



18<sup>th</sup> July 2024

- Where Cruiser treated seed has been used (in 2023 or 2024) please adhere to the stewardship document regarding rotational crops. This includes cover crop mixes. (see below or visit the [Cruiser Stewardship document](#)).
- Virus symptoms are generally low with a few primary infection plants visible in crop.
- We are now receiving reports of increasing levels of foliar diseases in crops, including, rust, downy and powdery mildew and cercospora. Monitor closely and apply fungicides where appropriate.
- Avoid letting disease establish as control throughout the rest of the summer and autumn will then be problematic. Follow the BBRO 8-point plan for disease control.
- Keep on top of your weed beet and bolters – if in doubt ‘Pull them out!’
- Listen to the [July Beet Cast](#) for a foliar disease update and overview of our cercospora forecasting and monitoring programme.



## ADVISORY

### Rotational requirements for Cruiser treated crops.

Please remember the following-crop restrictions apply for subsequent crops planted on the same area of land as Cruiser SB sugar beet drilled in 2024.

- Any crop excluded from the below table should be considered ‘restricted’ i.e. a minimum of 32 months from drilling of Sugar Beet.
- The 32-month restriction applies to those agri-environment options that allow flowers to grow or appear on the same ground on which Cruiser SB treated seed was sown in 2024.
- Cover crops (including mixes) must also follow the 32-month restrictions.

[Further information available here.](#)

### Yellowing in crop

Whilst there are a few small pockets of virus yellows showing, there are a number of other potential causes for yellowing in the field. This could be acid patches (from wet areas in the field), manganese or magnesium deficiency or the secondary symptoms associated with boron deficiency or downy mildew (check the heartleaf carefully for signs of disease) to name just a few. If you have any concerns please contact the BBRO plant clinic.



Fig 1: Plant Clinic QR code

## Foliar disease and control

Keep a very watchful eye for the development of foliar disease symptoms in your crop. For crops destined to be harvested later in the season this is a key stage for ensuring canopies are well protected. Remember to adhere to harvest intervals for crops likely to be harvested in September and early October. Please refer to the list below of current available products. Also, a summary of the 2023 commercial product fungicide trial can be found in the latest Beet Review.

Product	Max No. Apps	Max Ind. Dose l or kg ha/yr	Max Total Dose l or kg ha/yr	Active (sulphur)	Active (triazole)	g ai l or kg	Active (strobilurin)	g ai l or kg	Active (SDHI)	g ai l or kg		Water Volume l/ha	Spray Quality
Angle, Priori Gold	2	1	NS		difenoconazole	125	azoxystrobin	125			35	200-400	Medium
Caligula	1	1.2	1.2		prothioconazole	125			fluopyram	125	7	200-300	Medium
Impact	1	0.5	0.5		flutriafol	125					28	Min 200	Medium
Kumulus DF, SOLFA	2	10	NS	sulphur							End Aug	Min 250	Medium
Microthiol Special	2	10	NS	sulphur		800					End Sept	200-600	Medium
Revystar XE	2	1.0	NS		mefenfluproconazole	100			fluxapyroxad	47.5	28	150-400	Medium
Thiopron (be aware of buffer zone restrictions)	2	9.7	NS	sulphur		825					NS	200-600	Medium
Twist	2	0.25	NS				Trifloxystrobin				21	min 200	Medium

The following points remain pertinent to disease control in 2024:

### Eight-point plan for autumn disease management

1. Know what disease(s) are in your crop in order to select the best fungicide options (see back pages for available fungicides).
2. Cercospora leaf spot appears to be an increasing problem in the UK and strains of this fungus are potentially resistant (due to QoI resistance) to strobilurin fungicides. If in doubt contact the BBRO for help with disease identification.
3. As seen from previous BBRO trials, do not apply fungicides too early, wait for early symptoms to show.
4. Conversely, do not apply products too late otherwise effective disease control will be difficult for the remainder of the season.
5. Always follow label recommendations for applying products at the correct growth stage.
6. Ensure the gap between the first and second, or second and third applications, is kept to within 28 days to prevent significant re-infection occurring between treatments.
7. Ensure water volume recommendations are adhered to and are not cut back.
8. Know where specific varieties are sown within fields to monitor any variety-disease interactions.

## Cercospora leaf spot

We have received reports of cercospora leaf spot being found in the crop. Unchecked this disease can lead to loss of canopy and reduction both in yield and essential winter cover against frost.

The latest results from the BBRO Spornado spore monitoring network (week 27 (right)) show the areas in which cercospora spores have been captured. If conditions are right the spores will enter the crop and spots will appear between 5 to 21 days after infection.

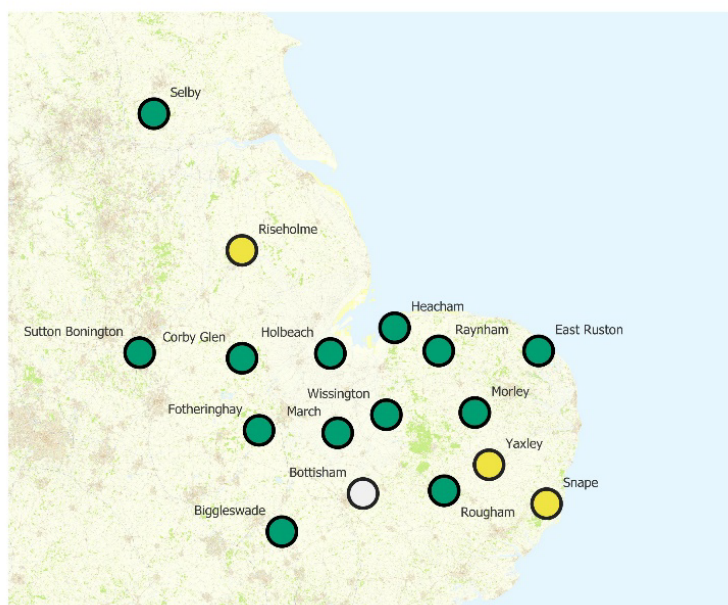
Cercospora tends to form small discrete regular circular spots. The centres of the spots are light grey/tan often with black stromata which resemble black pepper grains. The borders surrounding the spots are typically reddish-purple. Cercospora lesions are initially more regular circles but as the disease progresses, individual lesions coalesce with others to form more irregular shapes.

