

Pasture News

Lower nitrogen prices will enable greater spring opportunities

Season pasture update by Ralph Papalia.

Ralph covers the shires of Augusta-Margaret River, Bridgetown, Bunbury, Busselton, Capel, Collie, Dardanup, Donnybrook, Harvey, Manjimup, Nannup, Pinjarra and Waroona.

Growers in my area experienced a relatively dry autumn. We had one main rain event, but even that was patchy. Autumn has been followed by a reasonably dry winter, so water reserves, in particular the water table have to-date been way down.

That has consequences for our pastures because soil water buffers against temperature change. When the soil is full to capacity, it has better temperature buffering than when it is not full. Water is a good retainer of heat, and colder soil temperatures suppress growth. Slow or poor performing pastures is what many growers have experienced so far this season.

Obviously, it has been dry as well and the two factors have combined to contribute to a real lack of soil mineralisation and subsequent nutrient release.

This year, we can add another factor into the equation. A result of the current market prices is that beef producers have retained cattle. Those animals have to be fed, and higher stocking rates have compounded the situation even further. It appears to be a set of circumstances that won't be resolved overnight and will continue to put pressure on pasture production in the coming months.

So growers need to have a sound fertilizer and stock management strategy in place now, to make the most of the rest of the growing season.

On the positive side, nitrogen has dropped in price, relative to last season. As a result growers have been putting more on, which has partially helped to offset seasonal conditions. Going forward, more favourable nitrogen pricing for this season means more opportunity to make the most of this conditions as they unfold.

In Table 2 below I've listed some of the Summit products I recommend for growers in my area. Which product and what rate is obviously determined by the individual circumstances. I'm always happy to help growers with any fertilizer enquiries.



*Ralph Papalia
Business Manager/Agronomist*

Table 1. Approximate nutrient removal (kg/t) of hay or silage

	Nitrogen	Phosphorus	Potassium	Sulphur	Calcium	Magnesium
Cereal hay	20	2	15	1.5	12	3
Mixed hay	25	3	20	2.5	9	4

Table 2. Ralph's fertilizer suggestions based on nutrition and pasture varieties

Product	Pasture mix	Paddock history and current nutrition	Rate
NKS32	Mostly ryegrass, some clover	No phosphorus required in spring. The paddock has a long history of being cut for hay or silage and has low soil potassium test results.	100kg/ha to 250kg/ha*
NKS21	Mostly ryegrass, some clover	No phosphorus required in spring. Soil test results show good potassium levels.	
Fodder Max	Grass dominated pasture	No phosphorus required in spring. When higher rates of nitrogen and only low rates of potassium are required.	
NKS Spring	50:50 clover and ryegrass	No phosphorus required in spring. Soil test results show low potassium. An economical solution.	
Grass Boost	Mostly clover, some ryegrass	No phosphorus required in spring. Low potassium soil test results.	
Hay Special	Mostly ryegrass, some clover	Some phosphorus required in spring.	
Hay	Mostly clover, some ryegrass	Some phosphorus required in spring.	

* Fertilizer rate will depend on a range of factors including yield potential, seasonal conditions etc. For typical nutrient analysis (%), refer to the Summit website.



Supercharging spring pasture growth

Season pasture update by Chloe Turner.
Chloe covers the shires of Boyup Brook,
Katanning, Kojonup, Wagin, Woodanilling

Pasture establishment and winter growth has been 'a bit of mixed bag' this season for growers in my area. Patchy rainfall at the start of the season has meant that pastures in general, have been slow in getting up and going. However, with a bit of rain and some sunny days over the last couple of weeks, the peak growing season should be just around the corner.

Many growers have cut back on their potash applications to pastures over last few seasons, in favour of preserving it for their cropping enterprises. Sulphur needed by pastures has been reduced too, limited in many cases to that supplied in the form of superphosphate which is generally applied early in the season.

With the current high stocking rates and a general lack of surplus feed in my area, the focus in the coming weeks should be on boosting spring pasture production. At least enough to support maintenance weights through until when market conditions improve.

Spring biomass accumulation from now through until seed or burr set will see nutrient demand at its highest. So it's vital that nutrients are in adequate supply and available to the plants to push production and setup next season with quality feed and seed.

