

NITROGEN NEEDS LIME

Improve fertiliser response with AgLime®

Healthy soils require fertiliser application. Without countering nitrogen-induced acidity, farmers may end up with poorer responses to applied fertiliser as plants are less productive.

Applying nitrogen (N) fertiliser makes soil more acidic. The change from ammonium or urea to nitrate leaves the hydrogen behind to acidify the soil. The amount of acidity depends on whether the applied nitrogen is leached as nitrate or taken up by plants and exported in produce.

The degree to which this occurs will vary depending on soil conditions and the form of nitrogen applied.

Graymont's AgLime® neutralises the acidity released by different types of fertiliser. Keeping your soils well limed with pH levels around 6.2 will improve the response to nitrogen fertilisers whenever they are used.

Call 0800 245 463 now for the right advice.

APPLICATION GUIDELINES

Different forms of nitrogen and corresponding levels of AgLime® demand

Urea – For urea application there are two extremes whereby the Nitrogen is all taken up, or a high proportion is converted and present as Nitrate. In the case of high nitrate concentration, the soil would generally require 3.5kg of AgLime® per kg of N applied to neutralise it. As we can't reliably predict what the extremes will look like, we plan on the average: around 1.8kg of AgLime® per kg of N added.

Di-Ammonium Phosphate (DAP) – DAP is usually applied as an effective way of getting a strategic seasonal N dressing on by teaming it with

the autumn or spring P-fertiliser application. Given that a typical dairy farm will need around 35 to 40kg P/ha/year, the N applied in this way as part of the program will total 31 to 35kg N/ha-which equates to an AgLime® need of 125 to 160kg lime/ha/year.

Mono Ammonium Phosphate (MAP) and Sulphate of Ammonia (SOA) – Both MAP and SOA being ammonium-based fertilisers will always acidify the soil. A tonne of MAP needs 580kg lime per tonne applied, while SOA needs 1100kg per tonne applied.

Light rate annual liming is the best way to counter nitrogen induced acidity. Farms following this practice with Graymont AgLime® have maintained a soil pH around 6.2.



0800 245 463
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