Up, At Planting

**Banded with Seed:**  
10 to 60 L/ha

**Banded with Furrow Jets:**  
Up to 100 L/ha



# Corn Popu<sup>TM</sup> Trial

In December 2018, SLTEC<sup>®</sup> conducted a trial of liquid popup fertiliser applied to maize.

The popup was SLTEC<sup>®</sup> **Corn Popu<sup>TM</sup>** applied at 80 L/ha via furrow jet.

The trial and control both received exactly the same fertiliser program, except for the application of liquid popup.

- 300kg of DAP strip-tilled
- Low PBI soil
- Moderate soil phosphorus

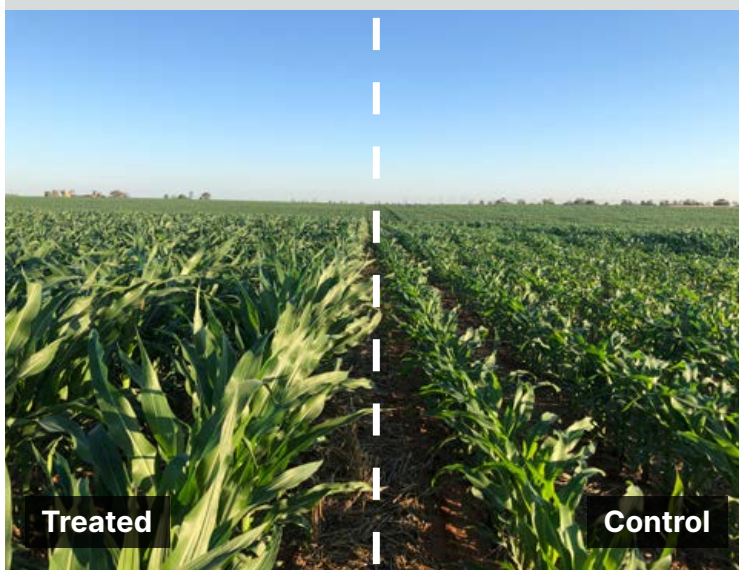
1. 23rd January



3. 11th February



2. 1st February



4. 19th February



# 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, which 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 paddock 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 paddocks 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

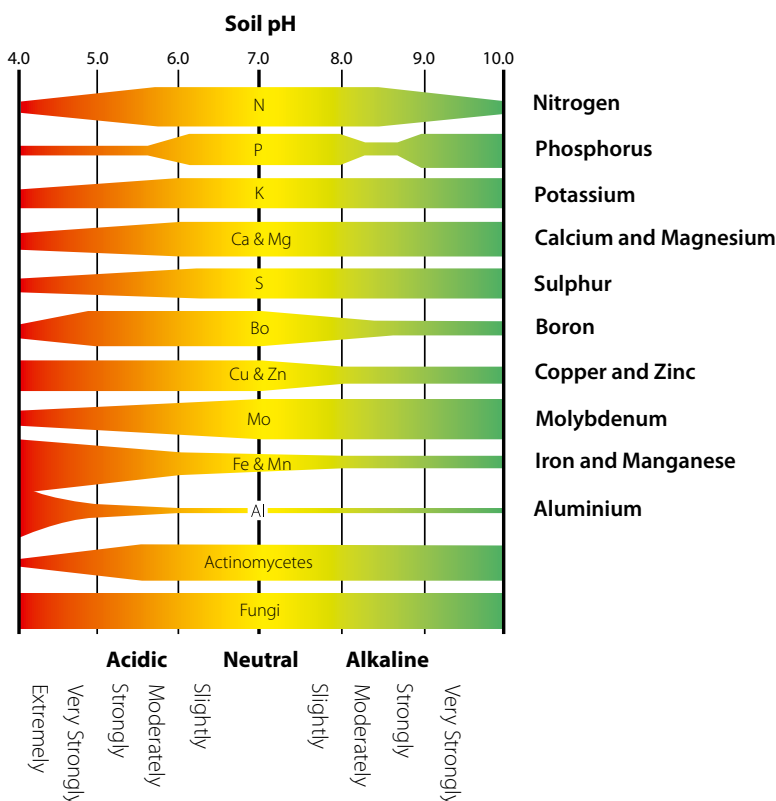
	Balance (%)
Calcium	60 - 70
Magnesium	12 - 15
Potassium	3 - 5
ESP	< 5
Hydrogen	< 20
Ca : Mg ratio	2 - 4

## 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)



**Maize prefers a soil with a pH of 6.0 to 7.0. If the soil is outside of this range, that the yield potential of the crop may be inhibited.**

# Tissue Testing

## ***Tissue testing is critical for maize crops.***

A simple leaf tissue test can take only minutes to conduct but can assist grower in making informed and profitable decisions.

