

Soil sample now and create a fertiliser plan

Early spring is an ideal time to soil sample. Usually a sample area should not exceed 4 hectares but in certain circumstances it can be a maximum of 8 hectares. €25 for a soil sample can have massive savings by putting on the correct type of fertiliser in order to maximise grass production. Farm maps are crucial to use when sampling in order to relate where the soil samples have come from.

Once the soil samples results have come back the first thing to rectify is lime requirement. The optimum pH for most soils is 6.2. We have seen a big reduction in the amount of lime being spread on farms and this is having a detrimental effect on grass growth. At lower pHs (below 5.7) phosphorus (P) becomes less available to the grass plant. So at a lower pH one could be putting on more fertiliser but not getting any response as it will be locked up in the soil unavailable to boost grass growth.

Under the Nitrates directive every farm has a limit on the amount of fertiliser that can be spread in a particular year. The amount of chemical Nitrogen (N) and Phosphorus (P) that can be applied will be dictated by the stocking rate of the farm, the concentrate usage in the previous year and also by soil samples. When soil samples are not in place Index 3 must be assumed.

Assuming index 3 is very inaccurate as in 2015 23% of soil samples received in Co. Limerick were at index 1, 25% were at index 2, only 27% were in index 3 and 24% were index 4. This means that when we assume index 3 in the absence of soils samples we will be wrong in 3 out of 4 soil samples. There is a downward trend in the P and K indexes and many farmers highlight the restrictions on fertiliser in the Nitrates Directive as being the main cause. However Potash (K) is not covered by the Nitrates Directive at all and we are seeing K indexes dropping at the same rate as P indexes so it's not solely regulation that's causing the drop. Once soil pH is optimum the next focus for the farmer should be to target index 3 for P & K. Also if a particular farm has a lot of soils at index 4 it may be possible to ease off P&K applications, which could be useful in reducing the fertiliser bill in year of poorer milk price.

Depending on the requirement for particular fields specific fertilisers can be used to rectify any deficiencies. N,P,K fertilisers are available in many different combinations along with N,P fertilisers, N,K fertiliser and of course P,K as well as straights. Slurry produced on the farm can also be a valuable fertiliser. A targeted approach is now needed for fertiliser strategies and this will be particularly important as farmers try to push grass growth on the milking platform. By rectifying pH and soil indexes, a gain of up to 3 tonnes of grass dry matter per hectare could be attainable.