



Blight

The recent wet and humid weather will increase the risk of blight in emerged crops, indeed we have already had our first blight warning of the 2021 season in late May. Many crops have already received their first application at this stage, as protection is always better than attempting to cure the infection when it comes to blight. One of the big changes we are going to see this year is the non renewal of mancozeb products and while the importance of mancozeb has declined over the last number of years it was still included in most programmes even if it was only one application. While the rules state that the active ingredient was revoked on January 4th 2021, it is still available to buy until July 4th with the final use up date of use is **January 4th 2022** so in reality this is the final season that products containing mancozeb can be used. From talking to different agronomists around the country there seems to be a very limited availability of mancozeb based products in the market, so this poses the question of what products do you use for early season control where they have tended to be used in the past. Early season control is usually dominated by contact fungicides such as mancozeb or fluazinam so in the absence of mancozeb then fluazinam would normally be the obvious choice, however as we know the 37 A2 strain of blight is resistant to fluazinam (Shirlan etc.), which has resulted in its use late in the

season to control tuber blight, largely disappear. We have confirmed that the 37 A2 strain is present in the Republic of Ireland in 2020, it was found in Northern Ireland in 2019 however what we don't know is how widespread the strain is across

the country.

This poses a problem with its use early in the season as we can't be sure that we will get good control, where fluazinam products are used early in the season, then they should only be used once and with a partner product such as cymoxanil. Another option here is Cyazofamid (Ranman Top) which is a contact fungicide but it also has good activity on tuber blight at the tail end of the season so be of of the total number applications allowed. aware By the second or third application we traditionally move to systemic products such as Infinito, Zorvec or Proxanil to cover the rapid canopy phase, crops will put on new leaves every couple of days so it is important that these are protected by a systemic product that can move through the plant. Keep intervals to 7 days with the exception of Zorvec products where the recommended interval is 10 days between products, these are generally applied on two applications back to back to give 20 days protection. If using Proxanil the best advice is to use a partner product such mancozeb or fluazinam to the mix this will help to protect the product from resistance development. Where blight does get into a crop then products containing cymoxanil will have curative activity and should be applied with the other partner products. Table 1 below shows some options for blight control throughout the season.

Table 1; Blight Control Strategy 2021 Options

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

Don't forget that cultural control is a very important part of IPM management of blight, so volunteers or ground keepers in cereal crops should be controlled using herbicides, while all potato dumps should be sprayed off as soon as plants appear and remember be on the lookout for casual or hobby growers whose crops can act as a source of infection. See tables 4 and 5 for details of the available potato fungicides for the coming season.



Uneven crop emergence

This seems to be a common problem in this season all across the country. In many crops there seems to be certain plants that have emerged normally and are growing away while others have struggled to emerge however they are growing but at a slower rate. The reason for this is unclear but it is probably down to the abnormally low temperatures experienced in May, where soil temperatures were anything from 1 to 2 degrees Celsius below normal. For details of soil temperatures from a weather station near you click on the following link https://www.met.ie/climate/available-data/monthly-data

This is having an impact in the timing of weed control and may affect maturity later in the season which could impact desiccation strategies.

Picture 1; Uneven emergence seems to be a common problem this year



Post Emergence Weed Control

While weed control on most crops seems to have worked well there are still a few situations where a second application may be needed to control broadleaf weeds. Options are limited at this stage to Titus (rimsulfuron) plus or minus metribuzin (Sencorex etc.) be aware that there are varietal restrictions and consult product labels before applying.

Basagran is also an option but only on certain varieties and up to a crop height

Basagran is also an option but only on certain varieties and up to a crop height of 15 cm. A maximum of 1.65 kg/ha is allowed and this is generally in two applications of 1.1 kg/ha followed by 0.5 kg/ha 7-10 days later. On Rooster crops you can expect to see some scorch so **do not** apply with an adjuvant. See label for further details.

