



Fight against Blight

ISSUE 9: IRRIGATION



Irrigation can help produce the ideal conditions to allow blight to sporulate, spread and infect crops. Crop growth under irrigation can be very rapid. In these conditions and particularly if there is blight in the area, robust monitoring and spray programmes **are essential**. Inevitably there will also be a dilution effect of fungicide loading on the foliage due to rapid growth and some reduction through washoff.

Management of irrigation is crucial to help reduce the risk of blight that it carries.

Irrigation frequently prevents fungicide application for several days because it results in ground conditions unsuitable for sprayers.

- Fungicide application should ideally be made prior to irrigation. This ensures that fungicide protection is maximum when high risk conditions prevail during irrigation.
- Use fungicides that are less prone to wash off and show good rainfastness characteristics. (see table)
- **Avoid irrigation in the presence of blight to minimise the risk of tuber blight.**

Rain Gun / Boom irrigation

- Ideally, allow 6-8 hours gap between spraying and irrigation to ensure rainfastness
- Avoid splash from water in the tramlines on to the crop from the sprayer wheels
- Make use of scheduling - only apply irrigation when the crop needs it. Soils that are over wet encourage blight in several ways.

Trickle irrigation

- Less of a risk than rain gun or boom irrigation

Irrigation pipes

- Plan where you will need to put header / feeder pipes in relation to where you will need to have access with your sprayer. Time spent moving pipes can be lost spraying time.
- Where pipes will obstruct sprayer access use pipe ramps or bury the pipes.
- Between irrigation move irrigation equipment well away from the crop so as not to compromise sprayer boom access and crop coverage.

Rainfastness	Active ingredients
+ (reasonable)	COPPER
+(+)	DITHIOCARBAMATE
++ (good)	CYMOXANIL, FAMOXADONE, FENAMIDONE
++(+)	CHLOROTHALONIL, FLUAZINAM, ZOAXAMIDE, DIMETHOMORPH
+++ (very good)	CYAZOFAMID, BENALAXYL, METALAXYL-M, PROPAMOCARB-HCL

Data taken from:

H.T.A.M. Schepers and C.E. Westerdijk (editors) Proceedings of the seventh workshop of an European network for development of an integrated control strategy of potato late blight : Poznan, Poland, 2-6 October 2002. – PPO-special report, no. 9 (Feb 2003).

For more information on how irrigation may affect blight control please contact your local advisor or BPC Agronomist, Mark Prentice tel: 0131 472 4149

Some of the information in this note was supplied by the BPC Potato Treater Group.

The information supplied is believed to be correct but neither the British Potato Council nor members of the Potato Treater Group accept responsibility for any errors or omissions.