



Fight against Blight

ISSUE 8: RESPONDING TO A CROP INFECTION



No fungicide in current use can be regarded as totally effective at stopping active blight.

Successful blight control can best be achieved by preventing the disease entering the crop.

However, responding to any infection requires swift and immediate action.

Reaction time to infection

- All blight sprays are protectant. However, products containing cymoxanil, dimethomorph and benthiavalicarb have limited curative (kickback) activity. Generally this is no more than 1 - 2 days after infection has occurred.
- Depending on weather, strain of blight and varietal resistance, there may be a latent period of as short as 3-4 days or as long as 7 days. (The latent period is the time following infection but before the crop shows signs of disease). If symptoms are present, eradicating these lesions with fungicides will be very difficult.

Control methods*

- Stop using or do not use any products which state on the label that they are not to be used in the presence of blight (all systemic products).
- If necessary alternate products to maintain a robust spray programme being mindful of resistance management issues and label recommendations.
- Change active ingredients / modes of action, as often as possible to reduce the risk of resistance.
- Always include products with curative activity when spraying infected crops.
- Consider using products with anti-sporulant activity in a tank mix with products with curative activity to slow the sporulation of active lesions. (see EuroBlight fungicide table link on the next page).
- If the crop has met a market specification in terms of tuber size and yield potential, it would be prudent to destroy the foliage immediately to reduce risk of tuber infection and also risk to neighbouring crops.

Removing foci

- Destroy or remove any infection or foci found in the field.

Foci size	Action
Single or few plants	Remove and destroy infected plants
Patch	Desiccate with knapsack using diquat
Large area / field	Desiccate with ground sprayer using sulphuric acid or diquat

- Desiccation treatments that kill the haulm quickly are preferred to reduce the risk of further disease spread. (see Grower Advice sheet 10 – Desiccation)

- Where desiccation is slow, the desiccated area needs to be protected by fungicides until the haulm is completely dead.
- When destroying infected foliage do not use flailing as this could increase spore spread.
- Plants surrounding infected plants will have been exposed to the greatest number of spores and maybe infected. Regularly check these areas for new symptoms and desiccate if necessary.
- Report all outbreaks to the BPC mapping service through a registered blight scout or on the details at the end of this sheet.

Note: Growers who wish to desiccate patches of a seed crop because of blight, that has been entered in to the classification scheme, need to contact the inspectors to discuss the situation **before** taking such action.

Early infections before tuber blight issues become apparent.

- Products with curative activity may have better anti-sporulant properties against the production of airborne spores (sporangia).
- These should be alternated on tight spray schedules following label recommendations to help reduce sporulation of active lesions.

Later infections when tuber blight is an issue

- Since tuber blight becomes more of an issue once tubers have formed, products with activity against the production and viability of zoospores (the small motile spores produced by *P. infestans* that can actively move in soil moisture) should be used.
- Curative activity and activity against sporangia production is still important.
- Curative products should be mixed with products with zoospore activity (providing that they are label approved mixtures), following label recommendations and resistance management guidelines.

For more information on specific fungicides, please refer to the table from EuroBlight on fungicide ratings. Available from BPC website at www.potato.org.uk/blight or from EuroBlight www.euroblight.net/EuroBlight.asp

Or refer to chemical manufacturers / suppliers for specific chemical activity.

Water Rate

- Ensure that fungicide coverage of the affected crop is adequate.
- In some situations it will be necessary to use more than 200 litres of water per hectare to ensure that the spray penetrates into the bottom of the crop.
- Adjust forward speed so that together with appropriate water volumes, good coverage and penetration of the canopy is achieved.

Weather

- Several days of hot dry weather will greatly limit further development of the disease. These conditions not only restrict sporulation but also can, if they persist, result in many diseased leaves being dropped.
- However, the pathogen can remain viable in stem lesions and develop rapidly from these when warm, humid conditions return.

Irrigation

- Blighted crops should not be irrigated.
- Irrigation can help produce humid conditions within the canopy that encourages sporulation.
- Irrigation water can wash zoospores into the soil leading to an increased risk of tuber blight.

USE PESTICIDES SAFELY, ALWAYS READ THE LABEL

For more information on responding to a crop infection, please consult your local BASIS registered advisor.

Always consult your buyer protocols before using any pesticides.

While every effort has been made to ensure that the information is accurate, no liability can be accepted for any error or omission in the content or for any loss, damage or other accident arising from the use of the pesticides listed herein. It is essential to follow the instructions given on the approved label before handling, storing or using any pesticide.