

Taking stock in tillage fields

Assess your plant populations as well as weed and disease threats.

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The Teagasc Harvest Report 2022 estimates that winter cereal plantings for harvest 2023 are down 34-35,000ha compared to last year. Most of the decrease is down to the wet weather, which prevented autumn planting. Winter oilseed rape area, by contrast, continues to increase on the back of a very good performance in 2022 and favourable drilling conditions in August and September.

Flood damage has left fields with areas where there are few, or no, plants. The question of whether to continue with the crop or re-plant should be driven by the potential yield of the crop and the cost of inputs.

Autumn field conditions made spraying difficult. Many wheat and oat crops in particular received no autumn herbicides. Most winter barley crops did receive a herbicide and an insecticide. But there are still many on wetter soils that didn't and are struggling, with bare patches evident. So, many crops will need to be treated in the spring for weeds.

Top priority are winter barley crops where grass weeds are present, particularly annual meadow grass or bromes.

Options are limited now and the effectiveness of the herbicides will also be reduced. Grass weeds that have tillered will not be fully controlled with the herbicides that are available – bear this in mind when choosing what to apply.

Products containing flufenacet, (Firebird), chlorotoluron (Tower) or pendimethalin (Stomp Aqua), will struggle to give adequate control

of grass weeds, particularly if they have continued to grow well during the winter. Some grass weeds started tillering before Christmas, so inspect crops and see what stage they are at before spraying.

All barley crops will need a tidy up in the spring to control broad-leafed weeds. If grass weeds are not a big problem, it may be wise to wait until later in the spring and control all the weeds at the one time.

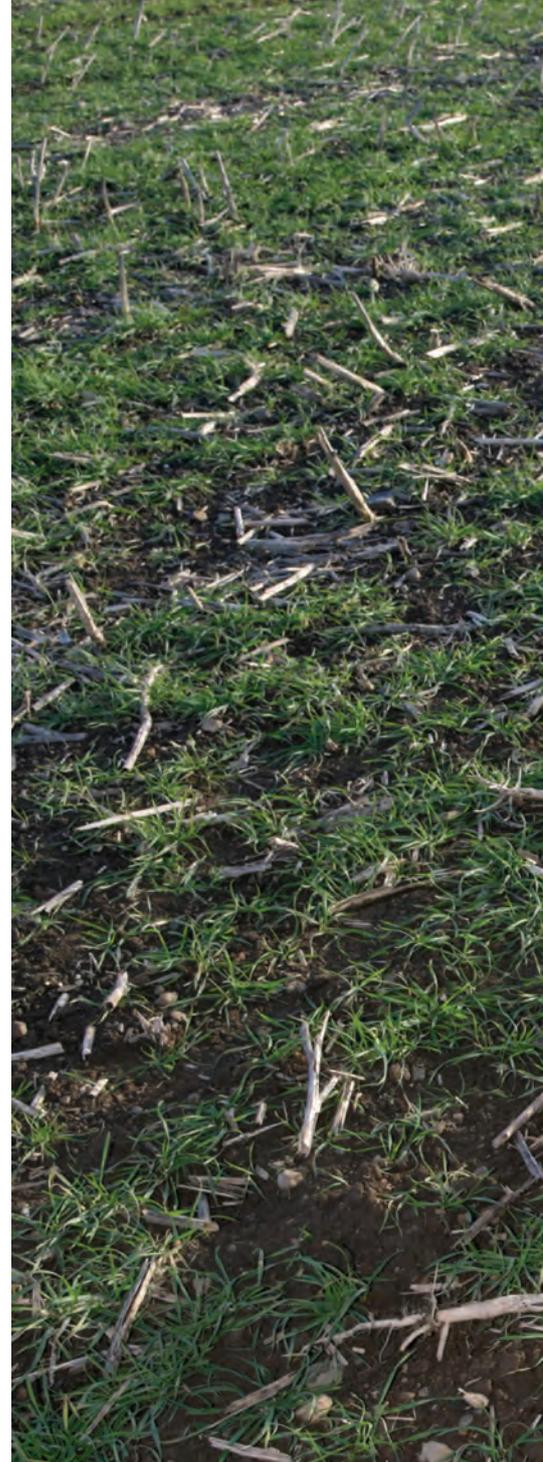
When choosing a spring herbicide, be careful about its persistence in the soil. Check the label restrictions or consult a company rep to find out if the product will have any effect on a following oilseed rape crop, especially if non-plough systems are being used. This has already been an issue in some oilseed rape crops planted in 2022.

