

Disease	Active Ingredients	Commercial Product rate/a	PHI	Additional Comments
Black Dot	azoxystrobin	6.0 – 15.5 fl oz Aframe, Equation, Quadris Flowable, Satori, Willowood Azoxy 2SC	14	Do not exceed one application of a Group 11 fungicide before alternating with a fungicide containing a different mode of action Quadris and Headline are Group 11 fungicides.
	azoxystrobin + chlorothalonil	1.6 pt Quadris Opti	14	
	azoxystrobin + difenoconazole	8.0 – 14.0 fl oz Quadris Top	14	
	pyraclostrobin	6.0 – 9.0 fl oz Headline SC, EC	3	Quadris Opti is a Group 11 and Group M fungicide.
	azoxystrobin + benzovindiflupyr	0.34 – 0.5 oz Elatus/1,000 ft row	14	Apply in-furrow at planting in a narrow band over the seed piece. Do not exceed 9.5 oz/a as a banded application.
	chlorothalonil	1.0 – 1.5 pt Bravo Weather Stik Echo 720	7	Note seasonal use limitations on the label. Current labeling for annual use of chlorothalonil products in Wisconsin allows 11.2 lb ai/a Bravo products (Ultrex, WeatherStik, Zn) (special WI registration expires 12/31/17, however a renewal is in process – please check DATCP special registration listings) and 16.0 lb ai/a Echo products (Zn, 720, 90DF) (special WI registration expires 12/31/20).
		1.5 – 2.25 pt Bravo Zn, Equus 500 Zn	7	
		0.875 – 1.25 lb Echo 90DF, Echo Zn	7	
		0.9 – 1.36 lb Bravo Ultrex 82.5WDG, Equus DF	7	
chlorothalonil + cymoxanil	2.0 pt Ariston	14	Apply at 7- to 14-day intervals. Use shorter interval when plants are rapidly growing and disease conditions are severe.	
cymoxanil + famoxadone	6.0 – 8.0 oz Tanos	14	Manages several other diseases. Follow resistance management guidelines. For suppression.	
difenoconazole	5.5 – 7.0 fl oz Top MP	14	Follow resistance management guidelines.	

*Restricted-use pesticide

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Black Dot (cont.)	fenamidone	5.5 – 8.2 fl oz Reason	14	Manages several other diseases. Follow resistance management guidelines. For suppression.
	fluopyram + pyrimethanil	11.2 fl oz Luna Tranquility (suppression)	7	Begin fungicide applications preventatively. Do not apply more than 43.6 fl oz/a per season. Do not make more than 2 sequential applications of any Group 7 or 9 fungicide before rotating with a fungicide from a different group.
	fluoxastrobin	0.16 – 0.24 fl oz/1,000 ft row Aftershock, Evito 480 SC 6.1 – 9.2 oz/a Tepera	7	Follow resistance management guidelines.
	flutolanil	0.71 – 1.1 lb Moncut 70-DF	at-planting treatment	Direct spray uniformly around or over seed piece in a 4- to 8-inch band prior to covering with soil.
	fluxapyroxad + pyraclostrobin	4.0 – 8.0 fl oz Priaxor	7	Make no more than 3 applications/a per season. Apply no more than 24.0 fl oz/a per season.
	mancozeb	0.4 – 1.6 qt Dithane F45 4F 0.5 – 2.0 lb Dithane M45, Penncozeb 80WP, Penncozeb 75DF 1.0 – 2.0 lb Dithane 75DF Rainshield NT, Koverall, Manzate 200 75DF	3 3 3	Do not exceed a total of 11.2 lb ai/a EBDC per growing season. EBDC materials include maneb, mancozeb, and metiram.
	mefentrifluconazole	3.0 – 5.0 fl oz Provysol	7	Do not apply more than 5.0 fl oz (0.13lb) / per acre per application. Do not male more than applications at 5.0 fl oz or

