Crop Action

Issue 4 Sunday 1 March 2026

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Editor's note

One big news item this week has been the government classifying a medium-scale adverse event for arable growers in Bay of Plenty, Gisborne/Tairāwhiti and Canterbury in regards to the challenging weather conditions experienced there over the last few months. This means extra funds have been allocated to support affected growers. You can find out more here.

Meanwhile, most non-maize harvest is finishing up in Canterbury and planning is underway for the coming season. On the topic of planning, you may wish to check out FAR's Harvest Snippets, which contain this season's CPT results, updated as they become available. The data in these publications will help with decisions around which cereal cultivar to plant this autumn.

FAR has also scheduled its Autumn Round Ups, which will provide information and discussion on what happened this season and why, how to harvest seed crops and maize under challenging conditions, cereal agronomy, autumn weed management, disease management in peas and other relevant topics. Check out the dates on the FAR events page. Further info around content will be added this week.

A hot topic for many growers seems to be how aphids and YDV might have affected harvest yields, especially in cereals. FAR is still assessing this season's data (see article below); however, risk factors to consider include early planting, not using treated seed, or mistiming autumn foliar insecticides (if required). We will have more on this topic at Autumn Roundups, in future Crop Action issues, and, as always, on Aphid Chat.

Chertsey Arable site update – A challenging season!

Harvest is nearing completion at the Chertsey and Lincoln research sites, with only the maize nitrogen trial still to be harvested. As many across Canterbury will appreciate, January and February weather conditions have been particularly challenging, although we also learned a lot, too.

Chertsey experienced a significant hail event in late December, which marked the beginning of a difficult run of weather. While most crops recovered reasonably well, autumn-sown wheat bore the brunt of the damage. As harvest approached, the crop's condition declined due to a combination of hail-induced seed shatter, secondary disease infections including sharp eyespot (*Rhizoctonia cerealis*) and Fusarium head blight (FHB), bird damage (sparrows and greenfinches feeding through bird netting), and wet harvest conditions. Despite these setbacks, the wheat yielded an average of 10.2 t/ha — approximately 15% below the long-term mean (estimated at 12 t/ha). Notably, in mid-December the crop was tracking well above the long-term average before the adverse weather events.

The 'Three[60]' ryegrass in the Future Farm trial also provided some interesting observations. While the ryegrass was less severely impacted by hail than wheat or maize, visual damage to seed heads was evident. Early indications suggest seed yields close to 1,000 kg/ha, below the 1,500 kg/ha target. Field-dressed yields were similar between the Conventional and Future Farm blocks; however, harvest samples from the Future Farm block contained significantly higher weed contamination, including wheat, hedge mustard, *Vulpia*, soft brome, *Poa* and speedwell. As a result, dressing losses are expected to be considerably higher in the Future Farm block, while the Conventional block remained relatively clean (see photo below). Seasonal conditions added further pressure, with ryegrass cut onto saturated soils on 29 January and harvested on 14 February, after 35 mm of rain fell on the windrows. Although harvest progressed well, regrowth through the rows and seed shatter from heavy rainfall events were beginning to affect the crop.

Conventional harvest on the left, future sample on the right. Photo: Owen Gibson

The white clover cultivation trial also experienced a variable season. Early weed pressure (including sow thistle, fumitory and groundsel) reduced crop competitiveness, although the crop improved markedly through December. However, high rainfall later in the season increased vegetative bulk and led to seed sprouting beneath the canopy of early flower heads. A pre-desiccation application of 2 L/ha MCPA followed by two sequential Reglone® (200 g/L diquat, Group 22) applications (one week apart) successfully retained most flower heads above ground level and helped minimise seed loss. Early yield indications are approximately 500 kg/ha.

Planning is now underway for the coming season's trials and FAR events, with cultivation and seed ordering in progress at both Chertsey and Kowhai Farm.

Crop management

General

Harvesting in the wet

As mentioned above, the weather has been a bit more settled recently, but some growers may still be struggling to harvest crops due to wet conditions, or just wanting to learn more about this issue. Getting your combine settings working for you in these situations can be a challenge, with so many variables to think about. A new FAR publication on this topic is now available on the website. Check it out if you are in this situation, or you just want to find out more so that you know what to do next time.

On a related topic, have you checked out this episode of Cut the Crop? Chris Smith is talking about measuring harvest losses in your combine harvester.

