

BLIGHT

The first blight warning of 2019 arrived before the end of May so growers need to be vigilant right from the start. A good blight control strategy should take into account the four key growth phases of the crop i.e. early growth, rapid canopy phase, stable canopy phase and senescence. All the different phases will require different strategies.

Early growth - The first fungicide application should be applied by the rosette stage of the crop. As normal a contact fungicide containing mancozeb is likely to be the first option on most crops.

Rapid Canopy - As the crop progresses during June move to more systemic fungicides which will give better protection of new growth. Products like Infinito, Zorvec + partner product will give good cover at this time. Keep intervals to 7 days especially in broken weather although Zorvec will give protection for up to 10 days. Don't forget to have cymoxanil based products on hand for curative activity when needed.

Stable canopy – The crop should be at full biomass at this stage, systemic fungicides are not as important at this stage so contact fungicides e.g. Ranman Top or Revus can be alternated into the programme. Again where outbreaks occur cymoxanil type products are very useful to aid control.

Senescence stage – crops are generally starting to die back at this stage or may have been desiccated or pulverised. Products included here should have good tuber blight control and prevent zoospore spread.

Table 1; Blight control strategy 2019

Growth Stage	Time	Product Options
Early season	May – Early June	Dithane, Shirlan etc., Curzate M /Moximate, Grecale/Kunshi, Nautile, Vendetta
Rapid Canopy	June – Early July	Infinito, Zorvec, Ridomil Gold +/- Cymoxanil
Stable canopy	July – Early Aug	Revus, Ranman Top, Proxanil, Valbon +/- Cymoxanil
Senescence	August – Sept.	Shirlan* (See note below), Ranman Top

***Note;** The strain of blight that is less sensitive to Fluazinam (Shirlan, Volley, Tizca etc.) called "Dark green" 37_A2 was found in Europe and the UK again in 2018 but at lower levels than 2017 so the recommendations for the use of fluazinam is the same as last year. The following guidelines should be adhered to;

1. Always apply fluazinam in a mixture (e.g. with cymoxanil or mancozeb – particularly under high pressure situation)
2. Use at full rate only – 0.4lt/ha
3. Alternate applications of fluazinam with other fungicides
4. Don't use fluazinam in the final 3 sprays if storing potatoes long term – you can use it at this stage if the potatoes are going into fresh market.

Cultural blight control

As always use cultural methods to reduce the pressure on this year's crop, all groundkeepers need to be controlled in nearby cereals, potato dumps also need to be destroyed sooner rather than later.

Watch out for awkward corners, areas around poles, sharp bends etc. that are difficult to spray where less than the ideal amount of fungicide is being applied, where possible reverse the sprayer into the corners before you start spraying,

otherwise these areas can act as entry points for the fungus to get into the crop. Be vigilant and don't rely solely on blight warnings to make decisions on timings.

WEED CONTROL

Where tidying up of some weeds is necessary options for broadleaf weed control are pretty limited. Table 2 shows the post emergence weed control options available to growers, Table 3 shows the susceptibility of common weeds to the herbicides that are available in 2019.

Table 2: Post-emergence broad leaf weed control

Timing	Product	Comment
Post Emerge	Titus 25g/ha + metribuzin (Shotput etc.) 0.35 kg/ha + Non Ionic Wetter 0.1% Follow in 10 days with Titus 25g/ha + Non Ionic Wetter 0.1%	Use where cleavers a known problem. Second application will take late germinating cleavers. Check varietal restrictions
Post Emerge	Titus 50g/ha + Non Ionic Wetter 0.1%	Usually a follow up treatment when where targeting cleavers also very useful control of scutch. Check varietal restrictions.

Table 3: Post-emergence weed susceptibility

Common Weed Name	Sencorex Post-em	Titus Post-em
Annual meadow-grass	S	MS
Annual nettle	S	S
Black bindweed		
Black nightshade	MS	MS
Black bindweed	S	MS
Black Grass	MS	
Charlock	S	S
Chickweed	S	S
Cleavers	R	S
Corn marigold	MS	
Red dead nettle	S	S
Fat hen	S	MR
Fool's parsley		
Field penny cress	S	MS
Fumitory	S	S
Groundsel	S	MS
Hempnettle	S	S
Knotgrass	MS	MS
Mayweed	S	S
Mustard white		S
Oilseed rape (Vol)	S	S
Orache	S	MS
Pale persicaria	S	MS
Pansy, field	MS	
Poppy common	S	
Redshank	S	S
Rye grass perennial	S	
Scutch	R	MS
Shepherd's purse	S	
Sheeps sorrel	S	
Sowthistle	MS	
Speedwell	S	
Wild oats		MS

S = Susceptible. MS = Moderately Susceptible.
R = Resistant. MR = Moderately Resistant.

Watch out for varietal restrictions when using metribuzin products post emergence, as they can give susceptible varieties a good scorch.

Avoid using Titus on crops destined for seed as can often cause a mottling on the leaves that is difficult to distinguish from virus infection.

Figure 1: Herbicide scorch



Post emergence grass weed/wild oats/vol. cereal control options include Falcon/Claw, Fusilade Max or Stratos Ultra. Check labels for rates and harvest intervals especially if digging green top.

