Teagasc
Advisory
Newsletter

TILLAGE

October 2020

Winter cereal varieties for 2020

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The old saying "a good start is half the battle" is very relevant when growing crops. Establishing the correct seed rate into good seed beds will help crops to achieve their potential. If crops are to achieve their targets, then calculating the correct seed rate in order to establish enough plants is the first step. What has become clear with seed this year is that thousand grain weights (TGW) are hugely variable, so the settings on the seed drill used for sowing certain crops and varieties will be different from last year. According to the Department of Agriculture, Food and the Marine (DAFM), the TGWs are higher this year in barley, so growers should check the labels for the TGW for each batch and calculate the necessary seed rate accordingly. The TGWs on **Table 1** were recorded by the DAFM in the 2020 harvest; however, these can vary significantly between varieties and also

Table 1: Winter barley varieties and suggested sowing rates in October 2020.

Sowing date (week)		October – first week	October – second week	October – third week	October – fourth week
Target plants m²		280	290	300	310
Sowing seeds m²		329	387	400	443
Percentage establishment		85%	75%	75%	70%
	TGW[1]	kg/ha			
KWS Cassia	57.9	191	224	232	256
LG Casting	58.2	192	225	233	258
KWS Infinity	58.5	193	226	234	259
Valerie	61.7	203	239	247	273
KWS Joyau	51.1	168	198	204	226
Pixel	50.5	166	195	202	224
KWS Kosmos	52	122	153	166	178
Belfry*	49.4	116	145	158	169
Bazooka*	49.9	117	146	160	171

*1 TGWs from 2020 DAFM trials. * Six-row hybrid barley seed rates 220-240 seeds/m².*

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between seed lots. Valerie in particular has a high TGW when compared to any of the six-row varieties. **Table 1** shows the required plants required for winter barley and the different seed rates required to achieve them at those TGWs. To calculate your own seed rate for barley, wheat or oats, follow the formula in **Table 2**.

Table 2: Seed rate formula.

Formula	Seed rate (kg/ha)	Seed rate (st/ac)
(Target plants per m^2/establishment rate) x TGW	kg/ha	= kg/ha ÷ 15.7
(e.g., Cassia) (280 ÷ 85) x 57.9	190.7	190.7 ÷ 15.7 = 12.1
(÷) x		÷ 15.7 =

Oilseed rape

The main disease concerns at this time of year are either light leaf spot (LLS) or phoma leaf spot. Phoma will be more visible on the leaf, whereas it will take time for the spores of LLS to become visible. Follow the threshold guidelines for the control of phoma (10% of plants affected). This fungicide timing also needs to be effective against both phoma and LLS. The choice of fungicide will often come down to whether 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. On forward crops where a regulator is needed, options include metconazole-based products (Juventus or Magnello) or tebuconazole-based products (Jade, Prosaro), again at half rates.

Aphids

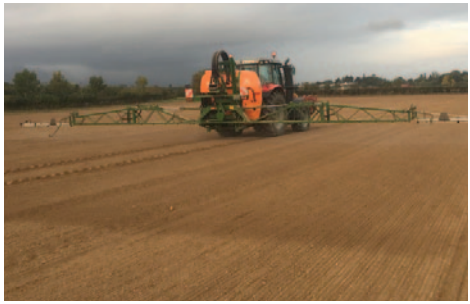
Due to the continuing concern of pyrethroid resistance, all growers are advised to assess crops for potential barley yellow dwarf virus (BYDV) risk (early drilled, warm autumn, green bridge, etc.) this autumn. There is no seed dressing available this year, so BYDV control is going to have to be a mixture of drilling date and pyrethroid insecticides. Earlier-drilled crops are more at risk than later-sown crops and more than one application of a pyrethriod will increase the risk of resistance developing. BYDV control guidelines based on Oak Park research are:

- early October-sown crops (high risk) – apply an aphicide in early November (at GS25);
- mid-October-sown crops (medium risk) – apply aphicide in early November or at 2-3 leaf stage if weather is very mild;
- crops emerging after mid November onwards – no treatment necessary except if weather is mild and aphids are plentiful or in coastal areas with a history of infection;
  and,
- pyrethroid aphicides include: Sparviero, Decis Protech, Sumi-Alpha, Karate, etc. – use full recommended application rates of aphicide.

