

Potato Cultivar Ratings: PVY, PMTV, Powdery Scab and TRV

For more information visit blogs.cornell.edu/potatovirus

Potato Cultivar PVY Susceptibility (foliar and tuber symptoms)											
#	Cultivar	# Isolates Used	Overall Foliar		Leaf Mosaic Severity by PVY Strain					Necrotic Symptoms	
			Symptom Severity	O	NTN	N:O	NWi	NE-11	Leaf	Tuber	
1	Ciklamen*	10	None	None	None	None	None	None	None	None	None
2	Eva*	12	None	None	None	None	None	None	None	None	None
3	Payette Russet*	8	None	None	None	None	None	.....	.....	None	None
4	Bannock Russet	12	None-Mild	None-Mild	None-Mild	None-Mild	.....	.....	.....	None	None
5	Calwhite	12	None-Mild	Mild	Mild	Mild	Mild	None	None	None	Yes
6	Kennebec	13	None-Mild	Mild	Mild	Mild	Mild	None	None	None	None
7	R. Norkotah 278	10	None-Mild	Mild	Mild	None-Mild	Mild	None-Mild	None	None	None
8	Red Gold	10	None-Mild	None-Mild	None-Mild	Mild	None-Mild	None	None	None	None
9	Rio Colorado	10	None-Mild	None-Moderate	Mild	None-Mild	Mild	None	None	None	None
10	Silverton Russet	12	None-Mild	None	None-Mild	None	Mild	None	None	None	None
11	Dakota Jewell	9	None-Moderate	None	None-Moderate	Mild	None	None	None	Yes	None
12	Premier Russet	11	None-Moderate	None	Mild-Moderate	Mild-Moderate	Moderate	.....	.....	Yes	None
13	Red LaSoda	12	None-Moderate	Moderate	Mild-Moderate	None	None	None	None	Yes	None
14	Russian Banana	10	None-Moderate	Moderate	Mild-Moderate	None	Moderate	Mild-Moderate	None	Yes	None
15	Snowden	12	None-Moderate	Moderate	Mild-Moderate	Mild-Moderate	Moderate	None-Moderate	Yes	None	None
16	Targhee Russet	4	None-Moderate	Moderate	Moderate	None	.....	.....	.....	Yes	None
17	Teton Russet	6	None-Moderate	Moderate	None	Mild	.....	.....	.....	Yes	None
18	Waneta	12	None-Moderate	None-Moderate	Moderate	None-Moderate	Moderate	None-Moderate	Yes	Yes	None
19	Gala	10	Mild	.....	Mild	None	Mild	Mild	.....	Yes	None
20	R. Nokotah CO8	11	Mild	Mild	Mild	None	Mild	Mild	.....	None	None
21	Tebina Russet	5	Mild	Mild	Mild	.....	.....	.....	.....	Yes	None
22	Atlantic	12	Mild-Moderate	Moderate	Moderate	Mild	Moderate	Moderate	.....	Yes	None
23	Bintje	11	Mild-Moderate	Moderate	Moderate	Mild-Moderate	Moderate	Moderate	.....	None	None
24	Blazer Russet	9	Mild-Moderate	Moderate	Moderate	Mild-Moderate	Moderate	.....	.....	None	None
25	Centennial Russet	10	Mild-Moderate	Moderate	Moderate	Mild	Moderate	Mild-Moderate	.....	Yes	None
26	Classic Russet	11	Mild-Moderate	Moderate	Mild	Mild-Moderate	.....	.....	.....	Yes	Yes
27	Dakota Ruby	10	Mild-Moderate	Mild-Moderate	Moderate	Mild-Moderate	Moderate	Mild-Moderate	.....	None	None
28	Modoc	10	Mild-Moderate	Moderate	Mild-Moderate	Mild	Moderate	Moderate	.....	Yes	None
29	Pomerelle Russet	6	Mild-Moderate	Mild-Moderate	Mild-Moderate	.....	Moderate	.....	.....	None	None
30	R. Norkotah	9	Mild-Moderate	Mild-Moderate	Moderate	Moderate	Moderate	.....	.....	None	None
31	Shepody	13	Mild-Moderate	Mild-Moderate	Moderate	Moderate	Moderate	Mild-Moderate	.....	None	None
32	Dakota Russet	10	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	.....	Yes	None
33	French Fingerling	11	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	.....	None	None
