

# ENTEC/N-Sure: A great leap forward in potato crop nutrition

- ✓ Improved nutrient uptake
- ✓ Reduced nitrogen waste
- ✓ Better results in wet conditions
- ✓ Greater efficiency, fewer applications
- ✓ Increased crop yield and quality

## Make sure your blend gets the ENTEC/N-Sure treatment

Whatever IPF nitrogen fertiliser goes into your blend, an ENTEC/N-Sure treated version is likely to be available.

For more information, contact  
your ENTEC-accredited IPF distributor  
or visit [entecfertilisers.com.au](http://entecfertilisers.com.au)



[incitecpivotfertilisers.com.au](http://incitecpivotfertilisers.com.au)

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## Exactly how much N do you need?

Our Nutrient Advantage<sup>®</sup> soil and plant tissue testing service can provide precise nutrient analysis and expert, objective recommendations based on your local conditions.

When you know exactly what your plants need, targeted blends can be very cost effective. And today growers around the country are producing higher yields with less fertiliser than in the past.

### Want the advantage?

Visit [nutrientadvantage.com.au](http://nutrientadvantage.com.au)  
or call 1800 803 453 and ask about  
our soil and plant tissue testing  
services.



Incitec Pivot Fertilisers



# DO LESS, GET MORE

A GREAT LEAP FORWARD  
IN POTATO CROP NUTRITION

**N-SURE** **ENTEC**<sup>®</sup>

Reduce costly nitrogen  
losses and help your plants  
use N more efficiently

## Does your N supply match your crop's N demand?

**Here's the problem:** a potato crop needs nitrogen most in the 40–70 days after planting. Yet traditionally, up to 70% of nitrogen (N) fertiliser gets applied in the first 30–40 days – when it's easier to get N close to the tuber, but N uptake is limited.

**The result:** a massive 'mismatch' in N supply v. demand that can cost you in:

### WASTED NITROGEN

What isn't taken up may be lost through leaching – excess irrigation/rainfall in sandy soils – or denitrification in heavier soils which become waterlogged.

### PRODUCTION INEFFICIENCIES

Higher N rates may be needed, plus added labour and fertiliser cost for multiple top-ups by sidedress.

### REDUCED YIELD AND QUALITY

Crop nutrition is less than optimal, and growth and development may suffer as a result.

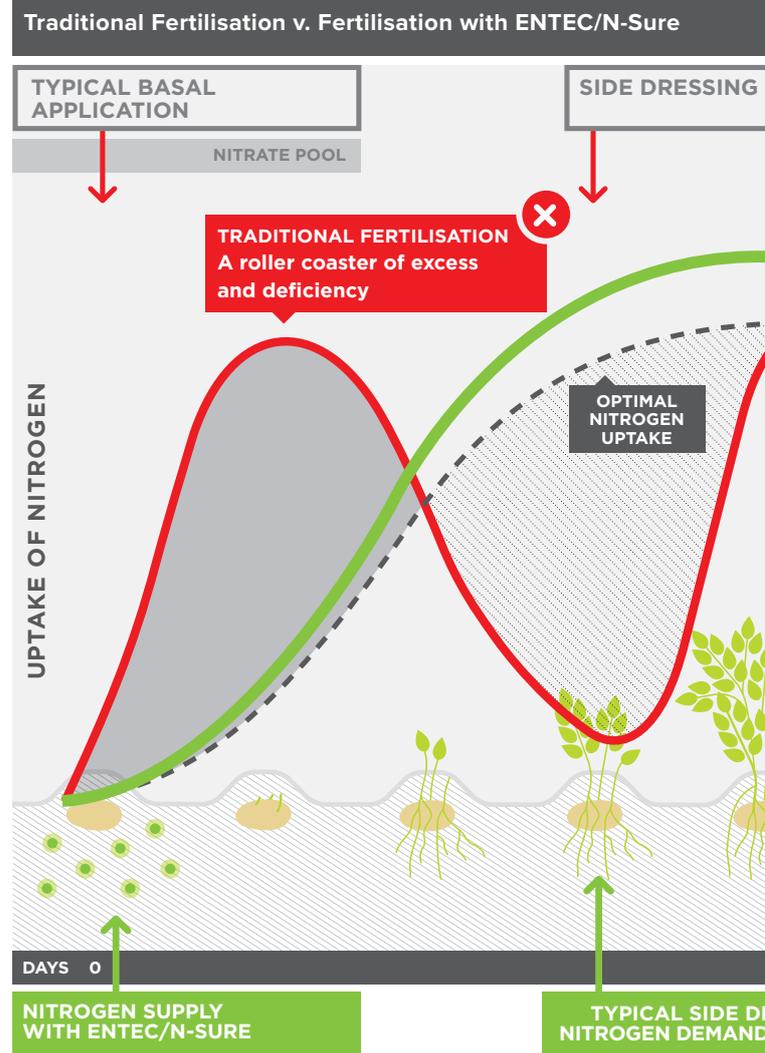
## Get N to your plants when they need it most with ENTEC® and N-Sure®