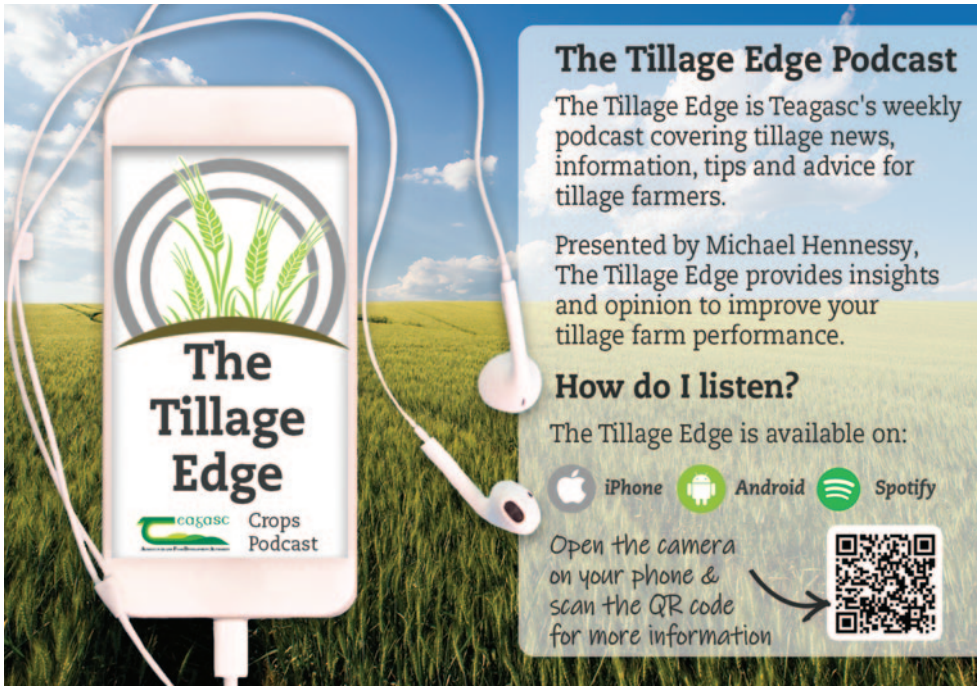
Autumn weed control

Where possible, apply pre-emergence herbicides to give best control of weeds. Products such as pendimethalin (various), prosulfocarb (Defy/Roxy), flufenacet (Firebird/Navigate, etc.) give best results when applied pre emergence, especially where annual meadow grass is a problem, while chlorotoluron (Tower) can be used early post emergence. Add in diflufenican (Stride/Diflanil/Sempra, etc.) to improve the control of charlock, chickweed and speedwells. 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. While most mixes will control a range of broadleaved weeds, some problem weeds like groundsel, fumitory, etc., may need a spring 'tidy-up' application. For other problem weeds such as sterile brome, avoid planting with winter barley as there are no products that will give adequate control, whereas in wheat, there are options such as Broadway Star, Monolith, Alister Flex or Pacifica Plus, which will control it. For more specific recommendations contact your local Teagasc advisor.



Apply pre-emergence herbicides to give best control of weeds.



Grass weed survey

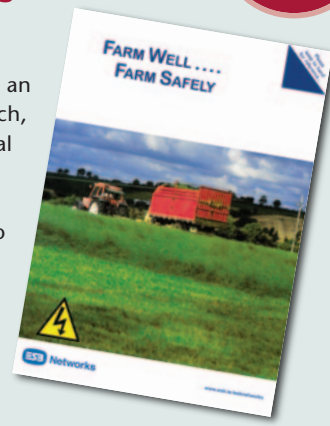
The Teagasc Enable Conservation Tillage (ECT) project is carrying out an online survey to get farmer insight on grass weed resistance management strategies. The survey will help to develop control strategies and the best supporting advisory messages for the future. It takes about 10 minutes to complete. Scan the QR code with your phone's camera here to complete the survey.

Take part in the grass weed survey.

HEALTH & SAFETY

Check lighting and electrical switches

The clocks go back on October 25, which brings shorter daylight time.
In advance of this, check your farmyard lighting.
Bulbs may need to be replaced and fluorescent covers may need cleaning to maximise light output.
To prevent trips and falls, make sure that all walkways are well lit and free of trip hazards.
Also, safety test your electrical residual current devices (RCDs) on switchboards. An RCD is an electrical safety trip switch, which trips if an electrical leakage occurs.
A trip switch is mechanical and needs to be test tripped regularly to ensure it is working. This is done by ensuring that there are no electrical devices operating and physically tripping the switch.



Consult the ESB Networks booklet: Farm Well Farm Safely.

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