Pre-emergence herbicides

Now that harvest is finished (in some paddocks, at least) attention will be turning to getting those areas turned over in preparation for autumn-sown crops. Many autumn-sown crops rely on pre-emergent herbicides to give the crop a competitive advantage and get it set up to yield well later. Many pre-emergence herbicides require adequate rainfall in the weeks following application for full efficacy, so it's important to monitor this after application, to get ahead of any possible issues. There are many options if you think you may have weed escapes such as mechanical weeding, as well as the usual post-emergence herbicides.
Further information on weed management can be found in the following resources.

- Integrated Weed Management
- Herbicide Screening Trial Results
- Management of ryegrass weeds

Grass grub

There will be extra attention on grass grub this year as the chemical control methods that growers have relied on in the past are no longer available. At this time of the year, grass grub are approaching their 3rd instar stage. The number of biological alternatives (such as BioShield®) is limited.

Cultivation will have limited effect on grub numbers at this stage in their life cycle. This is because 2nd and 3rd instar need living roots to mature, so while a fallow will put a hold on grass grub development it will not kill them. Sacrificial crops are a good idea to limit damage in your main crop.

Plant-back issues after herbicides

Hail and other weather issues have resulted in some growers harvesting cereals (and, maybe, other crops) as silage, rather than grain. If this is something you are considering, keep in mind that these paddocks will be turned around more quickly than originally planned and that this earlier planting could lead to herbicide residues having a greater effect on the new crop. Brassicas in particular can be susceptible to such effects. Check your spray diary and consult your agrichemical company representative or agronomist for further information.

Changes to hemp growing regulations

On the 11th of December, the Ministry for Regulation announced a new regulatory framework for industrial hemp (iHemp).

The main point for growers to note is that you will no longer need a licence to grow low THC industrial hemp; you will only need to notify Police and MPI of your intention. Ministry of Health are working on the changes to the industrial hemp regulations 2006 and the new framework will be announced in a few months, in time for the 2026/2027 growing season. (Note that hemp is usually plant in October-November in New Zealand.)

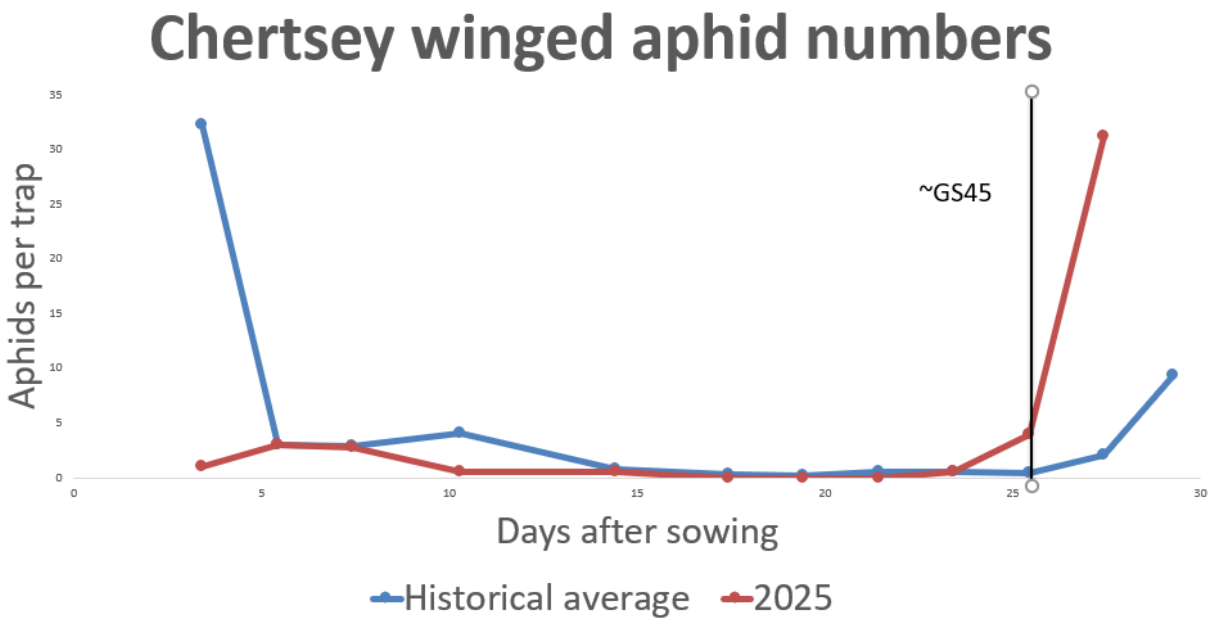
MOH have provided some guidance on the key changes here, but if you have any questions or feedback, please contact admin@nzhia.com for more information.