Potash is fundamental for plant health, flowering, water utilisation and in assisting recovery from plant stresses e.g., water stress, frost, disease and pathogens. Potassium deficiencies are more common in legume pastures, as ryegrass has deeper root systems that can access this nutrient at depth - providing there are no compaction or subsoil issues.

There is also a direct relationship between potassium availability and nitrogen uptake efficiency, which will be essential for ryegrass production this season. This is important because in many paddocks there was minimal available soil nitrogen at the start of the season, the consequence of some high production years and lack of summer rains to stimulate mineralisation.

It seems that sulphur often gets forgotten at this time of the season. And yet its importance in livestock production, plant development and seed quality are well documented.

Sulphur is essential for nitrogen fixation in legume pastures and for the uptake of nitrogen in grass species. It also helps with translocation throughout the plant of proteins to the seed. Sulphur is essential in plant cell structure and assists in plants overcoming stress (similar to potassium).

With such a high variability of soil types and PBI's throughout my region, growers will get the best out of their spring fertilizer with applications according to soil type and nutrient requirement. For example, sandy paddocks with low PBI should receive multiple applications across the season to maximise plant utilisation and stop off-site losses.

Look for the signs your pastures need a boost. Better growth around manure and urine areas is a key sign of deficiencies. Summit inSITE tissue tests or in-season Fuel Gauges can assist in showing the responsiveness to various nutrients.



Chloe Turner
Summit Area Manager, Kojonup

If the soil has been lacking adequate nutrition for some time, it may be a good decision to resow sub-clovers next season, as the quality of the seed bank would have degraded, and plant numbers reduced.

In terms of which product will work best, Summit has a wide range of well balanced spring fertilizers to choose from. The right product really depends on pasture composition, with paddocks that have a high level of clover getting enough potassium and sulphur.

Some of our most popular N, NS and NKS fertilizers are shown in Table 3 below, and of course we can blend fertilizers to get the balance right for you.

Table 3. The Summit Fertilizers Nitrogen, NS and NKS range

Product	Nutrient content (%)			t/m ³
	N	K	S	
Amsul	21.0		24.0	0.95
MAXam	21.0		24.0	1.01
MAXamFLO	22.0		6.2	1.26
NitroPlus	33.5		12.0	0.85
Sulphate of Ammonia	21.0		24.0	1.07
UreaPlus	37.3		8.4	0.82
UreaS	41.6		4.2	0.79
NKS21	28.8	12.5	5.7	0.88
NKS32	25.6	16.5	5.3	0.91
NKS Spring	22.0	14.0	10.7	0.94
UAN	32.0			1.32
Urea	46.0			0.75

A strategic approach needed for K applications

Season pasture update by Mark Ladny.
Mark covers the shires of Albany (West),
Broomehill, Cranbrook, Denmark, Plantagenet
and Tambellup.

Leading into this season, summer rainfall in my area was negligible and whilst early autumn rain in March and April was good, May rain was well below average (see rainfall chart to the right for Mount Barker, typical for my area). The highest single rain event in May was below 9 mm.

This much lower than average rainfall month was of significance because having adequate moisture in the soil before it begins to cool is crucial for plant establishment. It also supports soil biological activity so that mineralisation of organic matter and nutrient recycling can occur.

The picture of the nitrogen Fuel Gauge to the right shows how responsive pastures were to early nitrogen applications.

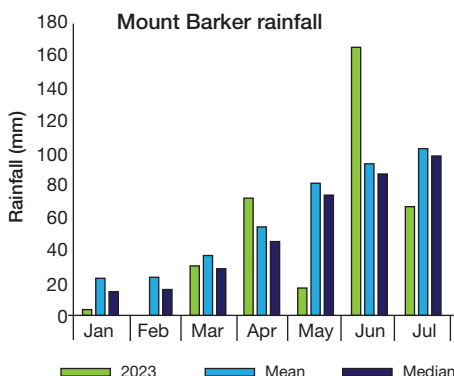
A general lack of early pasture production has led to growers supplementary feeding livestock well into winter, which is exhausting on-farm supplies and some growers have had to purchase additional feed.

