

2014 Potato Fungicide Roster and Ratings (in order of preference – Best to Poorest) with specific emphasis on the control of late blight (LB)  
(*Phytophthora infestans*)

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Potato fungicides	MOA for LB (Protectant/Curative/Antisporulant)/ <u>Mobility</u>	<sup>1</sup> FRAC Group	<sup>2</sup> Risk mtg	REI (hrs.)	PHI (days)	No. applic./amt/season	<sup>3</sup> Usage rate	<sup>4</sup> Efficacy Foliar/Tuber Blight	<sup>5</sup> Special comments & Resistance Mtg. measures
<b>Ridomil Gold</b> <b>Bravo</b> ( <i>mefenoxam</i> + <i>chlorothalonil</i> )	<b>P, C, A/Systemic</b>	4 + M5	H <sup>1</sup> for Gp 4; mix = M	48	14	Don't exceed 11.25 lb a.i. /A/S of chloro. products	2.5 pt (rate = 1 lb a.i. chloro.)	Foliar = ++++	<i>mefenoxam</i> is effective for US22, US23 only, but not for most other isolates of LB; <u>Note High</u> fungicide resistance for Gp. 4 used alone; Alternate with different MOA between each spray.
	<i>mefenoxam</i> - effectiveness based upon isolate							TBIt = ?	
<b>*Previcur Flex</b> ( <i>propamocarb</i> ) add <b>Contact</b>	<b>P, C, A/Systemic</b>	28	L-M	12	14	5 applic./6 pt per season	LB @ 0.7-1.2 pt.	Foliar = ++	TM with contact fungicide; Suggest alternating diff. MOA with each spray.
	Good upper movement to stems and leaves							TBIt = ++(+)	
<b>*Presidio</b> ( <i>fluopicolide</i> ) <b>(Not Approved now on Potato)</b>	<b>P, C, A/Translaminar/Sys.</b>	43	H	12	7	4 applic./12 fl oz	LB @ 4 floz	Foliar = +++	TM with contact fungicide; no more than 2 consecutive applic. before alternating to diff. MOA.
	Preventative; some curative reach-back activity; add contact							TBIt = ++++	
<b>Revus Top</b> ( <i>mandipropamid</i> + <i>difenoconazole</i> )	<b>P, c, a/Translaminar</b>	40 + 3	L-M	12	14	4 applic./28 fl oz	LB + other @ 5.5-7 floz	Foliar = ++	No more than 2 consecutive applic. before alternating to diff. MOA; addition of surfactant rec.
	Added broad spectrum component							TBIt = +	
<b>Ranman 400SC</b> ( <i>cyazofamid</i> ) add <b>Contact</b>	<b>P, -, -/Contact</b>	21	H	12	7	10 applic./27.5 fl oz	LB @ 1.4-2.75 floz	Foliar = ++;	TM suggestion; No more than 3 consecutive applic., then switch to 3 sprays of diff. MOA; TBIt use 2-3 sprays before vine kill.
	Limited systemic activity							TBIt = ++(+)	
<b>*Gavel 75DF</b> ( <i>zoxamide</i> + <i>mancozeb</i> )	<b>P, -, -/Contact</b>	22 + M3	L-M	48	3	6 applic. or 12 lb/sea.	LB, EB @ 1.5-2 lb	Foliar = +	Suggest alternating diff. MOA with each spray.
	Not systemic, some vapor activity reported							TBIt = +++	
<b>*Zoxium 80WSP</b> ( <i>zoxamide</i> ) add <b>Contact</b>	<b>P, -, -/Contact</b>	22	L-M	48	3	8 applic. or 2 lb/sea.	LB @ 2.5-4.0 oz/A	Foliar = +	Product will only control LB; Do not make more than 2 consecutive applic.
	Same as above w/o mancozeb							TBIt = +++	
<b>Forum</b> ( <i>dimethomorph</i> ) add <b>Contact</b>	<b>P, c, A/Translaminar</b>	40	L-M	12	4	30 oz/season	LB @ 6 oz/A	Foliage = ++	TM suggestion and addition of spreading/penetrating adjuvant; alternate with diff. MOA.
	Use as preventative							TBIt = ++	
Priaxor	Not registered NYS; suppression only								
Zampro	Not registered NYS; LB foliar and Tuber blight								