34	Russet Burbank	23	Moderate	Moderate	Moderate	Moderate	Moderate	.....	.....	None	None
35	Alturas	10	Moderate-Severe	Severe	Moderate	Moderate	Moderate	.....	.....	Yes	Yes
36	Chipeta	10	Moderate-Severe	Moderate-Severe	Moderate-Severe	Moderate	Moderate	Moderate-Severe	.....	Yes	None
37	Chippewa	11	Moderate-Severe	Moderate-Severe	Moderate	Mild-Severe	Moderate	.....	.....	Yes	Yes
38	Clearwater Russet	3	Moderate-Severe	Severe	Moderate	Moderate-Severe	.....	.....	.....	Yes	None
39	Dakota Trailblazer	10	Moderate-Severe	Moderate-Severe	Severe	Moderate-Severe	Severe	Severe	.....	Yes	None
40	GemStar Russet	10	Moderate-Severe	Moderate	Moderate-Severe	Moderate	Severe	Moderate-Severe	.....	None	Yes
41	Highland Russet	11	Moderate-Severe	Severe	Moderate	Moderate	Moderate	.....	.....	Yes	Yes
42	Lamoka	10	Moderate-Severe	Moderate	Moderate	Moderate-Severe	Moderate-Severe	Moderate	.....	Yes	None
43	Mountain Gem Russ	7	Moderate-Severe	Severe	Moderate-Severe	.....	Moderate	.....	.....	Yes	None
44	Ranger Russet	21	Moderate-Severe	Moderate-Severe	Moderate-Severe	Moderate	Moderate	.....	.....	Yes	Yes
45	Alpine Russet	15	Variable	Severe	Mild	Mild	Mild	Moderate-Severe	.....	Yes	None
46	Andover	11	Variable	Severe	Moderate	Mild	.....	Moderate	.....	Yes	None
47	Chieftain	10	Variable	Severe	Moderate	Moderate	.....	Mild	.....	Yes	None
48	Colorado Rose	10	Variable	Moderate	Moderate	Moderate	Moderate	Mild-Severe	.....	Yes	None
49	Dakota Crisp	10	Variable	Moderate-Severe	None-Moderate	Mild	None-Mild	Mild-Moderate	.....	Yes	Yes
50	Desiree	11	Variable	Severe	Moderate-Severe	None	Moderate	Severe	.....	Yes	None
51	Freedom Russet	10	Variable	Mild-Severe	Severe	Mild-Moderate	Moderate-Severe	Mild-Severe	.....	Yes	None
52	Goldrush	12	Variable	Severe	Mild	Moderate	.....	.....	.....	Yes	Yes
53	Katahdin	12	Variable	Severe	Moderate	Mild	Moderate	Mild	.....	Yes	Yes
54	Marcy	12	Variable	Severe	Mild-Moderate	Mild	Moderate-Severe	Moderate-Severe	.....	Yes	Yes
55	Megachip	10	Variable	Severe	None-Mild	None-Mild	.....	None-Mild	.....	Yes	None
56	Nicolet	10	Variable	Severe	Moderate-Severe	None-Mild	Mild-Moderate	None-Severe	.....	Yes	Yes
57	Oneida Gold	10	Variable	Mild-Severe	Severe	Severe	Severe	Severe	.....	Yes	Yes
58	Pike	12	Variable	Severe	Mild-Moderate	Mild	Mild-Moderate	None-Mild	.....	Yes	Yes
59	Pinnacle	10	Variable	Moderate-Severe	Moderate-Severe	Moderate	Mild-Severe	Mild-Severe	.....	Yes	None
60	Red Endeavor	10	Variable	.....	None	None	None-Severe	.....	.....	None	None
61	Red Norland	12	Variable	Moderate-Severe	Moderate	None-Mild	Moderate	None	.....	Yes	None
62	Red Thumb	10	Variable	Moderate-Severe	None-Mild	None-Mild	Mild-Moderate	None-Severe	.....	Yes	Yes
63	Snowbird	10	Variable	Moderate-Severe	Moderate-Severe	None-Moderate	None-Moderate	None-Severe	.....	Yes	None
64	Superior	12	Variable	Moderate-Severe	Moderate	Mild-Moderate	Moderate	None-Mild	.....	None	None
65	Umatilla Russet	12	Variable	Mild-Severe	Moderate	Mild-Severe	Moderate	Severe	.....	Yes	None
66	Yukon Gem	19	Variable	None-Severe	None-Severe	Mild-Moderate	Moderate-Severe	.....	.....	Yes	Yes
67	Yukon Gold	39	Variable	Severe	Severe	Mild	Moderate	Moderate	.....	Yes	Yes