Table 2; Post emergence herbicide options

Timing	Product	Comments
Post Emergence	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%	Good control of cleavers, brassicas, fumitory, fat hen, orache, poppy, wild oats & chickweed. Thistles moderately susceptible
Post Emergence	Titus 50g/ha + Non Ionic Wetter 0.1%	Good Control of cleavers, brassicas, amg, chickweed, poppy and wild oats. Poorer control of fat hen, fumitory and orache.

For grass weed control any of the different graminicides should provide adequate control provided there are applied on time. Check individual labels for timings. Potato crops and other break crops offer an ideal opportunity to deal with difficult

grass weeds before the field returns to cereals.

Table 3 outlines the options available.

Table 3; Approved graminicides 2021

	Falcon/Claw100 /Satchmo	Fusilade Max	Pilot ultra	Stratos Ultra
A.I. (Family)	Propaquizafop 100g/L (Fop)	Fluazifop 125g/L (Fop)	Quizalofop-P- Ethyl 60 g/L (Fop)	Cycloxydim 100g/L (Dim)
V. Cereals	0.7-1.0	1.0-1.5	0.75- 1.25	2
Wild oats	0.7-1.0	1.0-1.5	0.75 - 1.25	1.5
Annual Meadow Grass	Checked @ 0.7- 1.0 Severly checked @ 1.5	-	-	-
Smooth Stock Meadow Grass	-	-	-	2
Italian Rye Grass	-	1.5	1.25	1.5
Perennial Rye Grass	1.2	1.5		1.5
Loose S. Bent	-			1.5
Sterile Brome	0.7-1.0	1.0-1.5		2
Black Grass	-	1.0-1.5		2
Black Bent	-	3		3
Creeping bent	-	3	-	-
Scutch	1.5	3	2.5	3.0-4.0
Authorised crops	Potatoes - ware	Potatoes - Ware	Potatoes - Ware	Potatoes - seed
				Potatoes - ware

Nitrogen

Due to the heavy rainfall in May some growers are considering topping up crops with nitrogen, this needs to be carefully thought out and should only be considered where the levels applied already are relatively low. Many crops will have received in excess of 120 kg/ha of nitrogen already and should have enough nitrogen already. If the level of nitrogen applied is lower than that, then there may be a benefit to applying a top dressing, but be careful too much extra nitrogen will delay maturity and desiccation, in what is already likely to be a late season. Potato crops generally take up most of their nitrogen by 50 days after emergence so aim to have any topdressing completed by then otherwise you may not see much of a benefit and could delay desiccation and harvest.

Table 4; Approved Potato Fungicides 2021

Product Name	Active Substance	Mode of Action	Rate/H a	PH I Day s	Max Tot Dose /ha	Max No Appls
Ranman Top	Cyazofamid 160 g/l	Contact	0.5 L	7	3.0 L	6
Shirlan/Tizca/ Volley/ Fluazinova	Fluazinam 500 g/l	Contact	0.4L	7	4.0 L	10
Kunshi	Fluazinam 375g/kg + Cymoxanil 250 g/kg	Translaminar + Contact	0.5 kg	7	4 kg	8
Grecale	Fluazinam 300g/kg + Cymoxanil 150 g/kg	Translaminar + Contact	0.6 L	7	3.6 L	6
Vendetta	Fluazinam 375g/kg + Azoxystrobin 150 g/kg	Contact and protectant	0.5 L	7	1	-
Option	Cymoxanil 600 g/kg	Translaminar Tank Mix partner only	0.15 kg	14	1.125 Kg	8
C50 WG	Cymoxanil 500 g/kg	Translaminar Tank Mix partner only	0.24 kg	7	0.96 Kg	4
Cymbal	Cymoxanil 450g/kg	Translaminar Tan k Mix partner only	0.25 kg	14	1.5 kg	6
Revus	Mandipropamid 250 g/l	Translaminar + Contact	0.6 L	3	2.4 L	4
Proxanil	Propamocarb 400g/l + Cymoxanil 50g/l	Translaminar + Contact	2.5 L	14	10 L	4

