

## Issue 20 Sunday 1 November 2026

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### Editor's note

There is cautious optimism among arable growers that I've talked to over the past couple of weeks. Crops are set up well for this time of the season; there is good soil moisture (for now), and disease and pest pressure has been manageable. Getting the most out of a strong start will require careful management of inputs going forward. Some coastal Canterbury growers were hit by hail on Thursday evening. Initial damage reports vary in severity by exact location and crop.

FAR is continuing its field events, including cereal snapshots, maize and ryegrass field days. Previous cereal snapshots can be found on [FAR's YouTube page](#). Also, of course, FAR's annual CROPS field day is coming up on Wednesday 25 November. We have a great line-up of speakers including Adam Christie from Scottish Agronomy, who will be talking on the importance of cereal genetics, so we hope to see as many of you there as possible. You can find details about this and other FAR events [here](#).

### Crop management

#### General

#### *Does your crop need micronutrients?*

FAR has received a few enquiries about whether it is worth applying a product that provides micronutrients to the crop. "Essential" micronutrients are trace elements that are essential for crop growth, but in very small quantities. Other micronutrients are important for animal health but not essential for crop growth.

| Essential micronutrients |    | Micronutrients for animal health |    |
|--------------------------|----|----------------------------------|----|
| Boron                    | B  | Cobalt                           | Co |
| Iron                     | Fe | Selenium                         | Se |
| Copper                   | Cu | Iodine                           | I  |
| Manganese                | Mn | Fluorine                         | F  |
| Molybdenum               | Mo |                                  |    |
| Nickel                   | Ni |                                  |    |
| Zinc                     | Zn |                                  |    |
| Chlorine                 | Cl |                                  |    |

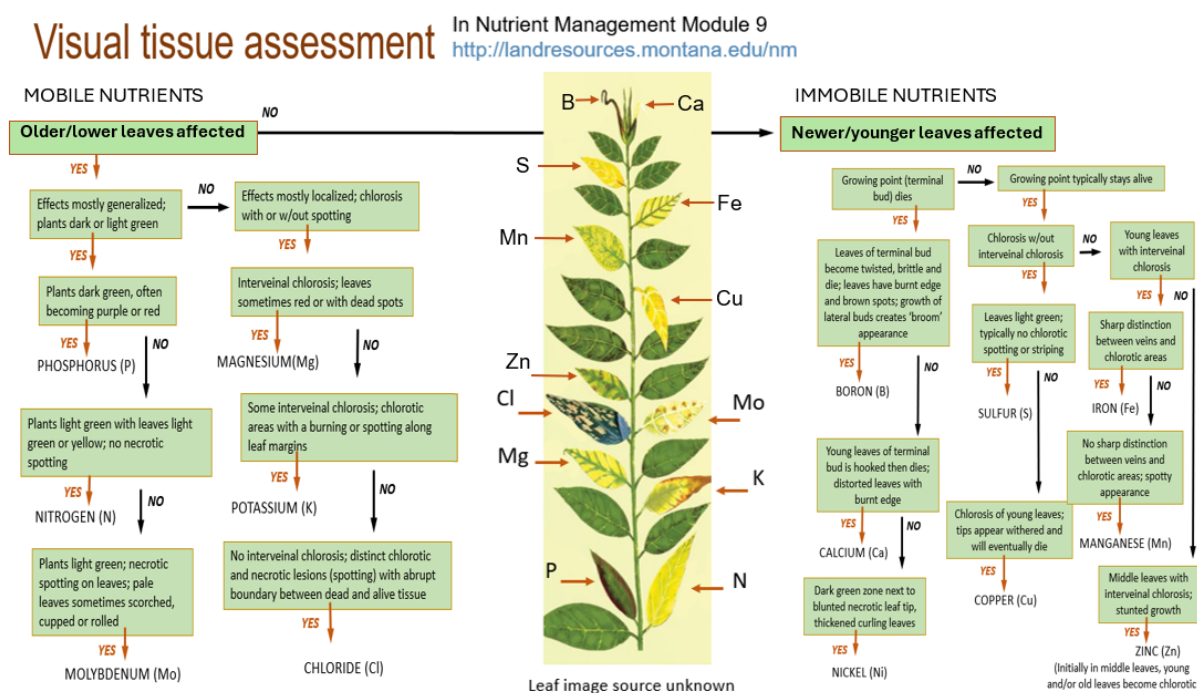
Only apply a micronutrient product when an actual deficiency has been identified by soil or tissue testing or observed plant symptoms (see Figure 1). Then choose a product which is backed by,