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Black Dot (cont.)				5 applications at 3.0 fl oz per acre per year.
	metaconazole	2.5 – 4.0 oz Quash	1	Do not make more than 4 applications per season. Do not male more than 2 sequential applications. Do not apply more than 16.0 oz/a per season.
	penthiopyrad	10.0 – 24.0 fl oz Vertisan	7	Do not exceed 72.0 fl oz/a per year. Make no more than 2 sequential applications of Vertisan before switching to a fungicide with a different mode of action.
	pydiflumetofen + fludioxonil	9.2 – 11.4 fl oz Miravis Prime	14	Suppression of black dot only. Do not apply more than 2 applications per year by air. Do not apply more than 34.2 fl oz per acre per year.
	pyraclostrobin + metiram	2.0 – 2.9 lb Cabrio Plus	3	Do not male more than 2 sequential applications before alternating to a non-Group 11 or M3 fungicide.
	zoxamide + chlorothalonil	32.0 – 34.0 fl oz Zing	7	Do not make more than 2 sequential applications before alternating to another mode of action.
Black Leg	<i>Bacillus amyloliquefaciens</i> strain D747	0.125 – 1.0 lb Double Nickel 55		Soil drench or apply as a foliar treatment depending upon disease management considerations.
	0.5% calcium or sodium hypochlorite	Hilex Clorox 1 gal Lysol 50%/10 gal water		Disinfect machinery, warehouse, planters, and seed cutters.
	copper hydroxide	1.0 – 3.0 qt Previsto		Apply a higher rate if considerations favor disease.
	formaldehyde	4 cups 40% solution/10 gal water		

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Black leg (cont.)	phenol	1 – 3% solution		
	streptomycin	100 ppm Agri-Mycin 17, Harbour		Can provide some suppression of blackleg symptom development. Soak cut seed pieces in this treatment for several minutes.
Common scab (<i>Streptomyces scabies</i>)	<i>Cultural practices aid in overall common scab management. Maintain adequate field moisture during tuberization and adjust pH to less than 5.2. Select varieties with resistance. Early-season stress can promote scab.</i>			
	chloropicrin	Varies by product	See label	Soil fumigation processes require special certification and management plans with the Department of Agriculture, Trade, and Consumer Protection.
	PCNB (pentachloronitrobenzene)	5.2 – 10.4 fl oz Blocker 4F	14	Do not exceed 5.0 lb of active ingredient per acre in any one season.
Early blight (<i>Alternaria solani</i>) and brown spot (<i>Alternaria alternata</i>)	azoxystrobin	6.0 – 15.5 fl oz Aframe, Equation, Quadris Flowable, Satori, Willowood Azoxy 2SC	14	Quadris and Headline belong to the Group 11 (strobilurin) fungicide category. Quadris Opti contains a combination of Group 11 and Group M fungicides. Do not exceed 1 application of a Group 11 fungicide before alternating with a fungicide having a different mode of action.
	azoxystrobin + difenoconazole	8.0 – 14.0 fl oz Quadris Top	14	Follow resistance management guidelines.
	difenoconazole	5.5 – 7.0 fl oz Top MP	14	Do not apply more than 28.0 fl oz/a per season. Special label with Omega for broad spectrum disease control.

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Early blight (<i>Alternaria solani</i>) and brown spot (<i>Alternaria alternata</i>) (cont.)	fluopyram	6.5 fl oz Velum Prime	7	Begin fungicide applications preventively. Do not apply more than 43.6 fl oz.a per season. Do not make more than 2 sequential applications of any Group 7 or 9 fungicide before rotating with a fungicide from a different group.
	fluopyram + pyrimethanil	<i>Early blight</i> : 11.2 fl oz Luna Tranquility	7	
	fluxapyroxad + pyraclostrobin	4.0 – 8.0 fl oz Priaxor	7	Make no more than 3 applications/a per season. Apply no more than 24.0 fl oz/a per season.
	mefentrifluconazole	3.0 – 5.0 fl oz Provysol	7	Do not apply more than 5.0 fl oz (0.13 lb) per acre per application. Do not make more than 3 applications at 5.0 fl oz or 5 applications at 3.0 fl oz per acre per year.
	metconazole	2.5 – 4.0 oz Quash	1	Do not make more than 4 applications per season. Do not make more than 2 sequential applications. Do not apply more than 16.0 oz/a per season
	penthiopyrad	10.0 – 24.0 fl oz Vertisan	7	Do not exceed 72.0 fl oz/a per year. Make no more than 2 sequential applications of Vertisan before switching to a fungicide with a different mode of action.
	pydiflumetofen + fludioxonil	9.2 – 11.4 fl oz Miravis Prime	14	Do not apply more than 2 applications per year by air. Do not apply more than 34.2 fl oz per acre per year.
	pyrimethanil	7.0 fl oz Scala SC	7	Follow resistance management guidelines.