PVY Cultivar Ratings:

None, Mild, Moderate, Severe, Variable

*PVY resistant varieties, plant did not become infected after inoculation

.....Not tested/planted

Source: Gray, Whitworth 2018



United States Department of Agriculture National Institute of Food and Agriculture

USDA-NIFA Award 2014-51181-22373

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Potato Cultivar PMTV Sensitivity (tuber symptoms)	
Cultivars	North Dakota Trial
Russet (French fry/processing)	PMTV Sensitivity
Alpine Russet	Moderately Insensitive
Alturas	Insensitive
POR06V12-3 (Castle Russet)	Moderately Insensitive
Bannock Russet	Insensitive
Centennial Russet	Insensitive
Classic Russet	Insensitive
Clearwater	Insensitive
Dakota Russet	Insensitive
Dakota Trailblazer	Insensitive
Freedom Russet	Insensitive
Gemstar Russet	Insensitive
Premier Russet	Insensitive
Ranger Russet	Insensitive
Russet Burbank	Insensitive
Sage Russet	Insensitive
Silverton Russet	Insensitive
Teton Russet	Insensitive
Umatilla	Insensitive
Russet tablestock	PMTV Sensitivity
Goldrush	Insensitive
Russet Norkotah	Insensitive
Russet Norkotah 278	Insensitive
Russet Norkotah 296	Insensitive
Russet Norkotah CO3	Insensitive
Russet Norkotah CO8	Insensitive
Red	PMTV Sensitivity
Chieftain	Moderately Sensitive
Ciklamen	Moderately Insensitive
Colorado Rose	Insensitive
Dakota Jewel	Sensitive
Dakota Rose	.....
Dakota Ruby	Moderately Insensitive
Dark Red Norland	Sensitive
Modoc	Sensitive
Red Endeavor	Sensitive
Red Gold	Insensitive
Red LaSoda	Moderately Insensitive
Red Norland	Moderately Sensitive
Red Thumb	Insensitive
Rio Colorado	Insensitive
Viking	Sensitive
White (chipping)	PMTV Sensitivity
Atlantic	Insensitive
Chipeta	Insensitive
Dakota Crisp	Moderately Sensitive
Dakota Pearl	Moderately Sensitive
Kennebec	Moderately Insensitive
Lamoka	Insensitive
Lelah	Insensitive
Marcy	Insensitive
Mega Chip	Insensitive
Nicolet	Sensitive
Pike	Insensitive
Pinnacle	Insensitive
Snowbird	Insensitive
Superior	Insensitive
Waneta	Insensitive
Specialty	PMTV Sensitivity
Austrian Crescent	Insensitive
Desiree	Insensitive
French Fingerling	Moderately Sensitive
Huckleberry Gold	Insensitive
Russian Banana	Insensitive
Snowden	Moderately Sensitive
Yellow	PMTV Sensitivity
Bintje	Insensitive
Gala	Moderately Insensitive
Onedia Gold	Insensitive
Yukon Gold	Moderately Insensitive

PMTV Cultivar Ratings:

Insensitive (overall incidence <5%)
 Moderately insensitive (overall incidence >5% to 10%)
 Moderately sensitive (overall incidence >10% to 15%)
 Sensitive (overall incidence >15%)
Not tested/planted

Source:

Yellareddygari, Whitworth and Gudmestad. 2018. Plant Dis. 102(6): 1148-1153



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Potato Cultivar Powdery Scab Susceptibility (tuber and root phase)				
Tuber phase of powdery scab	Root phase of powdery scab			
	Very resistant	Moderately resistant	Moderately susceptible	Very susceptible
Very resistant	Alturas	Alpine Russet	Russet Burbank	Snowden
	Atlantic		Umatilla Russet	
	Bannock Russet		Yagana	
	Dakota Jewel			
	Dakota Russet			
	Dakota Trailblazer			
	Dark Red Norland			
	Karu			
	Ranger Russet			
	Russet Norkotah			
Yukon Gold				
Moderately resistant	Colorado Rose	Dakota Crisp		Lamoka
		Red Norland		Nicolet
Moderately susceptible		Dakota Ruby		Red Pontiac
		Viking		
Very susceptible			Dakota Pearl	Ivory Crisp
			Red LaSoda	Kennebec
				Shepody

