

104.01

FERTILISERS FOR RESEEDING

To achieve good germination, maximise yields & prolong the life of a new ley it is important to pay close attention to soil fertility.

WHY SOILTEST?

If soils are either low in phosphate (P), low in potash (K) or are acidic then a new reseed won't perform as it should. All the money spent on reseeding (around £250/hectare) could be wasted if soil nutrient levels are poor.

LIME

Reseeding presents a good opportunity to apply & incorporate lime into grassland soils.

Minimum Soil pH for mineral soils*

Grass	5.8
Clover	6.0
Barley cover crop	6.2

Apply lime after ploughing and work into the seedbed. If more than 3t/acre recommended then apply over 2 years. Heavy applications can create 'hotspots' which will reduce germination and affect nutrient availability. Too high a pH can also induce trace element deficiencies.

* Peat soils should be limed to pH 5.5

PHOSPHOROUS (P) & POTASH (K)

Required by grass seedlings to stimulate root growth & to regulate water losses and nutrient flow. Without adequate P & K nitrogen will not be used efficiently & yields will be reduced.

Target: Soil indexes should be at 2-3 for P and at 2 for K. Clover growth is more influenced by P and K deficiencies than grass growth.

P and K deficiencies should be corrected at the time of reseeding with water soluble superphosphate, muriate of potash or as a compound.

P and K requirements (kg/ha)

Soil index	0	1	2	3
Phosphate	125	80	50	30
Potash	125	80	50	0

Depending on N needs compounds such as 0:24:24 or 17:17:17 are often suitable for seedbed applications.

NITROGEN (N)

Stimulates the early growth of plants.

Spring reseed Apply a small amount of nitrogen (around 50 kg/ha) to maximise growth.

Summer reseed No nitrogen application is needed. (The process of cultivation will release enough nitrogen from the warm soils. If nitrogen is applied at this time too much soft leafy growth can accumulate before winter – leading to increased winter kill).

If clover is included in the mix it is advised that no nitrogen is applied. Grass growth from applied N would be likely to smother clover seedlings.

MANURE & SLURRY

Are good sources of P and particularly K.

Typical nutrient content of livestock manures (kg/t)

	DM%	N	P	K
Cattle FYM	25	6	3.5	8
Dairy slurry	6	3	1.2	3.5
Poultry litter	60	30	25	18

Incorporating manure or slurry into the seedbed will reduce potential nutrient losses and improve soil structure.

Caution: organic material on the surface of the seedbed can impede the drill & also restrict seedling growth by toxic organic acids produced as it breaks down. Make sure high dry matter manures are well incorporated.

FERTILISERS WHEN OVERSOWING

P and K applications should be the same as for a full reseed. It is crucial not to apply any nitrogen. Applied N will feed the existing grasses, which can then smother emerging seedlings.

READING: MAFF Fertiliser Recommendations (RB209).

Metric Conversion
Kg/ha x0.8 = units/acre