

# TILLAGE

July 2021

## Straw Incorporation Measure

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*Straw must be incorporated into the soil after harvest.*

The Straw Incorporation Measure (SIM) is a welcome measure to help improve soil quality by adding carbon, and will also deliver reductions in greenhouse gas (GHG) emissions. For farmers that applied for the SIM all eligible crops applied for must be harvested, the straw must be chopped, spread evenly, and incorporated into the soil as soon as possible after harvest. In terms of incorporation, the following methods are deemed acceptable:

- discing;
- tined cultivators that can successfully

incorporate the quantity of straw present; and,

- straw rakes as required in strip-till/no-till situations.

Ploughing of straw without prior incorporation with soil is not permitted under the SIM.

Good incorporation is essential to avoid pest problems, particularly slugs, and poor crop establishment:

- ensure that straw is chopped and spread evenly across the combine header width;
- incorporation needs to be shallow but deep enough to get a good mix with the soil;
- avoid deep cultivation as this will inhibit the germination of grass weeds/volunteer cereals and will make soil difficult to work in the autumn after heavy rain; and,
- rolling is not a requirement of the scheme but would conserve moisture and help germination of grass weeds.



*Soft brome.*



*Sterile brome.*



*Blackgrass.*



*Canary grass.*

## Grass weeds

Blackgrass is an increasing problem on tillage farms. The problem normally starts with a very small number of plants but multiplies very quickly. One blackgrass plant/m<sup>2</sup> can return six million seeds/ha, so it is vital to walk crops prior to harvest.

July is the perfect month to assess the level of grass weeds on your farm and to put an integrated pest management (IPM) control plan in place. Identify the weeds present and record their location in the field. Identification is easier when grass weeds are headed out, but if you are not sure contact Teagasc or any agronomist for help. Hand rogueing can be done if the population is low, or desiccate larger areas if seeds have not already been set in the head. If you suspect you have a resistance issue, contact your local Teagasc advisor to arrange testing.

### Stop spread with good machinery hygiene

Good machinery hygiene is the most critical factor in stopping the spread of grass weeds across your farm. Most grass weed problems start inside the gate where the contaminated machine starts working. Always take time to clean down the machine following working in a field with a grass weed problem. While this is a chore and takes up valuable time during a busy harvest, it could save thousands of Euro, and later man hours, in controlling grass weeds in the future.

Finally, draw up an IPM control plan. The control plan will have many elements, but it will be largely based on cultural control. This may involve autumn cultivations, rotation, sowing dates, crop choice and primary cultivation method.

## Varieties for harvest 2022

July is a good month to view and compare varieties for next season. Variety selection is becoming increasingly important as an IPM tool for tillage farmers, as the challenge from diseases increases. For example, selecting a variety that is weak on yellow rust can add significant cost and risk for the farmer. Good resistance to rhynchosporium can make the difference between two or three fungicide applications in winter barley. While Covid-19 has restricted many of the

events that would normally happen, discussion group meetings are a valuable resource to discuss the merits of different varieties and how they perform in your local area. The Department of Agriculture, Food and the Marine (DAFM) has many of its variety trials on farms and if there is one in your area, it may be worth a visit. The winter oilseed rape recommended list has recently been released and is available on the DAFM website at:  
[www.gov.ie/en/publication/e997b-winter-oilseed-rape-recommended-list-2021/](http://www.gov.ie/en/publication/e997b-winter-oilseed-rape-recommended-list-2021/).



For all the latest tillage news the Teagasc tillage podcast is available on the Teagasc website, Apple Podcasts, Spotify or on the QR code here.

## HEALTH & SAFETY

### Farm Safety Week

July is the most dangerous month of the year, with the highest levels of farm workplace deaths based on past records. Let us change this trend in 2021.

While many farming activities take place in July, tractor and machinery work and children on the farm are particular concerns. Farm Safety Week starts on Monday July 19 when the official launch occurs. Daily themes are as

**FARM  
SAFETY  
WEEK**  
**YELLOWWELLIES.ORG**

follows: Tuesday – Dying to get the job done? Tiredness can kill; Wednesday – Farm safety may not cost the Earth but not doing it may cost you your life; Thursday – Protecting the public; and, Friday – Your health, your safety, your choice. Farm Safety Week is a collaboration between the farm safety partnerships of the UK ([www.yellowwellies.org](http://www.yellowwellies.org)) and Ireland. The daily themes reflect the fact that safety to a large extent is within our own controls. Follow Farm Safety Week messages in the media. The hashtag for the week is #FarmSafetyWeek.



## Pre-harvest glyphosate

This has been a difficult season to achieve good weed control in spring crops. Initially growth was poor in April and broken weather in May resulted in delayed herbicide application and poor control on large weeds. Chickweed is an example of this where ALS resistance and poor spraying conditions combined to let it slip through the net.

Pre-harvest glyphosate is only allowed for weed control in cereals and as a desiccant for oilseed rape. Crops destined for seed or malting should not be treated with glyphosate.

### Grain

Applying pre-harvest glyphosate to a crop will give effective long-term control of scutch, thistles, perennial sow thistle, etc. The best

results are achieved when the weeds are actively growing in moist soils. Leaving glyphosate application until after the harvest is not as effective on these perennial weeds. Applying pre-harvest glyphosate also has implications as regards cross compliance, as these fields should have a green cover (sown crop or natural regeneration) established within six weeks of application.

### When to apply?

From 14 days before normal harvest date collect 20 grains from the centre of several ears. Press your thumbnail firmly into the grain and if the indentation holds on all the grains the crop is ready for spraying (at or below 30% moisture content to avoid a yield penalty). Target weeds must be green, actively growing and accessible to the spray.

## Tillage webinar

### Online 11:30am July 6, 2021

The Tillage Establishment Systems and Grass Weed Webinar, as part of the Enable Conservation Tillage (ECT) project, will focus on tillage systems and grass weeds from the south. To register, visit:  
[zoom.us/webinar/register/WN\\_FcZi3dZXTvSycjFdTQToLg](https://zoom.us/webinar/register/WN_FcZi3dZXTvSycjFdTQToLg).

The project is running a series of webinars (see: [www.teagasc.ie/crops/crops/grass-weeds/enable-conservation-tillage-ect/events/](http://www.teagasc.ie/crops/crops/grass-weeds/enable-conservation-tillage-ect/events/)) focusing on farms from across Ireland that are converting to non-plough-based systems and

also how these farmers are dealing with grass weed challenges.

The last of our ECT project webinars looks at blackgrass and sterile brome control on three of our ECT focus farms and how the identification of resistant grassweeds on these farms will affect their management strategies. Topics covered:

- blackgrass and sterile brome control in non-inversion tillage systems; and,
- resistant grass weed identification and management.

Irish Agricultural Supply Industry Standards (IASIS) points are available and a Zoom log in is necessary to view the webinar.