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Editor's note

Harvest is still underway for some, while others are focused on autumn sowing. FAR staff are in the middle of the autumn round of ARG meetings, meeting with growers to discuss current production challenges and opportunities, and how our research can support them. The message is consistent: profitability remains under pressure, and this needs to be a central consideration in everything we do.

With this in mind, FAR has worked with Macfarlane Rural Business to develop updated costs of production for a range of irrigated crops...see below. The spreadsheets cover the season just gone as well as forecast costs for the 2026/27 season. We hope this helps inform your arable planning. The sheets can be edited. Allowing you to insert your own farm numbers to calculate figures specific to your own situation. [Download Cost of Production sheets here.](#)

Crop management

General

Updated costs of production

Costs on this sheet are for a standard set of crops from a case study of a typical irrigated Mid-Canterbury arable farm with a mid- to high-input system, using contractor prices. As such, these figures may not exactly reflect your particular farm system. They provide historical trends and a tool for growers to include inputs and prices that are closer to their own situations and regional locations.

There are two spreadsheets. The first is based on forecast figures for the for the 2026-27 harvest. The second is based on 2025/26 figures. [Download Cost of Production sheets here](#)

Input efficiency tips

With concerns about fuel and fertiliser prices increasing, FAR Technology Manager Chris Smith has some tips for doing your best to use inputs as efficiently as possible. [Find out more here.](#)

Autumn weed management and herbicide resistance

Herbicide-resistant weeds are becoming more of a pressing issue on arable farms. Autumn is a time when key tools can be employed to prevent the development of a herbicide-resistant weed population in autumn-sown crops.

It's also a good time, if you have a free moment, to create an on-farm biosecurity plan for the coming months and season. Having a plan involves all staff and visitors in the battle against weeds and herbicide resistance.

An on-farm biosecurity plan

FAR have produced an arable farm biosecurity register to help you create a clear biosecurity plan. It covers six areas:

- Visitors, e.g. contractors and consultants, and their vehicles, clothing, tools etc.
- Machinery, particularly contractors'.
- Livestock and brought on feed.
- Seed and plant material, including using tested clean seed and detailed record keeping.
- Monitoring for biosecurity incursions, particularly regular crop walks, and what action to take if they occur.
- Good communications with neighbours, contactors, advisors and everyone involved in the farm business.

For more information and to download the risk register see www.far.org.nz/resources/arable-biosecurity-risk-register

Particular issues for weed biosecurity include: the movement of people, machinery, seeds and animal feeds on the farm and develop protocols for reducing these risks. For example:

- Requirements for machinery clean down and movement on and off the farm.
- Requirements for personnel visiting the farm and specific crops.
- Certification of seeds and ensuring clean seed.
- Specifications for imported feeds and moving feed within farm from known weedy areas.
- Undertaking regular crop scouting, particularly at crop establishment when many weeds germinate, but, also towards and before harvest when escaped weeds are larger, easier to identify and before they set seed.

Autumn weed management

a. Cultivation

Cultivation before planting can promote a flush of weeds, which can make for a more even germination that is easier to control. Delaying sowing after the first cultivation pass can allow the use of a stale or false seedbed, which improves the effectiveness of herbicides.

Note that no-till practices don't inherently raise the risk of herbicide resistance developing, but will change the type of weeds that are prevalent. Smaller-seeded species will predominate and this will need to be considered when planning weed control programmes. Remember also that weed control in cereals after a grass seed crop can be particularly challenging because of the weed seed bank left in the soil post-harvest. Many growers choose to plough the seed under in this situation.

Recent FAR research has shown that strategic ploughing can reduce weed biomass and improve yield. No-till plots in the long-term establishment trial at Chertsey had more weeds than other types of cultivation, but after a one-off cultivation these plots showed lower biomass.

b. Pre-emergence herbicides

The biggest single risk factor for the development of herbicide resistance is the overuse of a single type of herbicide. Almost all herbicide resistance on New Zealand arable farms is to active ingredients in the Mode of Action (MoA) Groups 1 and 2. Both groups are used as post-emergence herbicides, so including a pre-emergence option can greatly reduce the risk of any herbicide-resistant weeds surviving. Weeds are also considered to be much less likely to develop resistance to pre-emergence herbicides – worldwide there are very few cases.

c. Consider your rotation

Having a diverse rotation allows the use of herbicides from different MoA Groups, as well as providing a different competitive environment that may change what type of weed is an issue. Also consider including cover crops and/or spring-sown crops, which further disrupts weed life cycles. If you know that certain paddocks are an issue (or you suspect they might be), focus your efforts there.

d. Non-chemical control

FAR has been investigating the use of spring tine weeders as a method of non-chemical weed management over the past few seasons. They are mostly used when the crop is small, but big enough to survive the treatment. The tines break up and/or bury the weeds while leaving the crop intact. Other types of mechanical weeder exist. The big advantage of mechanical weeding is that herbicide resistance is not an issue. Read more [here](#).

