

TILLAGE

May 2022

Winter wheat

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The introduction of new fungicides to control disease in winter wheat are welcome but fungicide timing is still a key determinant of successful disease control in wheat (**Table 1**). A fully emerged leaf 1 (flag leaf) and leaf 3 are the key timings. Research has shown that plus or minus seven days of a fully emerged leaf 1 can make a significant difference to disease control in high disease pressure situations. The azole, Revysol, and the new Qil Inatreq are welcome additions to disease control in wheat. Both products have performed well against septoria in Teagasc trials and in the field. However both are at risk of resistance and should only be used once per crop, at the rate required and in mixtures with a multisite like Folpet. Older products (Ascra Xpro, Elatus Era, etc.) still have a role in disease control but the foundation of good disease control is still applying products at the correct timings.

Table 1: Winter wheat fungicide programme.

Timing	Product
Leaf 3	Folpet 1.5L/ha + 80-100% (azole/SDHI/Qil)
Leaf 1 (flag leaf)	Folpet 1.5L/ha + 80-100% (azole/SDHI/Qil)
Start of flowering	Azole mix



Apply fungicide to fully emerged leaf 1.

Winter barley

The latest stage to safely use a PGR is the awns peeping. Terpal 1.2-1.5L/ha or Cerone 0.6-0.7L/ha are options but watch latest timing. The final fungicide needs to be timed at the awns emerging stage. It should consist of an Azole plus a SDHI/strob and 1.5L/ha of Folpet to assist in the control of ramularia.

Recent Teagasc experiments on the control of ramularia shows that the best timing comes between GS45 (boots swollen) and GS49 (first

awns visible). An application of Folpet at GS59 (ear emergence complete) did not contribute to control.

Winter oats

The final fungicide timing as the ear emerges from the boot in winter oats is targeting rust and mildew and to prolong green leaf area. Suitable product mixes include azole/SDHI/strob mix, e.g., Elatus Era 0.75-0.8L/ha or Proline 0.5L + Amistar/Comet 0.5L +/- mildewicide or Boogie 1.0L/ha.

Teagasc events

The series of Teagasc crop walks continues in May. Consult the Teagasc website for details of

crop walks in your area. See www.teagasc.ie/news--events/national-events/.

Spring barley disease control

Applying a fungicide at the correct timing is the foundation for successful disease control in spring barley (Table 2). Teagasc research indicates that applying the first fungicide at mid/late tillering (Table 3) and a second at awn emergence can result in a yield increase of over 0.5t/ha in a high disease pressure year over delayed timings. Use a mix of active ingredients that target the fungus at no more than a half rate of each of the individual components. Include Folpet 1.5L/ha to assist in the control of

ramularia. All fungicides have strengths and weakness so it is important to match the correct fungicide with the varietal characteristics. All current spring barley varieties contain the mildew resistance locus (mlo)-based powdery mildew resistance so the inclusion of a specific mildewicide is rarely warranted. It is essential to walk the crop beforehand and then decide on fungicide choice and rate in conjunction with the varietal characteristics. A mismatch of fungicide and variety can lead to either poor disease control or unwarranted fungicide use.

Table 2: DAFM spring barley disease ratings.

	Gangway	RGT Planet	SY Errigal	Geraldine	Skyway	SY Amity
Mildew	8	8	8	(8)	(8)	(8)
Rhynchosporium	5	5	5	(7)	(7)	(6)
Brown rust	6	5	7	(7)	(7)	(7)
Net blotch	8	5	8	(8)	(6)	(8)

() = limited information



Match fungicide to varietal disease characteristics.

Table 3: Spring barley fungicide programme.

Timing	Disease	Programme
Tillering GS<30	Rhyncho Net blotch Brown rust Mildew	Mixtures Azole + strob/SDHI Mildewicide where required.
Awn emergence GS39-49	Rhyncho Net blotch Brown rust Mildew Ramularia	Mixtures Azole + strob/SDHI Mildewicide where required.

Teagasc tillage podcast

For all the latest tillage news, the Teagasc tillage podcast is available on the Teagasc website, Apple Podcast, Spotify or on the QR code shown.



Basic Payment Scheme

The closing date for Basic Payment Scheme (BPS) applications for this year is Monday May 16. Application for the Straw Incorporation Measure (SIM) is also done at this time.

The SIM could be a good management tool this year with current high fertiliser prices and also to facilitate the timely sowing of winter oilseed rape given the high prices available for the crop.

Beans

Beans were sown earlier than normal this year, which may increase disease pressure. The key to bean disease control is early spraying when disease is first seen or expected. Chocolate spot is the main threat but downy mildew and sometimes rust can rob yield. Apply Elatus Era at 0.66L/ha (only once) or Signum at 0.5-0.75L/ha, or Amistar 0.5L/ha plus tebuconazole 0.75L/ha at the start of flowering.



Apply fungicide to beans before flowering to control chocolate spot.

Buffer zones

May is a busy month for the application of plant protection products (PPPs). It is important to adhere to the buffer zones on product labels to protect our water. Buffer zones are applicable to all surface waterbodies and can vary in size (1m-70m) but 1m applies in all cases regardless of application rate. The buffer zone on a product label is applicable when the product is used at full rate using standard flat fan nozzles.

Buffer zones can be reduced when using Department of Agriculture, Food and the Marine (DAFM)-approved drift-reducing nozzles, when using reduced application rates or a combination of both. It is important to refer to the PCRD website to establish the required buffer zone for each product.

See:

www.pcs.agriculture.gov.ie/sud/waterprotection/stripe-surfacewatertoolforreducingtheimpactofpesticideintheenvironment/.



Ensure you know buffer zones for waterbodies.

HEALTH & SAFETY



May is a high-risk month

May is the month when silage making commences. It is a high-risk month when safety planning is needed. There is a lot of machinery movement, both in the farmyards and on public roads, so knock-down, roll-over and crushing accidents are possible. Make sure that there is a clear view for drivers at entrances/exits to public roads. Warn oncoming traffic of dangers, but warning devices such as signs and bollards should not be placed on a road surface. Farmers and

contractors should discuss safety matters in advance. Watch out for blind spots where collisions could take place. Stop immediately if any dangerous work takes place and resume only when safe. Keep family members, particularly children and elderly farmers, well away from moving machinery. Ensure that farmyards are tidy to allow efficient machinery movement. Remember too that speed kills – make sure that machinery movement occurs at a steady pace.