

TILLAGE

April 2024

Spring crops

EDITED BY
SHAY PHELAN,
TILLAGE SPECIALIST



Increase barley seed rates in April.

The poor weather in March delayed field work in most of the country. Prioritise the sowing of beans, wheat and oats, and aim to have them sown as early as possible in April. While there is time to sow spring barley, you should increase seed rate as you drill later into April. Aim to sow approximately 350 seeds to establish 300 plants. For all crops, incorporate compound fertiliser into the seedbed to try to get quick establishment and uptake.

Fertiliser for spring cereals:

- select a suitable fertiliser to deliver sufficient seedbed nitrogen (N) for early establishment and sufficient phosphorus (P) and potassium (K) to match crop offtakes;



AIM TO SOW
APPROXIMATELY

350

seeds to establish
300 plants.

TEAGASC ADVISORY NEWSLETTER

TILLAGE

- P trials in spring barley indicate the benefits of placing P fertiliser on P index 1 soils in terms of rapid root and tiller development;
- recent work in spring barley has also shown that higher rates of K (80-100kg/ha) can help to reduce brackling;
- reduce the chemical fertiliser rates where organic manures have been applied;
- apply remaining N at mid tillering – for malting, apply all the top dressing as soon as tramlines are visible; and,
- watch crops for signs of manganese deficiency and treat as soon as symptoms appear.

Aphids

The few early March-sown crops will not need an aphicide; however, crops sown in late March, which emerge in April, and April-drilled crops, are at higher risk, especially in areas with a history of barley yellow dwarf virus (BYDV) or near coasts. Crops at risk should receive an aphicide at the 3-4 leaf stage for optimum effect. Use full label rates to get best control but

monitor after spraying to assess for resistant aphids.

Weed control:

- early application (4-5 leaf stage of crop) using reduced rates will save money;
- best results will be achieved when the weed and crop are growing actively;
- weather before spraying will influence how well the weed takes up the chemical – ideally wait for two to three warm days before spraying; and,
- options include: sulfonyleurea, e.g., Ally Max or Cameo Max, etc., half to two-thirds rate plus fluroxypyr 0.75L/ha or Galaxy 0.75L/ha or Pixxaro 0.375L/ha, or Zypar 0.75-1.0L/ha, depending on the weed spectrum of the field.

Wild oats

Pinoxaden (Axial Pro 0.6L/ha) or fenoxaprop (Foxtrot) can be applied with certain herbicides on different crops, so check each label for restrictions. Where wild oat herbicides are applied separately, obey intervals to maximise the efficacy.

Winter wheat

Nitrogen

Complete the main N application now (before GS32). This generally equates to half the total amount of N for the crop in a three-split programme and is typically in the range of 100-125kg/ha (80-100 units/ac). Apply the final split at flag leaf. In a two-split programme, the application



Apply the main split of nitrogen by GS32.

TEAGASC ADVISORY NEWSLETTER

TILLAGE

at GS32 should bring the crop up to its final amount.

Weed control

There are still some crops that haven't received a herbicide, especially if sown late. Where there are grass weeds (e.g., bromes) Pacifica Plus or Broadway Star are options. Resist the temptation to use significantly reduced rates of both, as this can lead to poor control or resistance. If only broad leaf control is needed, use a sulfonylurea at two-thirds to three-quarters rate with an appropriate mixer product, e.g., Galaxy.

PGR

Apply a plant growth regulator (PGR) by first node (GS31). Options include CCC 75% 2.0L/ha plus or minus an adjuvant – K2 1.8L/ha, CCC 1.0L/ha plus Moddus 0.2L/ha or Meddax Max 0.2kg/ha. Temperatures need to be above 8°C for best effect.

Fungicide

Leaf 4 spray (T0): long-term Teagasc trials have shown little or no yield response to the T0, so this is definitely an area where savings can be achieved, especially in first wheats that were late sown. Septoria is resistant to all the strops, so it is pointless using them on wheat unless yellow rust is a concern. In this case, Comet and Fezan can be applied.

Leaf 3 spray (T1): Apply when the third last leaf is fully emerged. Growth stage may not be an accurate indicator of the actual leaves present in the crop, so dissecting plants and identifying the correct leaf to apply the first fungicide is critical for optimum septoria control. Include the multisite folpet 1.5L/ha plus 80-100% of SDHI/Qii mixes, e.g., Questar, Revystar XL, Adexar, Elatus Era, Ascra Xpro. Add a mildewicide where mildew is present.

Winter barley

April is key for growth in winter barley and all the vital jobs need to be done, i.e., complete fertiliser application, growth regulation and disease control.

Nutrition

Complete N applications before GS32 as barley does not use late N efficiently and needs its N working before you see the flag leaf. Manganese deficiency is common



Awns peeping stage.

again this year after all the rain and needs attention.

TEAGASC ADVISORY NEWSLETTER

TILLAGE

Fungicide

Most crops are probably on a two-spray strategy, with the possible exception of those in the south. Crops in the northern half of the country on clean varieties will receive two applications at GS31-33 followed by GS39-49.

Again in 2023 we have seen growers delaying the final fungicide until flowering. However, continuous Teagasc and international trials clearly show that the awns peeping stage is the ideal timing for that final fungicide to control ramularia. Delaying by two weeks to apply to the head has resulted on average in a decrease in yield of 0.4t/ha.

Options include: Siltra, Decoy co-packs, Elatus Era, MacFare Xpro or Proline plus SDHI (Imtrex)/strob. Add folpet at 1.5L/ha to the

last spray for the control of ramularia. Again, don't forget that in barley half rates of azole/SDHI/strob fungicides will give adequate control.

PGR

Aim to apply a PGR on two-row varieties between GS32 and 37 for effective shortening, e.g., Terpal 1.2-1.5L/ha, Cerone 0.5-0.7L/ha, Meddax Max 0.3-0.5kg/ha. For six-row varieties or two-row varieties on very fertile sites, two applications are generally required. Consider Moddus 0.2L/ha plus CCC 1.0L/ha at GS30/31, followed by the normal timing at GS32-37. Watch the weather when applying PGRs, as frost will lessen the effect of the products, while also increasing the possibility of scorching.

Fertiliser safety

Spreading fertiliser can be high risk. Consider if a contractor can help. Keep fertiliser spreading equipment in good condition. Bulk or big bag options minimise the need for manual lifting but you need the appropriate equipment. Beware of damaged bags, as they can become unstable, cause sudden movement, and collapse. Your lifting hook should have well-rounded edges. Never stand under or close to raised bags or leave bulk bags hanging in the air unattended. Always lower lifting equipment safely when the task is complete. Use a long-handled knife when opening the bag. All 50kg fertiliser bags should be lifted by two people. Bags should be placed at waist height to reduce bending. Use good manual handling techniques.

HEALTH AND SAFETY

