

"Perspectives on resistance to
WPBR – C.rib for Whitebark Pine....

what we noticed from Siberian Pine

a wide ranging species that shows
strong endemic resistance...."

John N. King,

B.C.F.S - RB, RET





Pissodes strobi
Peck



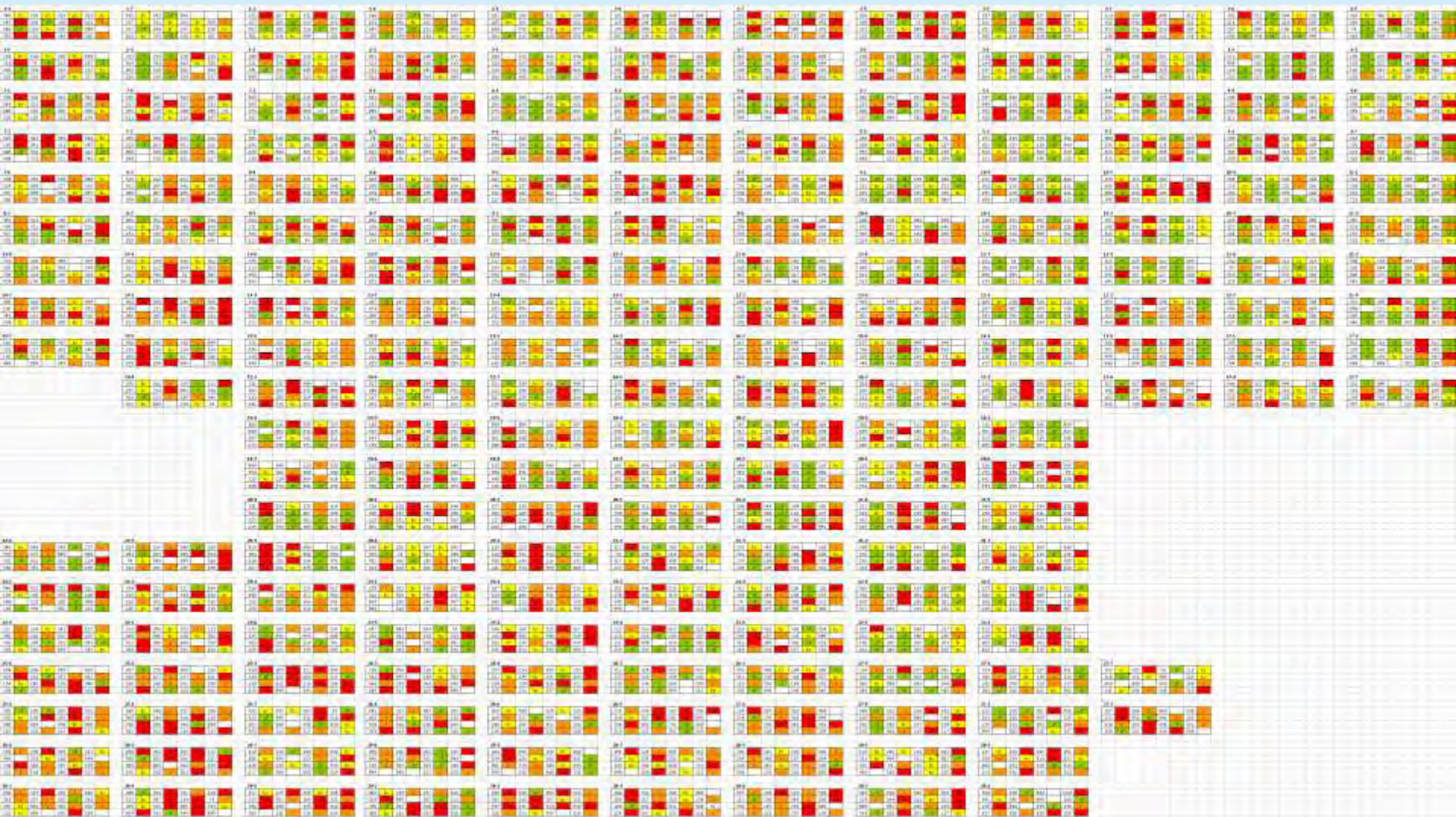


Breeding Program for Genetic Resistance



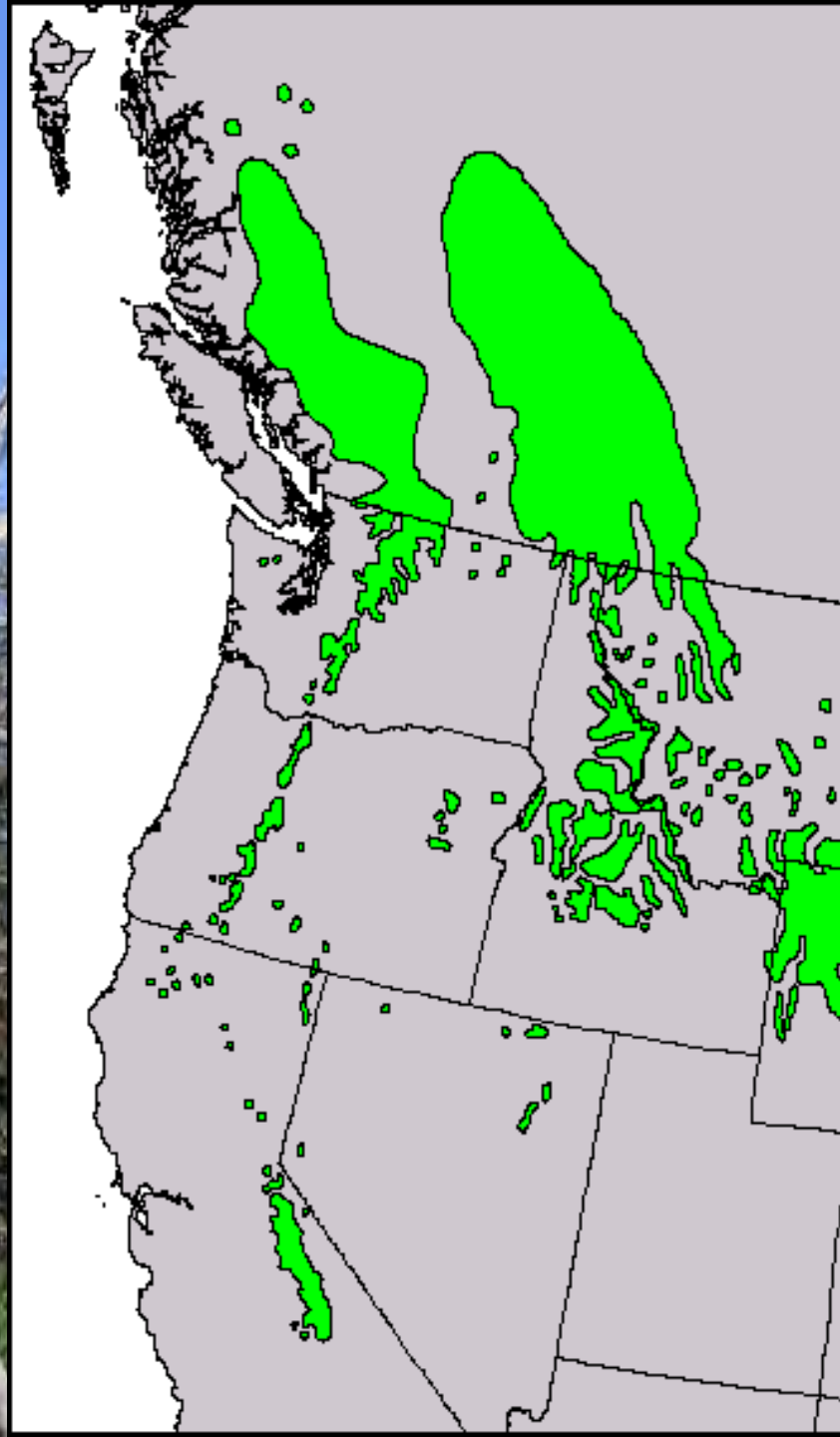


Field Resistance Assessment in F1 Trials



fam	TYPE	ORIGIN	_FREQ_	mclean	msurv	sclean	ssurv	nobs
334	DDX	DIALLEL 80-4, ID# 9421723	29	90%	90%	26	26	29
300	DDX	DIALLEL 80-6, ID# 9421183	28	86%	89%	24	25	28
303	DDX	DIALLEL 80-6, ID# 9421273	29	72%	90%	21	26	29
302	DDX	DIALLEL 80-6, ID# 9421251	28	71%	82%	20	23	28
301	DDX	DIALLEL 86-6, ID# 9421218	29	69%	72%	20	21	29
339	DDX	DIALLEL 80-3, ID# 9421735	25	68%	84%	17	21	25
313	DDX	DIALLEL 80-4, ID# 9421593	30	67%	87%	20	26	30