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Table 4; 2019 Potato blight products and Euroblight rating

Potato Blight Fungicides 2019											Euroblight rating 2019			
Product Name	Active Substance	Mode of Action	Rate/Ha	RRP/ha ex VAT	Marketing Company	Water Vol.	Application Interval	PHI	Max Total Dose	Max No Applications	Curative	Leaf Blight	Rain Fastness	New Growth
Dithane 945	Mancozeb 800g/kg	Contact	2.25 kg/ha	25kg/ TBA	Whelehans	200 – 1000	7 days	7 days	-	Not Specified	0	2		0
Pencozeb WDG	Mancozeb 750 g/kg	Contact	2.1 kg/ha	€62/10 kg	Unichem	200 - 1000	7 - 14 days	7 days	16.8 Kg/ha	8	0	2		0
Ranman Top	Cyazofamid 160 g/l	Contact	0.5 L/ha	€150/5L	Whelehans	200 – 400	5 days	7 days	3.0L	6	0	3.8	3	2
Shirlan/Tizca/Volley/ Farmco Blitz/Fluazinova	Fluazinam 500 g/l	Contact	0.4L/ha	€32+/1L	Whelehans/ DHM / Croplink/ Farmco/ Barclay	200-500	7 days	7 days	4lt/Ha	10	0	2.9	2 1/2*	-
Ridomil Gold MZ 68 WG	Mancozeb 640 g/l + Metalaxyl M 40 g/l	Systemic + Contact	2.5 kg/ha	€113/5kg	Syngenta	200	10 - 14 days	7 days	7.5 Kg/ha	3	2 1/2*		3*	2
Option	Cymoxanil 600 g/kg	Translaminar (Tank Mix partner only)	0.15 kg/ha	€92/1.5kg	Terrachem	200 – 500	7 – 10 days	14 days	1.125 Kg/ha	8	-	-	-	-
C50 WG	Cymoxanil 500 g/kg	Translaminar (Tank Mix partner only)	0.24 kg/ha	€31/kg	Unichem	200 +	7 days	7 days	0.96 Kg/ha	4	-	-	-	-
Cymbal	Cymoxanil 450g/kg	Translaminar (Tank Mix partner only)	0.25 kg/ha	€38/1kg	Whelehans	200	7 – 10 days	14 days	1.5kg	6	-	-	-	-
Revus	Mandipropamid 250 g/l	Translaminar + Contact	0.6 L/ha	€260/5L	Syngenta	200	7-10 Days	3 Days	2.4 L/ha	4	1*	4	3*	2*
Nautile DG	Mancozeb 680 g/kg + Cymoxanil 50 g/kg	Translaminar + Contact	2.3 kg/ha	€68/10 kg	Unichem	200	7-10 Days	14 days	13.8 Kg/ha	6	2*	-	2*	
Curzate M WG	Cymoxanil 45 g/kg + Mancozeb 680 g/kg	Translaminar + Contact	2.3 Kg/ha	€79/10 kg	Terrachem/ Whelehans	200	10 – 14 days	7 days	15 Kgs/ha	6	2*	-	2*	-
Moximate			2.5 kg/ha						10 Kg/ha	4				
Proxanil	Propamocarb 400g/l + Cymoxanil 50g/l	Translaminar + Contact	2.5 L/ha	-	Unichem	400	7 days	14 Days	10 L/ha	4	2 1/2*	-	-	-
Kunshi	Fluazinam 375g/kg + Cymoxanil 250 g/kg	Translaminar + Contact	0.5 kg/ha	-	Whelehans	200-500	7-10 days	7 days	4 kg/ha	8	-	-	-	-
Grecale	Fluazinam 300g/kg + Cymoxanil 150 g/kg	Translaminar + Contact	0.6 L/ha	-	Unichem	200-500	7-10 Days	7 Days	3.6 L/ha	6	-	-	-	-
Vendetta	Fluazinam 375g/kg + Azoxytrobilin 150 g/kg	Contact and protectant	0.5 L/ha	-	Terrachem	200-400	7-14 days	7 Days	-	-	-	3.6	-	-
Infinito/ Farmco Blight	Propamocarb 625 g/l + Fluopicolide 62.5 g/l	Translaminar+ systemic	1.6 L/ha	€175+/10L	Bayer/ Farmco	200-400	7 days	7 days	6.4 L/ha	4	2*	3.8	2 1/2*	2*
Valbon	Benthiavalicarb 17.5 g/kg + mancozeb 700 g/kg	Translaminar + Protectant	1.6 kg/ha	€150/9.6kg	Whelehans	200-400	7 – 10 days	7 days	9.6 kg/ha	6	1 1/2*	3.7	2 1/2*	-
Zorvec Enicade \$	Oxathiapiprolin 100 g/l + (Mancozeb 68%w/w + Cymoxanil 45g/l)	Systemic +Protectant (Must tank mix with partner product)	0.15 L/ha + Curzate M	€288/Pack 1l + 10kg	Terrachem	200-400	7-12 days	7 Days	0.6 L/ha	4	2*		3*	2.5*

Note: Euroblight 2015(Green) 1* = reasonable effect, 2* = good effect, 3* - v. good effect

Note: \$ fungicide rating for Zorvec Enicade refers to Oxathiapiprolin alone