



PRESS RELEASE

## **Prescription fertiliser approach reduces nitrogen use and increases lamb growth rates**

Increases in lamb growth weights and forage nutrient quality – all while considerably reducing the amount of nitrogen applied – are the standout findings from a two-year practical trial on a Northumberland farm sheep farm.

The practical study showed that by using a targeted prescription blended fertiliser to correct nutrient deficiencies within the soil profile, lamb growth rates increased by 20.7%. What's more, through the addition of seven micro-nutrients in the prescription fertiliser, the farmer was able to cut nitrogen use by 15%.

This translated to better nitrogen use – with 33% more nitrogen was available in the forage – while sodium levels also increased by over 35% compared with the straight nitrogen area. The liveweight gain per kilogram of nitrogen applied was 50% higher on the prescription area, too.

The split field trial treated one half of the acreage with a Nutri-Match 23-11-0 + 8Na + 9SO<sub>3</sub> + Mo + Zn + Mn + Se prescription fertiliser from Origin Fertilisers, while the other half was applied with straight Ammonium Nitrate (AN). All lambs involved in the trial were Aberfield crosses and reared as twins, so growth rates were representative across the board.

Abby Kellett, technical agronomist covering Northumberland at Origin Fertilisers, played a key role in carrying out the trial. "A balanced fertiliser grade targeting key nutritional areas within the soil, rather than a straight AN application, offers significant benefits for the availability and uptake of many key nutrients, as well as helping to improve nitrogen use efficiency (NUE)."

"By adding both macro and micronutrients to the fertiliser blend, we were able to correct these deficiencies and ultimately create a more rounded nutrient profile in both the soil and the forage. This is most beneficial in influencing lamb growth rates at eight weeks and older when grass makes up more than 80% of their diet."

During the first eight weeks of life, lambs grazing the AN treated area gained on average 330g/hd/day, which led to an eight-week average of 23.51kg/hd, while the prescription treated pasture registered 358g/hd/day, which translated to 25.28kg/hd.

The prescription area increased soil fertility, forage quality and lamb weight gains substantially, but also offered a significantly better return on investment, despite having an initial higher purchase cost.

"For every £1 invested in the Nutri-Match grade, the farmer had the potential to achieve a £5.88 return based on the extra weight gains achieved by the end of the 16-week period. When looking at this from a per kg of nitrogen applied, the blended treatment produced 13.19kg/ha which translated into 50% more than the AN area," concludes Miss Kellett.

By prescription matching and feeding the soil with a full range of nutrients as opposed to feeding the animal directly, there are added benefits of building soil reserves, meaning nutrients such as phosphate and selenium can be used by plants in future seasons.

ENDS

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**Picture:** Lambs grazing

**Caption:** The liveweight lamb gain per kilogram of nitrogen applied was 50% higher on the prescription fertiliser area



**Picture:** Abby Kellett

**Caption:** A balanced fertiliser grade targeting key nutritional areas within the soil offers significant benefits for the availability and uptake of many key nutrients, says Abby Kellett.

**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**

### **Abby Kellett**

Nutrition agronomist, Origin Fertilisers

[Abby.kellett@originfertilisers.co.uk](mailto:Abby.kellett@originfertilisers.co.uk)

Issued by

Edd Mowbray

Agribusiness Communications

[edd@abccomms.co.uk](mailto:edd@abccomms.co.uk)

07534 650401