

# TILLAGE

October 2022

## Autumn planting

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With autumn drilling already having started, the jury is still out about how much winter barley will be planted in the coming season. On the back of some outstanding yields, the area of winter wheat looks to be fairly secure (as do winter oats), but with many reports of spring barley out yielding its winter counterpart many growers may opt to switch. However, don't forget the advantages that winter barley brings to the farm like spreading the workload, extra straw yield, an earlier start to the harvest, etc., so don't discount the crop just on the back of one bad harvest.

### Variety choice

In winter barley we are fortunate to have quite a lot of choice between two-row, six-row and six-row hybrids. All have their own advantages and disadvantages. When deciding on a variety, yield is often the deciding factor, but straw strength

and the disease resistance profile can often add hidden costs that can be more important than the yield rating. KWS Tardis will be the most popular variety this year and has a good overall package. Casting performed well for many this year, while Bordeaux is the new variety available. In terms of six-rows Belfry is the most popular while KWS Joyau offers barley yellow dwarf virus (BYDV) tolerance for those who are worried about aphid damage, which was a significant issue in 2022.

In wheat, unfortunately, variety choice is much narrower in that Graham and a new variety called Dawsum will make up 79% of the total seed available. This is primarily due to the poor performance of many of the newer varieties in their ability to resist septoria infection. In oats, Isabel and Husky are all that are available, with Barra finally having being dropped after more than 30 years on the list.

### Seed rates

Take care in calculating your seed rates as thousand grain weights (TGW) will be different this year than in 2021; therefore, seed rates should be adjusted accordingly. Seed assemblers now print the TGW on all lots and bags of seed and this should be consulted when calculating

the seed rate for your crops. Soil condition, percentage establishment and time of year should also be taken into account. Be aware that six-row hybrid barleys are sown at lower rates (200-240 seeds/m<sup>2</sup>) compared to other barley varieties. **Table 1** shows the seed rates at different TGWs for both wheat and barley.

**Table 1: Wheat and barley seed rates.**

Planting date	October week 1		October week 2		October week 3		October week 4	
	Barley	Wheat	Barley	Wheat	Barley	Wheat	Barley	Wheat
Target plants (m <sup>2</sup> )	280	250	290	260	300	270	310	280
Sowing seeds (m <sup>2</sup> )	350	313	387	347	400	360	443	400
Percentage establishment	80%		75%		75%		70%	
TGW (g)	Seed rate (kg/ha)*							
45	158	141	174	156	180	163	199	181
46	161	144	178	159	184	166	204	184
47	165	147	182	163	188	169	208	188
48	168	150	186	166	192	173	213	192
49	172	153	189	170	196	176	217	196
50	175	156	193	173	200	180	221	200
51	179	159	197	177	204	184	226	204
52	182	163	201	180	208	187	230	208
53	186	166	205	184	212	191	235	212
54	189	169	209	187	216	194	239	216
55	193	172	213	191	220	198	244	220

\*To convert kg/ha to stones/ac – multiply kg/ha by 0.064.

## Autumn weed control

Pre-emergence herbicides have been shown to be more effective in controlling many problem grass weeds such as bromes, blackgrass and annual meadow grass. Fortunately, there are choices, so pick a mix that will control the main weeds encountered in each field. Remember it is unlikely that the same mix will cover all the weeds in all fields, so specific knowledge of the predominant weeds is vital for pre-emergence herbicides to work efficiently. If in doubt, ask your local Teagasc advisor for details of which weeds the different herbicides give best control of and use this as the base of your programme. Products such as pendimethalin (various), prosulfocarb (Defy/Roxy), flufenacet (Firebird/Navigate, etc.) give best results when applied early, especially where annual meadow grass is a problem, while chlorotoluron (Tower) can be used early post emergence. Add in diflufenican (Stride/Diflanil/Sempre, etc.) to improve the control of charlock, chickweed and



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speedwells. Firebird MET will help to control groundsel as well as many other broadleaf and grass weeds. Avadex (Tri-allate) will improve control of blackgrass and Italian ryegrass, while Zypar will improve control of fumitory, poppy and volunteer beans. Many of the active ingredients will appear in mixes, so choose products that will control as many of your weeds as possible. Target the most problematic weeds first and the less important ones can be tidied up later.

## Oilseed rape

Seed sales figures suggest that there has been an increase in the area of oilseed rape planted again in 2022, with much of it planted early and in ideal conditions. Even in dry conditions, establishment seems good, although there have been reported cases of slug and pigeon damage. Try to get on top these early so that canopies will be big enough to reduce grazing later in the season and hopefully, fertiliser costs. Phoma will be the main target of autumn fungicide applications; however, varieties differ in their susceptibility, so follow the threshold guidelines for the control of phoma (10% of

plants affected). Don't forget that this fungicide timing needs to be effective against both phoma and light leaf spot (LLS). The choice of fungicide will often come down to whether or not the crop needs a growth regulator effect or not. Backward or thin crops will not need a growth regulator, so an application of a half-rate prothioconazole (Proline) should be adequate. In early sown crops where a regulator is probably needed, options include metconazole-based products (Sirena, Plexeo) or tebuconazole-based products (Prosaro, Jade, Pontoon, Protendo), again at half the recommended rates.

## Farm records and Gatekeeper

At the recent Teagasc Crops Forum a new partnership was launched where Teagasc has teamed up with Farmplan to provide a crop recording software package called Gatekeeper Express+ for Teagasc clients to record their farm records digitally on a simple-to-use cloud platform. The three-year partnership with Farmplan aims to increase the number of farmers who record their farm activities on a digital platform. The area of crop recording software is very crowded, with desktop and mobile apps available to download; however, very few are suitable for

Irish farmers. Teagasc scanned the market to ensure the Gatekeeper Express+ software is suitable for Ireland and is easy to use by all tillage farmers. Gatekeeper Express+ is an independent software provider, which holds farmers' data in a highly secure manner in compliance with all GDPR requirements. Growers can opt at any stage to share their information with one or more of their advisors. More details are available on the Teagasc

website at:  
<https://www.teagasc.ie/crops/crops/crop-recording/>.



## Winter and well-being

Get ready for the winter. With animals returning indoors the yard will become very busy. It is important to check that your safety electrical switches or residual current devices (RCD) are working correctly. Check that farmyard lighting is adequate, as poor lighting is associated with farm accidents. If replacing bulbs or cleaning lenses always use appropriate equipment to gain access to the height. If you're in doubt or need advice always contact a qualified electrician.

### Five Ways to Well-Being

Life can be hectic at times, but taking time to

incorporate one or more of the Five Ways to Well-Being published by Mental Health Ireland into your life can help you function well and feel good.

1. Make the time each day to connect with other people around you.
2. Be active – discover a physical activity that you enjoy.
3. Be aware and take notice of the world around you, e.g., the changing seasons.
4. Keep learning – try something new, set yourself a new challenge.
5. Give – giving to others is good for you.