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Early blight and late blight	azoxystrobin	6.0 – 15.5 fl oz Aframe, Equation, Quadris Flowable, Satori	14	Evito, Gem, Headline, Quadris, Reason, and Tanos belong to the Group 11 (strobilurin) fungicide category. Quadris Opti contains a combination of Groups 11 and M5 fungicides. Do not exceed 1 application of any of these products before alternating with a fungicide having a different mode of action. Tanos must be tank mixed with a contact fungicide having a different mode of action. Following the final application of Reason 500 SC, wait 30 days before rotating to wheat; wait 1 year before rotating to all other crops. Use higher rates and short we intervals when disease pressure is severe.
	azoxystrobin + chlorothalonil	1.6 pt Quadris Opti	14	
	azoxystrobin + difenoconazole	8.0 – 14.0 fl oz Quadris Top	14	
	cymoxanil + famoxadone	<i>Early blight:</i> 6.0 oz Tanos 50DF <i>Late blight:</i> 6.0 – 8.0 oz Tanos 50DF	14 14	
	fenamidone	5.5 – 8.3 fl oz Reason 500 SC	14	
	fluoxastrobin	2.0 – 3.8 fl oz Aftershock, Evito 480 SC	7	
	pyraclostrobin	<i>Early blight:</i> 6.0 – 9.0 fl oz Headline SC, EC <i>Late blight:</i> 6.0 – 12.0 fl oz Headline SC, EC	3	
			3	
	pyraclostrobin + metiram	2.9 lb Cabrio Plus	3	
	<i>Bacillus mycoides</i> isolate J	1.0 – 4.5 oz LifeGard WG	0	
	boscalid	2.5 – 4.5 oz Endura WDG	10	

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Early blight and late blight (cont.)	chlorothalonil	1.0 – 1.5 pt Bravo Weather Stik, Echo 720, Equus 720	7	Note seasonal use limitations on label. Current labeling for annual use of chlorothalonil products on Wisconsin allows 11.2 lb ai/a Equus products (Ultrex, WeatherStik, Zn) and 16.0 lb ai/a Echo products (Zn, 720, 90DF).
		1.5 – 2.25 pt Bravo Zn, Equus 500 Zn	7	
		0.875 – 1.25 lb Echo 90DF, Echo Zn	7	
		0.9 – 1.36 lb Bravo Ultrex 82.5WDG, Equus	7	
	chlorothalonil + cymoxanil	2.0 pt Ariston	14	
copper hydroxide	0.66 – 2.66 pt Champ Formula 2	0	Gives fair control of early blight and good control of late blight. Can be tank mixed with mancozeb, or chlorothalonil for broad-spectrum disease control. Tank mixing with insecticides such as Monitor may reduce effectiveness of the insecticide.	
	0.67 – 2.67 pt Kocide 4.5 LF	0		
	1.3 – 5.3 pt Kocide LF	0		
	0.5 – 1.75 lb Kocide 3000	0		
	0.75 – 3.0 lb Kocide 2000 DF	0		
	1.0 – 4.0 lb Champion 77WP; Kocide 101, DF	0		
cymoxanil	3.2 oz Curzate 60DF	14	Do not use Curzate 60DF alone; always mix with another registered protectant fungicide such as mancozeb, chlorothalonil, triphenyltin hydroxide, or metiram. Do not apply more than 7 sprays per season. After 3 to 4 applications of Curzate 60DF, switch to another fungicide program for one to two sprats	

