

Fertilizer News

Summit's largest ever Field Research trial program continues to roll along

By Dr Mark Gherardi
Field Research Manager

With more than 40 Summit trials spread across 29 locations throughout the agricultural region, a great deal of effort has gone into the planning and execution of the 2016 field trial program. The Field Research team will ensure the trials meet the high standards necessary to produce valuable and uncompromised yield data when harvest time comes around.

As grain trials are now flowering or showing seed set at various stages of development, we can observe how vegetative biomass responses to fertilizer treatments translate to harvest yield differences.

In many cases strong visual differences are apparent, making it an ideal time for growers to view the trials.



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- Yield forecast tools tested in Esperance
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- Spring fertilizer to boost production



Geraldton Depot Business Manager, Shane Turner, discussing field trials at Mullewa.

Trial program highlights

- Continued development and demonstration of the value of the Summit Fuel Gauge system using NDVI, N-rich strips and N response curve plots. These were viewed at the Northern Agri Group Spring Field Day at Binu. They are also replicated in wheat, barley and oat plots in other areas of the state and are proving to be extremely valuable tools to assist with in-season N application and rate decisions.
- Determining impacts of directing fertilizer spend toward P, N or a NP combination in first-year pastures coming out of cropping rotations on gravelly soils in the Collie-Williams area. While both P and N look to be beneficial, early-season grazings show N responses standing out with markedly increased pasture production.

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Why you should choose Summit

Summit Fertilizers 2016/17 Fertilizer Supply Offer is now open and offering substantial rewards to assist your farm business.

Summit is committed to supplying high quality fertilizers and has one of the widest ranges in WA. Our products include Australian made compounds DAPSZC and MAPSZC, high quality NPK compounds - Gusto and Vigour, as well as quality pasture fertilizers Superphosphate, SuperPasture and Pasture.

Our SummitQ services are delivered on-farm and include soil and plant sampling (with sites selected via biomass imagery), sample analysis and Fuel Gauges, all backed by extensive field research. Together with local Area Manager experience these services provide practical nutrient recommendations to boost the returns you make from your fertilizer investment.

To take advantage of our offer, simply contact your local Summit Area

Manager, nominate your fertilizer by 30 November 2016 and receive Summit's Productivity Package:

- SummitQ Technical Services to the value of \$2.00/tonne
- Half price fungicide coating and free of charge selenium, blended at standard rates for products chosen from our Pasture or Superphosphate ranges.

Your fertilizer can be collected at the time of your choosing with fast and convenient despatch, operating 24/7 during the busy seeding season.

Summit customers know we are easy to do business with.

Tax invoices, order position and statements are mailed to you regularly or you can see these, together with collection summaries, anytime by logging on to SummitConnect on the Summit Fertilizers website.

This season consider Summit Fertilizers for your fertilizer supply and find out how we can help you lift the return on your fertilizer investment.

Hear what our farmers have to say!

Summit customers keep coming back to the quality products that Summit has on our list.

To find out why they choose Summit, go to our website at

www.summitfertz.com.au

and hear it straight from them.



*Peter and David Smith, Carnamah: DAPSZC
"We've always used DAPSZC...it gets the crop off to a good start."*

New appointments for the Esperance region

Summit Fertilizers has new staff in the Esperance region.

Tim Donkin (right) has taken on the role of Esperance (West) and Ravensthorpe Area Manager.

Caroline Krygger is now the Customer Service Manager and Joel Dixon is Depot Operator. Nick Donkin has taken on the role of Depot Business Manager.

They can be contacted on:

Phone: 08 9076 4100

Fax: 08 9071 5035

Nick: 0428 715 045

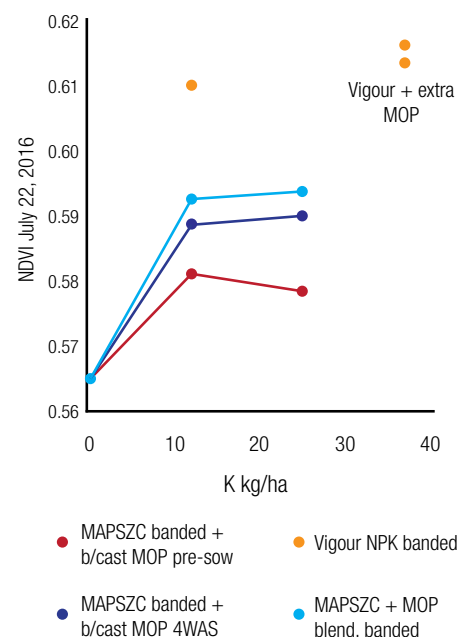


Tim Donkin
Esperance (West) and
Ravensthorpe Area Manager
0408 092 355

Summit's largest-ever Field Research trial program continues to roll along *(cont. from page 1)*