Powdery Scab Cultivar Ratings:

Very resistant, Moderately resistant, Moderately susceptible, Very susceptible

Source: Bittara, Thompson, Gudmestad and Secor. 2016. Am. J. Potato Res. 93(5): 497-508



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Potato Cultivar TRV Sensitivity (tuber symptoms)		
Cultivars	TRV Sensitivity	
	North Dakota trial	Washington trial
Russet (French fry/processing)		
Alpine Russet	Sensitive	Sensitive
Alturas	Moderately Insensitive	Sensitive
POR06V12-3 (Castle Russet)	Insensitive	.....
Bannock Russet	Sensitive	Sensitive
Centennial Russet	Insensitive	Sensitive
Classic Russet	Sensitive	Sensitive
Clearwater	Sensitive	Sensitive
Dakota Russet	Sensitive	Sensitive
Dakota Trailblazer	Sensitive	Sensitive
Freedom Russet	Sensitive	Sensitive
Gemstar Russet	Sensitive	Sensitive
Premier Russet	Sensitive	Sensitive
Ranger Russet	Sensitive	Sensitive
Russet Burbank	Sensitive	Sensitive
Sage Russet	Sensitive	Sensitive
Silverton Russet	Sensitive	Sensitive
Teton Russet	Moderately Sensitive	Sensitive
Umatilla	Sensitive	Sensitive
Russet tablestock	North Dakota trial	Washington trial
Goldrush	Moderately Insensitive	Sensitive
Russet Norkotah	Sensitive	Sensitive
Russet Norkotah 278	Sensitive	Sensitive
Russet Norkotah 296	Sensitive	Sensitive
Russet Norkotah CO3	Sensitive	Sensitive
Russet Norkotah CO8	Sensitive	Sensitive
Red	North Dakota trial	Washington trial
Chieftain	Sensitive	Sensitive
Ciklamen	Insensitive	Moderately Insensitive
Colorado Rose	Sensitive	Sensitive
Dakota Jewel	Sensitive	Sensitive
Dakota Rose	.....	Sensitive
Dakota Ruby	Moderately Sensitive	.....
Dark Red Norland	Sensitive	Sensitive
Modoc	Moderately Sensitive	Sensitive
Red Endeavor	Sensitive	Sensitive
Red Gold	Moderately Sensitive	Sensitive
Red LaSoda	Sensitive	Sensitive
Red Norland	Sensitive	Sensitive
Red Thumb	Sensitive	Sensitive
Rio Colorado	Insensitive	Sensitive
Viking	Sensitive	.....
White (chipping)	North Dakota trial	Washington trial
Atlantic	Sensitive	.....
Chipeta	Moderately Sensitive	Sensitive
Dakota Crisp	Moderately Sensitive	Sensitive
Dakota Pearl	Sensitive	Sensitive
Kennebec	Sensitive	Sensitive
Lamoka	Sensitive	Sensitive
Lelah	Insensitive	Sensitive
Marcy	Sensitive	Sensitive
Mega Chip	Moderately Insensitive	Sensitive
Nicolet	Sensitive	Sensitive
Pike	Moderately Sensitive	Sensitive
Pinnacle	Sensitive	Sensitive
Snowbird	Sensitive	Sensitive
Superior	Insensitive	Sensitive
Waneta	Sensitive	Sensitive
Specialty	North Dakota trial	Washington trial
Austrian Crescent	Moderately Insensitive	Moderately Sensitive
Desiree	Sensitive	Sensitive
French Fingerling	Sensitive	Sensitive
Huckleberry Gold	Sensitive	Sensitive
Russian Banana	Insensitive	Sensitive
Snowden	Sensitive	Sensitive
Yellow	North Dakota trial	Washington trial
Bintje	Insensitive	Moderately Insensitive
Gala	Insensitive	Moderately Sensitive
Onedia Gold	Insensitive	Sensitive
Yukon Gold	Sensitive	.....

TRV Cultivar Ratings:

Insensitive (overall incidence <5%)
 Moderately insensitive (overall incidence >5% to 10%)
 Moderately sensitive (overall incidence >10% to 15%)
 Sensitive (overall incidence >15%)
Not tested/planted

Source:

Yellareddygari, Brown, Whitworth, Quick, Hamlin and Gudmestad. 2018. Plant Dis. in press.

