

# Get a head-start on pasture growth



Viable Agriculture South Island territory manager  
Ian Ferguson. PHOTO SUPPLIED

Farmers can get a head-start on pasture and crop growth going into spring with a granular fertiliser that performs in cooler temperatures.

Immediately effective in both cool and warm weather, ASN Cold Start provides an ideal nitrogen to sulphur ratio for all crops, including pasture, hay and silage, maize, cereals and vegetables.

The combined package of nitrate, ammonia and sulphate sulphur provides superior performance to alternative fertilisers, especially in cool conditions.

ASN Cold Start is available from Viable Agriculture, a small independent Ashburton-based fertiliser company. Viable Agriculture imports high quality granular fertiliser, specifically selected for New Zealand growing conditions, from leading overseas manufacturers.

Viable Agriculture  
South Island  
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Volatilisation and leaching are reduced to very low levels, significantly improving environmental outcomes

Ferguson said ASN Cold Start is ideally applied in both August and September.

When it comes to nitrogen (N), the presence of both forms (ammonium and nitrate) in a fertiliser provides a superior winter pasture response, Ferguson said.

Plants absorb most of their N requirements in the nitrate form, but many fertilisers contain only ammonium N, for example Ammo, urea, ammonium sulphate, DAP and MAP.

To supply plants with readily available nitrate N, the ammonium N typically undergoes conversion by soil bacteria in a process known as nitrification. This nitrification process is dramatically slowed when soil temperatures fall below 10deg, during excess soil moisture after high rainfall and when soil aeration is poor.

AgResearch trials in 1995 confirmed that ASN Cold Start produced significantly more pasture drymatter than other N forms. These positive responses were maintained through to the final cut (57 to 77 days after application).

In independent trials on three Canterbury dairy farms over 28 days in 2013, 160kg/ha of ASN Cold Start (41.6kgN) was compared with 125kg/ha of Ammo36 (45kgN). Pasture growth on the farms was monitored from August 19 to September 23.

The farms, two near Ashburton and the third at Fairlie, produced between 33 and 96 per cent more drymatter with ASN Cold Start compared with Ammo36 at similar N rates over the trial period.

As ASN Cold Start does not volatilise, N losses to the atmosphere do not occur. Application can be flexible to suit weather conditions.

Dew will break down the granules, requiring only adequate water to dissolve and wash it in for it to be fast acting.

ASN Cold Start also combines readily available sulphate sulphur with N for maximum pasture growth.

Temporary sulphur deficiencies are often observed in winter because of low soil temperatures, lack of mineralisation, high rainfall and leaching.

ASN Cold Start provides sulphur as readily available sulphate which ensures efficient N utilisation. Research has shown N inputs can be reduced by up to 20 per cent without loss of production in the presence of adequate sulphur.

Ferguson said it was ideally followed by CRN44, which, in complete contrast to fast-acting ASN Cold Start, is one of the products in its Rustica time release range of controlled release fertilisers. Applications of CRN44 are recommended in October and January.

Viable Agriculture's controlled release fertilisers incorporate environmentally-friendly biodegradable plant-based polymer coatings for superior nutrient recovery, greater N efficiency, no volatile losses, reduced leaching, fewer applications and at lower rates compared with conventional fertilisers.

Nitrogen is released from the granule at a controlled rate, dependent on temperature and moisture.

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CRN44's rate of release closely matched pasture uptake, with one application supplying N for 90 to 120 days.

"This can save up to four applications compared with urea, reducing spreading costs."

Ferguson said that volatilisation losses made urea very inefficient and therefore more expensive.

"In contrast, CRN44 gives outstanding value and reduces N losses as supply of N from CRN is closely matched to pasture requirements."

This would assist farmers to minimise their N losses and meet tightening environmental compliance requirements. It could also assist farmers to reduce nitrogen applications in line with the Government's planned nitrogen cap, without a reduction in pasture production.

For more information:

[www.viag.co.nz](http://www.viag.co.nz)

Spreading ASN Coldstart® in the first round will give you a consistently superior economic response!



Ammonium Sulphate Nitrate

26-0-0-13

Immediately effective in both cool and warm weather  
Ideal Nitrogen : Sulphur fertiliser for all crops including process and fresh vegetables, pasture, hay and silage, maize and cereals.

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