

TILLAGE

July 2019

Grass weeds

Edited by

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Grass weeds are very evident on tillage farms this year. This increase can be attributed in some way to the increased area of winter cereals in 2019, which favours autumn-germinating species like bromes and blackgrass; however, canary grass and wild oats are also present in spring crops. Correct identification is key for successful control (**Figures 1-4**). July is the perfect month to assess the level of grass weeds on your farm and to put an

integrated pest management (IPM) control plan in place. Walk all fields prior to harvest, identify the weeds present and record their location in each field. Identification is easier when grass weeds are headed out but if you are not sure, contact Teagasc or any agronomist for help. Hand roguing can be done if the population is low, or desiccate larger areas if seeds have not already been set in the head.



FIGURE 1: Sterile brome.



FIGURE 2: Blackgrass.

Stop spread with good machinery hygiene

Good machinery hygiene is the most critical factor in stopping the spread of grass weeds across your farm. Most grass weed problems start inside the gate, where the contaminated machine starts working.

Always take time to clean down a machine following working in a field with a grass weed problem. While this is a chore and takes up

valuable time during a busy harvest, it could save thousands of Euro, and man hours, in controlling grass weeds in the future.

Finally, draw up an IPM control plan. The control plan will have many elements but it will be largely based on cultural control. This may involve autumn cultivations, sowing dates, rotation, crop choice, and primary cultivation method.



FIGURE 3: Meadow brome.



FIGURE 4: Canary grass.

Beet

Crops intended for later harvesting should receive a fungicide to prevent leaf diseases, especially rust. Products include Opera, Escolta, Score, etc. Also use the opportunity to top up on boron if a sufficient amount has not already been applied.

Treat fodder beet for disease in July.



Pre-harvest glyphosate

Pre-harvest glyphosate is only allowed for weed control in cereals and as a desiccant for oilseed rape. Crops destined for seed or malting should not be treated with glyphosate.

Grain

Applying pre-harvest glyphosate to a crop will give effective long-term control of scutch, thistles, perennial sow thistle, etc. See weeds covered and recommended rates in **Table 1**. The best results are achieved when the weeds are actively growing in moist soils. Leaving glyphosate application until after the harvest is not as effective on these perennial weeds. Applying pre-harvest glyphosate also has implications as regards cross compliance, as these fields should have a green cover (sown crop or natural regeneration) established within six weeks of application.

When to apply?

From 14 days before normal harvest date collect 20 grains from the centre of several ears. Press your thumbnail firmly into the grain and if the indentation holds on all the grains, the crop is ready for spraying (at or below 30% moisture content to avoid a yield penalty). Target weeds must be green, actively growing and accessible to the spray.

Oilseed rape

Glyphosate should be applied when at least two-thirds of the seeds are turning from green to brown in the middle of the main stem. Harvest takes place two to three weeks later. It is advisable to generally use a high rate of glyphosate when burning off the crop (e.g., Roundup Flex at 3.0L/ha) and especially when targeting perennial weeds. Use 200-250L/ha of water to get good coverage of the crop. An interval of 14-21 days is necessary before combine harvesting.



Desiccate OSR when at least two-thirds of the seeds per pod have changed from green to brown.

Table 1: Rates of glyphosate (360g/L) pre-harvest.

Weeds	L/ha
Annual grasses, cereal leaves and stems	1.0
Annual broadleaved weeds	1.5
Scutch 0-25 shoots/m ²	2.0
Scutch 26-75 shoots/m ²	3.0
Scutch 76+ shoots/m ²	4.0
Volunteer potatoes and other perennial weeds	4.0

HEALTH & SAFETY



The most dangerous month

July is the most dangerous month of the year on farms. For the 15-year period 2004-2018, almost 17% of farm deaths occurred during July. This is double the average per month.

The principal causes of accidents in July are: vehicle and machine use (particularly tractors and loaders); falls from heights and falling objects; cattle; and, slurry. During this month in particular, give attention to operating machinery safely. Never get into a 'crush zone' and always operate a vehicle from the driver's seat.

Be harvest ready

July is the perfect month to get maintenance done on machines prior to the harvest. Ensure that all PTO shafts are covered and that all guards are in place, particularly on the combine and the baler. The harvest is typically the time of year when there are casual staff on the farm and they may not be familiar with all your work practices. These staff are a high accident risk. Ensure that all staff read the farm risk assessment document and are familiar with the machines they will be operating. The risk assessment document has a specific section on harvesting. Ensure that safe work practices are carried out on the farm. Staff should be trained on the correct procedures to follow in a given situation;



Use three contact points when getting up/down from a tractor.

for example, the safe way to deal with blockages in a baler/combine, or the correct way to attach a trailer to a tractor ensuring that all safety mechanisms are in place. Finally, stop work that is being done in an unsafe manner and rectify the problem.