# Crop Action

## Issue 21 Sunday 15 November 2026

### *In this issue of Crop Action:*


- Cereals: Spring disease manegment, Yellow dwarf virus (YDV) in cereals
- Herbage: Cocksfoot disease management, Irrigation management for grass seed crops, Disease management in turf ryegrass seed crops
- Maize: Soil testing, Potentially Mineralisable Nitrogen (PMN) and side-dressing, Post-emergence weed control in maize, Fall armyworm
- Other crops: Ascochyta management in peas, White blister disease management in radish seed crops
- Weather updates: Long-term climate outlook, FAR weather tool and soil moisture data


## Editor's note

We are now less than two weeks out from FAR's big field day – the ever-popular CROPS event, at our arable site near Chertsey. We have a full programme planned for the day (which can now be viewed at the link above), including international guest speakers Adam Christie from Scottish Agronomy and compaction expert Philip Wright. We look forward to seeing everyone to chat all things arable.

## Regional updates

### *Southland*

The wheels appear to be back on track (and in the paddock) for most after the rough start to spring. The last of spring planting is underway with reports of spring-sown crops germinating well. The weather conditions have been variable; western Southland is looking for some heat while eastern Southland has muggy conditions and aphids are starting to thrive.

The South Otago Southland Arable Research Group meets next week to discuss research priorities for the year ahead. If you feel strongly about a particular research gap in the region, get in touch with one of our ARG members – a list of SOS members can be found here.

I look forward to seeing you at the end of the month at the Southland cereals CPT field walk. More information can be found here. *Nicole Foote, FAR Regional Coordinator*

### *South Canterbury/North Otago*

Crops are well established and looking good. Continued rain at the right time from now through to December will have them set up well, with some heat required to finish crops off. *(Philippa Rawlinson, FAR Regional Coordinator)*

### *Mid-Canterbury*

After a warm couple of weeks and good crop growth, the outlook is set to change, with showery easterlies and cooler temperatures expected over the next fortnight. Most crops are established or emerging well, and sowing, spraying and irrigation are progressing. Crop health decisions are front of mind, although disease pressure is relatively low at present. Ryegrass paddocks have been closed, with nitrogen and growth regulator applications due to be completed soon. Maize planting is well underway with many looking to grain rather than silage. Livestock performance and lamb returns have also been positive.

There is still a fair bit of grain remaining on farm, with prices yet to lift as hoped. Insect activity in stored grain is a concern. Grass-weed escapes and suspected herbicide resistance are appearing in some paddocks, highlighting the value of good establishment and timely management. Many growers are now irrigating full time, but with rain forecast, keep checking soil moisture and irrigate only when needed. *Cindy Lowe, FAR Regional Coordinator*

## Northern North Island

Hail on 29th October has left areas of crop around Leeston & Southbridge with damage. The most common damage reports are bruising and minor shredding of leaves which growers hope will have limited yield impact at this time of the season. However, some areas of more severe damage have led to the silaging of early barley and ryegrass, peas being redrilled and radish being abandoned.

Irrigation is in fuly swing across NSI. Regular showers are helping irrigators to keep pace with crop demand.

Autumn wheats have had their flag leaf & T2 sprays; Spring wheats having PGRs & T1. Reports are that crops are largely clean for disease but some strip rust and septoria present lower in canopy which may not pose too much of a threat.

Spring barley has had first PGR, heading towards T2 & terpal timings. Early fungicides have done a good job keeping crops clean. A good spring with moisture underfoot has seen barley needing a strong PGR programme due to extra growth.

Grass seed crops are closed, with PGR & fertiliser programmes ongoing.

Winter feed is going in the ground, with reports of larger areas being planted this year in response to market conditions.

FAR surveys completed in NSI over the last summer have showed an increase in the number of farms with herbicide resistance, including multiple resistance to both group 1 & 2 which was picked up on 11% of farms in the survey. Continued vigilance is needed. Monitor all crops over the next month to assess effectiveness of herbicide programmes. Manage any weeds that have escaped herbicide programmes and reduce seed set by rouging, spot spraying or mulching/silaging. Watch old fence lines in amalgamated paddocks, which can be weed hot spots. *(Donna Lill, FAR Regional Coordinator)*

## Southwest North Island

Most maize crops across the SWNI region have now been planted, with only a small number of cereal and pea paddocks still to go in. A dry winter has left soil moisture levels lower than usual at planting, but the favorable spring conditions have provided some excellent planting windows and crops have established well. The dry season has also helped lift soil temperatures, supporting establishment and early growth.