ENTEC and N-Sure are stabilising treatments that gives nitrogen fertilisers weeks, even months more critical staying power.

With ENTEC and N-Sure, supply at last matches demand.

Applied at the same time as conventional fertiliser, they keep N in the stable ammonium form for longer – so it remains in the soil and is available to the crop for longer.

With ENTEC/N-Sure you could get a lot more



*Actual results may vary. Factors such as weather and environmental conditions, soil conditions and other variables will impact the results growers achieve.*

## HOW ENTEC/N-SURE DOES IT

ENTEC/N-sure works by inhibiting nitrifying bacteria in the soil, by using the inhibitor 3,4-dimethyl pyrazole (DMP). This slows down conversion of the more stable ammonium form of nitrogen to the nitrate form that's more prone to loss. DMP keeps nitrogen available in the soil longer and available to the plant more continuously throughout the critical weeks of greatest N need.<sup>1</sup>

ENTEC is applied to

wwUrea, GranAm and Nitrophoska, while N-Sure is applied to MAP & DAP to ensure compatibility and N utilization.

for your nitrogen investment:

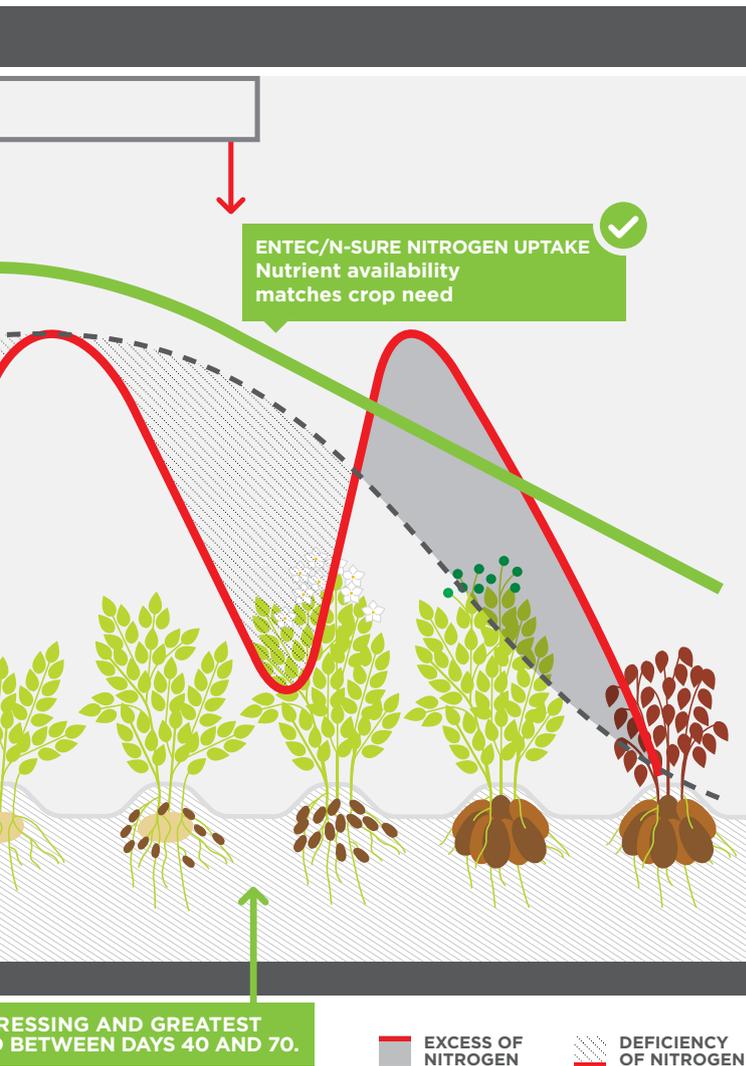
**More N utilised** – improved uptake, better growth, and promotes greater uptake of phosphorus, copper and zinc.