With the current feed scenario in mind, its now time to think of how much hay and/or silage production will be required to get you through the summer and into early autumn 2024.

Nutrient requirements for quality hay/silage production is high, in particular for potassium, and so it is time to consider fertilizer rates and which product is best for your paddocks.

The good news is that nitrogen prices have fallen significantly from the historic highs of the past two years. Potash pricing on the other hand looks set to remain at current levels until 2024 stocks arrive. So I'm encouraging my clients to be strategic with their potassium applications.

Potassium levels are often variable across the farm with reserves reflecting soil type, historic fertilizer inputs and/or areas that have been used as feed out paddocks. This highlights the value of Summit soil sampling and nutrient maps that help identify nutrient reserves (An example is shown in the Summit inSITE potassium map, right).

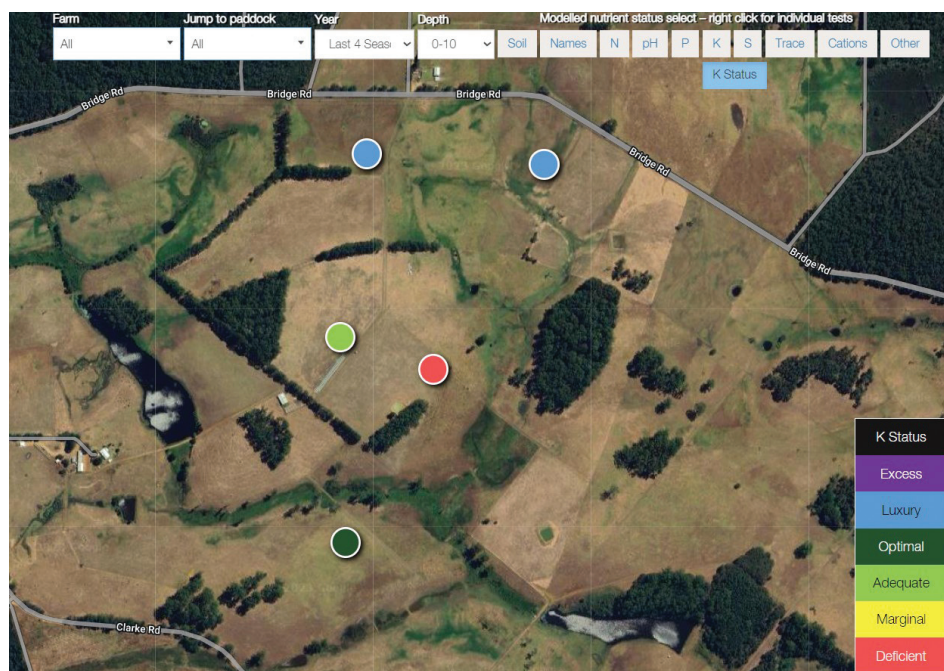


Mark Ladny
Summit Area Manager Albany (West)

Armed with the right soil information the best farm production areas can be identified to achieve the highest overall gross margin. For example, the Summit inSITE map below has identified two areas, one with luxury and one with optimal levels of potassium. If used for hay or silage production, the grower

could focus on partnering nitrogen and sulphur with the current potassium reserves, which would most likely prove to be a great financial strategy.

Summit Fertilizers has a wide range of spring fertilizers and can blend additional nutrients as required.



Delivering pasture products suited to grower needs

The Summit Bunbury Depot has the capacity to apply a wide range of coatings to fertilizers, as well as blend products and additives together to meet individual farmer requirements.

Prescription blending most often goes hand-in-hand with site specific soil and tissue analysis. Often growers will choose one of our high quality propriety products and add to that.

Three very useful fertilizer additives that are gaining interest in the South-west are:

- ALOSCA;
- Calciprill; and,
- Magprill.

ALOSCA

We have been getting very positive feedback from growers this year that the prevalence of legumes in their pastures has been positively impacted by the addition of ALOSCA Granules. Inoculating legumes with the right rhizobia is well documented to improve legume growth, nitrogen fixation, soil nitrate levels and increase yield.