Crops are performing well with the help of timely rainfall events so far this season. Having regular rainfall throughout the remainder of the season is going to be very important for sustaining crop growth and maximising yield. Overall, it has been a very good start to the season and things are ticking along nicely in the SWNI region. *(Eddie Harris, FAR industry graduate)*

### *Northern North Island*

Growers have had a good run through planting, and most is now complete. It has been very dry across the wider Northern North Island. Despite this, crops are looking healthy with crops ready for post-emerge treatments. *Philippa Rawlinson, FAR Regional Coordinator*

# Crop management

## General

## Cereals

### *Spring disease management*

Autumn-sown cereals are now at, or approaching, T1 fungicide timing, with some already past this point. The extent to which disease develops in a crop is a balance between disease pressure and field resistance. Disease pressure for *Septoria tritici* blotch (STB) varies between seasons and is determined by the amount of inoculum present, weather conditions and region.

The key weather indicators for disease pressure are wet weather and high relative humidity (>85% for 20 hours or more) between the start of stem extension (GS 30) and the end of ear emergence (GS59), especially during October and November. By monitoring weather conditions during this period, you can determine disease pressure and an appropriate disease management programme. Field resistance is determined by cultivar and crop management (sowing date, stubble management, etc).

The tables below can be used to estimate the likely time between a risk period and the first STB symptoms appearing. Use Table 1 to look for risk periods in your region, then add the latent period from Table 2 to find the optimum time to spray for STB.

Additional resources:

- Latest arable updates on fungicide resistance and management:
  - Cereal Update 232
  - Cereal Update 233
  - Cereal Update 234
  - Cereal Update 235
  - Cereal Update 236
- 2024 Cereal disease management strategy
- Cut the Crop

**Table 1.** Latent period (days) of STB from October 11th to November 8th, 2026.

| | **2026** |
|---|---|
| **Methven** | 20 |
| **Wakanui** | 19 |
| **Timaru** | 20 |
| **Fairlie** | 20 |
| **Gore** | 20 |
| **Levin** | 18 |

**Table 2.** Total precipitation in mm from October 11th to November 8th, 2026.

| | **2026** |
|---|---|
| **Methven** | 74 |
| **Wakanui** | 53 |
| **Timaru** | 52 |
| **Fairlie** | 44 |
| **Gore** | 92 |
| **Levin** | 54 |

**Table 3:** Risk periods (relative humidity periods (RH>85%)) for the past four weeks (October 11th to November 8th, 2026) for key cereal-growing regions of New Zealand. Risk periods are represented by red boxes.

| Date | October | | | | | | | | | | | | | | | | | | | | November | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Methven | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wakanui | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Timaru | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fairlie | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gore | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Levin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

### *Yellow dwarf virus (YDV) in cereals*

Aphid numbers are now beginning to ramp up in many parts of the South Island, as is usual for the time of year. However, some sites are still showing very low numbers and everywhere is well behind what many growers experienced last season. YDV symptoms on autumn-sown cereals are much harder to find as well. While some of this is no doubt attributable to a more robust foliar insecticide programme from growers, there are also several growers who have not sprayed this season, where aphid pressure is about the same (and in some cases lower) as the sprayed crops. The threat was certainly real early in the season, with June staying warm well into the risk period, but spring was a different story, with frosts and southerly fronts keeping aphid populations in check at key times. Spring-sown crops that are yet to go past GS 32 might still warrant a well-timed insecticide – it's worth a check on your crop before making the call. Aphid monitoring has now concluded for the season in most locations (Southland may continue for a bit longer, and some spring crops are being monitored).

## Herbage

### *Cocksfoot disease management*

In recent years, FAR and SIRC have been conducting trials on management of downy mildew (*Sclerophthora cryophile*), a disease which has become a significant issue in cocksfoot seed crops, particularly in Canterbury. The disease is characterised by head bleaching and reduced seed yield. The causal organism for downy mildew is an oomycete, not a true fungus, so regular fungicides are often less effective, requiring a more tailored approach. Products such as Phoenix® (500 g/L folpet) and

Ridomil® Gold (40 g/kg metalaxyl-M + 640 g/kg mancozeb) have been found to be the most effective in FAR trials.

