

Ontario Phytophthora Tolerance Test 2023: Woodslee, Ontario

This Report Contains Published Registered Varieties Only

Planting Date: June 19, 2023

Stand Count Dates:

HUZ	Date
2200/2400	August 31, 2023
2600	September 2, 2023
2800	September 2, 2023
3100/3400	October 10, 2023

Plot Size: Single row, 50 seeds/row

Replications: 4, randomized blocks

Phytophthora root rot testing is carried out on clay soils infested with common races of Phytophthora at Woodslee. Phytophthora Root Rot (PRR) ratings were changed starting in 2019. Previous methodology used counting plants shortly after emergence (3-4 weeks after planting) and a subsequent counting 4 weeks later. The loss was estimated based on the difference between count 2 and count 1, taken as a percentage. The limitation in this counting method is that it does not take into account pre-emergence mortality due to PRR nor does it take into account late season mortality. Starting in 2019 we began expressing the PRR ratings based on final stand in a High phytophthora pressure environment. This final stand was only rated once for all maturity groups and this was again changed to rate the plants near the R6 growth stage which was done in 2020 in order to capture late season PRR damage.

2023 Phytophthora Tolerance Test MG00E & MG00 (2200/2400)

Entry	Name		Final Stand	% Stand	% Loss
2	ABACA		34.25	68.5	31.5
3	Amino R2X		33.00	66.0	34.0
4	Atiron		33.00	66.0	34.0
5	B0073EE		38.50	77.0	23.0
6	Bourke R2X		36.50	73.0	27.0
7	Bronco R2X		34.25	68.5	31.5
10	Donaldo R2X		32.25	64.5	35.5
11	Elmo E3		34.25	68.5	31.5
13	Fresco R2X		7.00	14.0	86.0
14	Hana		27.75	55.5	44.5
15	Hart R2X		36.75	73.5	26.5
16	JAGO		37.75	75.5	24.5
17	Koa		29.25	58.5	41.5
18	Kudo R2X		27.75	55.5	44.5
19	Liska		32.25	64.5	35.5
20	Maya		34.00	68.0	32.0
21	Merino R2X		30.25	60.5	39.5
22	Mozart		26.25	52.5	47.5
32	P002A42E		25.00	50.0	50.0
33	P005A59E		31.25	62.5	37.5
34	Nala		27.50	55.0	45.0
41	PR229001Z		24.00	48.0	52.0
42	PR23X2650		28.25	56.5	43.5
43	PRO 03X74		31.00	62.0	38.0
44	PS 0072 XR		39.50	79.0	21.0
45	PS 0098 XR		38.50	77.0	23.0
46	Rico R2X		38.00	76.0	24.0
47	Salto R2		35.25	70.5	29.5
48	Siberia		21.00	42.0	58.0
50	Enduro E3		43.00	86.0	14.0
53	SI 00723XFN		34.25	68.5	31.5
56	Triquet R2X		24.25	48.5	51.5
57	Utica		32.75	65.5	34.5
58	Verso R2X		32.50	65.0	35.0
59	Young R2X		32.50	65.0	35.0
60	P007A68E		treated seed*		
61	Sloan	check - low field tolerance, rps	10.50	21.0	79.0
62	Conrad	check - high field tolerance, rps	28.75	57.5	42.5
63	Williams	check - moderate field tolerance, rps	29.75	59.5	40.5
64	OX20-8	check - no field tolerance, Rps 1a	0.75	1.5	98.5
65	Haro(1-7)1	check - minimal field tolerance, rps	11.50	23.0	77.0
Mean of Entries			31.74		
CV			31.80		

*entry had treated seed and was not included

2023 Phytophthora Tolerance Test MG0 (2600)

Entry	Name	Final Stand	% Stand	% Loss
1	Stine 05EG62	35.50	71.0	29.0
2	Stine 06EG29	38.00	76.0	24.0
3	AAC Kovik	33.00	66.0	34.0
4	AAC Shinju	32.50	65.0	35.0
6	Acardia	34.25	68.5	31.5
7	Acora	35.75	71.5	28.5
8	Acuna	32.00	64.0	36.0
9	Altitude R2	16.25	32.5	67.5
11	Angelica	34.75	69.5	30.5
12	Apollina	37.00	74.0	26.0
13	Asahi	29.75	59.5	40.5
14	Asana	30.25	60.5	39.5
15	Atacama	32.50	65.0	35.0
16	Atena	37.75	75.5	24.5
17	Aurelina	27.50	55.0	45.0
18	Axis E3	MV*	MV*	
19	Aya	32.25	64.5	35.5
20	B036CE	37.00	74.0	26.0
21	B043EE	31.25	62.5	37.5
22	B074HE	42.75	85.5	14.5
23	Beliveau R2X	34.50	69.0	31.0
24	Canstar	43.00	86.0	14.0
34	Dyno R2X	41.50	83.0	17.0
35	Elico E3	37.75	75.5	24.5
36	Emilio E3	29.25	58.5	41.5
37	Enyo E3	44.75	89.5	10.5
38	PS 0423EN	38.50	77.0	23.0
39	Ezra	35.50	71.0	29.0
40	Genesis	26.75	53.5	46.5
41	Haltifo	33.75	67.5	32.5
42	Harvey E3	36.50	73.0	27.0
43	Havane	30.00	60.0	40.0
45	Hola	29.50	59.0	41.0
46	Kagawa	37.50	75.0	25.0
47	Kristian	40.75	81.5	18.5
48	Kyoto	26.25	52.5	47.5
49	Malart	42.00	84.0	16.0
50	Marula	35.75	71.5	28.5
51	MONDO	41.00	82.0	18.0
52	Mya	32.25	64.5	35.5
54	Nano R2X	34.00	68.0	32.0
55	Navan	35.75	71.5	28.5
63	OAC Acclaim	34.25	68.5	31.5
64	OAC Bruno	27.25	54.5	45.5
65	OAC Carson	31.50	63.0	37.0

