

BEEF

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Planning fertiliser requirements for 2022

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Indications are that fertiliser prices will remain at all-time highs for 2022 with nitrogen (N) near tripling in price, and phosphorus (P) and potassium (K) nearly doubling compared to 12 months ago. Now is the time to plan fertiliser requirements for 2022 to reduce the impact of high fertiliser costs. Get prepared now and complete the following steps in the coming weeks.



Complete soil sampling for all fields.

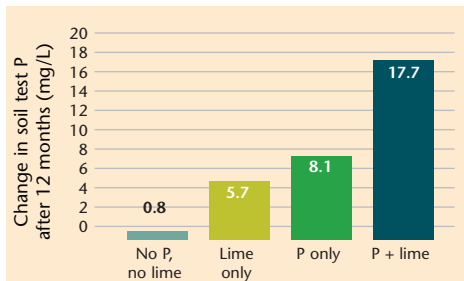


FIGURE 1: Average change in soil test P (Morgan's P test) across 16 mineral soils treated with P (100kg/ha of P), lime (5t/ha of lime), and P and Lime, and re-tested after 12 months.

- 1. Soil analysis** – update your soil analysis of every field to establish current soil fertility levels. This provides very cost effective (€1.25/ha) information for tailoring P and K applications across the farm in 2022. Fields at optimum P and K Index 3 will utilise applied N most efficiently at 65% compared to just 35% N efficiency for P and K Index 1 and 2 fields. Target appropriate rates of N towards soils with optimum fertility levels in

the early part of the season (first and second rounds) to maximise its efficiency to grow grass.

- 2. Soil pH and apply lime** – liming acidic soils to increase the soil pH to between 6.3 and 6.8 will increase soil N release by up to 70kg/ha/year. This will reduce the overall farm fertiliser N requirements and reduce fertiliser N costs. Correcting the soil pH will increase the availability of soil P and the utilisation of P as either cattle slurry or chemical P fertiliser. A recent study completed at Johnstown Castle demonstrates how critical lime application can be for increasing soil P availability – see **Figure 1**.
- 3. Test cattle slurry** – as a valuable source of N, P and K, cattle slurry should be applied to fields with the largest nutrient demand, for example, fields planned for grass silage production. Have your slurry tested to determine its N, P and K values and adjust application rates to supply crop

Table 1: Available N, P and K values of cattle slurry at different DM percentages in spring by LESS application.

Dry matter (%)	N kg/m ³ (Units/ 1,000 gals)	P kg/m ³ (Units/ 1,000 gals)	K kg/m ³ (Units/ 1,000 gals)
2	0.4 (4)	0.21 (2)	1.4 (13)
4	0.7 (6)	0.35 (3)	2.1 (21)
6	1.0 (9)	0.5 (5)	3.5 (32)
7	1.1 (10)	0.6 (6)	4.0 (36)

Note – on Index 1 and 2 soils reduce slurry P availability by 50% and reduce K availability by 10%.

nutrient requirements. By targeting slurry appropriately, you can offset some of the requirement for expensive chemical fertiliser on your farm. **Table 1** shows the effect of slurry dry matter on N, P and K levels.

- 4. Complete farm fertiliser plan** – contact your local advisor now to update your farm fertiliser plan to put in place a strategy for lime, cattle slurry and fertiliser requirements for 2022.



Happy Christmas

Teagasc would like to wish all of our clients a happy and peaceful Christmas. 2021 certainly brought a lot more optimism to the beef sector, compared to previous years, with improved output prices and favourable weather conditions. An increased level of confidence encourages everyone to examine their plans for the future and Teagasc will be there in 2022 to work with all of our clients to overcome the many challenges that are facing all farming enterprises. Finally, it's important that safety is kept to the fore in everyone's minds over the festive period to ensure we start 2022 in the best possible way.

