Teagasc
Advisory
Newsletter

BEEF

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Replacing used P and K

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Soil P and K levels are trending downwards and this will reduce N efficiency.

Fertiliser sales of phosphorous (P) and potassium (K) have fallen considerably over the last two years. This is not surprising with the large increases we saw in the price per tonne. Many farmers also decided to take a 'holiday' from applying P and K to lessen the impact further. We are now seeing the result of this reduction in the soil sample results that are coming back. Soil P and K levels are trending downwards and this will considerably reduce the efficiency of the nitrogen (N) that is spread on these soils. Long term, this means more losses, i.e., reduced returns (€) for each kg of N

A FIRST-CUT CROP

of silage will remove

20kg

of P and 125kg of K per ha.

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spread (through less grass grown) but also more emissions of greenhouse gases from reduced efficiency and more N needed to get the same level of growth.

Lower prices

Prices quoted this year for compound fertilisers are back considerably compared to the last two springs. Grass farmers who have a P allowance for their farm should aim to apply enough P and K to at least replace what they are going to remove over the next six months. **Table 1** shows what beef and sheep farmers need to spread if they are using 18-6-12 as their product of choice on grazing ground. If your P and K indices are low and you can afford to build some of the lost nutrients back up, the extra bags of 18-6-12 per acre needed are also shown. This will ultimately save N, as its efficiency increases at a soil P and K index of 3.

Silage harvests take huge amounts of P and K out of fields and, if they are not replenished, soil fertility levels can deplete very quickly. For example, a first-cut crop of silage will remove 20kg of P per ha (16 units per acre) and 125kg of K per ha (100 units per acre). Cattle slurry at a rate of 2,500-3,000 gallons per acre will replace the majority of the offtakes.

Table 1: Grazing ground P and K advice.

Stocking rate (LU/ha)	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0
Beef/sheep	P (K) advice			
kg/ha	7 (10)	10 (15)	13 (20)	16 (25)
Units/acre	6 (8)	8 (12)	10 (16)	13 (20)
Product	1 bag 18-6-12	1.3 bags 18-6-12	1.7 bags 18-6-12	2 bags 18-6-12
Build-up – Index 2	+ 1 bag	+ 1 bag	+ 1 bag	+ 1 bag
– Index 1	+ 2 bags	+ 2 bags	+ 2 bags	+ 2 bags

Training a young bull

A lot of new stock bulls have arrived on suckler farms in recent weeks and many more will be bought over the coming months. Most new stock bulls are very young and inexperienced, and it is important that they are given every chance to make sure they work to their capacity,

Ideally, only buy a bull that has been fertility tested by a vet.

especially in their first year in a herd. In a short video produced by Teagasc, Doreen Corridan explains that mating is actually a learned trait and there are many management hints that suckler farmers can use to ensure the bull is working properly. This is before he is introduced to the rest of the herd.

Always look for a fertility test

Ideally, only buy a bull that has been fertility tested by a vet, so that you can be 100% sure that the bull has reached puberty and is producing normal semen. After that, you have to make sure that he can mate cows and also that he has the desire to mate – neither of these are guaranteed. Scan the QR code to watch the two-minute video and pick up some very useful tips.

Date for the diary

Teagasc will hold a major open day at our beef research centre in Grange, Co. Meath, on Wednesday, June 26. This will be a must-attend event for anyone with an interest in beef farming. The theme of the open day is 'BEEF 2024 – Securing your Future', and the day will highlight the latest technologies, services, research and advice that will aid beef farmers over the coming years to ensure that they can continue to farm profitably and sustainably. This event is kindly sponsored by FBD Insurance. Come along and enjoy the day.

RESEARCH UPDATE

BRD housing project

JOHN DONLON of Teagasc Grange outlines the new BRD housing project, which aims to identify the key housing-related risk factors for bovine respiratory disease in pre-weaning dairy-beef calves.

Housing design plays a key role in creating a healthy environment for calves.

Bovine respiratory disease (BRD) presents a significant challenge to maintaining the health and welfare of dairy-beef calves. It is the leading cause of mortality in calves between one and five months of age. The calf housing environment is a key stressor that may predispose a calf to BRD. Housing design plays a key role in creating an environment that is conducive to the rearing of healthy calves.

Project ambitions

In this project, we hope to use new technology to measure the levels of pathogenic viruses and bacteria in calf houses. We will examine the levels of housing air contamination with dust and ammonia. This data will be related back to the health of the calves in each of the farms, and allow us to make better decisions on what housing design aspects should be altered to help reduce the likelihood of a BRD outbreak.

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