

Teagasc Notes for week ending Friday 4th February 2022

Slurry Quality

The slurry spreading season is now open and weather conditions have been excellent since the 12th of January for getting this valuable fertiliser out on grazing and silage ground. It is great to see so many farmers and contractors using Low Emission Slurry Spreading (LESS) equipment. Using this equipment has huge benefits in terms of a reduction in odours, soiling of grass and above all a reduction in the losses of valuable nutrients for grass growth.

Fertiliser prices have increased threefold on last year and the use of slurry as a valuable fertiliser is critical to reduce overall fertiliser costs on farm during 2022. Apart from the cost element, using slurry as the number one source of nitrogen, phosphorus and potash and only topping up with urea or compounds to meet crop requirements is vital going forward. This is to continue the progress on improving on water quality as shown by the ASSAP programme in the region and also help us meet our Carbon emissions targets as an industry. It goes without saying that phosphorus and potash should only be applied on the basis of a valid soil sample and nutrient management plan.

The nutrient value of slurry varies depending on the dry matter (how watery it is) of it. The more dilute the slurry is, the lower the level of nutrients in it. Knowing the value of your slurry will help you make the right choices in terms of application rates and top-ups with chemical fertiliser. The easiest way to know the value of your slurry is to use a slurry hydrometer which illustrates the typical amounts of available N, P and K in the slurry. The slurry hydrometer is a relatively quick, cheap and easy on farm tool to use but it is a very delicate piece of equipment. Laboratory analysis of slurry can also be used but in practice is rarely done due to the time and cost of such analysis.

Very watery slurry at 2% DM has approximately 4 units of N, 2 units of P and 13 units of K per 1,000 gallons. At 4% the slurry is quite watery but contains 6 units of n, 3 units of P and 21 units of K per 1,000 gallons. Your typical slurry should be in the region of 6% DM and will have 9 units of N, 5 units of P and 32 units of K. So the old adage that 1,000 gallons of cattle slurry is equal to a bag of 0-7-30 is not far off the mark. Keep in minds that with LESS systems the slurry will need to be liquid enough to go through the trailing shoe or band spreader applicator.

When spreading slurry, always be mindful of Health and Safety with extremely toxic slurry gases and large machinery posing a risk to farmers, contractors and livestock. Also, observe the required margins for land drains and streams of a minimum of 5m to prevent nutrient escape to waterbodies.