Teagasc
Advisory
Newsletter

Teagasc/Boortmalt
Joint Programme

June 2020

Spring barley crop update

Edited by
Eoin Lyons,
Joint Programme
Advisor

The majority of spring barley was drilled in excellent conditions, and as a result, plant counts are on target, with 300 plants per m^2 being achieved regularly.

Tiller formation was aided by early rainfall across most of the spring malting barley area; however, since then rainfall levels across the south east have been well below average and as a result micronutrient deficiencies and stressed crops are commonplace.

However, a positive of the dry conditions is that disease levels remain low across each of varieties, with most crops having now received their T1 fungicide application.

If not yet completed, aim to apply before the end of tillering to protect developing tillers.

Spring barley crops established well but are now under stress.

teagasc
Agriculture and Food Development Authority

BOORTMALT
MASTERS OF MALT

Disease control

The focus for most growers should now turn to T2 fungicides. Ensuring that the application is carried out at the correct timing is vital to achieving high-yielding crops (**Figure 1**). Teagasc research has shown that applying the T2 at flag leaf to awns visible (GS37-49) will result in an increase of 0.3t/ha, compared to delaying application until the head is fully out (GS59).

Control of ramularia in spring barley is extremely important for maintaining green leaf area and producing quality grain. For the past number of years, the advice was that a chlorothalonil (CTL)-based product should be included at the T2 timing to protect the flag leaf and prevent ramularia from infecting the leaves during the critical grain filling period. However, since May 20 all CTL products have been banned for use on crops.

The most cost-effective alternative for ramularia control will be Folpet. Last season, across each of the monitor farms, farm trials were carried out to determine the efficacy of Folpet versus CTL (Bravo). While it is difficult to match the performance of CTL for ramularia control, the farm trials did show that Folpet gave approximately 80% control of ramularia when compared to CTL. See **Table 1** for suggested products and rates to use for T2 applications on spring barley.

Apply T2 fungicide at the awns emergence stage for best yield response.

Rainfall data

The weather stations placed on the monitor farms last year remain in place for this year. It will come as no surprise to many growers that rainfall levels have been extremely low since drilling and, at time of writing, most crops are under considerable stress as a result.

Figure 2 indicates the total rainfall in mm across each monitor farm since March 20 compared to the Met Éireann 30-year average for the same period and locations. With this deficit in rainfall, micronutrient deficiencies are common in most crops. Correcting these issues is important to prevent further stress on the crop. However, as the weather data shows, moisture is the main limiting factor that is affecting crop development and therefore, repeat applications of micronutrients may not correct these issues being experienced until there is rainfall.

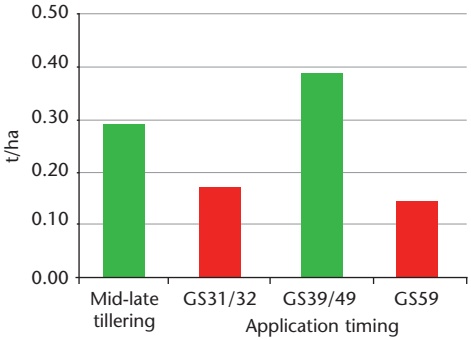


FIGURE 1: Fungicide application at tillering and awn emergence gave the best response.

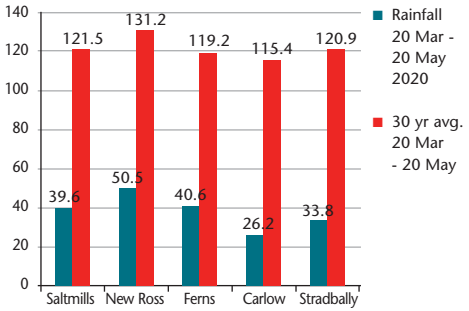


FIGURE 2: Rainfall data in mm for each monitor farm from March 20 to May 20 compared to the 30-year average for the same period.

Table 1: Products and rates to use for T2 applications on spring barley.

Timings and products	Notes
T2 timing: flag leaf to awns visible (GS37-49) Folpet at 1L/ha plus Half to three-quarters rate of SDHI/triazole mix (e.g., Elatus Era, Bontima, Ceriax, Siltra) **OR** Folpet at 1L/ha plus Half to three-quarters rate triazole (Proline, etc.) plus Half-rate SDHI (Imtrex/Zulu, etc.)	Target final spray before head has emerged when the awns are just visible. Ensure Folpet is part of the spray programme for ramularia control.

MONITOR FARM UPDATE

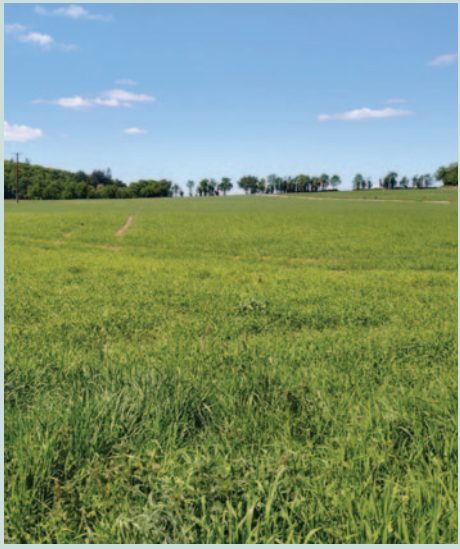
David Walsh-Kemmis

The Stradbally area of Co. Laois, where David's farm is located, has been hit worse than most in relation to lack of rainfall and, at the time of writing, his spring barley crops were experiencing considerable stress as a result. However, despite this, the spring barley both established and tillered well, with an average of 1,200 shoots per m^2 across the crops on the farm, which is on target to produce the desired yield.

This year, as part of the Joint Programme, David has drilled two new malting barley varieties on the farm. The varieties, which are named Tungsten and Splendor, are growing on a trial basis on each of the monitor farms. The aim is that both these varieties will replace the current varieties over the coming years. David applied his T1 fungicide in mid May at the mid-tillering stage. A micronutrient of EPSO Combitop was also applied, as the crop was suffering magnesium deficiency.

Wild oat control was due to take place at this timing also, but this was delayed as the crop was under considerable stress and applying a herbicide would have further stressed the crop.

This will now have to be completed before awn emergence. The final action before harvest for David's crop will be T2 fungicide application, which will be applied at awns emergence.



New malting varieties, Tungsten and Splendor, on David's farm.

Magnesium deficiency in one of David's crops.