

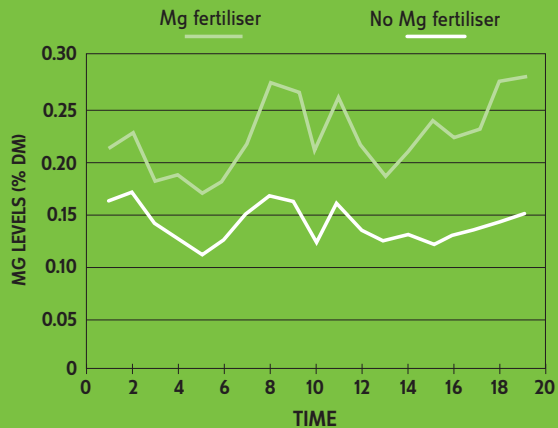
## soil magnesium levels are declining

Although most New Zealand soils have sufficient Mg reserves to sustain optimal pasture production, recent studies show that soil Mg levels are declining, especially on sheep and beef farms, where Mg is not often included in fertiliser applications.

AgResearch have calculated that in the absence of fertiliser applications, farmland will show an average drop of 1 Quick test Mg unit every three years.

Soil type	1990	1995
Pumice	32	52
Ash	6	12
Peat	13	20
All	16	44

The table above shows the percentage of soil samples that were below the optimum Mg level in 1990 and 1995. By 1995 44% of all the samples in this survey had less than optimum soil Mg levels.



This graph clearly shows both the seasonal changes in pasture Mg levels and also the beneficial effect of incorporating Mg into fertiliser applications.

## how much is enough?

The amount of Mg required by any animal varies with its physiological status. Pregnant animals require more Mg than non-pregnant stock; lactating animals require higher levels again. A 380 kg dairy cow needs to ingest 6.7 g Mg a day in its feed, this rises to 8.6 g in the late pregnancy and 28 g during lactation.

# A better balance of nutrients

**Maximise your pasture production and animal health in one easy hit.**

 **Ballance**  
**pasturemag™**



Strategic partner to:



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 **Ballance** agri-nutrients

## the facts about pasturemag

**pasturemag** is a granular fertiliser that contains five of the major nutrients needed for healthy plant growth – nitrogen (N), phosphorus (P), sulphur (S), magnesium (Mg) and calcium (Ca). By combining all of these nutrients in the one product, **pasturemag** helps to reduce the possibility of any one nutrient deficit limiting pasture production.

Made in New Zealand from high-quality raw materials sourced locally and overseas, **pasturemag** is suitable for the majority of farm types throughout the country. It can be used for capital fertiliser applications, as a maintenance fertiliser, or to restore soil fertility after silage or hay has been harvested.

**pasturemag** is a very flexible product, and it can be blended with additional N, S or potassium (K) to meet the needs of specific farming situations.

## on-farm benefits

The P in **pasturemag** is present mainly as citric acid-soluble phosphate, with some 70 percent of the total P being in this form. Citric acid-soluble phosphate is released into soil slowly, so helps to provide a long-term, steady supply of P for plants. The slow-release characteristics of the P in **pasturemag** make the product ideal for use in situations where P run-off is a risk.

**pasturemag** also supplies S in the readily plant-available sulphate form. This is particularly valuable when **pasturemag** is applied in spring, since the S will be available through the main growing season. **pasturemag** may also be applied in autumn, but this should only be done in areas where winter rainfall is low and drainage is minimal, otherwise there is a risk of sulphate S being lost through leaching.

Mg is an essential element for stock health, and at typical application rates **pasturemag** supplies sufficient Mg to meet the normal maintenance requirements of most dairy operations.

Another benefit of using **pasturemag** is that it helps add Ca to the soil. Although Ca deficiency in New Zealand soils is virtually unknown, adding Ca in **pasturemag** helps to offset losses that occur through leaching.

## storage and spreading

**pasturemag** may be blended with potash and trace elements, but it should not be combined with other products, especially **superten**, as there is a risk of the mix becoming wet and lumpy, which will lead to spreading difficulties and may cause crop striping.

**pasturemag** does not contain any residual acid, but should not be used for drilling down the spout with seed.

**pasturemag** is suitable for groundspread or aerial application. To maintain product quality, **pasturemag** should be stored in cool, dry conditions.

## specifications

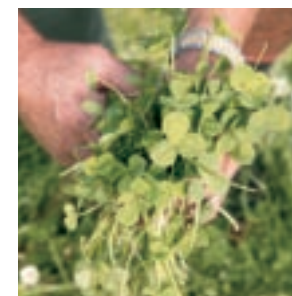
Bulk density	1.1 – 1.2 kg/l
Particle size range	1-4 mm - at least 60 percent <0.5 mm - <5 percent
Crushing strength	2 kg
Moisture level	7 percent
Fluorine content	<270 g/kg P
Cadmium content	<280 mg/kg P

All products in the **pasturemag** range are blends made from Fertmark-registered products.

product range	N	P	K	S	Mg	Ca
pasturemag	6.9	5.8	-	7.1	4.3	14
pasturemag 5K	6.2	5.2	5.0	6.4	3.8	13
pasturemag 7K	5.9	4.9	7.5	6.1	3.6	12
pasturemag 10K	5.5	4.6	10.0	5.7	3.4	11
pasturemag 15K	4.8	4.0	15.0	5.0	3.0	10
pasturemag 12N	11.5	5.1	-	6.3	3.8	12
pasturemag 16S	6.2	5.2	-	15.9	3.8	13
pasturemag peat	6.0	5.2	6.0	10.9	2.7	13
pasturemag pumice	6.0	5.2	6.0	10.9	2.7	13

application guidelines	use	rate (kg/ha)
pasturemag	General pasture, early spring	300-500
pasturemag 5K	Dairy, non-specific	300-700
pasturemag 7K	Dairy, autumn	350-600
pasturemag 10K	Dairy, spring	300-500
pasturemag 15K	Dairy, spring, post hay or silage	400-600
pasturemag 12N	Dairy, spring, drystock	250-400
pasturemag 16S	S-deficient soils	350-600
pasturemag peat or pasturemag pumice	Peat and pumice soils, autumn	375-500

The inclusion of N in **pasturemag** promotes a rapid pasture response, while P and S support sustained growth.



By applying Mg to soil, **pasturemag** helps to protect the health of your stock.

**pasturemag** contains Ca, which helps reduce soil acidity and is essential for plant and animal health.



With a commitment to sustainable farming practices, Ballance sponsors the BFEA to ensure future generations benefit from today's resources.

all you need  
to grow

