

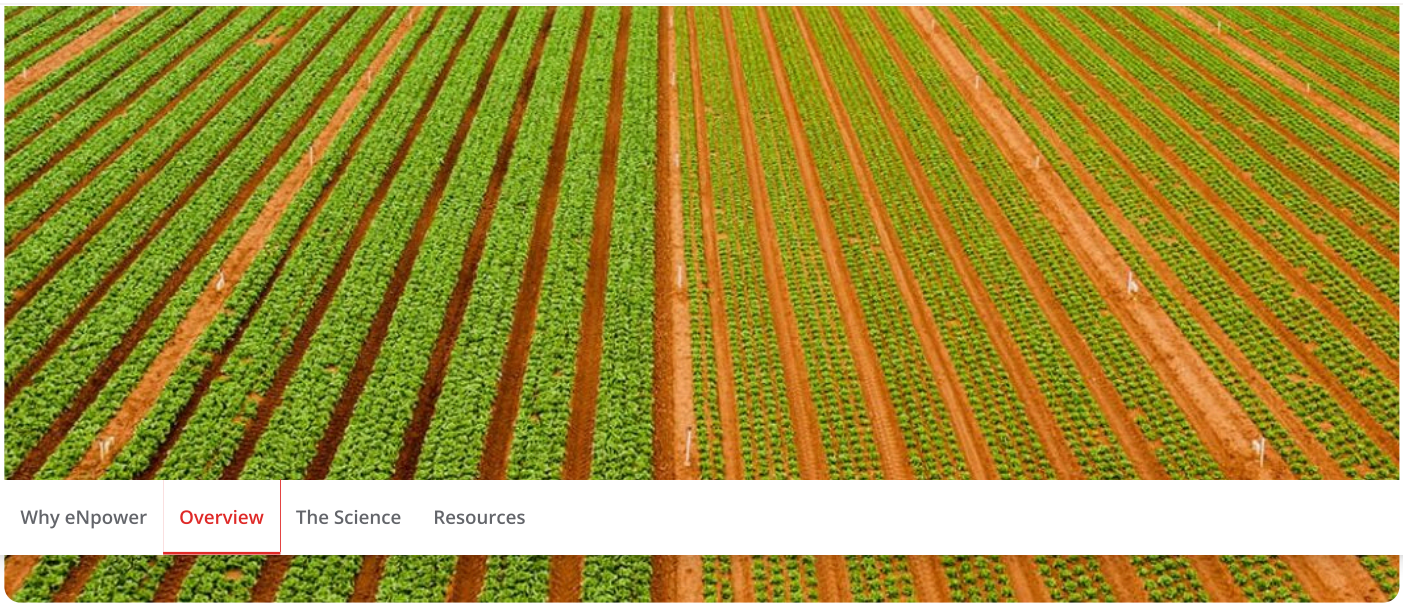
NITROGEN RETENTION eNpower 18:20

eNpower

Applied in the subsurface to help reduce losses from denitrification and leaching.

Get in touch





Why eNpower

eNpower is an enhanced efficiency fertiliser that helps you get more from every kilogram of nitrogen. Using proven nitrification inhibitor technology, it slows nitrogen loss through leaching, denitrification, and runoff – keeping more nitrogen available for your crop.

In reef-regulated areas or when nitrogen prices are high, adding more fertiliser isn't always feasible or profitable. That's where eNpower makes a real difference.



Overview

More retention. More efficiency. Less risk.

eNpower is our patented DMP-G nitrification inhibitor coating for granular urea and other ammonium-based fertilisers, including **Gran-Am, EASY N, DAP, MAP, and Granulock**. This innovative coating slows the conversion of ammonium nitrogen to nitrate nitrogen, stabilising nitrogen in the root zone where crops need it most.

By keeping more nitrogen in the ammonium form, eNpower reduces losses via leaching and denitrification, supports consistent crop growth, and maximises your fertiliser investment. Tested and proven under Australian conditions, eNpower gives you confidence that your nitrogen is protected, efficient, and sustainable.

Made for Australian Farmers

Developed by Incitec Pivot specifically for Australian soils and farming conditions, eNpower is backed by years of agronomic and laboratory research. The coating technology ensures uniform application, deeper granule penetration, and reduced dust formation, making it easier to handle and spread.

Where eNpower Works Best

Subsurface urea applications – Ensure adequate soil coverage above the granule to minimise volatilisation.

High organic matter soils – Organic-rich soils, like in tropical regions, can speed nitrogen conversion, increasing leaching risk.

Sandy or low clay soils – Nitrogen can move quickly through these profiles; eNpower holds it in the root zone longer.

Hot conditions – High temperatures accelerate nitrogen losses.

High rainfall – Waterlogged soils increase denitrification and can flush nitrogen away from plant roots.

Managing Nitrogen Loss Pathways

eNpower takes a holistic approach to nitrogen efficiency, addressing leaching and denitrification.

In sugarcane – whether ratoon or planting – it helps crops retain colour longer, reduces nitrous oxide emissions by up to 30%, and keeps nitrogen available throughout the season. It performs reliably even under tropical conditions, where nitrogen losses are often greatest.

Features and Benefits

1

Nitrogen Retention

Reduces nitrogen loss, keeping more nitrogen in the soil and available to crops.

2

More Flexibility in Application

Provides flexibility to apply ahead of rainfall, knowing nitrogen is protected.

