



PRESS RELEASE

New digestate additive reveals nitrogen increases to help offset fertiliser cost

An innovative trial exploring if a new slurry additive can improve nutrient availability in digestate has shown a 20.3% increase in available nitrogen content and a 29% reduction in dry matter solids after the first year.

The new Digest-It slurry additive from Origin Fertilisers is a live liquid biological bacteria that has been used in digestate for the first time and has been well proven to significantly reduce ammonia emissions and increase ammonium nitrogen levels in slurry. The trial took place at a 1.2MW anaerobic digestion plant in Lincolnshire.

The 20.3% increase in ammonium nitrogen was shown after a 12-week period following the application of Digest-It. A further 29% reduction in oven dry solids has translated to the digestate being easier to pump, which in turn has reduced machinery wear and fuel use, along with shortening filling times.

As an outcome of reducing solid content, the digestate has a thinner consistency and is therefore easier for the plants to absorb following application to the soil. Plants aren't using as much energy to search for nitrogen, and nitrogen losses through volatilisation are reduced.

Callum Norman, speciality sales manager at Origin Fertilisers, who was involved in the trial, says that while the headline increases make excellent reading, the wider benefits of applying Digest-It shouldn't be overlooked.

"The treated digestate had less nitrogen content than the untreated product. The upshot here is that the same amount of land can have 13% more digestate spread on it before NVZ limits are reached, which could be hugely beneficial for growers on smaller acreages with excess digestate to spread.

"We are really pleased with the results of the trial. The environmental benefits, such as reduced volatilisation due to the conversion of ammonia into ammonium, and supplying good microbes to the soil, will be a huge benefit to all farms and help contribute towards agriculture reducing its emissions," concludes Mr Norman.

From a financial perspective, the Digest-It trial returned a 2:1 cost benefit and only requires one application so reduces the labour requirement compared with additives that need ongoing applications.

The results have been collected from samples taken every two weeks, during the closed period of the digester after application, and then compared with previous samples taken. The feedstock for the plant is a consistent mix of forage maize and rye, which translates into a 6kg/N/tonne value.

ENDS



Image: Callum Norman

Caption: Environmental, financial, and practical benefits were key improvements following the Digest-It trial, says Callum Norman.



Image: AD plant

Caption: Users of AD plants can realise the full nutrient value of digestate by adding Origin Fertilisers' additive Digest-It.

Notes to editors:

- Origin Fertilisers is a national manufacturer and distributor of fertiliser with 12 production facilities across Great Britain and headquarters in Royston, Hertfordshire.
- Origin has over 15,000 products to help arable and grassland farmers make better use of fertiliser – both financially and environmentally – by using targeted prescription fertilisers to improve soil fertility and crop productivity. Targeted nutrition (with a known carbon footprint) can have a significant impact on helping farming reach sustainability goals.
- A team of regional in-house nutrition agronomists offer practical advice to growers on ways to improve their crop nutrition and fertiliser usage.

Contacts:

Mandy McAulay

Marketing manager, Origin Fertilisers

mandy.mcaulay@originfertilisers.co.uk

Edd Mowbray

Agribusiness Communications

edd@abccomms.co.uk

07534 650401