Foschek® (400 g/L phosphorous acid) also shows promise, and an additional trial was established during the 2024-25 season to investigate the optimal timings and rates. In the 2024–25 trials, Foschek® applied at 5 L/ha as part of integrated programmes with other oomycete-targeting fungicides further demonstrated its potential effectiveness. Further work is needed to confirm the most effective growth stage application timings for Foschek® in cocksfoot seed crops.

The disease is more severe when conditions have resulted in prolonged leaf wetness, so if you are in this situation, consider applying a control spray such as the ones listed above. If a fungicide is warranted, note that fungicide applications at ear emergence and flowering have shown to be the most effective in FAR trials. Be sure to also take into account any withholding periods listed on the fungicide label, especially if the crop will be used for animal feed post-harvest.

Also note, it is important to be aware of the risks of fungicide-resistant pathogens developing; this can be mitigated by rotating between different active ingredients and making sure to stick to label instructions regarding the number of applications allowed in one season.

Further reading: FAR Focus 16: Cocksfoot Seed Production

### *Irrigation management for grass seed crops*

FAR trials have shown that browntop (*Agrostis capillaris*) seed crops have a high water demand in late maturity. Therefore, irrigation management that prevents the crop from reaching the point of drought stress is key. Browntop seed crops are less drought-tolerant than ryegrass, wheat or cocksfoot, so it is important to keep them irrigated throughout the season, particularly during hot, dry periods. Find out more in Herbage Update 82: Irrigation management for browntop seed crops.

Perennial ryegrass seed crops, while more drought-tolerant than browntop, still benefit from irrigation – FAR trials in Canterbury have shown that around 220-320mm of irrigation increased seed yield by 520-1300 kg/ha. Ideally, irrigation should replace 50-66% of evapotranspiration (ET), to leave room for rainfall. Read Herbage Update 80: Irrigation management for perennial ryegrass seed crops here.

### *Disease management in turf ryegrass seed crops*

The principal disease limiting seed yield in turf perennial ryegrass seed crops is stem rust (*Puccinia graminis* subsp. *graminicola*). The first application of fungicide for these crops typically goes on at GS 32, coinciding with the emergence of final leaf three. Follow-up sprays are required at ear emergence and flowering, with a fourth spray included two weeks later if disease pressure is high. FAR is currently preparing a comprehensive update on this topic to be published in November, but in the meantime, some key considerations are listed below.

- The GS 32 application is often thought of as a preventative measure, since the severity of how the disease will present is not known at that stage. In some seasons and under some market conditions, the GS 32 fungicide application may not be economically beneficial.

- Fungicides from multiple modes of action (DMI (triazoles), QoIs, SDHIs) should be included in the programme but always keep in mind that that some products are limited in the number of times they can be used in a season. Consult with your agronomist and always read the label of any agrichemical product before use.
- Fungicide resistance is a continual threat. Fungicides from different Fungicide Resistance Action Committee (FRAC) mode of action groups should be used in mixtures or with alternation within a programme wherever possible.
- Proline (prothioconazole, Group 3) is the backbone of stem rust programmes, but FAR data shows benefits in including strobilurins and SDHIs to the programme. These will also help prevent fungicide resistance.
- A tool to predict when weather conditions are favourable for stem rust spore germination is available in the "Weather" section of the FAR website. Click on the "Pest & Disease" section at the top of the page.
- As harvest approaches, any fungicide application should be planned to ensure the product's withholding period can be met before cutting.

Forage-type seed crop management is different. New Zealand-bred forages have a lower stem rust risk, but a starting programme for managing stem rust will normally incorporate fungicide applications at GS 32 with a PGR, plus one application at head emergence. It is also important to note that many forage-types will include a proprietary endophyte. Proline® can significantly impact endophyte viability on sensitive endophyte strains. Identify the endophyte strain carried by the cultivar and confirm the seed company's endophyte requirements before finalising the fungicide programme.

Further resources:

- Arable Update 84
- Arable Update 87

## Maize

### *Soil testing, Potentially Mineralisable Nitrogen (PMN) and side-dressing*

North Island maize growers may be making side-dressing N decisions now, with South Island growers to come in the next few weeks. FAR has undertaken a considerable amount of research to develop good practice strategies and tools for nitrogen side-dressing; these include the DeepN soil test protocol, the AmaizeN calculator, and the Nitrate Quick Test.

