

Reseeding grassland swards

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Summary

- Reseeding is one of the most cost effective on-farm investments.
- There is little difference between reseeding methods once completed correctly.
- There is no loss in grass production in the establishment year with spring reseeding compared to permanent pasture.
- White clover can be established into existing swards by over sowing.
- Management after reseeding is important to ensure good establishment.

Introduction

Less than 2% of Ireland's grassland area is reseeded annually despite grass being our dominant feed source. Swards with low perennial ryegrass content are costing farmers up to €300/ha/year due to reduced DM production and reduced nitrogen (N) use efficiency. Reseeding costs approximately €750/ha; however the increased profitability of the new sward would cover the cost in just two years making reseeding one of the most cost effective on-farm investments.

Timing of reseeding

Timing of reseeding depends to a large extent on weather conditions, and grass supply. Generally, total grass production from a spring reseed is as much as, if not more than, old permanent pasture in the establishment year. Establishing clover is more reliable in spring than autumn due to the stability of soil temperatures. Conditions for post-emergence weed control are also more favourable following spring reseeding. While autumn reseeding may make sense from a feed budget perspective, soil conditions deteriorate as autumn progresses; lower soil temperatures can reduce seed germination, and variable weather conditions reduce the opportunity to apply post-emergence spray and to graze the new sward.

Cultivation techniques

The most appropriate cultivation method for a given paddock/farm depends on a number of factors including soil type, quantity of underlying stone, weather conditions and machine/contractor availability. While there are many cultivation and sowing methods available; once completed correctly, all methods are equally effective.

Key points when preparing for reseeding and cultivating

- Soil test and use the results.
- Spray off old sward with glyphosate.
- Graze tightly or mow to remove any herbage on the paddock.
- Choose a cultivation method that suits your farm.
- Apply lime.
- Ensure a firm fine seedbed for good seed to soil contact.
- Roll after sowing.

Cultivar choice

Grass cultivars should be selected from the Teagasc Pasture Profit Index or Irish Recommended List; both provide information on cultivars tested in Irish conditions. Recommended sowing rate is 35 kg seed/ha (14 kg/ac). Include a minimum of 3 kg of each cultivar in a mixture, and no more than three or four cultivars per mix. Keep the heading date range in a mix narrow — no more than seven days.

Establishing white clover swards

Direct Reseeding

Follow the key points for establishing a reseed as outlined above with the addition of 1–2 kg/ha of white clover seed to the mixture.

Over-sowing

Over-sowing is a simple and low cost method of introducing white clover into swards. Success is very much dependent on weather conditions around sowing.

Key steps involved with over-sowing white clover:

- Seed can be broadcast or stitched into a sward using a suitable machine. Over-sow immediately after grazing (≤ 4 cm post-grazing sward height) or cutting for surplus bales. Over-sowing clover into dedicated silage paddocks is not advised.
- Clover seeding rate of 3.5–5 kg/ha is recommended for over-sowing.
 - » Sow with a P fertilizer, e.g. one bag 0-7-30 or 0-10-20/ac.
 - » Reduce nitrogen fertiliser post over-sowing.
 - » Roll or spread 2,000 gallons/acre of watery slurry to ensure good seed-soil contact.

Management of reseeds

Weeds in new reseeds are best controlled at the seedling stage before the first grazing. Use a clover safe herbicide if there is clover in the sward. If over-sowing, it may be better to control established weeds beforehand. It generally takes around 11 months to fully establish a reseed. Reseeded swards should be grazed as soon as the roots of the new grass plants are strong enough (root stays anchored in the ground when pulled). Early grazing allows light to the base of the plant to encourage tillering and, where relevant, clover establishment.

Conclusions

There is little difference between reseeding methods once a firm seed bed is established and good seed-soil contact is achieved. White clover can be established at reseeding or incorporated into existing swards by over-sowing. Post-sowing management has the biggest impact on the establishment and production potential of swards.