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Editor's note

Crop Action is back after a short winter hiatus. Since the last issue the weather has turned more wintery. This has finally knocked aphid numbers, which were causing many (including FAR) to apply autumn insecticides to cereals. Other than that, it's "steady-as-she-goes" for the most part, and there is a chance to prepare for what could be a challenging season, if the very dry El Niño arrives. See [below](#) for some advice on how to prepare.

Crop management

General

Soil testing

Soil quality is an important component of growing profitable crops. A test that is useful to carry out at this time of year is the **MiniVSA** (Mini Visual Soil Assessment), developed by FAR specifically for arable farmers. This 30-minute DIY soil quality test can be carried out by anyone and requires only a few pieces of equipment that all farmers will have on hand. The method can be found [here](#).

Preparing for a possible dry summer

El Niño conditions are expected this season, so it's a good time to check irrigators and install or reinstate soil moisture probes. Installing probes while there is still good soil moisture helps them settle properly, providing solid baseline data before soils start drying out. It's much harder to establish useful probe data once moisture levels begin to drop. Some of the biggest irrigation efficiency gains are achieved at the start and end of the irrigation season.

It's also worth having irrigation pumps and irrigators serviced to avoid breakdowns and delays early in the season. A conversation with your service provider now could save a lot of headaches later.

Further reading: [Technology Update 001: A guide to moisture monitoring systems](#)

Weed management

If you haven't already done so, now is a good time to walk crops and identify any weed issues.

At FAR's Kowhai Farm research site, most of the area has been planted in a faba bean cover crop ahead of spring cropping. On 10 May, the faba bean crop was treated with **500 mL/ha Gallant Ultra plus 1 L/ha Ezi Cover Adjuvant Oil** to control volunteer cereals and ryegrass.

Control of cereals and grass weeds has been excellent across most of the paddock. However, in one area, several ryegrass plants survived the application (Figure 1). These surviving plants may indicate herbicide resistance so must be managed.

If you find similar 'misses' it is vital to manage/remove them before they have an opportunity to set seed. At Kowhai Farm, the surviving ryegrass plants will be removed by hand. In addition, the faba bean cover crop will be terminated before the ryegrass can reach maturity, preventing seed return to the soil seedbank.

Figure 1. Suspected resistant ryegrass to group 1 herbicide Haloxypop, applied on 10 May 2026.



In autumn-sown crops, another option is a **double-knock** strategy, where a second herbicide with a different mode of action is applied while weeds are still small. However, herbicide options can be limited depending on the crop. It is also important to note that the Australian experience of using double-knock is no guarantee that herbicide resistance will not be an issue.

In faba beans, applying another Group 1 herbicide such as clethodim would not be a sustainable strategy. Repeated reliance on the same mode of action increases the risk of cross-resistance, potentially reducing the effectiveness of clethodim as well. Protecting the remaining effective chemistry is critical.

Cereal crops generally provide more flexibility, with Group 2 and Group 5 herbicides offering additional ryegrass control options.

Use every tool available

Where herbicide resistance is suspected, preventing seed set must be the priority. An integrated weed management approach gives the best chance of slowing the spread of resistance. Consider using a combination of:

- Rotating herbicide modes of action.
- Implementing robust pre-emergence herbicide programmes.
- Using mechanical weed control where practical.
- Applying double-knock herbicide sequences.
- Terminating heavily infested areas with broad-spectrum herbicides and, where appropriate, transitioning to spring cropping.
- Hand rogueing surviving plants before seed set.
- Minimising harvest weed seed return by reducing combine losses.

No single tactic will solve herbicide resistance. Success comes from integrating multiple control methods over several seasons.

Test suspected resistant weeds

Herbicide resistance is now widespread across New Zealand. The stigma surrounding resistance has largely disappeared, and the focus should now be on early detection and proactive management to preserve the herbicide options that remain effective.

Through the Primary Sector Growth Fund (PSGF) programme, FAR, in partnership with the NZ Vege Council and SIRC, is offering a **free herbicide resistance testing service** for growers.