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Early blight and late blight (cont.)				before applying additional sprays of Curzate 60DF. Very warm day and night temperatures hastens curative activity to 1 day rather than normal 2-3 days.
	mancozeb	0.4 – 1.6 qt Dthane F45 4F 0.5 – 2.0 lb Dithaane M45, Penncozeb 80WP, Penncozeb75DF 1.0 – 2.0 lb Dithane 75DF Rainshield NT, Koverall, Manzate 200 75DF	3 3 3	Do not exceed a total of 11.2 lb ai/a EBDC per growing season. EBDC materials include maneb, mancozeb, and metriam.
	mancozeb + chlorothalonil	1.2 – 1.8 lb Elixir	7	Also controls black dot. Do not apply more than 18.0 lb product/a per crop.
	mandipropamid/difenoconazole	5.5 – 7.0 fl oz Revus Top	14	Make no more than 2 consecutive application before switching to a non-Group 40/3 fungicide. Do not exceed 28.0 fl oz/a Revus Top per season. The addition of a spreading/penetrating type adjuvant, such as non-ionic surfactant, is recommended.
	metiram	1.5 – 2.0 lb Polyram 80 DF	14	Do not exceed 14.0 lb/a Polyram 80 DF per season.
	pyrimethanil	7.0 fl oz Scala SC in combination with broad spectrum fungicide	7	Scala belongs to the Group 9 fungicide category and controls only early blight. If used alone, Scala does not control late blight. Use the 7.0 fl oz/a rate of Scala only in a tank mix with a broad spectrum fungicide. Alternating the tank-mix combination with a broad-spectrum fungicide is a

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Early blight and late blight (cont.)				resistance management strategy.
	trifloxystrobin	<i>Early blight:</i> 2.9 – 3.8 fl oz Gem 500 SC <i>Late blight</i> 3.8 fl oz Gem 500 SC tank mixed with a registered protectant fungicide	7 7	
	triphenyltin hydroxide (TPTH)	4.0 – 6.0 fl oz *Super Tin 4L	7	Do not exceed 18.0 fl oz/a Super Tin 4L, 11.25 oz/a Super Time 80WP, or 11.5 oz/a Agri Tin 80WP per season. Combination of TPTH fungicides with MH-30 and some emulsifiable concentrate insecticides can cause serious crop injury. High rates may injure foliage if sensitive varieties such as Superior and Norland. Observe 24-hour field re-entry period as specified on label. Note information regarding mixing, loafing and application.
		2.5 – 3.75 oz *Agri Tin 80WP, *Super Tin 80WP	7	
triphenyltin hydroxide (TPTH) plus mancozeb or metiram	3.0 fl oz *Super Tin 4L or 1.87 oz *Super Tin 80WP or 1.87 oz *Agri Tin 80WP <i>plus one of the following:</i> 1.5 lb Dithane M45 80WP, 75DF, WSP or 1.2 qt Manex F4 or 1.5 lb Manzate 200 75DF or 1.5 lb Penncozeb 80WP, 75DF or 1.5 lb Polyram 80DF	7 7 7	Combining TPTH with maneb, mancozeb, or metiram reduces foliage injury while providing improved control of early blight. See comments on TPTH above. Do not exceed a total of 11.2 lb ai/a EBDC per growing season, EBDC materials include maneb, mancozeb and metiram.	

