

## Potato Late Blight Fungicides Registered for WI, 2013.

In-furrow and seed treatment registrations are omitted. This is not a comprehensive list. Most fungicides listed are for use in conventional production systems. List compiled 4 June 2013.

**Amanda J. Gevens, Extension Plant Pathologist, UW-Madison**

Office Phone: 608-890-3072; E-mail: [gevens@wisc.edu](mailto:gevens@wisc.edu)

Trade Name (rate/A)	Active Ingredient(s)	PHI	REI	FRAC #	Comments
<u>Agri Tin, Super Tin 4L, Super Tin 80WP</u> (4-6 fl oz)	triphenyltin hydroxide	7 days	48 hours	30	Restricted use pesticide. 3 fl oz rate can be used if material is tank-mixed with another fungicide.
<u>Alude</u> (1.25 qt in 90 gal water)	mono and dipotassium salts of phosphorous acid	0 days	4 hours	33	Foliar application
<u>Fosphite, Rampart</u> (1-4 qt in at least 20 gal water/A)	potassium phosphite	0 days	4 hours	33	Foliar post-emergence spray and post harvest spray for control in storage.
<u>Fungi-Phite</u> (Foliar: 2 qt/A Seed trt: 15% volume to volume-2 ton in 1 gal solution)	potassium phosphite	0 days	4 hours	33	Seed piece spray and foliar post-emergence spray. Tank-mix with another effective fungicide is recommended and use high label rate for late blight control.
<u>Badge SC</u> (1-3 pt at 7-10 day interval)	copper hydroxide, copper oxychloride	0 days	24 hours	M1	Protectant activity only.
<u>Bravo Ultrex</u> (.7 then .9 to 1.36 lb)  <u>Bravo WeatherStik, Echo 720, Equus 720 SST, Initiate 720, Chlorothalonil 720 SC</u> (.75 then 1-1.5 pt)  <u>Bravo Zn, Equus 500 Zn</u> (1 1/8 then 1 1/5 to 2 1/4 pt)  <u>Echo Zn</u> (1 to 2.125 pt)  <u>Equus DF</u> (.7 then .9 to 1.36 lb)  Echo 90DF (5/8 then 7/8 to 1.25 lb)	chlorothalonil	7 days	12 hours	M5	11.25 lb a.i./acre maximum on standard label. However, WI has a special 24(c) registration for long season potatoes extending the max a.i. from 11.25 to 16 lb a.i./acre with Bravo (Syngenta) and Echo (Sipcam Advan) formulations.
<u>Cabrio Plus</u> (2.9 lb)	pyraclostrobin+m etiram	3 days	24 hours	11+M3	17.4 lb/acre maximum per season. Do not apply more than 2 sequential applications.

## Potato Late Blight Fungicides Registered for WI, 2013.

Trade Name (rate/A)	Active Ingredient(s)	PHI	REI	FRAC #	Comments
<u>Champ WG</u> (1 to 1.5 lb 3 to 4 lb in severe areas)	copper hydroxide	0 days	24 hours	M1	Use high label rates for foliar late blight protection.
<u>Champ Formula 2 Flowable</u> (2/3 to 2 2/3 pt)					
<u>Champ DP Dry Prill</u> (2/3 to 1 lb 2 to 2 2/3 lb when disease is severe)					
<u>Kentan DF</u> (1-2.5 lb 4 lb when severe)	copper hydroxide	0 days	24 hours	M1	Use high label rates for foliar late blight protection.
<u>Kocide 2000</u> , <u>Kocide 3000</u> (.73-3 lb .5-1.75 lb)					
<u>Nu-Cop 3L</u> (2/3 to 2 pt 2 to 4 pt if severe)					
<u>Nu-Cop 50DF</u> (1-1.5 lb 3-4 lb if severe)					
<u>C-O-C-S WDG</u> (1.5- 4 lb)	copper oxychloride, basic copper sulfate	0 days	24 hours	M1	Use high label rates for foliar late blight protection.
<u>Curzate 60DF</u> (3.2 oz foliar)	cymoxanil	14 days	12 hours	27	Locally-systemic fungicide. Must be tank-mixed with a protectant fungicide. Rainfast within 2 hours.
<u>Dithane F45</u> <u>Rainshield</u> (.4 to 1.6 qt)	mancozeb	24 hours	3 days	M3	Max rate per acre/season is 11.2 lb a.i. Plant as soon as possible after seed treatment.
<u>Dithane M45</u> (.5 to 2 lb)					
<u>Roper DF</u> <u>Rainshield</u> (1 -2 lb)					