Given the price of N and the contribution N fertilisers have on GHG emissions, to optimise nitrogen-use-efficiency a soil sample should be collected to a depth of 60 cm before side-dressing to determine the amount of plant available nitrogen in the soil. If soil type and yield zones are known within the field, representative DeepN samples should be collected by each soil type and yield zone. If these zones are not known, a standard sampling protocol should be used for the field, taking care to avoid areas of the field where animals may have congregated or other anomalies might have occurred. A Nitrate Quick Test or Min-N lab analysis can then be completed to determine the amount of available soil nitrogen, and from there, a nitrogen side-dressing plan completed.

Potentially mineralizable Nitrogen (PMN) can also be considered when making decisions, to fine-tune side-dressing decisions. Soil test results will give a figure under optimal conditions – count on 20-50% of this value becoming available during the season. The exact number depends on soil temperature and moisture. This value can then be used to adjust side-dress N amounts. Read more on this topic on page 36 of FAR's Annual Research Report 2021-2022.

For more information, refer to the resources below.

- Soil nitrogen supply calculator
- Nitrogen: The confidence to cut back, FAR Focus 14
- The Nitrate Quick Test Mass Balance Tool and User Guide
- AmaizeLite – N calculator for maize
- Nitrogen use efficiency in maize

### *Post-emergence weed control in maize – weed size matters*

Target early-emerging weeds before they become too advanced, rather than delaying spraying to catch later flushes.

- Start with a robust pre-emergence programme. Residual herbicides reduce weed pressure and subsequent flushes, supporting more effective post-emergence control.
- Follow label limits for both maize and weeds. Late applications can reduce weed control and risk crop injury.
- Judge weeds by growth stage, not physical size. Small fathen and grass weeds may already be near their treatment limits. Oversized fathen can appear badly damaged after spraying but recover and produce seed.
- Inspect paddocks carefully, especially for grasses. Summer grass can develop beyond the three-tiller stage in as little as 10 days under favourable conditions, making the effective treatment window short (see picture).
- Prioritise the first weed flush. Early weeds pose the greatest competitive threat. Manage later-emerging weeds separately without compromising early control; maize canopy development generally suppresses their growth and seed production.
- Read more here.

Below: Summer grass (*Digitaria sanguinalis*) with three tillers. These plants are small and can be easily overlooked. *(Photo credit: T. K. James, AgResearch)*



## *Fall armyworm*

Maize planting is now well underway across New Zealand. As crops emerge and develop, regular scouting for fall armyworm (FAW) is important. Early detection gives growers more time to assess damage levels and make informed management decisions.

Over the past two seasons, FAW has generally caused greater problems in later-planted maize and sweetcorn, as FAW populations increase as the season progresses. Where conditions allow, early planting remains a useful part of managing this risk.

### *Start scouting as soon as plants emerge*

Once crops have emerged, regularly check for signs of FAW activity. Look for:

- Windowing or small holes in leaves.
- Larger holes and feeding damage as larvae develop.
- Frass around feeding sites.
- Larvae in the whorl or on leaves.
- Plants showing signs of significant feeding or damage.

Correct identification is important. FAW can be confused with other caterpillar species found in maize and sweetcorn. When scouting for FAW, record other caterpillars you find and, where possible, take photographs. This information helps build a better understanding of pest activity across regions.

Cutworm is also worth watching for, particularly while crops are emerging and plants are young. Despite treated seed, high cutworm infestations have occurred in several regions over the past couple of seasons. Including cutworm and other caterpillars in your normal FAW scouting will help ensure potential pest problems are not overlooked.

### *Use the FAW resources*

The FAW website www.fallarmyworm.nz has many resources to help identify FAW damage. It also includes identification guides, information on FAW damage at different larval stages, scouting guidance, economic thresholds and information on other caterpillar species that may be encountered during crop inspections. Visit the Resources section of the website and use these tools when scouting your crops. A recent FAR webinar providing practical guidance on finding and identifying FAW in the crop can be viewed here.

### *Key actions*

- Scout early: start checking crops once they emerge.
- Scout regularly: continue monitoring as crops develop and temperatures increase.
- Know what you are looking for: use the website resources to help identify FAW larvae and recognise FAW damage.
- Look beyond FAW: record cutworm and other caterpillar species found during scouting.
- Record your observations: note the location, crop stage, pest observed and level of damage where possible.
- Report FAW activity: your observations help build a better picture of FAW activity and seasonal risk across New Zealand.

Local information improves timing and outcomes. Your observations are important. Please report FAW activity and outcomes to ashley.mills@FAR.org.nz.