Further resources:

- [Herbicide resistance webinar](#) (2025)
- [Integrated Weed Management](#)
- [Herbicide Screening Trial Results](#)
- [Management of ryegrass weeds](#)
- [Extra 144 Vulpia hairgrass](#)

Cereals

Aphid monitoring

Sticky traps are now in place in most of the Canterbury paddocks, with only Methven, Lincoln and Pleasant Point still to be set up. Southland monitoring will also come online in May.

Limited monitoring data was available at the time of writing for the current season, but where data has been collected, aphid flights have been observed. Later-sown crops often miss these flights, which are the source of primary infection for YDV (Yellow Dwarf Virus). At this time of year, cereals sown with insecticide seed coating are unpalatable to aphids, and hence protected from early infection, which is the most damaging time for cereals to be infected with YDV. Crops sown with insecticide-coated seed are generally considered to be protected from YDV infection until tillering (GS21).

Remember that you can get the latest in Aphid Monitoring data for your region, as well as information on insecticides and other aspects of aphid management, at the [Aphid Chat](#) website. Guidance on assessing the growth stages of cereals can be found [here](#) too.

For further information, see p34 of the recent [Autumn Roundups booklet](#); you can also watch the online version of the Southland Roundup [here](#). The relevant part starts at 1:22:17.

Herbage

Weed control in white clover

New white clover plantings establish quickly, so it's time to get out and identify any problem weed species in your crop. A common post-emergent herbicide at this time of year is flumetsulam (mode of action Group 2, e.g. Preside™). The flumetsulam label states that the crop should be past the four trifoliate leaf stage (but before stolon elongation) and that weeds should also be small. Some

formulations of flumetsulam (e.g. Headstart®) state that they can be applied any time after emergence, but warn of the likelihood of some temporary yellowing and suppression of the crop.

Another option is Dynamo®, which contains bentazone (Group 6) in addition to flumetsulam. (Note that other formulations of bentazone exist.) Bentazone widens the range of weeds controlled, but is less effective in cool (less than 20°C) weather. The Dynamo® label states that crops should be past the two trifoliolate leaf stage, but before stolon elongation. Some growers suggest that both products can be used at earlier crop stages without adverse effects. Refer to the spray labels for lists of weeds controlled. Note that Dynamo® is often not used until temperatures warm up in spring.

You should also have a plan for any weed seedlings not controlled by the above sprays. Leaving control of species such as sow thistle (*Sonchus* spp.) until late winter/spring will make control much more difficult. Including a second herbicide such as MCPA or MCPB (both Group 4) in a tank mix may be worth considering. Research results on this topic are available [here](#) (see page 48). Always read the herbicide label before use.

Grass weeds are generally considered easier to control in white clover seed crops. The mode of action Group 1 (“-fops” such as haloxyfop-P-methyl (Group 1, e.g. Gallant™ and generics) or clethodim (Group 1, Arrow® and generics)) is an important weapon. However, populations of grasses with resistance to Group 1 herbicides do exist, and overusing a single active in a single area will lead to these herbicide-resistant populations dominating. Propyzamide (Group 3, Kerb™/Polka™) is a good alternative where Group 1 herbicide resistance is known or suspected. Order your propyzamide now to ensure you have the product on hand when the weather is right for application.

The table below lists herbicides suitable for use on white clover seedling crops (see next page). You can also browse the latest information from this year’s trials in the booklet content associated with the Clover Weed Management event held this week. [Find it here.](#)

Active ingredient	Trade name(s)	Target weeds	Mode of Action Group
clethodim	Arrow® and generics	Grasses	1
flumetsulam	Preside™, Headstart® and generics	Broadleaf	1
diflufenican + bromoxynil	Argosy® etc.	Broadleaf	12 + 6
bentazone		Annual broadleaf	6
propyzamide	Kerb™/Polka™	Grasses & sorrel	3
MCPA/MCPB		Broadleaf	4
imazethapyr	Spinnaker® etc.	Broadleaf and grasses	2

Maize

Time to reconsider maize establishment?

