

The right nutrition for new pastures



By Lee Menhenett - Grazing Systems Agronomist

Supplying sufficient nutrients in the right balance is critical in pastures, whether you are aiming for longer term persistence, high levels of pasture production or successful new pasture establishment.

SUPERFECT[®]

In most pasture situations, SuPerfect[®] provides excellent responses when used to supply phosphorus and sulphur in maintenance or capital applications.

The tried and true formulation of SuPerfect offers the right balance of nutrients to support legume-based pasture systems and its low analysis allows effective coverage of the nutrients when spread in the paddock.

But when it comes to establishing pastures, a different nutrient balance is required.

For a good start, new pastures need some nitrogen, phosphorus and sulphur together.

GRANULOCK[®] SS

Last year, Incitec Pivot Fertilisers introduced a new high-quality starter fertiliser called Granulock[®] SS for both pasture and cropping situations. Its analysis and handling characteristics make it an excellent choice for establishing new pastures.

Nitrogen	Phosphorus	Sulphur
10%	17.5%	12%

Starter nitrogen

At pasture establishment a small amount of nitrogen can go a long way.

While graziers may be used to applying rates of 30-60 kg/ha of nitrogen to achieve dry matter responses in established pastures, as little as 10 kg/ha of nitrogen can be useful in direct drill sowing operations.

Supplying some nitrogen in conjunction with phosphorus stimulates early growth for seedlings which assists with quicker establishment and provides greater seasonal production of dry matter.

Vigorous seedlings have the ability to establish bigger root systems to forage for nutrients and moisture, providing quicker growth and more dry matter and also a more resilient plant.

Safe rates of fertilisers need to be considered when applying starters at sowing, as high nitrogen concentrations in contact with or in close proximity to the seed can cause seed or seedling death.

Safe rates are dependent on the concentration of nitrogen (higher rates are worse), row spacing (wider row spacing increases fertiliser concentration in the row), soil type (heavy soil types are more buffered against burn), moisture (moist soil conditions also buffer burn) and seed size (smaller seeds are more susceptible).

As a rule of thumb, 20 to 25 kg/ha of nitrogen should be safe when sowing a pasture seed (grass and legume mix) on 15 cm row spacings in a moist loam soil.

Readily available phosphorus

When establishing pastures, a minimum of 10 kg/ha of phosphorus is recommended in the sowing row close to the seed, even where phosphorus is above optimum levels.

This gives the seedling roots a nearby and available source of phosphorus for a good start.

Higher phosphorus rates can be applied if soil fertility is below optimal, as long as the application stays within safe seed rates.

High sulphur

Legume-based pasture systems require annual maintenance applications of 12 kg/ha of sulphur. This allows for removal, leaching losses and also for the nutrient to cycle through the organic matter.

Where new pastures are being direct drilled and there is minimal soil disturbance, sulphur cycling will be low compared with paddocks under cultivation.

Using Granulock SS at sowing provides a good supply of immediately available sulphur to the establishing pasture, as well as a longer-term supply from its elemental sulphur component.

Granulock SS contains 12% sulphur (significantly more than MAP or DAP), with one third plant available sulphate sulphur and two thirds elemental sulphur.

By choosing Granulock SS, graziers are also choosing a fertiliser with excellent handling characteristics, similar to MAP, for hassle-free sowing. Granulock SS can be blended with other fertilisers as required.

If you invest in pasture establishment, with the right balance of nutrition from the start, the rewards can be enjoyed for years to come.

For more information on Granulock SS, contact me on 0412 565 176 or lee.menhenett@incitecpivot.com.au.



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