Fertiliser Advice for Grass Establishment

Mark Plunkett, Johnstown Castle, Research Center, July, 2019

Soil Testing

Soil sample fields in advance of reseeding – where establishing grass seeds by ploughing take the soil sample from the ploughed soil to get a better indication of the soils fertility status and future fertiliser applications. Establish soil P & K levels and apply suitable fertilisers / manures before or during soil cultivations. Check soil pH and apply lime as recommended on the soil test report.

Lime

Reseeding time offers a perfect opportunity to correct soil pH and apply lime. Apply lime to the seedbed and incorporate into the top 10cm of soil. This will provide the ideal conditions for fast and even seed establishment. Where soil magnesium levels are low (<50pppm) apply magnesium limestone to correct soil Mg levels.

*Optimum Soil pH for Mineral Soils **	
Grass	6.3 – 6.5
Clover	6.5 – 7.0
*Peat's - Lime to a pH 5.5 – 5.8	

Phosphorus (P) & Potassium (K)

Soil P and K are an essential at reseeding time. P and K are required for rapid root and tiller development during the early stages of establishment (1st 3-6 weeks). In addition P & K is required to ensure the longevity of rye grasses in the sward over time. Aim to maintain soils at ***Soil Index* 3** for maximum production and persistency of clovers & rye grasses. Apply P & K fertiliser as per soil test report and incorporate into the seedbed at sowing time (see table below). Insufficient soil P & K will result in poor establishment of rye grasses / clovers and the benefits of reseeding will be lost. *Additional P allowance of 15kg P/ha is available at index 1, 2 & 3 for reseeds as per Nitrates.*

P & K Advice (kg/ha)

Soil Index	***1***	***2***	***3***	***4***
P	***60***	***40***	***30***	***0***
K	***110***	***75***	***50***	***30***

Suitable fertilisers include 0-10-20,10-10-20, etc.

Nitrogen

Sufficient N is one of the essentials in aiding good grass establishment. Grass seeds have a low N requirement during the early stages of establishment. Too much N will encourage weed growth and competition for new grass seedlings.

Apply approx. 30kg N/ha at sowing time to maximize grass growth. Apply 30 to 40kg N/ha 6 to 8 weeks after reseeding.

N for grass est. without cover crop (kg/ha)		
Index	**Grass Only**	**Grass/legume**
1	40 - 75	60
2	40 - 75	50
3	40 -75	40
4	40 - 75	40

Undersown crops apply 40kgN/ha after cereal harvest. Reseeds following long-term tillage will benefit from additional N in the first 3 years.

Manure & Slurry – Available N, P & K

Manure Type	**N**	**P**	**K**
	units/1,000gal		
Cattle slurry	6.5	5	32
Pig slurry	19	7	20
units/tonne			
FYM	2.7	2.4	12
Broiler litter	28	12	36
SMC	3	3	16

Organic Manure–Good Source of N, P & K

Apply organic manures / slurries to build soil fertility status while supplying nutrient requirements. It is best to rapidly incorporate high N manures (pig / poultry manures) to reduce N losses (N). *When applying organic manures to P index 1 & 2 soils only supply 50% of crop P requirement in organic form and the remaining 50% as chemical P.*

Make sure that manures are applied evenly and well incorporated at sowing time. This will reduce problems during establishment especially in a min – till system.

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