Entry	Name		Final Stand	% Stand	% Loss
66	OAC Champion		25.75	51.5	48.5
67	OAC Elevation		12.25	24.5	75.5
68	OAC Evolution		33.50	67.0	33.0
69	OAC Kamran		32.75	65.5	34.5
70	OAC Strive		33.75	67.5	32.5
71	OAC Wallace		33.75	67.5	32.5
72	Orr R2X		40.25	80.5	19.5
96	P04A98E		30.25	60.5	39.5
98	P06A38E		29.50	59.0	41.0
101	P08A44E		37.25	74.5	25.5
102	Panorama		26.75	53.5	46.5
103	Park E3		34.00	68.0	32.0
104	Pico R2X		35.00	70.0	30.0
105	Katano		30.50	61.0	39.0
112	PS 0322 EN		36.75	73.5	26.5
113	PS 0420 XRN		23.25	46.5	53.5
114	PS 0521 XRN		39.50	79.0	21.0
115	PS 0779 XRN		34.25	68.5	31.5
116	PS 0944 XRN		38.75	77.5	22.5
117	Ramage XF		37.00	74.0	26.0
118	Reece R2X		28.75	57.5	42.5
119	RICHMOND		14.25	28.5	71.5
120	Samson E3		28.25	56.5	43.5
121	Savage R2X		35.75	71.5	28.5
122	Mason XF		20.25	40.5	59.5
123	Sharp E3		28.75	57.5	42.5
124	Ridley XF		31.00	62.0	38.0
125	Seabrook R2X		32.50	65.0	35.0
130	SI 0620XTN		34.25	68.5	31.5
131	SI 0720E3N		37.25	74.5	25.5
132	SI 0921XTN		27.25	54.5	45.5
136	SI 0323E3N		33.00	66.0	34.0
148	Vertigo R2		37.50	75.0	25.0
149	Sloan	check - low field tolerance, rps	13.00	26.0	74.0
150	Conrad	check - high field tolerance, rps	34.00	68.0	32.0
151	Williams	check - moderate field tolerance, rps	29.25	58.5	41.5
152	OX20-8	check - no field tolerance, Rps 1a	0.50	1.0	99.0
153	Haro(1-7)1	check - minimal field tolerance, rps	7.50	15.0	85.0
Mean of Entries			32.35		
CV			29.82		

*entry had more than 50 seeds

2023 Phytophthora Tolerance Test MG1 (2800)

Entry	Name	Final Stand	% Stand	% Loss
1	Stine 10EG20	35.50	71.0	29.0
2	Stine 12EB32	37.50	75.0	25.0
3	Alinova	36.75	73.5	26.5
4	B103EE	41.75	83.5	16.5
5	B119KE	37.25	74.5	25.5
6	B158DE	43.75	87.5	12.5
7	B163EE	26.25	52.5	47.5
8	B173EE	41.50	83.0	17.0
9	B182ME	40.75	81.5	18.5
10	Baltazar	44.50	89.0	11.0
11	Barton	40.75	81.5	18.5
13	Compass E3	MV**	MV**	
15	EXP1123XFN	36.50	73.0	27.0
16	Finch	39.75	79.5	20.5
17	Forto	39.50	79.0	21.0
18	Inwood	37.00	74.0	26.0
19	Keith XF	42.00	84.0	16.0
20	Matilda	31.00	62.0	38.0
21	Miko R2	32.75	65.5	34.5
31	OAC Aberdeen	39.00	78.0	22.0
32	OAC Malory	43.75	87.5	12.5
33	OAC Union	40.00	80.0	20.0
34	Odessa	33.75	67.5	32.5
35	P11A10	26.00	52.0	48.0
36	P12T94E	35.25	70.5	29.5
38	P14A12E	19.50	39.0	61.0
40	P17A87E	32.25	64.5	35.5
41	P18A73E	34.00	68.0	32.0
42	P19A37E	38.00	76.0	24.0
46	Mercado XF	37.50	75.0	25.0
48	PS 1022 EN	35.00	70.0	30.0
49	PS 1421 EN	34.75	69.5	30.5
50	PS 1520 XRN	36.25	72.5	27.5
51	PS 1721 EN	40.50	81.0	19.0
52	Rask E3	40.75	81.5	18.5
53	Rondo R2X	43.25	86.5	13.5
54	Savard E3	38.25	76.5	23.5
61	Elliott R2X	30.00	60.0	40.0
67	SI 1120E3N	37.50	75.0	25.0
68	SI 1222E3N	33.75	67.5	32.5
69	SI 1422XTN	26.00	52.0	48.0
70	SI 1820XTN	38.50	77.0	23.0
71	Skyline	37.25	74.5	25.5
72	Summit E3	42.00	84.0	16.0
78	SI 1323XFN	34.75	69.5	30.5

