Moving to a liquid nutrient regime delivers benefits for a Welsh mixed farmer

Moving from traditional nitrogen inputs based around granular urea and ammonium nitrate to L-CBF BOOST, L-CBF TERRA FED and TL 17 has transformed pasture output for Bleddyn Pugh whilst delivering significant savings in nitrogen inputs.

Bleddyn farms in mid-Wales, only a seven-minute drive from the Royal Welsh Showground. Crops of cereals and fodder beet aim to make his beef and sheep enterprise self-sufficient in feed.

"Compared to some dairy farmers, we haven't been excessive users of ammonium nitrate (AN) and urea, but we have used it for some time on our pasture," says Bleddyn.

A comparison with a neighbour's organic fields led Bleddyn to the conclusion that his system was becoming increasingly reliant on continued applications of nitrogen fertiliser.

"It became a situation where the more we used, the more we had to use.

"We try to fertilise all our grazing fields with nitrogen before we start lambing in April. We saw that through April, our grass was a fortnight ahead of our neighbour, who was organic.

"At that time, we were pleased that we were doing the right thing. However, by the beginning of May, once our AN had run out, the tables had turned. Their grass was still growing, and ours was going backwards as it waited for the next top-up of fertiliser."

This started us thinking we should try something different," explains Bleddyn.

Having trialled several foliar fertiliser products in the past and always getting on well with them, the huge increases in nitrogen prices in spring 2022 pushed Bleddyn to look at a wider usage on his farm. A webinar organised by his agronomist discussing foliar urea and L-CBF BOOST encouraged him to adopt a foliar programme more extensively on his farm.

"We used a lot of L-CBF BOOST, L-CBF Terrafed and TL 17 the season before last, more again in the last 12 months and have done a lot of contract spraying for farmers locally," says Bleddyn.

In the old system, the fields would receive 50 Kg of N per hectare in April, and those that were cut for silage would have an additional 90 Kg of N per hectare after the first cut. Bleddyn dropped the early application of 50 kgN/ha in April and is now using TL 17 foliar N for after-cut or grazing applications. TL 17 is a combination of urea and a carbon source (L-CBF BOOST). The QLF Agronomy programme is delivering about a quarter of the nitrogen as the old granular applications, but Bleddyn has seen overall grass yields increase.

"Now we are seeing our grass growing before the first fertiliser applications in the spring; I think this is because our soil biology is improving.

"Last year, we were able to compare two holdings that had grass leys resown after roots, where we put almost identical flocks of lambs onto the two areas on the same date in the autumn.

"We were getting twice as many fat lambs in the autumn off the areas that had been in the foliar system for two years. You could definitely see this was a result of the quality of grass that had come from the ground in the foliar system for longer," concludes Bleddyn.

Bleddyn Pugh's grassland fertiliser programme

Field use	Product and timing	Nutrient delivery
Silage fields	110 L/ha of TL17 (18% N & 17% L-CBF BOOST) after the first cut of silage.	20 kgN/ha 19 L/ha L-CBF BOOST
Grazing pasture	60 L/ha of TL17 (18% N & 17% L-CBF BOOST) after the field is first grazed.	11 kgN/ha 10 L/ha L-CBF BOOST

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Benefits to clover in multispecies leys

"We have always been big believers in clover. However, we were sowing extensive mixed clover leys and five years later had nothing to show for it. It got to the point where we were moving away from clover in our leys because we thought our ground wasn't suited to it," says Bleddyn.

The new foliar system has greatly benefitted the clover in Bleddyn's leys. The increased clover has produced more nitrogen, which has given more growth.

When we first started using the QLF Agronomy programme, we were lucky to have 3-5% clover in the leys; it was nothing but ryegrass.

"Within 12 months, we had increased that to around 25% clover. Looking at the growth this spring, I expect it to climb another 5-10%," states Bleddyn.

The farm tends to run a five-year rotation of grass resowing and fodder crops. The clover has become so strong in the leys that Bleddyn has found it bouncing back from glyphosate applications ahead of direct drilling root crops.

Clover regrowing in between the rows of root crops has provided the farm with the additional benefit of balancing the energy and protein requirement for his flock when it is grazed.

"We were putting a protein feed or blocks out, but now we can pretty well balance the diet with what we have in the field," adds Bleddyn.

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