independent testing under New Zealand conditions. Seek advice from a trusted rural professional. For more information on micronutrients, see X146, below.

## Further reading:

- [X145 Spring nutrient requirements](#)
- [X146 Micronutrients: On-farm decision making matrix](#)

**Figure 1:** Using plant tissue symptoms to identify nutrient deficiencies.



## 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.

- 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](#)

|         | 2026 |
|---------|------|
| Methven | 21   |
| Wakanui | 20   |
| Timaru  | 23   |
| Fairlie | 22   |
| Gore    | 21   |
| Levin   | 20   |

|                |             |
|----------------|-------------|
|                | <b>2026</b> |
| <b>Methven</b> | 63          |
| <b>Wakanui</b> | 45          |
| <b>Timaru</b>  | 48          |
| <b>Fairlie</b> | 48          |
| <b>Gore</b>    | 46          |
| <b>Levin</b>   | 44          |

[illegible]

### ***Aphid monitoring***

Spring cereals can benefit from a well-timed foliar insecticide between GS 21 and GS 32. Aphid monitoring continues in the South Island for another three weeks, but we are now past the major risk period for autumn-sown crops. Despite a warm start to winter, the season turned out to be a typical one, with timely southerlies keeping aphid populations from getting away. Winged aphid detections this time last year were ramping up significantly, but this season the numbers are down. For all the latest in aphid monitoring data, and to find useful advice on beneficial insects, insecticides and more, please visit [Aphid Chat](#). You can also check out a recent FAR publication on this topic in this [Arable Update](#).

## **Herbage**

### ***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.

You can read more on this topic [here](#), and also attend FAR's upcoming [field day](#) on the topic (among other things).

### **Small broomrape management in clover**

The parasitic weed small broomrape (*Orobanche minor*, see photo below) can be a significant issue in clover seed crops, as some export markets require the crop to be free of this weed at inspection. Seed yield may not be affected by the weed except in stressed (e.g. dryland) crops. Control options are limited, but FAR trials have shown herbicides such as Equate® (imazethapyr, Group 2) to be effective if applied before the weed emerges. October and early November were shown to be effective in one trial. Read the full Arable Update [here](#).



## 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.

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



### *Greasy cutworm management*

Maize planting is complete at FAR's Northern Crop Research Site (NCRS), and attention is now turning to other things, such as pest management. Greasy cutworm (*Agrotis ipsilon*) is a serious pest of maize, with some growers reporting severe losses last season. The current mild winter and prevailing El Niño conditions suggest this could be another bad season for this pest. Clothianidin seed treatment (Poncho®, a Group 4A insecticide), requires the cutworm to sever a treated maize plant to ingest it; thus it is only an effective choice under low pest pressure. Alternatively, a synthetic pyrethroid (SP) can be added to the

pre-emergence herbicide mix. SPs act through contact with treated soil as cutworm emerge at night, potentially controlling the pest before maize emergence.