A leaf tissue test can inform the grower if the nutrients in the crop are adequate to achieve desired yields, and if not, what nutrients should be considered to amend the deficiency or toxicity.

Tissue testing can also identify why different paddocks are growing differently while on the same program. A tissue test can quickly identify nutrient differences in the neighbouring crops.

Tissue testing should be carried out at about 10am in the morning on a calm day that is not overcast. The collected leaves should be sent in the post immediately to your analytic company of choice. If that is not possible, they should be stored in an esky until they can be posted later that day. A test should be posted early in the week to avoid getting stuck in transit over the weekend as this can cause the samples to decay and result in incorrect data.

There are three recognised periods to conduct tissue testing.

### **Period 1**

The first is **image 1**; When the crop is less than 30 cm in height, 20 - 30 plant tops should be collected.

The whole plant should be cut off at ground level, being careful not to collect any soil in the sample.

This is a critical stage to test the crop. At this stage you can still rectify any crop deficiencies easily as the growth stage still allows the crop to be trafficked by most farmer boom sprays. In some cases the required nutrient can also be tank-mixed and hence co-applied with ag chemicals.

### **Period 2**

The second timing to collect tissue tests is when the crop is over 30cm tall but has not begun to tassel, at any growth stage in the period. The leaf sample that is collected is the youngest mature leaf below the whorl as per **image 2**. This will be the last leaf that has a visible collar. 20-30 full leaves should be collected. At this stage the application of a nutrient is still highly recommended to achieve the yield potential if a deficient is identified.

### **Period 3**

The last opportunity to collect a tissue test is at 50% silking as per **image 3**. The leaf immediately below the silking cob should be collected. Do not include the collar in the sample.

At this late stage of growth, you may not want to invest any further into the current crop. However, the test results can still provide feedback on if the crop can go to maturity on a full tank or if it will limp over the line as it has run out of nutrients. This data can be used to refine future programs.



**Image 1**



**Image 2**



**Image 3**

# Potassium & So Much More



## Nature's K™

Product Code: GG0182

Nature's K™ is derived from a highly controlled organic plant extraction process and, as a result, delivers a wide range of amino acids and organic compounds.

With 10.0% potassium as its cornerstone and 1.8% phosphorus, Nature's K™ is a cost-effective potassium source with so much more.

The ratio of 5.5 : 1 potassium to phosphorus makes Nature's K™ ideal for a wide variety of crops.

### Role of Potassium in the plant

- Plays a role in photosynthesis and plant food formation.
- Important in conjunction with calcium and boron, in the proper development of cell walls.
- Controls plant cell turgor and subsequently the opening and closing of leaf stoma, supporting the plant's response to drought stress.
- Improves a plant's ability to combat disease and insect damage.

### Guaranteed Analysis (w/v)

Nitrogen (N)	0.6%
N as amino acids	0.3%
Phosphorus (P)	1.8%
Potassium (K) - MKP	10.0%
Sulphur (S)	2.6%
Carbon (C)	0.6%
Fulvic Acid	2.1%
Amino Acids	2.8%
Specific Gravity	1.160 kg/L
pH	8.5 - 10.0

### Also contains;

#### Biostimulants:

- Plant-derived amino acids
- Fulvic acids

### Typical Application Rates

#### Foliar:

Up to 40 L/ha with at least 200 L of water, as required

#### Fertigation:

##### Maize:

100 - 300 L/ha application, as required



# 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 (w/v)

Nitrogen (N)	11.7%
N as urea	11.7%
Phosphorus (P)	4.9%
P as PO <sub>4</sub>	4.9%
Potassium (K)	13.6%
Sulphur (S)	2.0%
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 Hydrolysate	0.4%
Kelp	0.4%
Molasses	0.4%
Specific Gravity	1.304 kg/L
pH Range	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



# High PZ™

Product Code: SNPK0080



FERTILIZERS

Apply a simple one pass application of High PZ™ to encourage crop growth in unfavourable conditions.

## Benefits of High P Z

- Can be used as a foliar pop-up where a liquid starter has not been used.
- Plant available zinc and phosphorous readily absorbed through the leaf.
- Boosts crop vigour in periods of rapid growth.
- Ideal foliar application during interrow cultivation.
- Encourages growth following cold weather after emergence.
- Saves yield potential in water logged conditions.
- Aids crops in overcoming carryover herbicides such as B group chemistry.