**Less N wasted** – reduced losses through leaching and denitrification.

**Better in the wet** – protection from waterlogging, with steady N availability in the face of excess rain or irrigation.

**More N for less** – potential for reduced N side dress applications.

**Potential improvements to crop return** – potential for higher yield, increased tuber size and reduction in disease.



**ENTEC/N-Sure stay active longer: The cooler the soil, the longer ENTEC/N-Sure stays active – up to 10+ weeks if soil temperature is less than 12 degrees<sup>3</sup>**

TYPE OF FERTILISER	TIME FOR NITRIFICATION TO OCCUR <sup>4</sup>
Conventional untreated nitrogen fertilisers	<b>1–3 WEEKS</b>
ENTEC/N-Sure treated enhanced efficiency fertilisers	<b>4–10 WEEKS</b>

## THE PROOF IS IN THE POTATOES

A number of demonstration sites and trials have shown just how much more you can get with ENTEC.

### A powerful demonstration

At one WA demonstration site, ENTEC produced not only a substantial increase in potato yield, but also an impressive boost to tuber size.



### More head-to-head evidence

Trial harvested in April 2016 at Pinnaroo, shows the potential for increase in yield from ENTEC treated fertilisers v. their untreated equivalents.<sup>2</sup>

TREATMENT (AT PLANTING)	Fresh yield (t/ha)	Yield increase
Nitrophoska	59.65	<b>13.4 t/ha</b>
Nitrophoska + ENTEC	73.05	<b>22.5%</b>
Nitrophoska + Stockosorb (35 kg)	62.3	<b>14.0 t/ha</b>
Nitrophoska + ENTEC + Stockosorb (35 kg)	76.3	<b>22.5%</b>
LSD	10.55	

1. A review of the nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP) A report prepared for Incitec Pivot Limited by Sultana, H., Suter, H. and Chen, D. (Feb-10) Department of Resource Management and Geography Melbourne School of Land and Environment (MSLE) The University of Melbourne.

2. Sown with a Nitrophoska Blend at 835 kg/ha (92.5 kgN/ha, 107.2 kgP/ha, 63 kgK/ha) +/- Entec +/- StockoSorb cv Almira, planted 23/11/16 In crop rainfall of 28mm + 30mm irrigation per week on a sandy loam Source: Jamie Clifford, IPF Agronomist, Adelaide

3. PASDA G., HÄHNDEL R., ZERULLA W., 2001. Effect of fertilisers with the new nitrification inhibitor DMPP (3, 4-dimethylpyrazole phosphate) on yield and quality of agricultural and horticultural crops. Biol Fertil Soils 34, 85-97.

4. Under typical soil conditions (soil temperature at time of planting in 12-14°)