

TILLAGE

July 2023

Stubble cultivation

Edited by
Ciaran Collins,
Tillage Specialist

The Nitrates Directive is designed to prevent pollution of surface waters and groundwater from agricultural sources and to protect and improve water quality. As part of the Nitrates Directive, tillage farmers are now required to take measures to establish green cover as soon as possible post harvest to prevent the pollution of waters caused by nitrates.

Shallow cultivation or sowing of a crop/catch crop must take place within 10 days of the baling of straw, or where straw is chopped, within 10 days of harvest. In all circumstances, shallow cultivation or sowing of a crop/catch crop must take place within 14 days of harvesting.

Key features of shallow cultivation measure

- Shallow cultivation is only applicable to counties: Carlow; Cork; Dublin; Kildare; Kilkenny; Laois; Louth; Meath; Offaly; Tipperary; Waterford; Westmeath; Wexford; and, Wicklow.
- In certain weather conditions, the Minister for the Environment, in discussion with the Minister for Agriculture, Food and the Marine, may grant an exemption.
- Soil consolidation as an alternative to shallow cultivation may apply in situations following oilseed rape or where the Land Parcel Identification System (LPIS) parcel has been certified by a Farm Advisory System (FAS) approved advisor as containing certain grass



Shallow cultivation or sowing of a crop/catch crop must take place within 14 days of harvesting.

weeds (brome species and black grass). If soil consolidation is practised as an alternative to shallow cultivation, it must also take place within 14 days of harvesting.

- A minimum of 20% and a maximum of 25% of cereal land on each holding shall not be subject to shallow cultivation post harvest to avoid possible negative impacts on farmland bird species. Unless a crop has subsequently been established, this land shall not be subject to the use of any herbicides until at least February 1 in the following year.
- Avoid cultivations where water flowing over the land surface can enter a watercourse.

Shallow cultivation does not apply in the following cases:

- where the farmer is certified organic;
- where a cereal crop or beans have been harvested after September 15, or where a cereal crop has been under sown with another crop;
- after root crops;
- where a winter cereal crop, oilseed rape or beans are due to be sown on the land by October 31; and,
- where land is destined for use by the National Ploughing Association.

Examples of required area for stubble cultivation for a 100ha farmer.

Q. A farmer with all spring cereals harvested before September 15, no catch crops and intends to have all spring cereals in 2024.

A. Stubble cultivate 75-80ha.

Q. A farmer with all spring cereals harvested before September 15, 100ha catch crops and who intends to have all spring cereals in 2024.

A. No stubble cultivation required.

Q. A farmer with all spring cereals harvested before September 15, 50ha catch crops and who intends to have all spring cereals in 2024.

A. Stubble cultivate 25-30ha.

Q. A farmer who has 100ha winter cereals in 2023 and intends to plant all winter cereals by October 31.

A. No stubble cultivation required.

Q. A farmer who has 50ha winter cereals, 50ha spring cereals in 2023 and intends to have the same cropping in 2024 (winter cereals planted by October 31).

A. Stubble cultivate 25-30ha of the land intended for spring cereals.

Q. A farmer who has 50ha winter cereals and 50ha spring cereals in 2023 and intends to have the same cropping in 2024 (winter crops planted by October 31). A farmer who plants 50ha catch crops on land destined for spring cereals.

A. No stubble cultivation required.

Q. A farmer who has 50ha winter cereals, 30ha maize harvested after September 15, and 20ha spring cereals in 2023, and intends to have the same cropping in 2024 (winter cereals planted before October 31).

A. No stubble cultivation required.

Straw Incorporation Measure

In relation to conditionality where a farmer has engaged in an agri-environment scheme including the Straw Incorporation Measure (SIM), the farmer can comply with those requirements. In the case of the SIM the farmer can have 100% of the cereal and oilseed rape area in SIM and is not required to leave 20-25% for overwintering birds.

Cover crops

There are many benefits to cover crops on tillage farms including a reduction in nutrient loss, increased soil organic matter levels and improved soil structure. Large biomass production is vital to maximise the benefits of cover crops, and early sowing is essential to achieve good autumn growth and subsequent large biomass.

Experiments at Teagasc Oak Park to demonstrate the effects of sowing date on biomass production showed that there was a linear reduction in the amount of biomass produced as sowing date is delayed (**Figure 1**). The mustard in the experiment lost 2t DM/ha for each three-

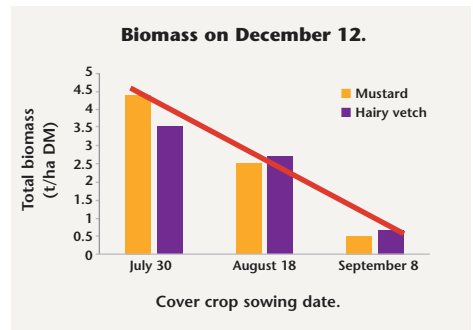


FIGURE 1: Biomass on December 12.

week delay in sowing, so the clear message from the experiments is to plant cover crops as soon as straw is removed to reap the benefits.

Grass weeds

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 small. Alternatively, you can 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.

Resistance testing (grass or broadleaved weeds)

The results of herbicide resistance testing from 2022 samples paint a worrying picture, where >70% of black grass or Italian ryegrass samples tested were resistant to both ACCase and ALS herbicides. We also found that poppies were resistant to ALS and/or hormone type (2,4-D) herbicides. If you suspect that you may have herbicide resistance in grass or broadleaved weeds (specifically black grass, Italian ryegrass or poppy) in your fields, use this unique free testing

service to check, which allows you to identify an effective herbicide programme to be used in conjunction with integrated weed management strategies. Good sample collection is essential for successful testing.

Contact your advisor, follow the instructions on <https://bit.ly/3MrlcgR>, or scan this QR code using your smartphone.



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 after 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 many man hours in controlling grass weeds in the future.

HEALTH & SAFETY

Farm Safety Week 2023



July is the most dangerous month of the year on farms so extra vigilance is needed. A lot of hazardous work takes place, particularly with machinery, while safety for children needs special attention.

Farm Safety Week takes place commencing Monday July 17 with the following programme:

- Monday July 17 – launch of Farm Safety Week by a famous person;
- Tuesday July 18 – quad safety – new quad safety regulations;
- Wednesday July 19 – livestock handling – talks at marts and social media video on livestock safety;
- Thursday July 20 – long-term health – collaboration with the Irish Heart Foundation;

- Friday July 21 – farm safety heroes – nominate a farm safety hero to the Irish Farmers' Association (IFA).

Farm Safety Week is a collaborative campaign, initiated by the Farm Safety Partnership in the UK and led in Ireland by the IFA Farm Family and Social Affairs Committee. Make farm safety your priority during Farm Safety Week and every week.



Teagasc Director Frank O'Mara with Alice Doyle (Irish Farmers' Association).

Teagasc tillage podcast

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

