

# TILLAGE

September 2022

## Teagasc Crop Forum

Edited by  
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**Date:** September 8, 2022

**Time:** 2.00pm-5.00pm

**Venue:** Killashee Hotel, Naas

The themes of this year's Crop Forum will be:

1. The Common Agricultural Policy (CAP) in a tillage context.
2. Reducing financial risk on tillage farms.

The event will conclude with a discussion forum with contributors from across the sector.

Attendees can attend in person on the day or can view the Forum on the usual social media channels. Further details are available on [www.teagasc.ie/news--events/national-events/](http://www.teagasc.ie/news--events/national-events/).

The new CAP payments will commence in 2023, so session 1 at the Forum will cover:

- CAP, including new eco schemes for tillage farmers;
- the Agri-Climate Rural Environment Scheme (ACRES); and,
- financial implications of CAP for tillage farms.

Due to the increasing cost of inputs, tillage farmers are exposed to increased financial risk. Session 2 at the Forum will examine:

- financial outlook for tillage farmers for 2023; and,
- measures to reduce risk on tillage farms.

The forum will also cover agronomy decisions for autumn 2022, as well as the launch of Gatekeeper software with Farmplan, and a new machinery sharing template.

### Teagasc tillage podcast

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



## Planning for harvest 2023

The stakes will be much higher for tillage farmers in 2023 as input costs, mainly driven by fertiliser, are expected to increase substantially. Tillage farmers carrying higher costs are highly exposed and are financially vulnerable if grain markets fall significantly below their current level.

Reducing risk is critical for 2023. Growing crops for high-value markets and crops that suit the

soil type on farm makes sense, but one of the key ways to reduce risk on tillage farms is to have a spread of crops. Make cropping decisions based on long-term yield averages rather than reacting to the previous harvest. While winter barley disappointed this year, there have been many years when it was harvested and straw baled before bad weather hit and spring crops turned into a salvage operation.

## Autumn planting

It is always tempting to avail of good weather in September to plant winter cereals but early planting carries risks. Planting winter wheat and barley early (in mid to late September – later further south) generally ensures good seedbeds and favourable temperatures during germination, leading to higher establishment rates. However, there is an increased threat from take-all, foliar diseases, lodging, grass weeds and aphids (barley yellow dwarf virus (BYDV)).

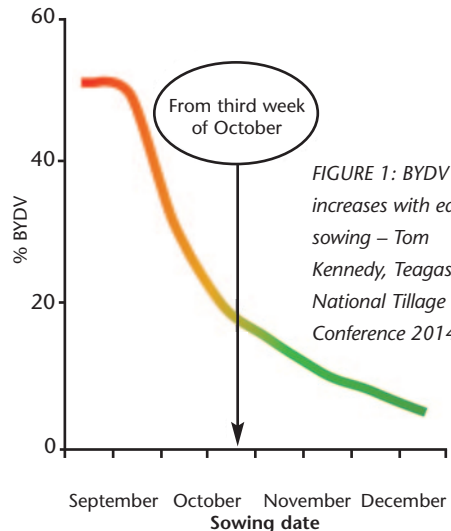
### BYDV

Early-sown crops are at the highest risk from BYDV (Figure 1) and yield reductions of 3.7t/ha have been recorded in Teagasc winter barley experiments. Risk increases when early sowing is combined with coastal location and followed by a mild autumn/winter, as the aphid migration period and overwintering risk both increase.

**Planting cereals in October significantly reduces the risk of BYDV over September planting.**

### Grass weeds

Avoiding the key germination period is a key integrated pest management (IPM) technique. The key germination period for sterile brome and blackgrass is September and tapers off as sowing moves into October. Winter barley should be avoided, as there are no reliable chemical control options. Delayed sowing also



allows the use of stale seed beds, which are an effective IPM measure to reduce the weed seed bank. Ideally, the first flush of brome/blackgrass should have appeared in the field before sowing. Plan to sow heavier land with low grass

weed pressure and lower BYDV and take-all sites first, leaving more vulnerable land till later. Spreading risk through a diversity of crops and a good rotation are key elements for a profitable tillage enterprise.

