



Issued: 7th September 2023



IN BRIEF

- Generally, crops continue to look well although recent hot weather is causing some wilting and yellowing. Some yellowing may be due to later developing virus symptoms, although other factors such as moisture stress, poor rooting, diseases or pests such as BCN may be involved.
- First crops are being lifted for the Bury factory and initial reports are of good yields, albeit some variable sugar levels. Current sunny weather will help lift sugar content.
- Foliar diseases such as cercospora and rust can be found in crops but currently at relatively low levels. Reports of powdery mildew are increasing in the dry and warm conditions.
- Monitor cercospora very carefully over the next week during the hot weather. Whilst humidity during the day is relatively low, high night-time temperatures and dew formation in the crop is resulting in extended periods of leaf wetness and this will increase the risk of disease spread.
- Many crops have received a fungicide but monitoring crops carefully for further development of symptoms and ensuring the interval is kept within 28 days, especially where the disease risk is higher is key. Remember, this may include more susceptible varieties. Check that the product applied has activity against the diseases present.
- A few isolated cases of beet moth feeding continue to be recorded. This may represent development of a second generation. The crop is more resilient to any damage compared to last season and to date the impact has been low. However, remain vigilant for signs of feeding damage.
- Looking forward to the next season: recording how different varieties are performing at this stage of the season provides a useful 'steer' for next season's varietal choices. Additionally, autumn soil sampling for BCN and soil pH will help with decisions for next season. Remember that autumn is also a good point to undertake a soil health assessment. [Info on BBRO website](#)
- [Cover crops survey](#). Please help us to understand the industry's use of cover crops by completing this survey.



ADVISORY

Foliar disease

Keep a very watchful eye for 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.

Make sure you know what diseases are present. Some rust symptoms may be confused with those of cercospora. In dry weather, rust pustules can form discrete lesions with a brown border. The lesions tend to be more irregular in shape compared to cercospora and the surrounding leaf tissue is often light green with a yellow halo, especially when held to the light.

Cercospora tends to form smaller more 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 shaped lesion.



Fig 1: Know your diseases. From left to right: cercospora, rust and powdery mildew.



Fig 2: Progression of cercospora on the same leaf over 10 days (no fungicide) Note the dew on the leaf on the right.

Leaf wetness is associated with cercospora development and the current warm weather, especially with warm overnight temperatures coinciding with morning dew on leaves will increase the risk. At temperatures above 20°C and more than 8-10 leaf wetness hours in any 24-hour period creates a period of high risk. The Weatherquest monitoring system measures relative humidity but not leaf wetness. BBRO leaf sensors in crops (see photo) are detecting increased leaf wetness levels in the current weather.

Aim to apply a fungicide to cercospora as soon as the first spots/lesions are found and especially if conditions are warm and wet. [Click here to see the latest cercospora risk maps.](#) Ensure the gap between the first and the second spray is kept between 28 days. A shorter interval may be required if disease pressure is high.

Fig 3: Cercospora symptoms and leaf wetness sensors. Water on the leaf surface will encourage symptom development. Aim to apply a fungicide at **first signs** of symptoms as it will be harder to manage as the disease progresses.



The charts below provide a summary of the fungicide options for 2023. Where the risk is high avoid cutting rates as efficacy and persistence will be compromised. Revystar XE has been found to be more effective on cercospora at the higher rate of 1 litre/ha (not 0.8 litre/ha). Now it is September, Caligula can be used. The Impact product label only claims moderate control of cercospora and ramularia for up to 2 months and may provide insufficient activity in situations where disease is established, and pressure is high. It will not control rust or powdery mildew.

Cercospora is now established in the UK and strains of the fungus are potentially resistant (due to QoI resistance) to strobilurin fungicides (this is a focus of new BBRO research). Follow specific product label advice and FRAC guidelines on managing resistance. Incorporate fungicides with different modes of action into your fungicide programmes, especially where later harvested crops may be expected to require more than two applications.

Product	Max No. Apps	Max Ind. Dose l or kg ha/yr	Max Total Dose l or kg ha/yr	Active (triazole)	g ai l or kg	Active (strobilurin)	g ai l or kg	Active (SDHI)	g ai l or kg	HI (days)	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	mefentrifluconazole	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

Product Example	Powdery Mildew	Rust	Ramularia	Cercospora *
Angle/ Priori Gold	✓	✓	✓	✓
Caligula	✓	✓	✓	✓
Impact	✗	✗	✓	✓
Revystar XE	✓	✓	✓	✓
Sulphur (e.g. Kumulus, Microthiol)	✓	✗	✗	✗

* Potential decrease in efficacy of some products, if resistant strains are present

Fig 4: Fungicide options for 2023 (View [BBRO Crop Protection options-2023](#))

Variety Choices

Now is the time to review your 2023 varieties and plan for the 2024 season. You can access the [2024 RL here](#) and the [April Beet Review RL article](#). We would also recommend that you listen to the [August BeetCast](#) where Dr Simon Bowen and Dr Georgina Barratt discuss the merits of understanding varietal traits and ensuring they are used to advantage. We will shortly be releasing a video of the variety strips at Morley to support you and look forward to seeing you at our September events where you can see the varieties up close for yourself.



EVENTS

**BEATING THE CHALLENGE
2023 AUTUMN
BeetField events**

British Beet
BBRO
Research Organisation

**Supporting growers to push the
crop and gain rewards**

SEPTEMBER 2023 - 1 hour visits

12th - Morley, Norfolk 8:30 and 10:00
12th - Yaxley, Suffolk 14:00 and 15:15
14th - Bracebridge 8:30 and 10:00
14th - Fotheringhay 14:00 and 15:15

- Harvest and storage
- Foliar diseases and fungicide programmes
- 2024 varieties in action
- Beet moth in 2023,
- Soil health and cover crop considerations

Book: www.bbro.co.uk/events

Click date to book.

**12th Sept
Morley**

**12th Sept
Yaxley**

**14th Sept
Bracebridge**

**14th Sept
Fotheringhay**



CONTACTS

British Beet Research Organisation, Centrum, Norwich Research Park, Colney Lane,
Norwich, NR4 7UG

Prof Mark Stevens mark.stevens@bbro.co.uk 07712 822194

Dr Simon Bowen simon.bowen@bbro.co.uk 07718 422717

Stephen Aldis stephen.aldis@bbro.co.uk 07867 141705

General Enquiries info@bbro.co.uk



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Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/23 and 31/05/24 reference CP/126447/2324/g. To claim these points please email 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. To claim these points please email nroso@basis-reg.co.uk.