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Early blight and late blight (cont.)	zoxamide + chlorothalonil	32.0 – 34.0 fl oz Zing	7	Do not make more than 2 sequential applications before alternating to another mode of action.
	zoxamide + mancozeb	1.5 – 2.0 lb Gavel 75DFp	3	Begin treatment before the onset of late blight. This product contains mancozeb, an active ingredient of EBDC. If using other EBDC-containing fungicides. Do not make more than 6 applications per season or exceed 12.0 lb/a of Gavel 75DF.
Early dying complex	<i>A soil test to determine the presence of Verticillium and/or nematodes is recommended prior to treatment since other agents that are not controlled by soil fumigation may cause early senescence of a potato crop. If Verticillium propagules, root lesion nematodes, or root knot nematodes are present in significant numbers, treatment with a soil fumigant may provide acceptable disease control.</i>			
	metam-sodium	50 gal Vapam HL, Metam, Sectagon 42		<p>Knife into plow layer of soil at a rate of 50.0 gal/a or on sandy soils only apply through the irrigation system in 0.6 – 1.0 inch water in the fall. An approved backflow prevention valve must be used when applying fumigant through irrigation system. Do not apply if significant rainfall is forecast in the next 24 hours. Fields must be monitor during and after application.</p> <p>Soil temperatures must be below 75° F. Treatment should not be applied immediately following a potato crop. Potato vine debris should be decomposed at the time of fumigant application for best results. A 2- to 3-year</p>

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Early dying complex (cont.)				rotation between potato crops is recommended. Fumigant cannot be applied through an irrigation system within ¼ mile of an institution such as a hospital, school, or prison.
Fusarium	azoxystrobin + fludioxonil + difenoconazole	1.0 fl oz Stadium/2,000 lb tubers		Postharvest treatment only. Do not use on the seed potatoes or seed pieces. Do not make more than one postharvest application to the tubers.
	cymoxanil + mancozeb + thiophanate-methyl	0.75 lb Evolve/100 seed pieces	seed treatment	Thoroughly cover seed pieces with treatment mixture.
	fludioxonil	0.08 – 0.16 fl oz Maxim 4FS or Spirato 480 FS/100 lb seed potatoes	seed treatment	If applied to potatoes being grown for seed, either a labeled rate of mancozeb or an in-furrow application of Quadris (azoxystrobin) at 0.40 fl oz/1,000 ft row must be applied after Maxim 4FS or Spirato 480 FS.
	fludioxonil + mancozeb	0.5 lb Maxim MZ/100 lb seed pieces	seed treatment	Apply using equipment that ensures uniform, and thorough coverage of each seed piece.
	flutolanil + mancozeb	0.75 – 1.0 lb MonCoat MZ/100 lb cut seed pieces	seed treatment	Apply immediately after seed cutting for thorough coverage of dust to the cut seed piece surfaces
	mancozeb	1.0 lb Potato Seed Treater PS or Mancozeb 6% Firbark/100 lb whole or cut seed pieces	Seed Treatment	Plant as soon as possible after treatment. Provides some control of late blight on cut seed.
	penflufen + prothioconazole	0.31 fl oz Ernesto Silver/100 lb seed pieces	Seed dressing applied at-plant	Do not apply more than 2.5 fl oz of slurry treatment/100 lb seed pieces. Application of an inert absorbent ingredient

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Fusarium (Cont.)				is recommended to improve suberization.
	thibendazole	0.42 fl oz Mertect 340-F/2000 lb of tuber		Mist unwashed tubers entering storage with 0.42 fl oz Mertect 340-F per 2000 lb of tubers in sufficient water for complete coverage. Additional treatment may be made before shipping by misting the tubers for 20 seconds in a solution containing 0.42 fl oz of Mertect per gallon of water. Do not treat seed potatoes after cutting.
	thiophanate-methyl + mancozeb	0.75 – 1.0 lb Tops MZ/100 lb cut seed pieces	Seed treatment	Thoroughly cover seed pieces with fungicide dust. Can also limit late blight spread on cut seed.
Late Blight	ametoctradin + dimethomorph	11.0 – 14.0 fl oz Zampro	4	Begin treatment prior to disease development. Do not make more than 3 applications of Zampro per season.
	cyazofamid	1.4 – 2.75 fl oz Ranman 400SC	7	Do not apply more than 10 sprays or 27.5 fl oz/a per year. Alternate Ranman (Group 21) sprays with a fungicide having a different mode of action. Crops not listed on the label should not be planted within 30 days after the last application.
	cymoxanil + mancozeb + thiophanate-methyl	0.75 lb Evolve/100 lb seed pieces	Seed treatment	Thoroughly cover seed pieces with treatment mixture.
	dimethomorph	6.0 oz Forum	4	Begin treatment before the onset of a late blight. Forum should be used as a tank mix with other protectant fungicides, but so not mix with