- Potassium (K) strategy trials in a number of locations look at rates, timing and application methods for supplying sufficient K to crops on low and marginal potassium status soils. Plant growth is reinforcing the message that banding K is generally a more efficient method of delivery to growing crops than topdressing. However, spreading potassium still has a place in nutrient programs. An encouraging addition to some of these potassium trials has been the performance of Summit Vigour – a newly formulated MOP-based compound granule containing N, P, K, S and trace elements – when compared with MOP blends and stand-alone spreading.
 - Grain trials looking at N and P combinations continue to demonstrate the value of starter P to crop growth. In a good season N responses have been significant. A number of trials have included K this year and the addition of K has enhanced the response to nitrogen and phosphorus. The evidence is strong that you need to supply all nutrients to get the best response.
- It has been interesting to observe the field trials under what is shaping as an extraordinary season in many areas of the state, with little or no limitations on soil moisture. In fact, in southern coastal areas and across to Esperance, waterlogging has impacted on many crops, including some trial sites.

Graph 1. Potassium strategies at Wickepin & impressive response to Vigour application



Summit Fertilizer trials will continue to be presented at various grower group spring field days. Our Area Managers are only too happy to show you through any trials in your local area. Your local Area Manager contact details are on the back page.



John Murray, Cadda Downs, Badgingarra: VIGOUR
"...nice balanced compound with potash and high trace elements...really happy with the way it handled the wet seeding."



Jason King, Fineterre Farm, Perenjori: MAPSZC
"...we're really happy with the handling of the fertilizer, it's great."

Stay connected!

SummitConnect is the convenient online option for farmers to:

- ☑ check orders,
- ☑ download tax invoices,
- ☑ view and print statements.

It's a fast, simple way of keeping on top of your fertilizer business.

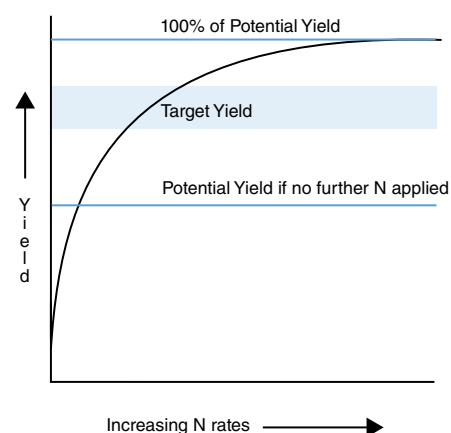
Summit services

- Summit Fertilizers uses an independent laboratory for both soil and plant analysis with interpretations based on Agriculture WA data.
- Some fertilizer can be coated with IMPACT® to help control blackleg in canola and some cereal diseases.
- Get over the phone or on the farm advice through Summit's own agronomists or our extensive network of agents.
- Summit carry out a range of field trials every year.
- Custom blending is a Summit specialty.

SUMMIT FUEL GAUGES

An N-Gauge is laid down immediately after sowing. Summit Area Managers generally use Summit UAN or MAXamFLO at a rate of around 200 L/ha.

- A high rate is used to get the crop to 100 per cent of it's potential biomass and is used on top of the farmer's practice.
- Target yield is around 85 to 95 per cent of the potential - dependant on the price of the grain.
- A GreenSeeker® (right) is used to assess crop growth both on and off the strip.
- By using the Summit N Calculator (below), Area Managers can assess the potential yield and protein benefits from applying extra nitrogen at a calculated rate to achieve the 80 to 95 per cent potential yield.
- Summit pioneered Fuel Gauges and N-rich strips. They are part of our productivity package.



Luke Hall, Halanson Farms, Wagin: GUSTO

"...I see no reason why this season shouldn't be as good as the last four that we've been using it."



Shayne and Troy Smith, Kingussie, Dumbleyung: MAPSZC

"We've been using MAPSZC for about 15 years."

Yield forecast tools tested in Esperance

Article from GRDC Ground Cover
July/August, 2016

Advances in crop yield predictive technology continue to accelerate and, if found to be accurate for local environments, offer opportunities for targeted fertilizer and herbicide management, more confidence in grain marketing and higher profits.

Being able to estimate in-crop what a particular paddock might yield paves the way for efficient input decision making and crop enterprise planning as the season unfolds.

In the Esperance port zone last year, the South East Premium Wheat Growers Association (SEPWA) worked with four growers across the region to test five in-season yield predictive systems.