ALOSCA Technologies has put a lot of effort into selecting the best rhizobia strains for each legume type i.e. clovers (Group C), medics (Group AM) along with other strains for the array of legume crop varieties.

ALOSCA Granules are bentonite-clay based and this carrier is impregnated with the plant specific rhizobia strain.

In terms of application the grower has a couple of options.

They can buy the product and add it at the recommended rate when transferring fertilizer to the seeder or spreader. For a grower applying 200 kg of superphosphate per hectare, they would need a blend ratio of 20:1 super:ALOSCA and managing that accurately on-farm can be problematic.

For the sake of simplicity and accuracy, most growers choose to let us blend the ALOSCA Granules with their fertilizer.

Feedback has been observations of very good clover nodulation, the clover as a percentage of the pasture is increasing along with improved dry matter production and pasture quality.

The quality comments are



ALOSCA Granules blend well with Summit fertilizers. The bentonite-clay granules are well formulated, within a similar size range to our fertilizers and low dust.

noteworthy and it will be interesting to see if pastures in those paddocks, in particular ryegrass, respond next year with a boost in soil nitrogen reserves.

ALOSCA is showing to be a very versatile addition to fertilizer.

An added advantage is that it can be put out with fertilizer at any time, although growers really need to consider the environmental aspects. From an eco-friendly perspective, fertilizer should be applied just after the season break in this area as industry best practice.

But there is some degree of flexibility there. ALOSCA Granules can be put out with later fertilizer applications, any time when there is good moisture and the legume roots are actively growing.

There needs to be enough moisture to break down the granule, release the rhizobia and wash them into the soil. Once in the soil they will move down with water movement to the plant root zone. The rhizobia themselves are also capable of swimming, so the

importance of a good supply of soil moisture cannot be stressed enough for a good result.

Best conditions for rhizobia survival would be plenty of soil moisture and warm soil temperatures.

To achieve the best nodulation result, it is also worth mentioning the importance of the trace element molybdenum. Molybdenum acts as a cofactor for the nitrogenase and nitrate reductase enzymes, which are important for nitrogen fixation, nitrate reduction and nitrogen transport in plants.

While that might all sound complicated, it comes with a simple message really. We encourage growers to have molybdenum in the fertilizer with application of ALOSCA because it has shown to be important in the nodulation process.

Suitable Summit fertilizers with molybdenum are (see Table 4.):

- Pasture CZM;
- Super Copper Zinc Moly; and,
- SuperPasture Copper Zinc Moly

Table 4. Summit products with Moly, suited to blending with ALOSCA Granules

Pasture Range	P	S	Ca	Cu	Zn	Mo
Pasture CZM	18.7	6.0	14.6	0.60	0.30	0.04
Super Copper Zinc Moly	9.0	10.8	9.7	0.60	0.30	0.06
SuperPasture Copper Zinc Moly	13.8	8.4	17.2	0.60	0.30	0.05



Bunbury based Summit Fertilizers Area Manager Ralph Papalia discusses the addition of ALOSCA Granules with Sam Weightman who farms at Forest Grove in the Shire of Augusta Margaret River. ALOSCA Granules can be blended in with fertilizer at the Bunbury Depot and top-dressed onto existing clover pastures. The granules introduce newer and better performing rhizobia strains to enhance legume nodulation and improve nitrogen production. This paddock on Sam's home farm (picture taken in late August) has seen a big boost in clover growth since receiving ALOSCA Granules.

The benefits of adding Calciprill and Magprill to fertilizer

Calciprill and Magprill are well formulated low dust granules that can be blended with various Summit fertilizers for accurate and convenient application.

Calciprill is essentially a good calcium carbonate/lime source and Magprill is a convenient way to add magnesium to enhance pasture and livestock production.

Calciprill

Calciprill is a granule composed of finely ground, high purity limestone with certified organic input. It contains 36% calcium, an essential nutrient for plant growth. The granules are low dust and of similar size range to our fertilizers, making them ideal for blending.

An advantage with Calciprill as a liming source is that the granules break down rapidly in moisture to release finely ground particles. Another advantage is that it can be applied regularly at low rates to help sustain optimal soil pH.

Keeping on top of soil pH is highly desirable compared with allowing the soil to slowly acidify over time and applying large quantities of lime every 5 to 10 years.