Cereals

Aphids and YDV

FAR has had a number of queries about potential links between some poor cereal yields and Yellow Dwarf Virus (YDV). We have been DNA-testing leaf material from monitored cereal crops this season to determine the level of YDV infection present. We're still waiting on the results. However, it has been a challenging season, and a range of factors, including nutrient deficiencies, environmental stress, or other diseases can produce similar effects and may be contributing to reduced crop performance. Aphid transmission occurring after GS 32 is generally not considered to be strongly yield-limiting, however, visible YDV symptoms (which may be most prevalent along paddock edges etc.) may not appear until weeks or even months after infection. A FAR study supporting this can be found on p97 of FAR's Annual Research Report 2020/2021. Numerous international studies also support this.

Canterbury aphid numbers at crop emergence were at or below historical averages during autumn (see graph below). This could be because the usual autumn aphid flights were earlier than usual, or planting was delayed by wet weather, or a combination of both. There was a large increase in spring around the end of October, which was not only earlier than usual, but also greater than usual. Despite the early flights, all the monitored crops were past the GS32 threshold.



A relatively mild early winter may have supported larger populations of wingless aphids which can contribute to secondary spread of YDV once colonies establish. While wingless aphids are not shown in Aphid Chat graphs, they are discussed in the regular summary reports, as well as in a separate reporting field above the graphs. In-field monitoring is always the best way to keep on top of secondary spread of aphids in your crop and provides an understanding of whether beneficial insects are in sufficiently healthy numbers to provide a free service. Information on how to do this moving into autumn can be found here.

Pest control in stored grain

Silos around the country are beginning to fill up. Pests are always a concern for stored grain, as some of the chemical control options can be toxic and, in some years, hard to come by. Integrated Pest Management (IPM) techniques such as storage hygiene can go a long way to controlling grain storage pests without the use of chemicals, so consider the following when setting up your silo to store grain.

- Ensure the grain store is clean before filling with grain. Many grain storage pests are very small and can survive in pockets of spilled grain or residue from the previous season.
- Once the grain is in storage, keep it cool and dry. If grain is harvested at high temperature, it can quickly increase by 10-15°C once inside storage, so cooling it is a priority. Likewise, if grain is harvested at high moisture content, it may need to be dried to prevent the risk of insect infestation and fungal development.
- Monitor temperature and moisture in the silo regularly; an increase in temperature and/or moisture can indicate a pest infestation.
- If you do require a grain storage product, there are a few that do not contain pirimiphos-methyl such as Fyfanon® a.i. 440 g/L maldison (Group 1B) and Silo® Eco a.i. 90% diatomaceous earth. Both of these products are grain protectants.

For more information

- The drying and storage of grain and herbage seeds book (2025)
- Arable Update 210 and Arable Update 211.
- An up-to-date list of stored grain insecticide treatments can be found here.

Herbage

White clover seed crop desiccation

It's been a challenging year for white clover seed crop desiccation. FAR has recently summarised five years of research into this topic. You can read it here. A more general discussion of clover desiccation options can be found here.

Maize

Harvesting lodged maize

A number of North Island maize growers are considering how best to deal with lodged maize crops, following recent storms.

FAR's Chris Smith has been through the literature and compiled some tips for how to harvest lodged maize...for grain and for silage.

Read it here.

Maize silage

Optimal harvest timing and ensiling means optimal silage quality which contributes, in turn, to maximising milk or meat production. For optimal feed quality maize silage is typically harvested between 32 and 38 % whole plant dry matter (WPDM). Depending on your crop characteristics, feed quality expectations and practical situation, the achieved WPDM% of your maize crop will likely vary.

Once the maize is harvested make sure it is well consolidated within the bunker of the stack. This will maximise silage quality and minimise dry matter losses.

For detailed information on when to harvest your maize for silage, managing crop variability, ensiling best practice, and the role of silage inoculants, visit:

- Pioneer maize silage resource page
- Corson Maize: Maize Silage Best Practice
- X121: The role of silage inoculants

For those trading maize silage, to ensure the outcome is fair for both parties we encourage you to visit FAR's Good practice guide for maize forage trading.