The focus of this GRDC funded and Esperance Regional Cropping Solutions Network (RCSN) group supported research was on:

- practicalities of implementation
- complexities of the tools
- accuracy of crop responses compared to predictions, and
- whether growers liked using them.

SEPWA project officer Alice Butler says the systems evaluated were Yield Prophet® and ProductionWise (both based on the Agricultural Production Systems sIMulator (APSIM)

model), iPaddockYield, Potential Yield Calculator (PYCAL) and nitrogen N-rich strips.

She says the project found the more complex tools Yield Prophet and ProductionWise did not necessarily deliver more accurate yield predictions (mainly due to a lack of regionally specific soil characterisation data).

These also generally took more time to set up, required more understanding and support from advisers and had greater room for error.

“The simpler tools of iPaddockYield, PYCAL and N-rich strips were easier to implement by growers and, in a lot of cases, out performed the more complex tools in yield prediction accuracy,” Alice said.

“We did find that during the season, yield predictions varied with the different models used at the various sites.”

Alice says the project found ProductionWise was the closest to predicting yield for Baudin barley at the Condungup site.

She says PYCAL and iPaddockYield had the closest yield predictions for Mace wheat at the Scaddan and Mount Ney trial sites and iPaddockYield had the closest prediction for Hindmarsh barley at the Neridup site.

“But when the growers were asked which tool they liked best and will

continue to use, three growers said N-rich strips and one grower said iPaddock Yield and N-rich strips, because of the simplicity of these tools,” she says.

“The level of understanding of the person setting up each tool also directly impacted on how accurately the model replicated the real world environment. The more simple tools appear to be suited to grower set-up and the more complex ones are probably better used with advisers – or adviser and grower collaboration – to be reliable and robust.”



Summit Fertilizers has pioneered Fuel Gauges and N-rich strips for growers as part of its productivity package.

Table 1. In-season management tools used in the GRDC-funded SEPWA Grower Tools project, the associated required information to set these up and indicative cost. (Source: SEPWA)

In-season management tool	Information required for set-up	Cost
PYCAL	Rainfall, soil moisture at sowing and soil evaporation value. PYCAL was used in the ProductionWise platform, as it used actual soil moisture at sowing.	Free – but this project used the one that was part of the ProductionWise package (which costs \$550 for up to 5000ha for one year).
iPaddock	Yield, 10 years of monthly rainfall and corresponding average farm crop yield.	\$179 – iPad/iPhone App.
ProductionWise	Runs off the APSIM model, which requires soil characterisation, soil-test results, rainfall data from nearest weather station, last year's yield, and nitrogen, as well as NDVI from satellite imagery to produce its prediction.	Starting package is \$550 for up to 5000ha for one year – web-based platform.
N-rich strips	High rate of nitrogen strip that is compared to paddock standard using a GreenSeeker to measure NDVI. The NDVI values for paddock and N-rich strip are then plugged into the N Calculator to give various N rates to produce various protein levels.	Strip laid out for \$50/paddock. GreenSeeker to read the strip \$600. N Calculator \$50/paddock. Summit Fertilizers has pioneered Fuel Gauges and N-rich strips for growers and is included as part of its productivity package.
Yield Prophet	Runs off the APSIM model, which requires soil characterisation, soil-test results, rainfall data, last year's yield, crop rooting depth and N application.	\$180/paddock plus soil-coring costs – web-based platform.

SummitQ a hit at the Field Days

Interest in Summit at the three major machinery field days was particularly strong this year, no doubt off the back of a terrific season for many. It was a great way for the company to demonstrate its ongoing commitment via new innovative ideas, products and technology. It was also a fantastic opportunity for growers to have access to staff from all of our departments and to get information on SummitQ.

SummitQ represents the technical services offered by Summit Fertilizers and is designed to boost farm productivity. SummitQ services are delivered by our Area Managers using their local knowledge and

experience to make practical fertilizer recommendations.

Under the umbrella of SummitQ, is a comprehensive range of high quality technical services.

Field research

Field research is central to the information that Summit Area Managers use every day to help farmers keep up-to-date.

The data from trials is analysed and used to improve products, keep farmers abreast of the latest in nutrition research and to continually improve our SummitQ services, so that we provide the best in-field advice.



Snapshot

Snapshot is Summit's soil and plant analysis service offering a snapshot of your farm's nutrient status. Delivering analysis and interpretation, Summit Snapshot has fast turn around times and the backup of your local Area Manager.

Snapshot is based on years of field research and is continually developed to make sure that our models and information are as current as they can be.