## Potato Late Blight Fungicides Registered for WI, 2013.

Trade Name (rate/A)	Active Ingredient(s)	PHI	REI	FRAC #	Comments
<u>Evito 480SC</u> , <u>Aftershock</u> (3.8 fl oz)	fluoxastrobin	7 days	12 hours	11	Follow label for resistance management.
<u>Forum</u> (Foliar and tuber control: 6 oz)	dimethomorph	4 days	12 hours	40	May be tank-mixed with another effective fungicide for enhanced management – but not required by label. Addition of an adjuvant may enhance management. Can be applied after vine kill.
<u>Gavel 75DF</u> (1.5 to 2 lb)	zoxamide+mancozeb	3 days	48 hours	22+M3	Do not make >6 applications/crop. Contact fungicide.
<u>Gem 500SC</u> (3.8 fl oz)	trifloxystrobin	7 days	12 hours	11	Follow label for resistance management.
<u>Headline</u> (6 to 12 fl oz)	pyraclostrobin	3 days	12 hours	11	Follow label for resistance management.
<u>ManKocide</u> (1.5 to 2 then 4-5 lb)	mancozeb+copper hydroxide	3 days	24 hours	M3+M 1	Not labeled as a seed trt for potatoes.
<u>Omega 500F</u> (5.5 fl oz)	fluazinam	14 days	48 hours	29	REI is 4 days for high exposure activities. New special local need label 24c in April 2011.
<u>Omega Top MP</u> (5.5 fl oz) – individual label for Omega sold in co-pack with Top MP (difenoconazole)	fluazinam	14 days	48 hours	29	Can be applied aerially. REI is 4 days for high exposure activities.
<u>Oxidate</u> (40 to 120 fl oz to 100 gal water, 30- 100 gal solution per acre)	hydrogen dioxide	0 days	1 hour	NC	Foliar spray for late blight. Frequent applications (5-day intervals) can limit sporulation.
Penncozeb 80WP, Penncozeb 75DF (.5 to 2 lb)  Penncozeb 4FL, Manzate flowable (.4 to 1.6 qt)  <u>Manzate Pro- Stick</u> (1 to 2 lb, seed trt: 1.25 lb/50 gal water)	mancozeb	3 days	24 hours	M3	Do not exceed 11.2 lb a.i./acre/year.
<u>Phostrol</u> (2.5 to 10 pt) (Post harvest trt: 1 gal/ton in .5 gal water)	mono- and di- basic sodium, potassium, and ammonium phosphites	0 days	4 hours	33	Can be applied as a foliar for late blight, pink rot, and Pythium leak. Can be applied post-harvest for storage disease control.

## Potato Late Blight Fungicides Registered for WI, 2013.

Trade Name (rate/A)	Active Ingredient(s)	PHI	REI	FRAC #	Comments
<u>Polyram 80DF</u> (1.5 to 2 lb in 15 gal water/acre minimum)	metiram	3 days	24 hours	M3	Metiram is an EBDC, like mancozeb (M3). Total amount of a.i. per year/acre must include all EBDCs.
<u>Previcur Flex</u> (.7 to 1.2 pt)	propamocarb hydrochloride	14 days	12 hours	F	Apply in a tank-mix with effective protectant. Can be applied as a broadcast or banded application over the row, post-emergence.
<u>Priaxor</u> (4-8 fl oz)	fluxapyroxad+pyr aclostrobin	7 days	12 hours	7+11	Cannot apply more than 3 applications/season. Follow label for resistance management. Xemium and Headline pre-mix.
<u>Quadris</u> (6 to 15.5 fl oz)	azoxystrobin	14 days	4 hours	11	Alternate away from Group 11 fungicides to manage resistance.
<u>Quadris Opti</u> (1.6 pt)	azoxystrobin+chl orothalonil	14 days	12 hours	11+M5	Alternate away from Group 11 fungicides to manage resistance.
<u>Ranman</u> (1.4 to 2.75 fl oz)	cyazofamid	7 days	12 hours	21	Follow label for resistance management.
<u>Reason</u> (5.5 to 8.2 fl oz)	fenamidone	14 days	12 hours	11	Follow label for resistance management.
<u>Revus</u> (5.5 to 8 fl oz)	mandipropamid	14 days	4 hours	40	Addition of an adjuvant is recommended.
<u>Revus Top</u> (5.5 to 7 fl oz)	mandipropamid+d ifenoconazole	14 days	12 hours	40+3	Addition of an adjuvant is recommended.
<u>Tanos</u> (8 to 10 oz)	cymoxanil + famoxadone	14 days	12 hours	27+11	Must be tank-mixed with an effective protectant fungicide.
<u>Ridomil Gold SL</u> (1 to 2 pt)	mefenoxam	14 days	48 hours	4	Do not apply beyond the at-planting stage.
<u>Ridomil Gold Bravo SC</u> (2.5 pt)	mefenoxam+chlor othalonil	14 days	48 hours	4+M5	Follow label for resistance management.
<u>Ridomil Gold Copper</u> (2 lb)	mefenoxam+copp er hydroxide	14 days	48 hours	4+M1	Tank-mix with an effective protectant.
<u>Ridomil Gold MZ WG</u> (2.5 lb)	mefenoxam+man cozeb	3 days	48 hours	4+M3	Follow label for resistance management.
<u>Zampro</u> (11-14 fl oz)	ametoctradin+dim ethomorph	4 days	12 hours	45+40	Do not make more than 2 sequential applications. Follow label for resistance management. Ametoctradin is new a.i.; dimethomorph is Forum (formerly Acrobat).