3

Reduction of Greenhouse Gas Emissions

Decreases nitrous oxide emissions, a greenhouse gas with 265 times the warming potential of CO_2
Supports on-farm environmental compliance and sustainability goals.



The Science

eNpower is our patented nitrification inhibitor DMP-G coating has been developed by the Incitec Pivot Research & Development using technology that ensures uniform application, deeper penetration into urea granules, and reduced dust formation, making it easier to handle and spread.

eNpower slows the breakdown of ammonium in the soil. This reduces nitrogen loss due to leaching, runoff and denitrification, ensuring more nitrogen remains available for plant uptake.

eNpower is a bacteriostatic, which effectively 'puts to sleep' the bacteria responsible for converting urea to other forms of nitrogen.

It stabilises the positive charged ammonium (NH_4^+) which binds to the negatively charged clay particles and organic matter in the soil.

This reduces the risk of nitrogen being carried out of the root zone by heavy rain or irrigation.

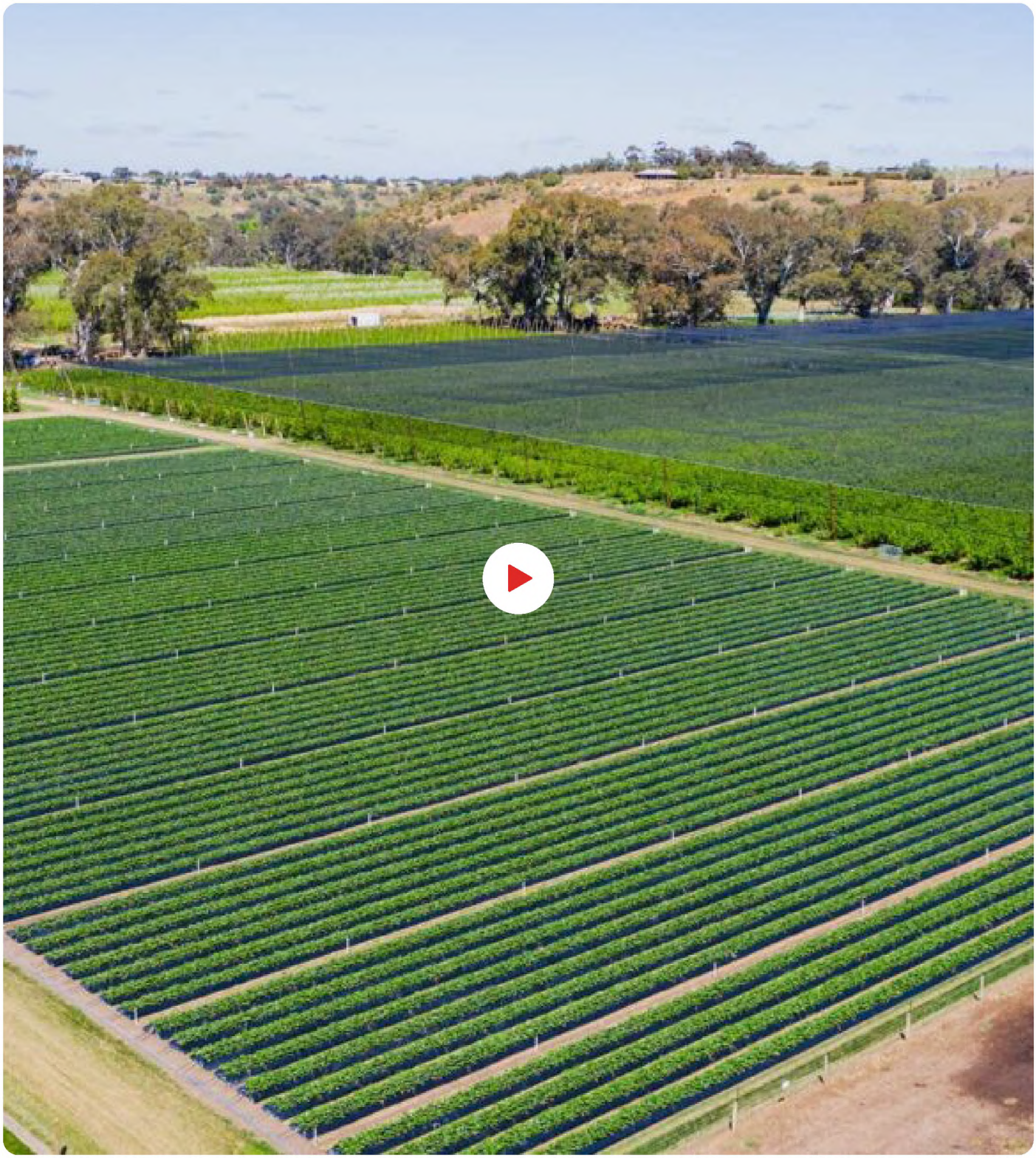
After 4-12 weeks, that ammonium then goes through its natural cycle, which mirrors the plants requirements over the crop.

Plants can take up ammonium or nitrate nitrogen, so it is not starving your crop at any stage.

Backed by our Nutrient Guarantee

With our Nutrient Guarantee, you can count on eNpower to deliver consistent, scientifically verified performance. Incitec Pivot has invested in proprietary coating technology through our network, this ensures consistently and reliable application of eNpower.

Smarter solutions for Mackay's Sugarcane industry, with Rob Dwyer



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Crop Type

Let's Talk



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