Factsheet

Potato blight control

Introduction

Potato blight is one of the most serious crop diseases in the UK. It is caused by a fungus-like organism (*Phytophthora infestans)*. The disease spreads most readily during periods of warm and humid weather; with rain it can reach epidemic proportions very quickly and affects organic and non-organic growers alike.

Although organic growers have access to few fungicides, there are preventative measures that can be implemented to reduce the incidence of blight.

Preventative measures

Cultural methods of control should always be a grower's first line of defence against blight.

- Choose blight resistant varieties.
  - The Sarvari Research Trust (SRT) breeds new, disease resistant varieties of potatoes, find out more at http://sarpo.co.uk
  - Agrico UK offer a range of blight resistant varieties, compare each varieties disease resistance at http://agrico.co.uk/products/varieties
- Use second earlies which bulk up before the highest risk blight periods.
- Destroy haulms at first sign of blight (providing this is near the end of the cropping period, especially with early bulking varieties) to prevent spread of blight to the tubers. There may be a reduction in yield, but this will be compensated, to some extent, by a reduction in costs.
- Use healthy seed potatoes – e.g. certified seed https://ahdb.org.uk/seed-classification
- If practical, restrict field size to prevent widespread infection and losses – agroforestry systems have been shown to slow down spread of infection.
- Rogue out any volunteer plants in following crops.
- Maintain good farm hygiene - for example, avoid potato dumps.
- Observe neighbouring farms' crops for early signs of blight.
- Maximise crop diversity in the fields; if practical, plant rows of alternating varieties.
- Do not store tubers infected with blight.
- Utilise trickle irrigation in preference to rain gun or boom irrigation to keep leaves drier.

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The methods listed below are intended to improve airflow between plants, this allows foliage to dry quickly after rain, therefore, slowing the spread of blight between plants:

- Avoid planting in sheltered sites
- Widen row spacings and inter-row spacings
- Plant rows into the prevailing wind

Monitoring

If you are concerned about getting blight, closely monitor the weather and any disease spread in the area. The blight watch website provides up to date information and will also provide email and text alerts to those who sign up if blight risks are identified in the post code area. The service is free – you just need to register online at https://blightwatch.co.uk

Cultural control

- If only a few plants are infected remove them from the crop to try to prevent further spread.
- If removing the haulm don't chop when the leaves are wet as this can just mean you spread the blight spores around.

How to manage an infected crop

At present potassium bicarbonate and copper are the only active ingredients that are known to be effective against blight and permissible under the EU organic regulations and Soil Association standards.

Although these products are included in the organic regulations neither of these products are currently registered for use on potatoes so they cannot be used on potato crops in the UK except under temporary emergency authorisations, which get published at https://secure.pesticides.gov.uk/offlabels/search.asp

Please refer to https://secure.pesticides.gov.uk/pestreg for the most up-to-date information on the authorisation of any plant protection product. Alternatively, you can contact your certification officer.

www.soilassociation.org Tel: 0117 314 5100
Email: producer.support@soilassociation.org
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Potassium hydrogen carbonate (aka potassium bicarbonate)

- **Not currently authorised.**
- Said to have some effect on early blight (which is the common name of the fungus *Alternaria solani*).
- Reputed to be more effective when mixed with a mild seaweed solution
- Can help delay initial infection and spread.

Copper – (copper hydroxide, copper oxychloride, copper oxide, Bordeaux mixture and tribasic copper sulphate)

- **Not currently authorised except through emergency authorisations with specified dates and geographical scopes:** https://secure.pesticides.gov.uk/offlabels/search.asp
- When permitted, legislation limits the use of copper to 4kg/ha/year.

The triggers for using copper should be:

- Blight in the crop or a neighbouring crop; or
- When a Hutton Criteria occurs in the area

You must record the fields you treat and provide information on the total amount of copper used at the end of the season.

Our Work

We recognise the difficulties that organic growers face in tackling potato blight. We are continuing to work with growers, the AHDB and DEFRA to encourage the relicensing of copper in the UK. We are assisting with research into copper alternatives as part of an EU funded RELACS project relacs-project.eu/inputs-in-organic/copper/
In 2019 we published 'pathways to coping without copper' (see below)

Additional guides and publications:

- Soil Association – Organic Potatoes: Pathways to coping without copper
- AHDB – Potato disease information
- FiBL & ORC – Organic potatoes technical guide.
- Garden Organic – https://gardenorganic.org.uk/potato-blight
- Organic E-Prints – Pest and Disease Management of Potato Crops with Homeopathic Preparations and Germplasm Variability.

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