

Teagasc Notes for week ending Friday 26th February 2021

Tillage Focus Mark Trimble, Teagasc, Kilkenny

Winter cereals

Establishment has been good in the majority of winter crops apart from late sown crops. Fertiliser application and any remaining weed control will be the priority over the next few weeks.

Phosphorus (P) and Potassium (K)

Prioritise any crops with low plant counts and fields with low P and K levels for first fertiliser application.

Table 1 shows the P and K requirements for a cereal crop yielding 10 tonnes/ha, where the straw is removed. P and K requirements need to be adjusted (P by 3.8 kg/t, K by 10 kg/t) for lower or higher grain yields.

Table 1: P and K advice for 10 tonnes/ha crop.

Soil Index	P kg/ha (units/ac)	K kg/ha (units/ac)	Bags/ac
1	58 (46)	130 (104)	4.5 bags 10-10-20
2	48 (38)	115 (92)	4.5 bags 12-8-20
3	38 (30)	100 (80)	4.25 bags 10-7-20
4	0	0	-

Winter barley - Nitrogen

Apply the first split of nitrogen (N), 50 kg/ha (40 units/ac), in early March and apply the main split by GS 31. On thin or backward crops, first N can be earlier (start of growth) but application rate should be low as crop demand is small. Sulphur (15 kg/ha) and trace element deficiencies (based on soil analysis and field history) should be applied to all cereals before GS 31.

Plant Growth Regulator (PGR)

An application of CCC 1.5 L / ha before GS 30 may be beneficial for any crops with lower plant counts. This is to encourage tiller survival (not to reduce lodging), can give a yield response and also helps to even up crops. This PGR can be applied with the first fungicide. Use Moddus / Medax Max plus 1.0L/ha CCC for high lodging risk fields at GS 30. For best straw shortening effect in barley, apply Cerone / Terpal / Moddus / Medax Max from GS 32-39.

Herbicide

Broad leaved weed control should be based on sulfonylurea combined with suitable partner eg. Zypar / Galaxy / Hurler etc. Active growth and high rates are needed to control overwintered weeds.

Winter wheat - Nitrogen

Apply 40 - 50 kg/ha of N as the first split in mid-March. Increase rates to 75 kg/ha for thin crops, second wheat or where take-all is a risk. Generally divide the nitrogen applications ¼:½:¼ over three splits. Apply the main split by GS 31 and the last split by GS 39.

Herbicide

Where grass weeds are present Pacifica Plus/Monolith + Biopower are options. Broadway Star + Torpedo is a strong brome option where annual meadow grass has already been controlled. Avoid crops under stress and be careful of tank mixes. Where no grass weeds are present a spring type option like Ally Max, Calibre, etc., plus Galaxy / Zypar / Hurler etc. for wider weed spectrum.

Spring Cereals

Spring barley – Seed Rates

Seed rate should be calculated based on the TGW which is printed on the bag. Sow 350 seeds / m² to establish 300 seeds/m² in good conditions. Be realistic about establishment percentage and adjust seed rate for soil conditions. In Teagasc experiments across three seasons (2011 - 2013) the average establishment rate was 78%.

Table 2: Spring barley seed rates to establish 300 seeds/m²

Variety	TGW*	kg/ha	St/ac
Gangway	48	169	10.8
RGT Planet	49.1	173	11.0
SY Errigal	49.5	175	11.1
Highway	50.3	178	11.3
Prospect	46.7	165	10.5
SY Arderin	52.5	185	11.8
SY Tungsten	50.3	178	11.3
Laureate	50.4	178	11.3

*TGW = Thousand Grain Weight - DAFM harvest trials 2020

Straw Chopping Scheme

The DAFM has secured a dedicated €10 million for a pilot scheme on straw incorporation for 2021. While the finer details are to be confirmed, it is expected the measure will cover the chopping and incorporation of cereal straw namely oats, wheat, rye and barley. Oilseed rape is also being considered.

While the Measure is awaiting approval in Brussels, rates have been reported of €250/ha for cereal straw (with a reduced rate for oilseed rape) where farmers chop and incorporate straw as soon as possible after the harvest. Farmers will nominate parcels on their BPS application for the scheme.

Prepared by Mark Trimble who is a tillage adviser working at Teagasc, Kilkenny.