Entry	Name		Final Stand	% Stand	% Loss
79	SI 1823E3N		32.75	65.5	34.5
82	Haldi		34.25	68.5	31.5
89	Taku		38.75	77.5	22.5
90	Wilma		42.50	85.0	15.0
91	Zeta		37.50	75.0	25.0
92	HDC Blake		treated seed*		
93	S14-H3		treated seed*		
94	Sloan	check - low field tolerance, rps	13.00	26.0	74.0
95	Conrad	check - high field tolerance, rps	36.25	72.5	27.5
96	Williams	check - moderate field tolerance, rps	31.50	63.0	37.0
97	OX20-8	check - no field tolerance, Rps 1a	1.50	3.0	97.0
98	Haro(1-7)1	check - minimal field tolerance, rps	14.50	29.0	71.0
Mean of Entries			36.48		
CV			26.65		

*entry had treated seed and was not included

**entry had more than 50 seeds

2023 Phytophthora Tolerance Test MG2E & MG2L (3100/3400)

Entry	Name	Final Stand	% Stand	% Loss
2	Stine 20EG02	43.50	87.0	13.0
3	Stine 25EG20	36.00	72.0	28.0
4	AAC 26-15	44.50	89.0	11.0
5	AAC Big Ben	44.50	89.0	11.0
6	AAC Wigle	36.25	72.5	27.5
8	B213EE	41.25	82.5	17.5
9	B243EE	41.00	82.0	18.0
10	B253LE	39.75	79.5	20.5
13	PS 1923XFN	36.50	73.0	27.0
14	Express R2X	38.75	77.5	22.5
15	Masters XF	34.75	69.5	30.5
19	OAC Bruton	38.25	76.5	23.5
20	OAC Kent	43.75	87.5	12.5
21	OAC Marvel	41.50	83.0	17.0
22	OAC Stirling	46.25	92.5	7.5
23	P20A48E	40.50	81.0	19.0
25	P22A67E	28.50	57.0	43.0
26	P24A07E	42.25	84.5	15.5
27	PS 2120 EN	42.25	84.5	15.5
28	PS 2322 XFN	41.25	82.5	17.5
29	PS 2521 XFN	45.75	91.5	8.5
30	Rowan	41.50	83.0	17.0
37	Kraft E3	43.50	87.0	13.0
38	Lawson R2X	40.75	81.5	18.5
39	SG 2311	42.25	84.5	15.5
40	SI 2121XTN	41.00	82.0	18.0
43	Tillson	40.00	80.0	20.0
44	Siena	38.50	77.0	23.0
47	Stine 29EF02	40.00	80.0	20.0
48	Stine 31EF02	37.50	75.0	25.0
50	Darby E3	44.25	88.5	11.5
51	PS 2923EN	43.25	86.5	13.5
54	P28A65E	35.75	71.5	28.5
55	P29A19E	40.00	80.0	20.0
56	P30A75E	39.50	79.0	21.0
57	P33A62E	35.00	70.0	30.0
58	PS 3022XFN	48.50	97.0	3.0
61	AAC McRae	treated seed*		
62	B283EE	treated seed*		

Entry	Name		Final Stand	% Stand	% Loss
63	DF 155		treated seed*		
64	HDC Blake		treated seed*		
65	Sloan	check - low field tolerance, rps	16.75	33.5	66.5
66	Conrad	check - high field tolerance, rps	35.25	70.5	29.5
67	Williams	check - moderate field tolerance, rps	36.00	72.0	28.0
68	OX20-8	check - no field tolerance, Rps 1a	0.00	0.0	100.0
69	Haro(1-7)1	check - minimal field tolerance, rps	19.50	39.0	61.0
		Mean of Entries	39.58		
		CV	21.57		

*entry had treated seed and was not included