Teagasc National Beef Conference

With the Covid-19 prevention guidelines advising that we should keep socialising to a minimum to ensure the transmission of the disease is kept to a minimum, Teagasc has decided that this year's National Beef Conference should once again be delivered through an online format. Details of the conference including speakers, presentations, dates and how to register to watch the conference can be found at: www.teagasc.ie. The presentations will be given on Monday, December 6 and Wednesday, December 8, starting each evening at 8.00pm. Viewers will have the opportunity to have their questions answered each evening and the presentations will also be recorded to be watched at a later date.

Controlling fluke: right product – right time

Table 2: Sample cattle liver fluke control products on the Irish market.

Active ingredient*	Sample product	Dose after cattle housed	Controls	Admin route
Triclabendazole	Endofluke 10%	Two weeks	Early immature, immature, adult fluke	Oral drench
	Fasinex 240	Two weeks		Oral drench
	Tribex 10%			Oral drench
	Cydectin triclamox	Six weeks		Pour on
Closantel	Closamectin inj	Seven weeks	Immature, adult fluke	Injection
	Closamectin pour-on	Seven weeks		Pour-on
	Flukiver 5% bovis	Eight weeks		Injection
Albendazole	Albex 10%	10-12 weeks	Adult fluke only	Oral drench
	Endospec 10%	10-12 weeks		Oral drench
Clorsulon	Bimectin plus	10-12 weeks	Adult fluke only	Injection
	Ivomec super	10-12 weeks		Injection
Rafoxanide	Ridafluke	10-12 weeks	Adult fluke only	Oral drench
Oxyclozanide	Levafas Diamond	10-12 weeks	Adult fluke only	Oral drench
	Zanil	10-12 weeks		Oral drench

*Where cattle are close to slaughter it is extremely important to check the withdrawal period of any fluke control product before using it as many have quite long withdrawals.

Most farmers will know if fluke needs to be controlled or not on their farm. If you do need to control fluke, make sure the treatment you use is effective (**Table 2**). Remember, it is the immature and early immature fluke that cause most damage to the liver:

- if you use a triclabendazole two weeks after housing and you have no resistance to this product you will kill all the liver fluke present in your animals;
- if you use a closantel two weeks after housing, you will not kill all the liver fluke in your animals, you will only kill the fluke your animals picked up over seven to eight weeks ago – you must repeat the dose five to six weeks later – waiting until your animals are housed seven or eight weeks

before giving any treatment is not advisable; and,

- If you use albendazole, clorsulon, rafoxanide or oxyclozanide you will only kill adult fluke, i.e., those picked up over three months ago. You are not treating any of the fluke that are damaging your cattle's liver using these products. It is only after they have travelled through the liver and into the bile duct that are you killing them.

Always check the status of your animals' livers at slaughter through the report sent to you from the factory, or online by logging onto the Irish Cattle Breeding Federation (ICBF) HerdPlus, going to services, Animal Health Ireland (AHI) animal health and following the link to Beef Health Check.

100th episode of *The Beef Edge*

Over the past two years farmers across the country have tuned into *The Beef Edge* podcast to hear timely technical information and the latest research and advice from Teagasc and industry stakeholders. Presented by Teagasc Beef Specialist Catherine Egan, the podcast covers the



latest news, information and advice to improve your beef farm performance.

Podcasts are free audio shows that anyone with an iPhone, Android phone or computer can listen to. You can listen anywhere and anytime. *The Beef Edge* is celebrating its 100th episode this month. A huge thank you to all that have featured on the podcast and tune in weekly.

Climate Actions for December

Organise your soil sampling now.



Weigh finishing animals over the winter to ensure they are on target for slaughter next Spring.



Order your protected urea for 2022 - learn how to value it relative to other forms of N.



Look at options to import organic manures on tillage farms.



Identify suitable heifers for breeding at 15 months and manage them to ensure that they will reach 60% of their mature weight at bulling time.



Plant new hedgerows and trees.