## Time for soil sampling

Crop yields from harvest 2022 were above average for most crops. This will have resulted in increased offtakes of phosphorus (P) and potassium (K), so it is very important to now assess crop P and K offtakes and soil fertility over the coming weeks.

Teagasc analysed 3,794 tillage soil samples in 2021 and the results show a slight decline in soil fertility on tillage farms when compared to the previous year:

- 18% of soils have optimum pH, P and K (6% decrease);
- 61% of soils have a soil pH >6.5 (13% decrease);
- 57% of soils are at P index 1 and 2 (7% increase); and,
- 32% of soils are at K index 1 and 2 (2% decrease).

Under the new Nitrates Directive all tillage farmers are required to take soil tests. In the absence of an up-to-date soil test result, P is assumed to be index 4 (no P allowance). Now is the ideal time to identify fields on the farm that require fresh soil samples.

Ensure soil samples are taken correctly and take a soil sample every 4ha or 5ha where soil type and cropping of lands were similar during the previous five years. This will provide the basis for lime, P, K and magnesium (Mg) applications for the next four to five years.



*All tillage farmers are now required to take soil tests.*

### Lime

Soil test results will provide recommended rates of lime to correct soil pH to the optimum pH 6.5 for a cereal crop rotation. Where crops such as oilseeds, beans or beet are part of the crop rotation, aim for a target pH 6.8. Aim to apply lime over the coming weeks and months to correct soil pH for either winter or spring crops. Lime is a soil conditioner and delivers many benefits to our soils from soil pH correction to improving soil structure at least cost. For winter crops, where possible, apply lime to ploughed/pressed soils. Optimising soil pH will provide the right soil conditions for the establishment of winter cereals and ensure such nutrients as P and K are readily available for

rapid establishment. Contact your local advisor today to take soil samples over the coming weeks and request an S4 soil test for tillage soils (pH, lime requirement (LR), P, K, Mg, manganese (Mn), copper (Cu) and zinc (Zn)).

**Cereal crop P and K requirements**

Winter cereals have a demand for P and K, which ensures that crops are well established in terms of rooting and tiller development entering the winter period. Index 3 soils will have a good supply of P and K for crop establishment; therefore, omit P and K

applications until springtime. For index 1 or 2 soils apply nutrients as shown in **Table 1**. A fertiliser product such as 0-10-20 or 0-7-30 will supply the correct balance of P and K at this stage. Apply at sowing time and incorporate into the seedbed. Complete fertiliser P applications by October 31. Where organic manures are available, they should be considered as a source of P and K for winter cereals. For example, farmyard manure (FYM)/cattle slurry/mushroom compost are all suitable organic manures, as they are low in nitrogen (N) and will supply good levels of organic matter.

**Table 1: Autumn P and K requirements for winter cereals (build-up).**

Soil Index	P (kg/ha)	K (kg/ha)	Suggested fertiliser product and rate (kg/ha)
1	20	30	200kg 0-10-20
2	10	15	100kg 0-10-20

**HEALTH & SAFETY**  
**Maintaining well-being**



Wellbeing is vital for ongoing satisfaction with life, yet rural dwellers report lower levels of wellbeing than the population as a whole. Mental Health Ireland (MHI) advocates the following five-step approach that anyone can follow to feel good and function well:

- connect with the people around you;
- be active, take exercise;
- take notice, be aware of the world around you and what you are feeling;
- keep learning, do something new; and,

■ give, volunteer or join a community group. Further information is available from the MHI website: <https://www.mentalhealthireland.ie/>.

**Survey**

A research group at Dublin City University (DCU) has asked Teagasc to promote a survey on farmer mental health literacy and help seeking among farmers. More information is available on Twitter at @FarMHealthP. You can complete the survey at: [bit.ly/3AKMKbl](http://bit.ly/3AKMKbl).