This page provides links to the 2024 Good Practice Guide, as well as the Maize Forage Purchase Contract 2024. Note that MBIE is currently reviewing Section 2.0 of the Good Practice Guide to ensure it is up to date with the current requirements and updated department details.

Fall armyworm update

Fall armyworm (FAW), *Spodoptera frugiperda*, remains active across much of the country. Pressure is still highest in Northland. Several sites continue to report moderate to high infestations. A second large moth flight has now been recorded in the Far North. Smaller flights are also being detected in other regions, including traps at Foundation for Arable Research NCRS (Waikato). These flights indicate continued breeding and movement between crops. Generations are overlapping. Larvae of mixed sizes are present in many paddocks. This pattern is typical for late February.

Key actions for this week are:

- Continue weekly scouting of all late maize and sweetcorn.
- Check cobs as well as leaves.
- Avoid spraying large or hidden larvae.
- Cultivate or disturb the soil soon after harvest to reduce pupae.
- Share observations with neighbours and advisers.

For further information, please visit the Fall Armyworm Management Hub.

Weather Updates

Long-term weather outlook

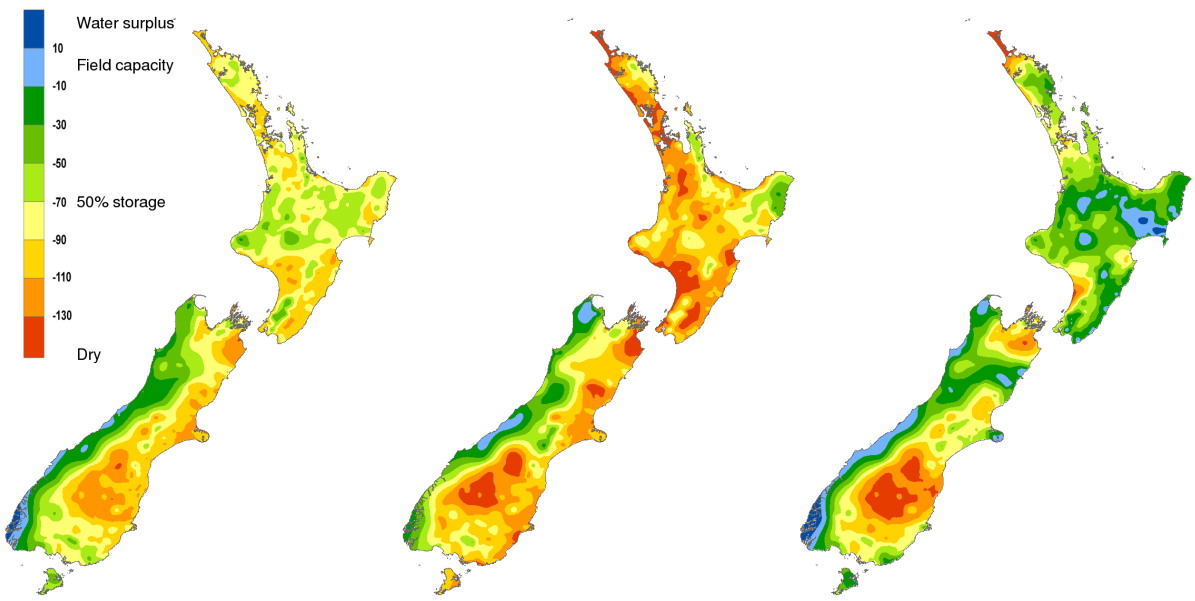
The tropical cyclone season has been quiet so far, but, NIWA notes, the highest risk period is late summer/early autumn. Temperatures for the next few months should be around average for the time of year, except for in the north of the North Island, where they will most likely be above average. The lower North Island is about equally likely to experience average or above average temperatures. Rainfall totals are likely to be above normal in the main arable areas of New Zealand, although in the east of the South Island and the west of the North Island, they are equally likely to be near normal. NIWA long-term climate outlook

FAR weather tool

The FAR online weather tool is a great way to track weather patterns and to compare the current season's conditions with those of previous years. There are also a number of tools available to help with predicting disease and pest pressure. You can check it out here. Click on the link and select the weather station closest to you from the drop-down box at the top right of the screen. Please contact us if you have any queries about the tool, or suggestions on how to make it better.

Soil moisture data: see more from NIWA here.

Soil moisture deficit (mm) at 9am on 22/02/2026



Historical average deficit at 9am on 22 Feb | Deficit at 9am on 22/02/2025 | Deficit at 9am on 22/02/2026

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