Fuel Gauges

The benefits of continuous, in-season nutrient monitoring are becoming more evident as farmers connect with the Summit Fuel Gauge program. An on-farm Fuel Gauge allows your Summit Area Manager to measure responses against your practice, using a Green Seeker to measure NDVI.

Fine tuning soil analysis recommendations and allowing for adjustments to planned nutrient applications as the season develops is the next step in production.

Using the Summit NCALC software Summit Area Managers can analyse the Green Seeker data and use it to assess crop responses to nitrogen and predict the rate required to maximise yield. Plant analysis can be used to assess other nutrient responses and to measure the reaction of other nutrients to the higher nitrogen applications.



Darrin Lee, Bligh Lee Farms, Mingenew: DAPSZC
"We need something that handles extremely well and has a good balance of nutrition."



Ben McTaggart, Mt Samuel, Mingenew: DAPSZC
"It's a really high quality product, compounded with lots of nitrogen and phosphorus and zinc."

Spring fertilizer to boost production

John Fleay of Roydon Nominees, runs a beef herd of about 1100 cows 20km west of Denmark. Each year he has soil testing done during the summer months to assist with making the right fertilizer decisions.

For his production it is important that enough fodder is preserved in spring to get his cattle through the summer and autumn months.

John applies an autumn top dressing of 120kg/ha of SuperPasture potash 51 and Se. This Summit product is preferred for its balance of phosphorus, potassium and calcium and also its combination of quick release sulphate sulphur and slower release elemental sulphur.

He understands to get the most out of any fertilizer applied during the year, it's important that soil pH is balanced. A regime of liming is carried

out each year over about 30 per cent of the pasture area. The soil types in his area are typically quite acidic and recommendations of 1.5t/ha of lime are common.

During early winter, John applies about 55kg/ha of nitrogen to boost specially selected pasture paddocks to increase winter feed for his cattle. Pasture improvement is an ongoing task for John. He looks for pasture mixes that will give him as much winter growth as possible during the slower growing colder months.

For spring fertilizer applications John chooses an NKS formulation from the extensive Summit range of well-balanced spring fertilizers. Spring fertilizer is applied to paddocks that are shut up for hay and silage production.

Typically John uses Summit

Fodder Max, which has a high nitrogen content to boost growth, and potassium to assist with plant growth and reproduction.

Potassium is an important nutrient in spring that affects both plant and animal health. Too little in the soil means reduced pasture growth, however, it's important to remember too much can lead to cases of Grass Tetany next calving season.

Potassium affects seed set and improves palatability in dry feed, so many fertilizer recommendations in spring aim to give a boost using nitrogen, sulphur and potassium.

The extended cold conditions that prevailed across the south coast of WA has meant that pasture growth over winter was slow and feeding out has been prolonged to keep livestock in good condition. As a consequence, fodder stocks for many growers are running lower than previous years.

With wet soil conditions and warmer spring days ahead, now is a good time to consider which spring fertilizer will best boost hay and silage production and make the most of the season.

Table 2. Just some of the range of Summit Fertilizer N pasture products

Summit product	Analysis (%)			Bulk density (t/m ³)
	N	K	S	
Urea	46.0			0.75
UreaS	41.6		4.2	0.79
UreaPlus	37.2		8.4	0.82
NitroPlus	33.5		12.0	0.85
Foddermax	30.3	7.5	8.5	0.87



Denmark cattle farmer, John Fleay, and Summit Fertilizers Area Manager, Peter Warren, discuss John's spring fertilizer needs.

Your local Summit Fertilizers Area Manager



GERALTON
Shane Turner
0429 947 919



COOROW
Juliet McDonald
0429 945 332



BALLIDU
David Armstrong
0447 109 545



MOORA
Brett Beard
0429 900 607



NORTHAM
Mike Tagliaferri
0427 989 099



CORRIGIN
Steve Cooke
0429 934 243



MERREDIN
Kobus Marais
0427 766 508



WILLIAMS
Jarrad Martin
0427 788 521



NARROGIN
Brett Coxon
0427 766 506



LAKE GRACE
Tony Carew-Reid
0427 766 517



ESPERANCE (WEST)
Tim Donkin
0408 092 355



ESPERANCE (EAST)
Nick Donkin
0428 715 045



BUNBURY
Ralph Papalia
0427 766 535



ALBANY
Peter Warren
0498 223 421



ALBANY
Andrew Wallace
0427 083 820



www.summitfertz.com.au

Summit Fertilizers - 29 Ocean St, Kwinana Beach, WA 6167
ABN 49 058 794 397