



Issued: August 6th, 2021

IN BRIEF

- Crops have received extremes of rainfall across the beet growing area.
- Some crops are showing yellowing and nutrient deficiency symptoms which in many cases (but not all) maybe drought related.
- Isolated cases of hail damage and waterlogging in areas of high rainfall.
- No high risk cercospora alerts triggered on the Sencrop network and no current high risks have been flagged by the Weatherquest system.
- Relatively low levels of powdery mildew and cercospora in crops.
- Vital to continue to monitor crops very closely for developing disease symptoms, especially following any rain. Ensure fungicide programmes are started at early onset of disease symptoms.
- Weed beet and bolters need to be removed now.

ADVISORY



Cercospora

No high-risk periods (conditions that will encourage rapid development of the disease) have been triggered, but average daily temperatures are expected to increase, therefore the risk may increase where rainfall and humidity is high.

Any crops that have received heavy rain showers or have been irrigated will be at a higher risk and need to be checked very closely for symptoms. Also check low lying areas of fields or areas of heavier soil types, where there may be a more humid microclimate within the canopy.

Fungicides

Applying fungicides at the early onset of cercospora symptoms is key to successful control. Only apply fungicides where symptoms are found.

It is difficult to be prescriptive about fungicide programmes as this may depend on which diseases are present, the level of symptoms and the expected weather conditions, we therefore recommend that you consult your agronomist. However, the following guide may be of assistance:

T1 – Start with a triazole/strobilurin-based product (Escolta, Mirador Xtra, Priori Gold) Follow label recommendations for rates and water volume.

T2 – If cercospora is present and risk of its further development is high (high risk period reported) a second spray may be required at 21 days. A second spray option may be a straight triazole such as Impact (Flutriafol) or even Epoxiconazole (still within the use-up period if you have the product on-farm).

BBRO have not tested copper and sulphur-based products, especially against a rapidly developing cercospora infection and would caution about relying on these products alone. They are used in other countries against cercospora (where approved as fungicides) with other fungicides to enhance the level of control.

T3 - Retaining the option of a second triazole/strobilurin product as the third spray is sensible. Timing (21 or 28 days) will depend on the progression of any cercospora and other disease symptoms. If you are targeting a later harvest and foliar disease is established, a third spray will help protect and keep canopies green.

Yellowing in crops

Yellowing is being more widely reported in crops. In some cases, this is isolated to occasional plants, in other cases the yellowing is more widespread or associated with areas of different soil type, compaction or potential nematode damage.



Fig 1 - 3: Yellowing symptoms ranging from small patches to larger areas and sometimes with associated leaf necrosis

In crops that have not received rain, moisture stress can result in yellowing and exhibit nutrient deficiency symptoms such as low magnesium and manganese. Symptoms may disappear following rain. Nutrient deficiencies can cause some leaf necrosis as well as yellowing (in the case of magnesium), particularly at the leaf margin. In areas of very high rainfall, yellowing may also be a result of transient waterlogging.

Leaf testing may be useful to confirm nutrient deficiency. In most cases, it is too late to apply granular fertilisers but where yellowing persists either after the rain or as soil dries out, a general foliar nutrient application is worthy of consideration.

We continue to see cases of capsid damage, especially on headlands and near field margins where the leaf tips have turned yellow. Some plants in areas where the soil type is either lighter/stonier or where the soil is compacted, have become water stressed and have turned yellow.

There also continues to be occasional plants or small patches showing virus infection. This would relate to primary infection points across fields.

Remember that the canopies of different varieties are characteristically various shades of green and this is quite clear at this stage of the season in crops. From a distance, it can look as if the crop is turning yellow.

Nematode patches

Suspected nematode (BCN & FLN) infestations are beginning to show up in infected fields, especially following the recent hot weather. In some cases, plants will turn yellow and begin to senesce. White female cysts of BCN are starting to show on the roots. Soil sampling for nematodes is best left until the autumn so make sure you have marked and mapped areas of concern for future reference.

Weed beet and bolters

Action is needed where there are bolters or weed beet in crops to prevent their number multiplying. Remember, that on average one weed beet plant may produce 1500 viable beet seeds.

Some weed beet are still at the pre-pollination stage and can be pulled, the stem broken and left on the crop to die. Many crops have or are now flowering, and plants may have been pollinated. As they will have potentially set seed, they need to be removed from the field.

More information and guidance on rouging and the key stages of weed beet, as well as the use of weed wiping and cutting can be found in the <u>BBRO Reference book</u>.



Missed the recent BeetField21 events? Don't worry we will shortly be hosting return visits to most of the sites to give growers the opportunity to view the 2022 variety strips. Watch out for your invite coming soon.

1st Sept: Thorney 2nd Sept: Morley 3rd Sept: Diss 6th Sept: Bracebridge

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