Potato fungicides - Continued	MOA for LB (Protectant/Curative/Antisporulant)/Mobility	<sup>1</sup> FRAC Group	<sup>2</sup> Risk mtg	REI (hrs.)	PHI (days)	No. applic./amt./season	<sup>3</sup> Usage rate	<sup>4</sup> Efficacy Foliar/Tuber Blight	<sup>5</sup> Special comments & Resistance Mtg. measures
<b>Curzate 60DF</b> (cymoxanil) add Contact	<b>P, C, a/Translaminar</b> Short residual, stronger curative properties	27	L-M	12	14	No more than 7 applic./sea.	LB @ 3.2 oz/A	Foliage = ++ TBIt = 0	TM required; Alternate sprays with fungicide with diff. MOA; Kick back activity is only 2 days if cool and zero if above 80F;
<b>Tanos 50DF</b> (famoxadone + cymoxanil) + Contact per label	<b>P, C, a/Translaminar</b> Two modes of activity; but mixture needs to be applied before infection occurs	11 + 27	M-H	12	14	48 oz/season	LB @ 6-8 oz	Foliage = ++ TBIt = 0	See the limitations above for <b>Curzate</b> ; treat essentially like a preventative spray.
<b>Strobilurin Fungicides (ex. Quadris F, Gem, Headline, †Reason, Quadris Opti, Quadris Top; Cabrio Plus)</b>	<b>P, -, a/Translaminar</b> Products do have activity for LB, but should not be relied upon as first line of defense. (Preventative only)	11 alone or with additional Group Nos.	H if used alone	4	14	Limit of 123 fl oz/season	LB rate @ 12.0 fl oz/A	Foliage = + TBIt = 0	Specifics are for <b>Quadris F</b> , no more than 1 application before switching to a fungicides with diff. MOA; See labels for other strobilurins for rates, etc.
<b>chlorothalonil (ex. Bravo Weather Stik)</b>	<b>P, -, -/Contact</b> Broad spectrum	M5	L	12	7	15 pt (11.25 lb a.i.) /season	LB @ 0.75-1.5 pt; other dis.	Foliar = ++ TBIt = 0	Good TM partner; Many other formulations and generics exist – see specific label
<b>mancozeb (ex. *Dithane DF Rain Shield)</b>	<b>P, -, -/Contact</b> Broad spectrum – for LB and EB	M3	L	24	3	Limit 15 lb (11.2 lb a.i./season)	LB @ 1-2 lb/A	Foliar = ++ TBIt = 0	Good TM partner; rate can be adjusted depending on plant size – see label
<b>Polyram 80DF</b> (metiram)	<b>P, -, -/Contact</b> Broad spectrum - LB and EB	M3	L	24	3	14 lb/season	1.5-2 lb/A	Foliage = ++ TBIt = 0	Use as a TM partner
<b>*Agri Tin</b> (triphenyltin hydroxide)	<b>P, -, -/Contact</b> Often used as TM partner	30	L-M	48	7	Limit of 11.25 oz/season	LB @ 2.5-3.75 oz/A	Foliage = ++ TBIt = ?	* <b>Super Tin</b> for LB @ 4-6 fl oz/A, limit 18 fl oz/season.
<b>copper (ex. Champ WG, since OMRI) (copper hydroxide)</b>	<b>P, -, -Contact</b> Broad spectrum – EB and LB	M1	L	24	0	No limits listed	LB @1-1.5 lb to 3-4lb/A	Foliage = + TBIt = ++	<u>Other OMRI coppers: Badge X2; Cueva; Nu-Cop 50DF</u> ; Many other <u>Conventional coppers</u> avail.

<sup>1,2</sup> FRAC = Fungicide Resistance Action Committee Group No. and Risk for fungicide resistance development; <sup>3</sup> Usage rate for LB as range or highest value; <sup>4</sup> Foliar and Tuber Blight ratings where 0 = no effect or not labeled; 0(+) = some effect; + = poor; ++ = OK-good; +++ = very good; ++++ = excellent. <sup>5</sup> Special comments: **TM** = tank mix with another fungicide for resistance management and control of other diseases like early blight; **MOA** = mode of action means selecting a fungicide from a different Fungicide Group \* = Restricted applicator use in NYS per DEC requirements; † = Not for use on Long Island.