FAR has developed guidance on collecting suspected resistant weed samples to ensure they arrive in good condition for testing by the weed science team at BSI, Ruakura. Testing can determine resistance to a range of post-emergence and pre-emergence herbicides, providing valuable information to support future weed management decisions.

Instructions for submitting seed for testing, along with a submission form, can be found [here](#). For further enquiries, please contact Owen.Gibson@far.org.nz.

The earlier resistance is identified, the more management options are available. Walking paddocks now could be one of the most valuable weed management activities you undertake this season.

Cereals

Aphid monitoring

Aphid numbers during May and June were the highest they have been since FAR monitoring began. However, they have now settled down following some good wet southerlies and hard frosts. Well-timed insecticide applications made towards the end of autumn should have knocked back aphid populations, reducing the risk of them building up in spring. Aphid build-up and spread is also slowed by the presence of beneficial insects – the number of beneficials in the crop depends on several factors. Factors that are within grower control include using beneficial-friendly foliar insecticides and having native plantings (or other areas with other flowering plants) nearby.

As aphid numbers are now close to zero, monitoring frequency has reduced to monthly until spring. You can find the latest in aphid data [here](#).

Cereal grazing

FAR has received inquiries about the grazing of wheat crops being grown for grain. This is not common practice in New Zealand, but anecdotal evidence suggests more growers are deciding to give it a try. Wheat can provide a valuable source of high-quality forage during winter when other options are limited.

FAR has conducted little research on this topic, but if you'd like to give it a go, there are some things to keep in mind:

- Grazing should be before GS 31 (stem extension). When this guideline is followed, some overseas research has shown that grain yields may even be improved.

- Other possible benefits include improved weed control and a reduction in the incidence of some diseases. Soil quality may be improved in some situations.
- Some cultivars may be more suited to grazing than others. Talk to your agronomist or seed company representative if you are unsure.

Further resources that may interest you:

- [Grazing of the wheat grain crop \(FAR, 2016\)](#)
- [British article on grazing wheat to keep down brassica volunteers](#)

Herbage

Sow thistle management

Now is the time to think about sow thistle management in white clover crops. The key timings for chemical control utilising 2,4-D ester (Group 4 Mode of Action) fall during July and August before temperatures warm up. The sub-species of sow thistle present in your crop may influence levels of control.

FAR trials in the 2020-21 season identified some additional herbicide options for sow thistle control. Products containing MCPA (Group 4) such as Agritone® and Tropotox® were effective but suppressed yield when applied in July. Better results were obtained when application was made in August and September. For more information see:

- [Identifying sow thistle](#)
- [Annual Research Results 2020/21](#) (pages 57-59)
- [Annual Research Results 2019/20](#) (pages 48-52)
- [White clover harvest and weed management seminar booklet](#) (April 2026)

Maize

Fall armyworm in volunteer maize

As winter begins, an important question for maize and sweetcorn growers is whether fall armyworm (FAW) can survive locally and contribute to infestations the following spring. Unlike many temperate insect pests, FAW does not enter a true diapause, or hibernation stage. Survival depends on access to suitable host plants and environmental conditions that allow continued development. This means green host plants present through winter may help support local populations.

During the 2025–26 season, high numbers of adult moths were detected in pheromone traps after maize harvest. While trap catches do not confirm overwintering, they indicate substantial late-season activity and highlight the need to better understand where FAW may persist during winter.

Volunteer maize as a green bridge

Volunteer maize is one of the most likely hosts to support FAW between cropping seasons. It is a preferred host and can remain green for extended periods following harvest, particularly where grain losses occur or winter conditions are mild.

FAW infestations are not always obvious. Small volunteer plants can appear healthy despite harbouring larvae within the whorl. For this reason, destructive sampling is important. Pulling plants apart and inspecting the growing point and leaf whorl is often the best way to detect FAW activity.

Volunteer maize is unlikely to support the entire overwintering population. Other hosts, including kikuyu, ryegrass and other grasses, may also contribute. However, volunteer maize is easy to identify and provides a useful indicator of local FAW activity.