It also enables growers to make use of their normal fertilizer spreading equipment for timely in-season applications.

As an example of what growers are currently doing, if they are putting out 200 kg/ha of superphosphate, they would have us blend in Calciprill for a combined application rate of 350 to 400 kg/ha, which seems to be a very manageable practice.

Magprill

Magprill is a granule made from finely ground, high purity dolomite with certified organic input. It can be used wherever higher levels of magnesium are required.

Magnesium is an essential nutrient for plant photosynthesis.

As with Calciprill, Magprill is low dust, blends well with our fertilizers to make it easy to spread, and the granules break down rapidly in moisture.

Magprill blended with pasture fertilizers can be as much about the animal health benefits as it is about plant production. Most of our soils have reasonable amounts of magnesium, however potassium tends to enter the plant a little bit easier than magnesium and young plants can often have high levels of potassium and lower concentrations of magnesium.

Grass tetany is one disease associated with low levels of magnesium in the blood.

Magprill, rotational grazing and deferred grazing, dusting magnesium onto feed, pasture licks, slow-release capsules can all help with magnesium related animal health issues.

Easy and convenient payment terms

Summit Fertilizers offers a wide array of options for bill payment - from settling by cheque, credit card, funds transfer/BPAY/Debit card or, the options of standing direct debit (4 days to the 25th of the following month – details provided below).

Summit Payment Options*

Fast Pay - Fast turnaround of credit limit - ease of use.

Monday (Day 1)	Tuesday (Day 2)	Wednesday (Day 3)	Thursday (Day 4)
Product collected	Tax invoice summary & Direct Debit advice emailed to customer		Direct Debit actioned

QuickPay - Refreshes credit limit fortnightly.

Monday to Sunday (Week 1)	Monday (Week 2)	Thursday (Week 2)
Product collected	Tax invoice summary & Direct Debit advice emailed to customer	Direct Debit actioned

Pay 7 - Refreshes credit limit early in following month.

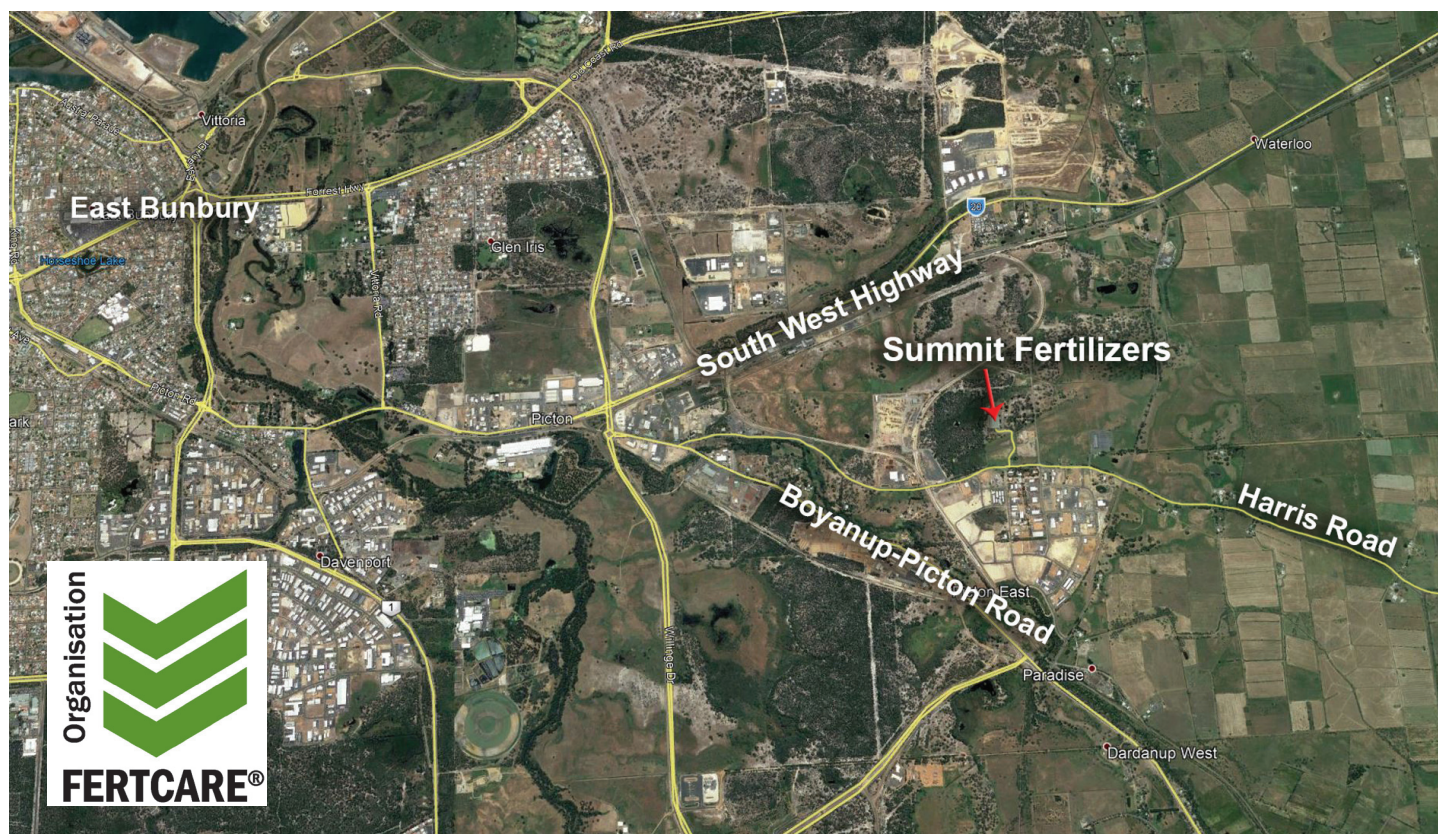
Collection	End of Month	1 st of Following Month	7 th of Following Month
Product collected all month long.	Tax invoice summary & statement emailed	Direct Debit advice email	Direct Debit actioned

