



SEEDING METHODS

By JC Machinery



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METHOD 1 - NO CHEMICAL TOP UP.....CLEAN (WEED FREE) OPEN SWARDS FOLLOWING SILAGE

Where a final cut of silage is being taken and the field is going to grazing, cut low to the ground and direct drill ½ to full rate seeds as soon as possible, whilst moisture is retained in the ground, and before the regrowth starts.

There should be enough moisture retained in the ground to allow the seeds to germinate and provided it doesn't dry out subsequently due to lack of rain, seed should be established before the old sward has fully recovered. It should be grazed with young stock or sheep 2 to 4 weeks later, depending on growing conditions.

This grazing keeps the old grass down, stops the old sward choking the new seedlings, and allows light into the newly established grass. The sward should be grazed in 2/3 weekly intervals until the end of the season. Never overgraze as this can cause the new seedlings to be pulled out. Newly established grass often does not become apparent until the regrowth after first cut of the following season.

- Check the Ph. of ground prior to seeding and apply a quick acting bagged lime as necessary to get the ideal pH of 6.5, especially with clover.
- Apply a light to medium coat of slurry immediately after seeding (depending on moisture) providing it contains no effluent or dairy washings.

METHOD 2 - NO CHEMICAL TOP UP.....CLEAN (WEED FREE) OPEN SWARDS FOLLOWING GRAZING

Graze the sward almost bare, using a mob stocking rate. Harrow/rake/roll the dung pats if necessary, drill the sward, and keep the stock on grazing, until the new shoots are just visible. As above; re-graze in 2 to 4 weeks' time, depending on growth.

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METHOD 3 - OFF LABEL HERBICIDE

Some customers have reported good results using an off label herbicide.

Metsulfuron Methyl (ally) at 1/3 rate 1.5 - 2.5g/ha. Not only does the chemical kill broad leaved weeds, but also helps suppress the growth of the existing sward for up to 10 days. Leave 10 days before re-grazing.

0.8 l/ha of 250 g/l trinexapac-ethyl (moddus) can be used as a growth regulator on silage or grazing land. It acts as a growth regulator to slow down growth of the existing swards, to allow new grass to get established. This should be applied as soon as regrowth is actively growing.

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- Vredo seeder cannot be held accountable for off label use of chemicals.

METHOD 4 - EARLY SPRING DRILLING

If the pasture has been badly poached, or there are bad patches due to frost kill, leatherjackets, pests etc over the winter, new grass seeds should be drilled in just before growth starts in springtime.

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METHOD 5 - COMPLETE SWARD DESTRUCTION

Where the old sward is very weedy and a complete re-seed is required, spray with glyphosate pre or post-harvest/grazing to get a total kill off of all vegetation, and direct drill with a new seeds mixture.

Following grazing it is preferable to graze tight, harrow/rake/roll as necessary, to disperse dung pats, then drill. Leave up to a week before spraying off, or certainly before the new seeds germinate. This procedure helps to stimulate a good regrowth to take up the chemical, without affecting seed germination.

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It is most important that you follow the chemical company's recommendation when spraying, ensuring that your grass plant has 10cm leaf for maximum chemical absorption. Only then seed at least 7 days after spraying and after there has been at least 20mm of rainfall. You will find that the active ingredient of the chemical produces an inhibitor to seed growth that sits in the top 1-2cms of the soil. It also neutralises all spare N all this inhibits growth. You may find that it is better to graze the grass very very tight before drilling with the Vredo and continue grazing 3-4 days after sowing instead of spraying with Roundup.

- Apply a light to medium coat of slurry immediately after seeding (depending on moisture) providing it contains no effluent or dairy washings.

METHOD 6 - OLDER LEYS, ROUGH PERMANENT GRASS OR OLD WORN OUT PASTURES

These need to be approached with care. Although Glyphosate deactivates when in contact with soil, there is a problem with toxic phenol and acetic acids being released by old decaying sprayed off vegetation., So if there is a thick mat or subsurface mat of roots and

fibre, (inevitably the seed is placed near this mat), then germination problems can occur due to localised acidic soil. This is worse in wet anaerobic conditions, before during or after seeding.

The problem with direct drilling into sprayed off grass or anything else that has a large root mat is that it is always a big gamble depending on the weather, especially after you have drilled, which is why some people say it's successful and others don't. An analogy is that silage (decaying grass) made in wet conditions is always more acidic when opened.

In a heavy mat situation, waiting for long enough for all the plants to die completely after spraying is the only way to guarantee success with direct drilling on old matted pastures. Otherwise you need to either shallow cultivate and roll, to increase the oxygen levels. Or if you're feeling lucky, take a gamble that the sward won't lie wet after drilling.

If you had a thick mat of decaying vegetation and spun bean seeds on the surface and then ploughed them in, you would get the same results. So either spray off in spring or drill in autumn, after a lime application, and probably another lower rate spray, pre drilling. Less production will be lost by spraying off in autumn, applying lime, and drilling in early spring, when a further lower rate spray is usually necessary.

In a lower more marginal mat situation, the application of quick acting bagged lime alone can help neutralize the effects of the acidic decomposition. But like all seeding techniques it depends on moisture and ground heat. Get the bagged lime on a few weeks before planned drilling date, even if the pH in the field is ok. In this situation, we recommend the delayed glyphosate application techniques discussed above. Which is to delay glyphosate application until after seeds have been planted, but before they germinate, so that the seeds get maximum exposure to germination, establishment, and deeper rooting before the acidic effects of the decaying plant material come to bear.

A few test sites dug with a spade will help you decide on the subsurface mat/thatch problems that might be present. Direct drilling after sprayed off temporary or more open leys isn't usually a problem as the root mat isn't big enough to damage seedlings with its acids and phenols.

In all the above cases use a vigorous quick establishing grass seed mixture up to 35kg/ha.

There is no doubt that a blend of 50% perennial Hybrid Tet, 25% Intermediate tet and 25% diploid works best. These are mostly larger seeds with greater energy reserves for coping with adverse situations. Italian ryegrass swards can easily be re-established at the end of their allotted production cycle, by re-drilling typically after the third season.

PESTS

- Slugs. Old grass swards can harbour slugs all year round, so it may be advisable, especially on heavy soils, to sow slug pellets along with the seed, or broadcast them at a higher rate where an attack had been observed post drilling.
- Leather jackets (daddy long legs / cut worm / Tipulidae) can be a problem, especially in spring drilling. If a field is thought to be at risk, spray with chlorpyrifos (Spannit or Dursban) on its own or with the glyphosate pre or early post drilling can give 6 weeks control.

- Fruit fly (*Oscinella frit*) Reseeds sown after early august can be at risk from fruit fly attacks. This pest is usually much localised. Fields with a past history of attacks and high risk fruit fly years, should be acknowledged. Once again they can be controlled by Chlorpyrifos application as above.

SOWING INTO PLOUGHED, PRE CULTIVATED AND LOOSER SEEDBEDS

Prior to seeding into cultivated land / field needs to be rolled. By running the roller in its lowest position, and therefore least pressure on the discs, seed can be laid on top of the pre-rolled field.

The roller will make a nice job of firming the seed into the soil, without the risk of capping, and no further rolling need take place.

SOWING INTO CEREAL STUBBLE

It is recommended to run at a slight angle to the existing stubble, approximately 10 to 15 degrees, so that the discs are never constantly running on a row of stubble. And are therefore running in and out of the existing stubble rows, and keeping forward speed up.



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