Infinito	Propamocarb 625 g/l + Fluopicolide 62.5 g/l	Translaminar+ systemic	1.6 L	7	6.4 L	4
Zorvec Endavia	Oxathiapiprolin 30 g/l + Benthiavalicarb 7 0 g/	Systemic and Protectant	0.4 L	7	1.6 L	4**
Zorvec Enicade + Gachincho	Oxathiapiprolin 100 g/l + Amisulbrom 200 g/l	Systemic and Protectant	0.15 L + 0.3 L	7	0.6 L	4**
Curenox 50 WP* (Off label approval)	Copper Oxychloride 87.8 % WP	Contact	1.0 Kg	8	6.0 kg	6

Notes;

Mancozeb Products

All products containing mancozeb are in the use up period and must be used up on farm before January 4th 2022

Table 5; Products containing Mancozeb

Product Name	PC S No.	Active Substance	Mode of Action	Rate /Ha	PH I	Max Total Dose /ha	Max No Appls
Dithane 945	037 05	Mancozeb 800g/kg	Contact	2.25 kg	7 day s	-	Not Specifi ed
Penncozeb WDG	036 08	Mancozeb 750 g/kg	Contact	2.1 kg	7 day s	16.8 Kg	8
Ridomil Gold MZ 68 WG	035 99	Mancozeb	Systemic + Contact	2.5 kg	7 day s	7.5 Kg	3

^{*} Curenox 50WP is approved by the Irish Organic Association for use on organic potato crops

^{**} Max of 3 consecutive applications

		640 g/l + Metalaxyl M 40 g/l					
Nautile DG	045 40	Mancozeb 680 g/kg + Cymoxanil 50 g/kg	Translamin ar + Contact	2.3 kg	14 day s	13.8 Kg	6
Curzate M WG Mox imate	904 78 046 70	g/kg +	Translamin ar + Contact	2.3kg 2.5 kg	7 day s	15 Kg 10 Kg	<u>6</u> 4
Valbon	034 11	Benthiavalicarb 17.5 g/kg + mancozeb 700 g/kg	Translamin ar + Protectant	1.6 kg/ha	7 day s	9.6 kg	6
Zorvec Enicade + Curzate pack		Oxathiapiprolin 100 g/l + (Mancozeb 68% w/w + Cymoxanil 45g/l)	Systemic + Protectant (Must tank mix Zorvec with partner product)	0.15 L/ha + Curzate M 2.3 kg/ha	7 Da ys	0.6 L	4**

^{**} Max of 3 consecutive applications

Potato Insecticides 2021

Table 6; Approved insecticides 2021

Product name	PCS No	Active Ingredient	Mode of Action	Max No of applicati ons	Rate ha	Pre harvest Interval			
Karate Zeon	4084			ware 4	75 ml	none			
Karis 10 CS	4454			4	75 ml	none			
Life Scientific Lambda	4868			4	75 ml	none			
Sparviero	4469			4	75 ml	none			
Ninja 10 CS	5178	lambda-	Contact	ware 4	75 ml	none			
Stealth	6468	8 Cyhalothrin 1 1 1 1 1 1 1 1 1	cyhalothrin				seed/ware 4	75 ml	none
Markate 50	5001			seed/ware 4	150 ml	none			
Ravane	5536			seed/ware 4	150 ml	none			
Insyst	3249	acetamiprid	20%	ware 1 seed 2	250 g	14 days			

Coragen	5295	chlorantranilipr ole	200 g/l	2	60 ml	14 days	
Movento	5349	spirotetramat	150 g/l	4	0.5 1/	14 days	
Teppeki	4399	flonicamid	500 g/kg	2	0.16 kg	14 days	
Closer	5341	Sulfoxaflor	120 g/l	2	200 ml	7 days	
Benevia (Colorado Beetle control only)	5354	Cyantraniliprol e	100 g/l	2	0.125	14 days	
Off Label							
Decis protech	5269	Deltamethrin	15g/l	seed only	670 ml	7 days	

Note; All tables are for guidelines purposes only and product labels should be consulted before using any products.











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