Pay 25 - Up to 55 days credit.

Collection	End of Month	10 th of Following Month	25 th of Following Month
Product collected all month long.	Tax invoice summary & statement emailed	Direct Debit advice emailed	Direct Debit actioned

* (Subject to Credit Approval)

The Bunbury Depot offers product blending along with quick and efficient despatch



Add to your business with SummitConnect

SummitConnect is our online customer portal, where you can view both your fertilizer transactions and inSITE soil and plant test history. It also offers a simple and convenient way to oversee your fertilizer transactions. This user-friendly interface allows you to easily view:

- Orders - See details of all your orders with Summit, including collection month and payment terms.
- Collections - View individual fertilizer collections, download loading and weight dockets.
- Transactions - Review your payments, credit limit, monthly statements and download your tax invoices.

Your inSITE reports are available anytime and anywhere. With our new and improved SummitConnect portal, you can see your entire soil and plant test history, including recommendation reports.

Another exciting feature are trend maps, which allows farmers to visualize how soil nutrients are tracking over time, across different depths and in different paddocks.

In-Season NDVI images are also available through our partnership with DataFarming.

The incorporation of NDVI images can be particularly useful for growers and Summit Area Managers, as problem areas in paddocks can be quickly identified and followed up for further investigation by targeted inSITE soil and plant testing.

Ultimately it's about providing our customers with the most accurate data, in the most accessible way, enabling you to make better decisions with regard to fertilizer inputs for this season and beyond.

Share your Data

To help make your business run smoother, SummitConnect includes a sharing functionality, allowing you to easily share your SummitConnect account and data with third party users, such as your accountant or agronomist.

Download our Summit Fertilizers App to easily access SummitConnect on mobile devices. We've specifically designed the App for optimal viewing of SummitConnect on phone and tablet screens.

Also included in the App are a range of useful tools and information, such as product analysis data, fertilizer calculators and our liquid fertilizer and pesticide compatibility checker.

Use the QR code below to download the Summit App.



A mobile phone screenshot of phosphorus test status from the Summit Fertilizers App.

Our partners in growth

At Summit we aim to offer much more than just fertilizer. Our core business will always be delivering high quality fertilizers and local advice. To assist with additional support services we work closely with independent industry business partners.

