

TILLAGE

August 2021

Straw incorporation

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The new Straw Incorporation Measure (SIM) has been a great success, with over 38,000ha committed to the scheme. Oats are the predominant crop in the scheme, which account for 33% of the area, barley is next at 25%, followed by wheat at 22%, and finally oilseed rape at 20%. There were 1,957 applications, with the average payment likely to be in the region of €4,500 per application. Key to the many benefits of the scheme is achieving good even straw chop length. Many choppers on harvesters may not have been used recently, so before you chop the designated fields make sure that the chopper is in good working condition, all the knives are in place and in good condition, and crucially that you are getting a good spread of the chopped straw across the full width of the

header. It might be a good idea to chop a headland before you enter the appointed fields just to make sure everything is working correctly and thereby avoid any unnecessary delays. As part of the scheme remember the straw must be incorporated as soon after harvest as possible using non inversion systems such as disks or tine cultivators. This is always advisable as it is easier to incorporate dry straw and it also facilitates sowing of cover crops where this is to be done. Chopping straw not only sequesters carbon into the soil but it also returns nutrients to the soil, reduces compaction, helps feed soil organisms and helps as a soil conditioner. For further information check out the DAFM website: www.gov.ie/en/service/86bd1-straw-incorporation-measure-sim/.

National Crops Forum

The National Crops Forum will take place again in September and will be in the form of two webinars due to the current restrictions. Topics

for discussion include nitrates, tillage farms and the carbon cycle, crop agronomy and grain markets. The date for the first webinar is Thursday, September 9. Details of the second webinar to be confirmed.

Catch crops

One of the key factors in growing good catch crops is early drilling, as August-planted crops always perform better than September crops. Target fields that were cleared early (e.g., winter barley) and get crops established. Be aware that crops like mustard will grow quite quickly and become stemmy, so leave these until later in the month. Green Low-carbon Agri-environment Scheme (GLAS) catch crops can be sown up to September 15, using light cultivation techniques (Table 1). Ploughing is not allowed. Remember catch crops in GLAS can only be grazed after December 1 and that two separate species must be sown. Avoid brassica species such as fodder rape, leafy turnip, etc., where oilseed rape is already in the farm crop rotation,



Drilling catch crops.

as these will increase the possibility of getting diseases like sclerotinia and club root in following oilseed rape crops. Outside of the GLAS scheme, there are other options such as redstart (a hybrid brassica), stubble turnips, or even kale, although yields will not be as high as in June-/July-sown crops.

Table 1: Seed rates for catch/cover crops in GLAS.

Species	Seeding	Ecological Focus Area	GLAS	Nitrogen
		No set rate. Suggested rate (kg/ha)	Prescribed rates (kg/ha)	
Brassicas	Forage/fodder rape	3	3-5	Will trap existing nitrogen
	Leafy turnip	3	5	
	Tillage radish	6-8	5	
	Mustard	8-10	6-10	
Legumes	Berseem clover	10-15	10-15	Will trap and add nitrogen
	Crimson clover	10-15	10-15	
	Vetch	50	12	Will add nitrogen
	Peas	80-100	30	
	Beans	150	90-100	
Grasses and cereals	Rye	70-90	65-80	Will trap existing nitrogen
	Oats (and black oats)	70-80	75-100	
Other	Phacelia	5-7	2-5	Will trap existing nitrogen
	Buckwheat	40	30-40	

Post-harvest stubble management



There has been a significant increase in problem grass weeds like bromes and black grass being reported to Teagasc advisors this year, as well as the usual fields of wild oats. Stubble cultivations are the first step in the control of many grass weeds, as the reliance on herbicides is not achieving adequate control on many farms. Grass weeds, especially black grass, could become the most problematic weeds on Irish farms if not controlled early. Growers are spending up to €150/ha on herbicides for control in the UK, so Irish growers must adopt a zero-tolerance policy. A full integrated pest management (IPM) approach including crop rotation, rogueing, stubble cultivations, machinery hygiene, herbicides and possibly grass ley has to be considered. Herbicides alone are not the answer.