Integrated pest management (IPM) based on pest counts, damage assessments and economic thresholds is more challenging for cutworm than for most other species. There is a lack of research establishing thresholds etc. Cutworms sever plants rather than simply damaging them, so monitoring is effectively counting dead plants. Scouting cannot reliably establish cutworm populations without carrying out test digs, as larvae are hidden below the soil. IPM practices, such as weed control during a six-week fallow (to remove green bridges) can be useful. However, a single, well-timed insecticide application (approximately \$17/ha) remains the key strategy for many growers. Reactive spraying following damage incurs an additional application cost and cannot recover plants already lost.

While insecticide resistance is a legitimate concern, cutworm control generally involves only one SP application, usually alongside clothianidin, which has a different mode of action. This considerably reduces the risk of resistance development.

You can read more on this topic [here](#).

### **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](http://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](mailto: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***

[Earth Sciences New Zealand](#) (ESNZ) are very clear that: "Very strong El Niño conditions are now present in the tropical Pacific and are expected to strengthen further. El Niño's influence on New Zealand's weather patterns is becoming increasingly apparent and is expected to be a dominant driver of climate patterns during the outlook period."

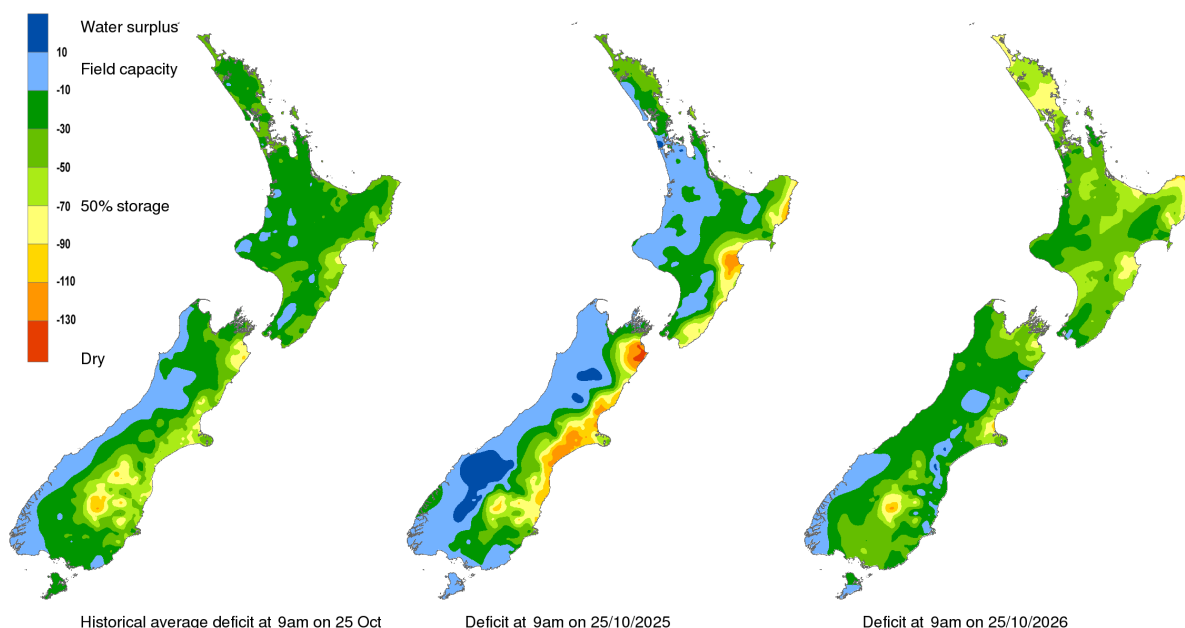
What this means for New Zealand is more (and stronger) westerly air flows, with more frequent fronts for the west and south and drier conditions in the east. We are also likely to experience significant deviations from this pattern with bouts of heavy rainfall from time to time. In general the weather is likely to be warmer and more variable than average. The South Island currently has healthy soil moisture, river flows, and snow and lake storage, but some parts of the North Island are starting to become dry. The north and east of the North Island are the most likely to experience challenges from dry conditions. Read more on El Niño [here](#).

## **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 25/10/2026



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