For soil and plant analysis, Summit has enjoyed a long-standing relationship with APAL (Australian Precision Ag Laboratory). APAL has state-of-the-art laboratories and is an accredited member of ASPAC (Australasian Soil and Plant Analysis Council).

In 2020, Summit Fertilizers joined forces with DataFarming. The result was that our clients immediately had free and regular access to 10 x 10m resolution, satellite based NDVI images through the SummitConnect user platform. This free NDVI information can be overlaid with Summit's inSITE test results to provide an exciting new way of looking in-season at paddock performance.

Caring for and protecting the environment

Summit Fertilizers has a strong corporate responsibility to caring for and protecting the environment, giving due consideration to all relevant environmental issues. It's in our DNA!

We want all our fertilizers to be used by growers in a way that maximises their efficiency and complies with environmental laws and regulations.

To this end, Summit is a Fertcare accredited organisation. Our Area Managers are trained to provide the highest quality advice, allowing you to optimise productivity while minimising environmental and food safety risks.

Summit Fertilizers Pasture Products

Product	Nutrient content (%)								t/m3
	N	P	K	S	Cu	Zn	Mo	Ca	
Pasture		18.2		10.0				14.19	1.07
Pasture Boost		17.1		14.8				13.34	1.06
Pasture Boost Potash		10.5	19.0	9.7				8.23	1.08
Pasture CZM		18.7		6.0	0.60	0.30	0.040	14.58	1.07
Pasture Potash 11		6.4	32.5	3.9				4.97	1.09
Pasture Potash 21		9.1	25.0	5.3				7.10	1.09
Pasture Potash 31		10.9	20.0	6.3				8.52	1.08
Pasture Potash 32		7.8	28.5	4.7				6.10	1.09
Pasture Potash 41		12.2	16.5	6.9				9.51	1.08
Pasture Potash 51		13.1	14.0	7.4				10.22	1.08
Super CZM		9.0		10.8	0.60	0.30	0.060	19.72	1.15
Super Potash 1:1		4.6	25.0	5.9				10.00	1.13
Super Potash 2:1		6.1	16.5	7.6				13.40	1.13
Super Potash 3:1		6.8	12.5	8.4				15.00	1.14
Super Potash 3:2		5.5	20.0	6.9				12.00	1.13
Super Potash 4:1		7.3	10.0	8.9				16.00	1.14
Super Potash 5:1		7.6	8.5	9.2				16.60	1.14
SuperPasture		13.6		10.5				17.10	1.11
SuperPasture CZM		13.8		8.4	0.60	0.30	0.050	17.15	1.11
SuperPasture Potash 11		5.5	30.0	4.6				6.84	1.10
SuperPasture Potash 21		7.9	21.0	6.4				9.92	1.11
SuperPasture Potash 31		8.7	18.0	7.0				10.94	1.11
SuperPasture Potash 32		6.8	25.0	5.6				8.55	1.11
SuperPasture Potash 41		10.0	13.5	7.8				12.48	1.11
SuperPasture Potash 51		10.4	12.0	8.1				12.99	1.11
Superphosphate		9.1		11.0				20.00	1.15
Supreme	5.3	13.6		13.5				10.64	1.04
Supreme Potash	3.6	9.1	16.5	9.3				7.10	1.06
Muriate of Potash			50.0	0.7					1.10
Sulphate of Potash			41.5	17.0					1.28

Contact your Summit Fertilizers pasture specialists



Ralph Papalia

Mob: 0427 766 535

rpapalia@summitfertz.com.au

Harvey, Capel,
Dardanup,
Busselton,
Bunbury, Collie,
Augusta-Margaret
River, Bridgetown,
Manjimup,
Donnybrook,
Nannup, Pinjarra,
Waroona.



Chloe Turner

Mob: 0447 469 245

cturner@summitfertz.com.au

Boyup Brook,
Katanning,
Kojonup, Wagin,
Woodanilling.



Mark Ladny

Mob: 0498 223 421

mladny@summitfertz.com.au

Albany (West),
Denmark,
Tambellup,
Cranbrook,
Plantagenet,
and Broomehill.