## Guaranteed Analysis (w/v)

Phosphorus (P)	18.0%
Potassium (K)	2.0%
Zinc (Zn)	14.0%
Specific Gravity	1.447 kg/L
pH Range	1.0 - 2.0

## Typical Application Rates

### Foliar (Ground Applied)

3 - 10 L/ha with at least 80 L of water

### Foliar (Aerial Applied)

3 - 5 L/ha with at least 40 L of water

# MoBo Complex™

Product Code: SNPK0053

MoBo Complex™ is a high-quality blend of boron and molybdenum in the ideal ratio for plant uptake in a number of plants. Some research suggests there is a synergy between boron and molybdenum at pollination.

## Boron's Function in the Plant

- Important in pollination and seed reproduction.
- Maintains a balance between sugar and starch.
- It is essential for proper cell wall formation.
- It plays a vital role in the proper function of cell membranes and the transport of potassium to guard cells for the control of internal water balance.

## Molybdenum's Function in the Plant

- It functions in converting nitrates (NO<sub>3</sub>) into amino acids within the plant.
- It is essential to the symbiotic nitrogen-fixing bacteria in legumes.
- It is essential to the conversion of inorganic phosphorus into organic forms in the plant

## Guaranteed Analysis (w/v)

Nitrogen (N)	6.0%
Molybdenum (Mo)	0.3%
Boron (B)	14.7%
Specific Gravity	1.387 kg/L
pH Range	7.0 - 8.0

## Typical Application Rates

### Foliar:

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

# Foliar Testing Results

During the heat of summer 2018, SLTEC® undertook some phytotoxicity testing. Below are examples of some of the outcomes.

- Product was applied via hand boom with a total rate of 200 L/ha.
- Assessments were undertaken 5 days after application.
- Application was on the 3rd of February to healthy crops.
- Air temperature at time of application was approximately 38 degrees.

## MoBo Complex™ at 10 L/ha

N 6.0%, Mo 0.3%, B 14.7%

Typical Application Rate: 3 - 5 L/ha



## High PZ™ at 20 L/ha

P 18.0%, K 2.0%, Zn 14.0%

Typical Application Rate: 3 - 5 L/ha



## TE 8 PLUS™ at 10 L/ha

N 2.6%, K 0.1%, S 4.2%, 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%

Typical Application Rate: 2 - 10 L/ha



## GG 10:14:7™ at 50 L/ha

N 10.1%, P 13.7%, K 6.5%

Typical Application Rate: 30 L/ha



## Corn PopUp™ at 30 L/ha

N 8.8%, P 11.1%, Zn 1.9%, Mo 0.004%, B 0.04%

Typical Application Rate: 10 - 30 L/ha



## BiologiCAL® PLUS at 30 L/ha

N 0.3%, P 0.1%, K 2.0%, S 1.8%, Ca 6.5%, B 0.1%, C 12.5%, Fulvic Acid 0.009%, Fish Hydrolysate 0.3%, Humic Acid 0.2%, Kelp 0.3%, Molasses 41.8%



## UAN™ at 25 L/ha (some burn)

N 42.5%

Typical Application Rate: 10 - 60 L/ha  
(Not recommended for summer spraying)



## Baseline Plus™ at 50 L/ha (minor)

N 11.7%, P 4.9%, K 13.6%, S 2.0%, Mg 0.2%, Mn 0.006%, Zn 0.01%, Cu 0.005%, Mo 0.005%, B 0.02%, Fe 0.01%, C 0.3%, Fulvic Acid 0.01%, Fish Hydrolysate 0.4%, Humic Acid 0.3%, Kelp 0.4%, Molasses 0.4%

Typical Application Rate: 2 - 15 L/ha



## Cotton Starter™ at 30 L/ha (minor)

N 1.8%, P 22.0%, K 7.5%, Zn 1.0%

Typical Application Rate: 3 - 10 L/ha



# Fluid Fertiliser Storage Systems

The team at SLTEC® have conducted extensive research into storage and handling systems and can assist you in designing and implementing your liquid nutritional program.

Well designed fluid fertiliser storage and injection systems are essential to ensuring your fluid inputs are effectively utilised, to maintain your workforce safety, and to minimise environmental impacts.

## SLTEC® Fluid Fertiliser Tanks

### Free Standing 32,000 L Tank

**Poly Tank complete with:**

- Manhole & safety lid
- Banjo fertiliser resistant fittings
- 3" camlock infill / outlet and air vent assemblies
- Stainless steel sight gauge assembly
- Bottom sump & 1" drain valve enabling 100% drainage
- Strong poly base to support and fittings

**Tank available for purchase or rental.**



### Free Standing 10,000 L Tank

**Poly Tank complete with:**

- Manhole & safety lid
- Banjo fertiliser resistant fittings
- Sight gauge 3/4"
- Tank height is designed to fit under Centre Pivot centre

**Tank available for purchase only.**







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