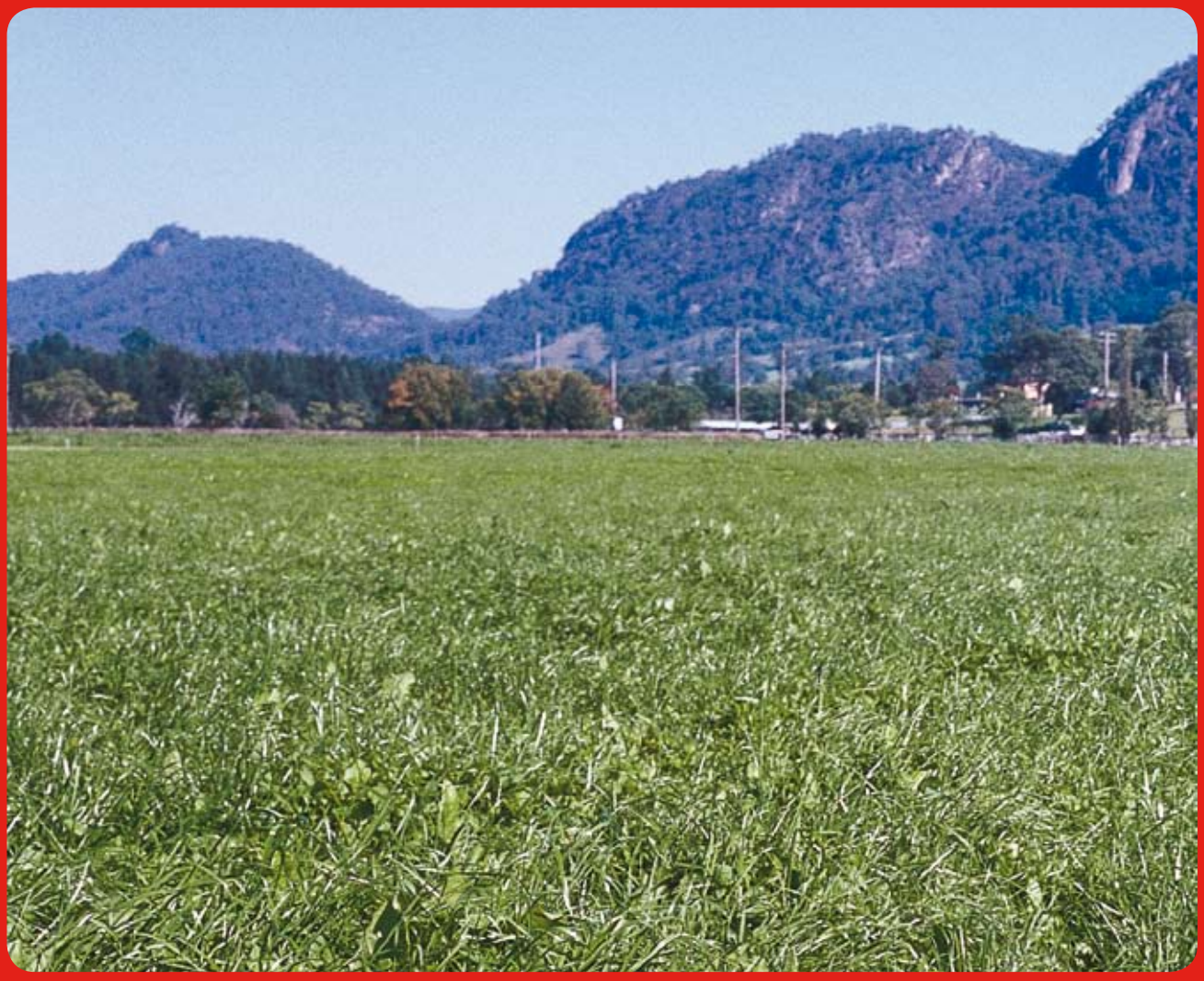
Granulock fertilisers for a healthy start



Give new crops and pastures a healthy start by sowing with Granulock® fertilisers.

Granulock 15 fertiliser supplies plants with the balance of nutrients they need, including nitrogen, phosphorus and sulfate sulfur, for good early growth and strong establishment.