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Late Blight (Cont.)				mefenoxam or metalaxyl. Adjust rates and timing according to late blight conditions. Do not exceed 30.0 oz/a of product per season. Consult the label for rotational crop restrictions. May be used after vine kill for control of late blight tuber infection.
	fluazinam	5.5 fl oz Omega 500F	14	Application should begin prior to onset of disease. Do not apply more than 3/5 pt/a per season. Tank mix with other fungicides such as chlorothalonil, maneb, or mancozeb. REI = 4 days for high exposure activities.
	fludioxanil + mancozeb	0.5 lb Maxim MZ/100 lb seed pieces	Seed treatment	Apply using equipment that ensures uniform and thorough coverage of each seed piece.
	flutolanil + mancozeb	0.75 – 1.0 lb MonCoat MZ/100 lb cut seed pieces	Seed treatment	Apply immediately after seed cutting for thorough coverage of dust to the cut seed piece surfaces.
	mancozeb			
	oxathiapiprolin	1.6 – 4.8 fl oz Orondis Opti A, Orondis Ultra A	5	Begin foliar applications prior to disease development and continue on a 5- to 14-day interval. Do not exceed 27.2 fl oz/a per year.
	propamocarb hydrochloride	0.7 – 1.2 pt Previcur Flex	14	Begin treatment before the onset of late blight. Tank mix with other fungicides such as chlorothalonil, maneb, or mancozeb. Adjust rates and timing according to late blight conditions. Do not exceed 6 pt/a of Previcur Flex per season.

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Powdery Scab	fluazinam	1.5 – 3.0 Omega 500F	14	Apply in-furrow for control of powdery scab. Special Local Needs Registration (11/16/16 – 12/31/20).
Rhizoctonia	azoxystrobin	0.4 – 0.8 fl oz Quadris Flowable/1000 ft row	-	Apply in-furrow at planting.
	azoxystrobin – benzovindiflupyr	0.34 – 0.5 oz Elatus/1000 ft row	14	Do not apply more than 9.5 oz per year of Elatus. Band over the seed piece.
	fludioxonil	0.08 – 0.16 fl oz Maxim 4FS/100 lb seed potatoes	Seed treatment	If applied to potatoes being grown for seed, either a labeled rate of mancozeb or an in-furrow application of Quadris (azoxystrobin) at 0.40 fl oz/1000 ft row must be applied after Maxim 4FS.
	fludioxonil + mancozeb	0.5 lb Maxim MZ/100 lb seed pieces	Seed treatment	Apply using equipment that uniform and thorough coverage of each seed piece.
	flutolanil	0.71 – 1.1 lb Moncut 70-DF	In-furrow, at-plant treatment	Direct spray uniformly around and over seed piece in a 4- to 8-inch band prior to covering with soil.
	flutolanil + mancozeb	0.75 – 1.0 lb MonCoat MZ/100 lb cut seed pieces	Seed treatment	Apply immediately after seed cutting for thorough coverage of dust to the cut seed piece surfaces.
	PCNB (pentachloro-nitrobenzene)	1.65 lb Blocker 10 G/1000 ft row	45	Direct 8.5-inch band into the furrow over the seed and cover as part of the hilling operation at planting. Received label for common scab control in 2014.
	penthiopyrad	10.0 – 24.0 fl oz Vertisan	7	Do not exceed 72.0 fl oz/a per year. Make no more than 2 sequential applications of Vertisan before switching to a fungicide with a different mode of action.