Reducing risk

Reducing grain losses at harvest is one of the most effective ways to minimise volunteer maize populations. Early control of volunteer plants can reduce the availability of suitable hosts through autumn and winter.

Where cultivation is used, soil disturbance may also reduce the survival of FAW pupae by exposing them to weather and natural enemies.

Scouting is key

Regular scouting is the most important management tool. Monitoring volunteer maize throughout winter, particularly in warmer regions, can provide an early indication of local FAW survival.

This is especially relevant for early planted sweetcorn crops. FAW has previously been detected under sweetcorn cloches during late August and early September.

As research continues, volunteer maize should be viewed as an important indicator host. Winter scouting may provide valuable insight into the level of FAW pressure growers might expect in the coming season.

Further information:

- [FAW website](#)
- [2026 Maize winter workshops presentation](#) (FAW section begins at 1:24:47)
- [Maize winter workshops 2026 booklet](#)

Weather Updates

Long-term climate outlook

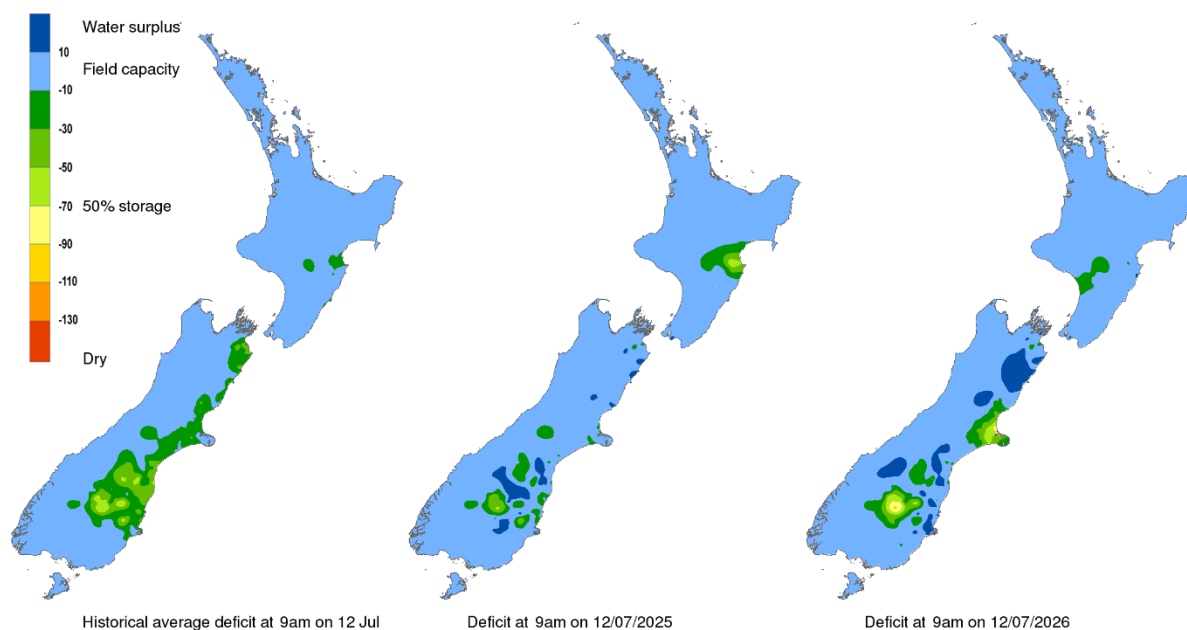
According to [Earth Sciences New Zealand](#), El Niño conditions have now been met in the Pacific, and while this is not having a direct impact on New Zealand yet, it will be a dominant feature of our weather systems in summer and beyond. This means over the next three months, the characteristic westerly flows typical of El Niño will become more common, leading to near or above average temperatures for the whole country. Rainfall on the South Island's west coast will be higher than usual, but everywhere else is either likely to have lower rainfall than average, or equally likely to be near normal or below normal. Water availability could become an issue in some areas this summer. In the shorter term, the remainder of this winter is expected to be unusually windy, with considerable temperature variability.

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 Earth Sciences NZ [here](#).

Soil moisture deficit (mm) at 9am on 12/07/2026



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