While harvest is still the focus for maize growers right now, some are already planning for next season. As diesel prices increase, the case for establishing maize using reduced tillage methods becomes even stronger. FAR trials have shown better results for reduced tillage systems on good soils, for both maize grain and silage. Read more [here](#).

Oilseed rape

Weed control in new oilseed rape sowings

Most oilseed rape crops have been sown, so it's time to be thinking about weed control. Pre-emergence herbicides such as trifluralin (Group 3) will have done much of the job already, but be on the lookout for potential problem weed populations, and consider a post-emergence spray if needed. Two Group 1 herbicides that are commonly used are fluzifop-P-butyl (Fusilade® Forte) and clethodim (Sequence™ and other generics). If herbicide resistance to Group 1 herbicides has been identified or suspected in the area, consider using Kerb® (propryzamide, Group 3) instead. Note that haloxyfop is not to be used on any oilseed rape crop, and remember that continued use of herbicides from a single mode-of-action group can lead to the development of an herbicide-resistant weed population over time.

Weather Updates

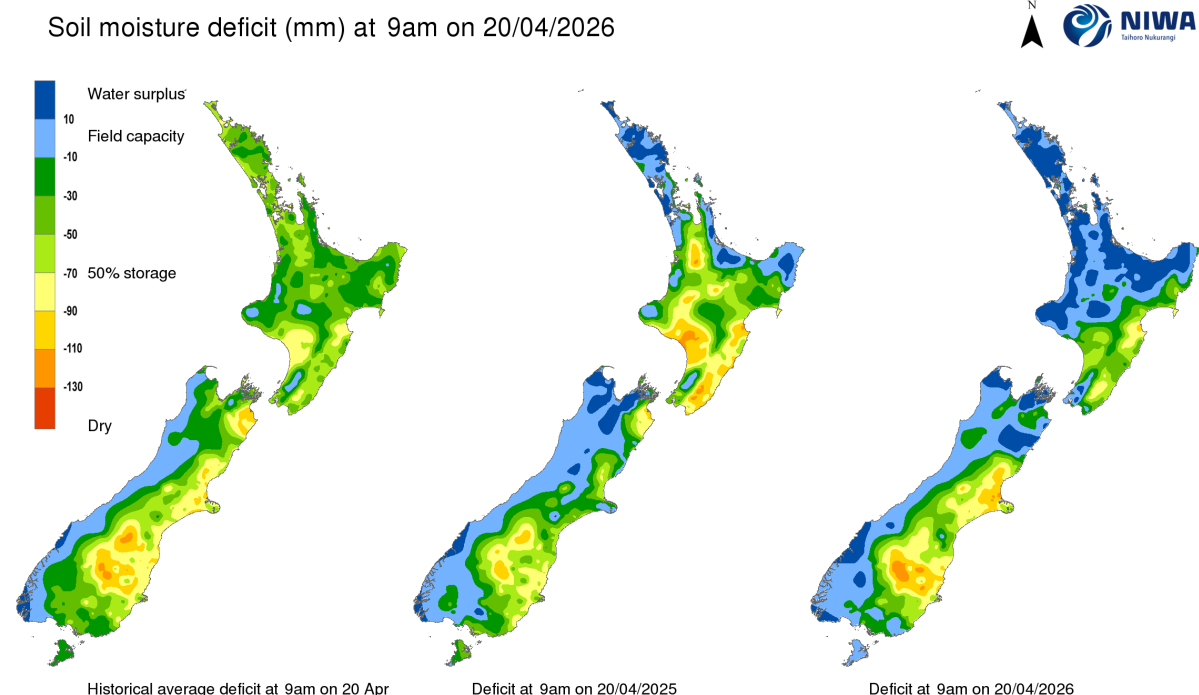
Long-term weather outlook

NIWA's [outlook summary](#) for April-June, predicts temperatures close to the long-term averages for all of New Zealand, although there will likely be cold snaps as we head into winter. Rainfall levels will also be close normal in the South Island, but the North Island is equally likely to experience normal or higher than normal rainfall totals. There could be some drier periods towards the end of this three-month period. The risk of heavy rainfall events due to tropical or sub-tropical influences is still elevated in April.

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](#).



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