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Rhizoctonia (cont.)	pyraclostrobin	0.4 – 0.8 fl oz Headline SC/1000 ft row		Apply in-furrow at planting.
	<i>Reynoutria sachalinensis</i> extract	1.0 – 4.0 qt or 2.2 – 8.8 fl oz/1000 ft row Regalia Rx Biofungicide	0	Improves plant health and induces the defense system of treated plants.
	thiophanate-methyl + mancozeb	0.75 – 1.0 lb Tops MZ/100 lb cut seed pieces	Seed treatment	Thoroughly cover seed with fungicide dust. Can also limit late blight spread on cut seed.
Root lesion and root knot nematodes	metam -sodium	Vapam HL, Metam, Sectagon 42		Generally double mineral soil rates for muck soils. More effective when soils are warmer than 55° F. A minimum of 3 weeks is necessary between fumigation and planting to prevent phytotoxicity.
Silver scurf (<i>Helminthosporium solani</i>) and black scurf (<i>Rhizoctonia solani</i>)	azoxystrobin	0.4 – 0.8 fl oz Quadris Flowable/1000 ft row	0	Apply at planting just before covering seed pieces with soil. Application of Quadris at planting does not appear to control early blight or late blight on the foliage later in the season. Do not exceed 2.88 qt/a Quadris per season.
	azoxystrobin + benzovindiflupyr	0.34 – 0.5 oz Elatus/1000 ft row	14	Do not apply more than 9.5 oz per year of Elatus. Band over the seed piece.
	azoxystrobin + fludioxonil + difenoconazole	<i>Silver scurf:</i> <i>Postharvest only:</i> 1.0 fl oz/2000 lb tubers		Do not use seed potatoes or seed pieces. Do not make more than one postharvest application to the tubers.
	cymoxanil + mancozeb + thiophanate-methyl	0.75 lb Evolve/100 lb seed pieces	Seed treatment	Thoroughly cover seed pieces with treatment mixture.
	fludioxonil	0.08 – 0.16 fl oz Maxim 4FS/100 lb seed potatoes	Seed treatment	If applied to potatoes being grown for seed, either a labeled rate of mancozeb or an in-furrow application of Quadris (azoxystrobin) at 0.40 fl

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Silver scurf (<i>Helminthosporium solani</i>) and black scurf (<i>Rhizoctonia solani</i>) (Cont.)				oz/1000 ft row must be applied after Maxim 4FS.
	fludioxonil + mancozeb	0.5 lb Maxim MZ/100 lb seed pieces.	Seed treatment	Apply using equipment that ensures uniform and thorough coverage of each seed piece.
	Flutolanil + mancozeb	0.75 – 1.0 lb MonCoat MZ/100 lb cut seed pieces	Seed treatment	Apply immediately after seed cutting for thorough coverage of dust to the cut seed piece surfaces.
	penflufen + prothioconazole	0.31 fl oz Ernesto Silver/100 lb seed pieces	Seed dressing applied at-plant	Do not apply more than 2.5 fl oz of slurry treatment/100 lb seed pieces. Application of an inert absorbent ingredient is recommended to improve suberization.
Tuber rot, Pythium leak, and pink rot	cyazofamid	<i>At planting:</i> 0.42 fl oz Ranman/1000 ft row (6.1 fl oz/a on 36-inch row spacing) <i>Lay-by hilling:</i> 2.75 fl oz Ranman		Do not use reduced rates as incomplete control can promote resistance.
	ethaboxam	8.0 fl oz Elumin	2	Follow resistance management guidelines.
	fluopicolide	4.0 fl oz Presidio	7	For pink rot control. Can be applied in-furrow in 5-10 gal/a spray mixture OR can be applied as a sidedress in 20-40 gal/a spray mixture.
	mefenoxam	0.42 oz Ridomil Gold SL/1000 ft row at planting 0.84 fl oz Ultra Flourish/1000 ft row at planting.		Mix Ridomil Gold SL or Ultra Flourish in a minimum of 3 gal/a of water and apply in a 6- to 8- inch band over the potato seed piece at planting.
	mefenoxam + chlorothalonil	2.5 pt Ridomil Gold Bravo	14	A total of up to 3 applications at 14-day intervals may be made