## Other crops

### *Ascochyta management in peas*

*Ascochyta* is an ever-present risk for pea crops, and if under irrigation or in other higher-pressure situations, considering your options might be worthwhile. A FAR trial last year suggested copper-based products might provide an effective alternative to Amistar®, although the window for application is important to ensure it's not washed off by rains. Tri-Base Blue® is a registered copper product for peas. Page 16 of this year's FAR Autumn Roundups Booklet has more information on this topic.

### *White blister disease management in radish seed crops*

White blister disease is caused by the oomycete *Albugo candida*. Management programmes are usually based around the fungicide Ridomil® Gold, with the addition of other fungicides to improve efficacy and guard against the development of fungicide resistance. First fungicide application is usually within the next few weeks. Read more on this topic here.

## Weather Updates

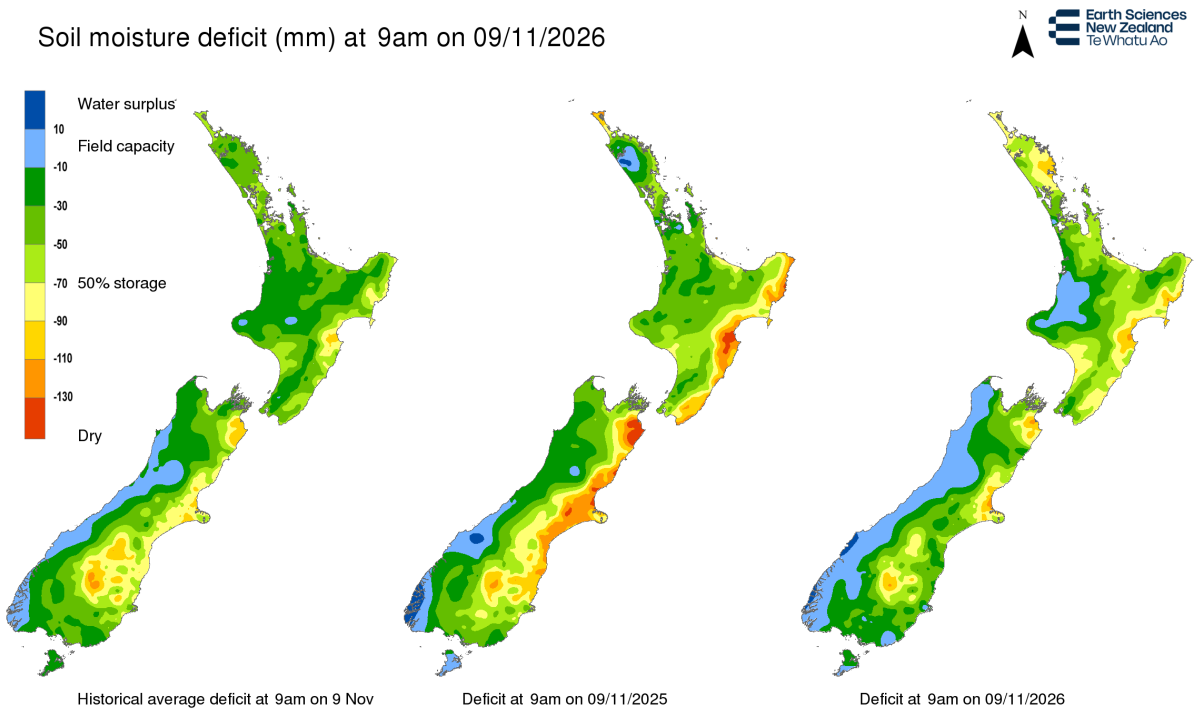
### *Long-term climate outlook*

El Niño is now firmly established in New Zealand, having strengthened during October, and is expected to reach its peak over the next three months. Westerly-quarter airflows (northwest, westerly and southwest) will predominate, with periods of unsettled weather, particularly for the South Island. The west and south of the South Island will be wetter than usual, while the east of the North Island will be drier. The north of the North Island may also have a drier than usual summer. The whole of the North Island and the east of the South Island are also likely to experience higher than usual average temperatures. Periods of unusually hot weather could hit the east of both islands. Read more on the Earth Sciences NZ website.

### *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.




## Contact the editor



Ben Harvey
Ben.Harvey@far.org.nz

***Alternatively, email one of our research leaders:***

Cereals - Jo Drummond
Maize – Rene Van Tilburg
Seed production – Sean Weith

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