GRANULOCK® 15

Incitec Pivot

Because the land is your life.

Granulock fertilisers set the standard

Granulock fertilisers set the standard for establishing crops and pastures.

They contain the balance of nutrients plants need for early growth and strong establishment, including nitrogen, phosphorus and plant available sulfate sulfur.

Drilling Granulock fertilisers creates a concentrated band of nutrients, including ammonium nitrogen and sulfate sulfur, that may improve phosphorus uptake.

Sulfate sulfur is vital for achieving the productive potential of new crops and pasture legumes.

Ask for Granulock 15 or Granulock 12 Blend to sow crops and pastures which are known to have high sulfur requirements, or where soil sulfur levels are low.

Quality fertilisers

Granulock fertilisers are high quality, compounded products that are easy to handle and apply.

Products available

Granulock 15 contains available nitrogen, phosphorus and sulfur in every granule. This ensures an even delivery of nutrients across the paddock, for even growth.

Granulock 12 Blend (a combination of Granulock 15 and MAP) provides a higher level of phosphorus. It is ideal for building soil phosphorus levels and maintaining a balanced ratio of plant available nutrients.

	Granulock 15	Granulock 12 Blend
N%	14.3%	12%
P%	12%	17.2%
S%	10.5%	5.8%

Importance of sulfur

The incidence of sulfur deficiency in plants has increased with the greater use of high analysis fertilisers such as MAP and DAP which are low in sulfur.

Sulfur responses were seen at more than 70 sites out of 80 in trials conducted by the DPI in Central and Northern NSW in the 1980s. Using Granulock fertilisers helps to correct this imbalance because of their high sulfur content.

Plant available sulfate sulfur

Sulfur is normally taken up by plant roots in the form of sulfate ions (Thomas, Hendricks and Hill, 1950).

Slow release forms of elemental sulfur cannot be used by plants until they are converted to sulfate.

The oxidation release of sulfur is slow when soil temperatures fall below 10^{0}C and ceases at around 4^{0}C (Weir, 1975). However, the optimum temperature for most micro-organisms responsible for sulfur oxidation is between 25^{0}C and 40^{0}C.

Granulock 15 and Granulock 12 Blend both contain 100% plant available sulfate sulfur.

Pasture establishment with Granulock

New pastures should be sown in autumn or early spring so that the new plants receive adequate warmth and moisture for quick germination and survival.

Pasture establishment is maximised when seeds are sown into a fine, firm, moist seedbed no deeper than 10 mm.

Granulock fertilisers are best applied in a band to the side or below the seed row, where new roots can access the nutrients.

Direct drilling is now the preferred method for establishing pastures. However, because it causes minimal soil disturbance, it is likely that mineralisation of nutrients such as nitrogen and sulfur will be reduced compared with a conventionally cultivated seedbed. This tends to increase initial nitrogen and sulfur requirements for pasture establishment.

Granulock 15 and Granulock 12 Blend are ideal in direct drilling situations because of their plant available sulfate sulfur.

Pasture seed is susceptible to fertiliser burn, particularly when high rates of nitrogen are applied.

However, Granulock 15 and Granulock 12 Blend can be used at rates of up to 125 kg/ha with the seed on narrow row spacings (18 cm) to foster excellent pasture establishment.

Molybdenum is important in the nitrogen fixation process of legumes. A molybdenum coating can also be applied to Granulock 15 (NSW only).

Nurture new pastures

Control weeds and pests before and after sowing to protect the new pasture.

Only begin grazing when the plants are well-anchored, usually at 100 mm (use a pull test).

Aim to rapidly defoliate the pasture to 30 to 50 mm using sheep or yearling cattle and then remove them. This minimises grazing damage while encouraging the new pasture to establish more tillers.

Consider applying a nitrogen fertiliser after the first grazing to promote quick recovery and encourage further tillering.

To maintain pasture quality and quantity and increase persistence, ensure annual applications of SuPerfect® or SuPer™ fertiliser.

Blend with potash where potassium is required.

For more information on Granulock 15 and Granulock 12 Blend, contact your local Incitec Pivot Agent or Dealer. Freecall 1800 009 832.

www.incitecpivot.com.au

GRANULOCK® 15

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