Shallow cultivations, no deeper than 2cm, will encourage up to 80-90% of sterile brome and black grass seeds to germinate. Do not cultivate too deeply as this can induce dormancy in some

weed seeds and delay germination.

It is also vital to identify the grass weed that you are encouraging to grow, as meadow brome needs exposure to light for a period

of time in order to break dormancy, whereas sterile brome needs to be covered. Where you are not establishing cover/catch crops, there may be an opportunity to carry out two to three cultivations and burn off with glyphosate before the establishment of the next winter or spring crop.

Jimmy Staples has produced a video on some practical tips in how to get good control of grass weeds using stubble cultivations. This can be accessed at the following link:

<https://www.youtube.com/watch?v=p7AiTNzum5M> or using the QR code pictured.

Headlands can often be the source of weeds, so it is vital for good control that headlands are cultivated, as well as the centre of fields.

Headlands should be cultivated last. Avoid dropping the cultivator on the headland and then driving into the field, as this may drag the weed seeds or rhizomes into the field. Consider turning before the tramlines to avoid this.

HEALTH & SAFETY

Beware of moving machinery



August is harvest month and a lot of machinery is moving on farms and public roads, including trailers, balers and silage gear. Movement brings danger, particularly to bystanders, including children and older farmers. A vehicle travelling at walking speed (5km/hour) travels 1.4 metres per second. Being struck gives a bystander little chance due to the impact force.

In August, a lot of powered machines are used

so make sure moving parts are guarded. This applies particularly to machines used in a stationary position, like augers and slurry vacuum tanker drive shafts. Entanglement in a moving machine part leads to horrific injuries. Also be aware of the dangers of livestock, particularly bulls at the end of the breeding season and autumn-calving cows with calves at foot.



Check the DAFM WOSR list for information on the main varieties.

Winter oilseed rape

Oilseed rape offers an ideal break from cereal rotations and is a good entry for first wheats. Other benefits include spreading the workload, soil structure benefits, and it can be used to control difficult grass weeds.

Winter oilseed rape management tips

Sowing date: mid August to early September, ideally before September 10. However, seedbed quality, i.e., fine and firm, is as important as the sowing date.

Variety: the Department of Agriculture, Food and the Marine (DAFM) Recommended Winter Oilseed Rape (WOSR) list is the best source of information on the main varieties. Conventional varieties or hybrids can be sown in August but in September you should only use hybrids.

Seeding rate: sow 60-80 seeds/m² to establish 30-50 plants/m² in the spring. Varietal differences in vigour, thousand grain weight, seed bed conditions and sowing date must be accounted for. Poor seed bed and late sowing will need higher (10%) seeding rates.

Weed control: field history is important as pre-emerge weed control is still the most effective.

Volunteer cereals, cleavers and grass weeds are the main competitive weeds and do most damage early in the crop's growth. Apply pre-emergence or early post-emergence treatments. Options include Butisan S/Rapsan 500 (1.5L/ha) or Katamaran Turbo (2.0-2.5L/ha) within 48 hours after sowing. Crops may also need a follow-up application to control some broadleaved weeds depending on the field. Complete grass weed and volunteer cereal control as soon as possible post emergence and in accordance with the herbicide label with any of the graminicides.

Clearfield varieties

Clearfield varieties are now being grown here as they offer an opportunity to grow oilseed rape in fields where brassica weeds such as charlock, hedge mustard, etc., are a problem. Clearfield varieties are hybrid varieties that can be identified by the letters CL in their name, e.g., Plurax CL. The herbicide Cleranda is specially developed for Clearfield varieties and not only does it control charlock, it also controls groundsel, fumitory, poppy and speedwells. However, Cleranda can only be used on Clearfield hybrid varieties as it will kill conventional varieties.