Fungicides Seed Treatments Registered for Disease Control in Pea, Lentil, and Chickpea

This table presents information on available fungicide products for the management of widespread seedborne and soilborne diseases of pulse crops (peas, lentils, and chickpeas) for use in the United States. The information is based on labeled application rates according to label instructions and the presence of disease. The table includes the most widely marketed products and is not intended to be a list of all labeled products nor is it an endorsement of any specific product.

Consulting this table does not substitute careful reading of the product label before an application is made.

2024 Seed Treatment Fungicide and Disease Efficacy Table

Table Summary: The table contains data that is arranged in rows and columns. The table is large, consisting of 3 primary columns, row 1 contains their headings. Column 1, Fungicide, divides into 4 sub-columns, their headings are in row 2. Column 2, Crop, contains no sub-divisions. Column 3, Disease Efficacy, divides into 7 different sub-columns, their headings are in row 2. Each cell in row 3 and below describes a fungicide class, fungicide active ingredients within each class, associated commercial product name, recommended application dose according to the product label, the pulse crops for which the product is labeled, and which seed- and soilborne diseases are controlled by the product. A key is located below the table. This table is meant only as a quick reference, and it should not be a substitute for label directions.

Fungicide					Disease Control [b] [c]						
Class [d]	Active Ingredient	Product	Dosage (fl oz/ 100 lbs seed)	Crop [a]	Ascochyta/ Mycosphaerella	Pythium	Aphanomyces	Rhizoctonia	Fusarium	Botrytis	Sclerotinia
Benzimidazol e Carbamates (1)	Thiabendazole	Mertect 340-F	P = 1.02; L = 1.05; C = 2.04	P,L,C	R				R		

Triazoles (3)	Ipconazole	Rancona 3.8 FS	0.085	P,L,C	R			R	R	R	R
	Mefentrifluconazol e	Relenya	0.19 - 0.77	P,L,C				R	R		
Phenyl- Amides (4)	Mefenoxam	Apron XL	0.16 - 1.28	P,L,C		R					
	Metalaxyl	Allegiance- FL	P = 1.05; L,C = 0.75	P,L,C		R					
	Sedaxane	Vibrance	0.08 - 0.16	P,L,C				R			
Succinate-	Fluxapyroxad	Systiva XS	0.24 - 0.47	P,L,C	S [e]			R	S		
dehydrogenas e Inhibitors (7)	Penflufen	Evergol Prime	0.16 - 0.32	P,C				R			
	Inpyrfluxam	Zeltera	0.2	P, L, C				R			
Quinone outside Inhibitors (11)	Azoxystrobin	Dynasty	0.153 - 0.765	L,C				R			
	Pyraclostrobin	Stamina	0.4 - 1.5	P,L,C	S <u>[e]</u>						
Phenyl- Pyrroles (12)	Fludioxonil	Maxim 4FS	0.08 - 0.16	P,L,C				R	R		
Aromatic Hydrocarbons (14, proposed)	Tolclofos-methyl	Rizolex	0.3	P,L,C				R	R		
Thiazole- carboxamides (22)	Ethaboxam	Intego Solo	0.3 - 0.6	P [<u>f]</u> L,C		R	S				
Mixed Mode of Action	Fludioxonil, Mefenoxam	Apron MAXX RTA	5.0	P,L,C		R		R	R		R

	Ipconazole, Metalaxyl	Rancona Summit	4.0	P,L,C	R	R	 R	R	R	R
	Prothioconazole, Penflufen, Metalaxyl	EverGol Energy	1.0	P,L,C	S	R	 R	R	S	
	Pyraclostrobin, Fluxapyroxad, Metalaxyl	Obvius	4.6	P,L,C	R [e]	R	 R	R	R	
	Pyraclostrobin, Fluxapyroxad, Thiophanatemethy l, Metalaxyl	Obvius Plus [g]	1.5	С	R	R	 R	R	R	
	Trifloxystrobin, Metalaxyl	Trilex 2000	1.0	P,L,C		R	 R	R		
	Thiabendazole, Sedaxane, Mefenoxam, Fludioxonil	Vibrance Maxx Pulses RTA	5.0	P,L,C	R	R	 R	R	R	R
	Thiamethoxam, Thiabendazole, Sedaxane, Mefenoxam, Fludioxonil	CruiserMaxx Vibrance Pulses	5.0	P,L,C	R	R	 R	R	R	

- a. P = pea, L = lentil, C = chickpea
- b. Organisms targeted. For a complete list, check the label. Not included on this table are: Phytophthora, Downy Mildew, Alternaria, Aspergillus, Cladosporium, and Penicillium.
- c. Product categories: R = Registered for use; S = Registered for suppression only; -- = Not registered.

- d. Fungicide Mode of Action (MOA): letter followed by number and Fungicide Resistance Action Committee (FRAC) Code, number.
- e. Registered for protection against fungi; check label for details.
- f. Product efficacy may be reduced in areas with fungal populations that are resistant to strobilurin fungicides.
- g. Only registered for chickpea.

Further Information

To learn more about seed treatment fungicides or other management strategies for diseases control in pulse crops, contact MSU Extension Plant Pathologist Dr. Uta McKelvy. For help with identifying crop disorders, contact your <u>local extension agent</u> or the <u>Schutter Diagnostic Lab</u> at Montana State University. The table on "Fungicides registered for pea, lentil, and chickpea seed treatment and disease control" is also available in a standard PDF format.

The Seed Treatment Fungicide and Disease Efficacy Table was developed with support from Montana State University Extension Integrated Pest Management, the Northcentral Integrated Pest Management Center - Pulse Crop Working Group, and the Montana Department of Agriculture.