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Tuber rot, Pythium leak, and pink rot (cont.)	mefenoxam + copper hydroxide	2.0 lb Ridomil Gold Copper	14	beginning at flowering. May also provide control of late blight of caused by a sensitive genotype.
	mefenoxam + mancozeb	2.5 lb Ridomil Gold MZ	3	
	phosphorus acid	<i>Foliar:</i> 2.5 – 10.0 pt Phostrol <i>In-furrow:</i> 3.75 – 10.0 pt Phostrol <i>Postharvest:</i> 0.1 gal Phostrol in 0.5 gal water/2000 lb tubers <i>Russet varieties only:</i> 12.0 – 16.0 fl oz Confine Extra in 0.5 gal water/2000 lb tubers	0	For control of pink rot, late blight, and Pythium leak. First foliar treatment should begin at tuber initiation at the 10 pt/a rate, followed by a second and third application timed 2 weeks apart. Use adequate spray mixture volumes when applying to avoid phototoxicity. In-furrow application aids on control of pink rot, late blight, and Pythium leak. Postharvest application can limit advancement and spread of pink rot, late blight, and Pythium leak. Use adequate spray mixture volumes when applying to avoid tuber damage.
White mold	<i>Bacillud mycoides</i> isolate J	1.0 – 4.5 oz LifeGard WG	0	Maximum level of protection is induced within the plant at 3 – 5 days. Protection can last up to 18 days.
	Boscalid	5.5 – 10.0 oz Endura WDG	30	Endura belongs to the Group 7 fungicide category. Do not exceed 2 sequential applications of Endura before alternating to a labeled fungicide with a different mode of action. Do not exceed 2 applications per season for white mold control. Do not exceed 20.5 oz/a Endura per season.

*Restricted-use pesticide

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Disease	Active Ingredients	Commercial Product rate/a	PHI	Additional Comments
White mold (cont.)	<i>Coniothyrium minitans</i>	0.75 – 1.5 oz/1000 sq ft Contans		Preplant or postharvest soil incorporation to reduce viability of pathogen sclerotia in soil. Can make up to 8 applications/a per season. This is a biological fungicide with a specific activity only against white mold.
	Fluazinam	5.5 – 8.0 fl oz Omega 500F	14	Application should begin prior to onset of disease. Do not apply more than 3.5 pt/a per season. Tank mix with other fungicides such as chlorothalonil, maneb, or mancozeb.
	Fluopyram	6.5 fl oz Velum Prime		Provides nematode, white mold, and early blight control. Follow resistance management guidelines.
	Iprodione	2.0 lb Rovral 50WP 2.0 pt Rovral 4F, Iprodione 4L, Nevado 4F	14 14	Treat when warm, wet weather conditions favor disease development. Up to 4 applications at 7- to 10-day intervals may be made. Note crop rotation information on label. All crops on the Rovral label may be grown after treated potatoes. Root crops, cereal grains, soybeans, and tomatoes may be grown the year following treated potatoes.
	metconazole	4.0 oz Quash	1	Make first application prior to infection at row closure and 14 days later if conditions promote disease. Do not make more than 4 applications per season. Do not make more than 2 sequential applications. Do not apply more than 16.0 oz/a per season.

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Disease	Active Ingredients	Commercial Product rate/a	PHI	Additional Comments
White mold (cont.)	pydiflumetofen + fludioxonil	11.4 fl oz Miravis Prime	14	Apply at or before row closure followed by a second application 14 days later. Do not apply more than 34.2 fl oz/a per year. Apply in a minimum volume of 10 gal/a for adequate coverage.
	thiophanate-methyl	1.0 – 1.5 lb Topsin M WSB, 70 WP 20.0 – 30.0 fl oz Topsin 4.5FL	21 21	Make first application just before row closure. Subsequent applications may be made at 7- to 14-day intervals if conditions warrant. Application at peak bloom provides best control. Do not apply more than 4.0 lb/a Topsin M WSB or 80.0 fl oz/a Topsin 4.5FL per season.

*Restricted-use pesticide

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