The fungus needs warmth and humidity for disease development which is relatively gradual, up to about 25°C, but growth goes into exponential increase at higher temperatures. Cercospora development is relatively suppressed at low humidity, even when temperatures are quite warm.

However, when we have days with humidity of more than 90% for 10-15 hours per day, the disease becomes more active, even at lower temperatures.

## 2024 Cercospora Leaf Spot Monitoring

Week 27:  
Monday 01/07/2024 to Sunday 07/07/2024



Site Status this week:

- No data available
- No cercospora spores detected via Spornado
- Cercospora spores detected via Spornado
- Cercospora detected in leaf sample (asymptomatic)
- Active cercospora lesions visible on crop
- Fungicide applied this week

Displayed data are obtained from the BBRO crop monitoring network and are provided for guidance regarding progression of the Cercospora Leaf Spot (CLS) across the UK.

It is still vital that crop walking is regularly undertaken and fungicides only applied to crops once disease symptoms are observed following a recommendation from a BASIS trained advisor.

Note: During the period of twice-weekly spore catches, the marker is turned yellow if either sample tests positive for cercospora via qPCR.

Update issued: 17/07/2024 V24.27.1.AW



Fig 3: Early cercospora development

The BBRO Cercospora Risk Forecast is based on the interaction between temperature and humidity to estimate a 'daily infection value' (DIV). The DIV is related to the likelihood of symptoms developing in the crop and has been extensively validated by assessing early Cercospora symptoms (categories ranging from no spots per leaf to >50 on a sample of 100 plants) in relation to temperature and humidity in commercial plots.

For example:

Two-days at 20°C/10 hours high humidity has a DIV (summed over two days) of 4.

Two-days at 24°C/15 hours high humidity will have a DIV (summed over 2 days) of 8.

Therefore, the cooler nights we have experienced have reduced the humidity levels over the two-day period.

The forecast weather patterns are likely to be favouring development of Cercospora leaf spot over the coming weeks. With this in mind, use of fungicides with good efficacy against CLS will reduce the production of spores and further infection of your crops.

### **Weed beet and bolters**

Keep on top of weed beet and bolters as these have increasingly been seen in crops. One weed beet could produce 1,500 viable seeds, this is of particular concern for anyone using ConvisoSmart technology. One of the key stewardship actions to preserve the longevity of this chemistry is to ensure scrupulous removal of bolters to prevent seed shed and a problem developing where the seed bank becomes contaminated with weed beet tolerant to ALS-chemistry. Consequently planning, meticulous management and attention to detail is vital – and cost effective for all growers.

- ✓ Failure to adequately control ConvisoSmart bolters breeds a new generation of weed beet that cannot be controlled with ALS-chemistry; there are no new technologies currently in development to manage this new problem
- ✓ Begin to identify fields with bolters which will require removal and have a plan / book labour to achieve this in a timely manner
- ✓ The most effective technique is hand-pulling; this is best done when soils are moist and using a fork to help remove the whole plant (including root)
- ✓ Ideally plants should be destroyed pre-flowering and removed from the field; snapping the stem close to the base can be an option at this timing, although beware of the potential for re-growth
- ✓ If plants have started to flower, then uprooting bolters and removing from the field is vital to minimise the risk of mature seed being shed
- ✓ Bear in mind fields will need to be walked methodically (eg. a tramline at a time) and at least twice (min. 3-4 week interval) to try and best ensure all bolters are removed



## EVENTS

### BeetField24 : Harvest interlude with BBRO

August is a busy time, but a short visit to one of the BBRO Demo Farm sites could pay dividends for your sugar beet.

**Foliar diseases:** Cercospora prevalence and fungicide support

**Cover Crops:** Risk and reward

**Soil:** Health assessment demo

**Variety Strips:** View the 2025 variety strips.

19th August 8:30 - Morley, Norfolk

20th August 8:30 - Eye, Peterborough

21st August 8:30 - Selby, Yorkshire

22nd August 8:30 - Yaxley, Suffolk

(allow 90 mins and dress for weather conditions)



**Book: [www.bbro.co.uk/events](http://www.bbro.co.uk/events)**

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## CONTACTS

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## BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between  
01/06/2024 – 31/05/2025 - CP/138145/2425/g. To claim these points please  
email [cpd@basis-reg.co.uk](mailto:cpd@basis-reg.co.uk)

Two NRoSO points in total (not per bulletin) have been allocated from 1st September 2023  
to 31st August 2024 - NO500860f and NO503154f from 1st September 2024 – 31st May  
2025. To claim these points please email [nrroso@basis-reg.co.uk](mailto:nroso@basis-reg.co.uk).