Barley crops will also probably need an insecticide to control aphids. It may be late to apply one, but trials have shown that a single application of an insecticide in January can still give adequate control of BYDV. Especially in high-risk areas in the south or along coasts.

Crops that received an insecticide in the autumn probably do not need a second application, unless they were sown very early.

In winter wheat, there are still plenty of options for weed control, with products such as Alister Flex, Pacifica Plus, Broadway Star or Monolith where grass weeds are an issue. Again, before selecting a herbicide, inspect the fields that need to be sprayed and assess the weeds that are present.

For example, Broadway Star is very good on grass weeds, including wild oats, and many broadleaf weeds, but annual meadow grass is resistant. Pacifica Plus is very good on grass



weeds, but is limited on weeds such as groundsel, fumitory and speedwells.

Growers also need to be aware of the increased incidence of resistant weeds. Always aim to alternate the herbicide chemistry to reduce the risk of resistance developing in your fields.

For any winter oilseed rape crop that still needs a herbicide, options are becoming limited. Kerb or Astrokerb must be applied by the end of January – after this, the only options for broadleaf weed control are Belkar or Korvetto, both which have a limited weed spectrum.

Growers should also be aware of light leaf spot infection. From the end of January, sample some crops by taking leaf samples, placing them in a plastic bag and putting the bag in a warm room. After 24-48 hours,

Table 1: Estimated winter crop plantings 2022 ('000 ha).

	2020	2021	2022	2023
Wheat	35.4	56.1	60.3	55
Barley	51.3	67.3	73.6	52
Oats	8.2	13.9	15.0	8
Oilseed Rape	8.7	10.0	14.5	19



Meath farmer Vincent Macken.

the typical salt-like lesions should be visible on infected leaves.

If there is disease present, then consider an application of a prothioconazole based product (Proline, etc.).

From mid-February, start carrying out GAI calculations on your crops using your smartphone to gauge the canopy size and the nitrogen requirement for the crop. Crops with GAI of less than 1 will probably need an application of nitrogen-based fertilisers before the end of February. Crops that have a large GAI, greater than 1.5, can wait.

Remember that a GAI of 1.0 represents 50kg/ha of nitrogen that is being stored in the leaves and which will not need to be applied. So try to keep pigeons from grazing on the leaves. One farmer who says he still has some tidying up to do is Vincent

Macken, one of our Teagasc Tillage Signpost farmers. Vincent grows winter wheat, winter barley, spring beans and winter oilseed rape on his farm near Kentstown, Navan, Co Meath.

Vincent drills the majority of his crops with a three meter Vaderstadt rapid drill.

"Last autumn I began drilling cereals before the end of September and managed to get all crops in before the weather broke," he says.

"I got some spraying done but will have to tidy up some weeds in the spring."

As part of a project on BYDV, Vincent is also monitoring aphid movement and has placed some yellow traps in his fields to catch aphids.

"So far, the numbers have been low and as a result, I decided not to spray an insecticide on the winter barley.

However, I might just spray one or two tramlines in January for comparison to see if there is an effect.

"Oilseed rape crops were sprayed with Falcon to control volunteer cereals and grass weeds but the crops will still need to get Astrokerb before the end of January to complete the grass weed control. I am comparing prothioconazole (Proline etc.) and tebuconazole (Sirena) to see which gives the best disease control in his oilseed rape crops," adds Vincent.

Drilling of beans will begin around the end of February if ground conditions allow but before that, he will destroy his cover crops by disking.

"We've got on well with both cover crops and beans in recent years," adds Vincent.

"They are good for sustainability but also fit very well in our rotation."