315	DDX	DIALLEL 80-2, ID# 9421595	28	61%	82%	17	23	28
342	DDX	DIALLEL 80-3, ID# 9421740	28	61%	82%	17	23	28
332	DDX	DIALLEL 80-4, ID# 9421721	30	60%	63%	18	19	30
307	DDX	DIALLEL 80-4, ID# 9421545	26	58%	65%	15	17	26
327	DDX	DIALLEL 80-2, ID# 9421624	28	57%	61%	16	17	28
106	Coast Parent	Parent tree 461 (coastal)	27	56%	74%	15	20	27
317	DDX	DIALLEL 80-2, ID# 9421597	27	56%	74%	15	20	27
333	DDX	DIALLEL 80-4, ID# 9421722	28	54%	54%	15	15	28
204	DF1	Parent trees 360X21079 Cross	25	52%	76%	13	19	25
74			29	52%	79%	15	23	29
318	DDX	DIALLEL 80-2, ID# 9421608	29	52%	72%	15	21	29
331	DDX	DIALLEL 80-4, ID# 9421715	28	50%	50%	14	14	28
208	DF1	Parent trees 183X21095 Cross	27	48%	67%	13	18	27
308	DDX	DIALLEL 80-4, ID# 9421546	26	12%	38%	3	10	26
228	F1	Parent trees 126X137 Cross	27	11%	44%	3	12	27
237	DF1	Parent trees 21142X145 Cross	28	11%	32%	3	9	28
213	F1	Parent trees 120X47 Cross	29	10%	24%	3	7	29
221	DF1	Parent trees 21145X640 Cross	29	10%	41%	3	12	29
338	DDX	DIALLEL 80-3, ID# 9421734	29	10%	31%	3	9	29
344	DDX	DIALLEL 80-3, ID# 9421743	24	8%	46%	2	11	24
217	F1	Parent trees 239X640 Cross	25	8%	40%	2	10	25
231	F1	Parent trees 372X128 Cross	26	4%	23%	1	6	26
337	DDX	DIALLEL 80-3, ID# 9421733	26	4%	31%	1	8	26
314	DDX	DIALLEL 80-4, ID# 9421594	28	4%	36%	1	10	28
239	Coast Parent	Parent tree 47 OP	29	3%	31%	1	9	29
236	DF1	Parent trees 21142X47 Cross	26	0%	27%	0	7	26
305	DDX	DIALLEL 80-1, ID# 9421521	28	0%	29%	0	8	28







P. pumila, Kunishar Island, S. Goroshkevich



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ПРЯНО-
АРОМАТИЧЕСКИЙ
САД



















Jesmond Tower





near Oliver, BC





Niut Mountain in the Chilcotin



2 heavily cankered seedlings from British Columbia family (Niut-03)



57.jpg



75.jpg

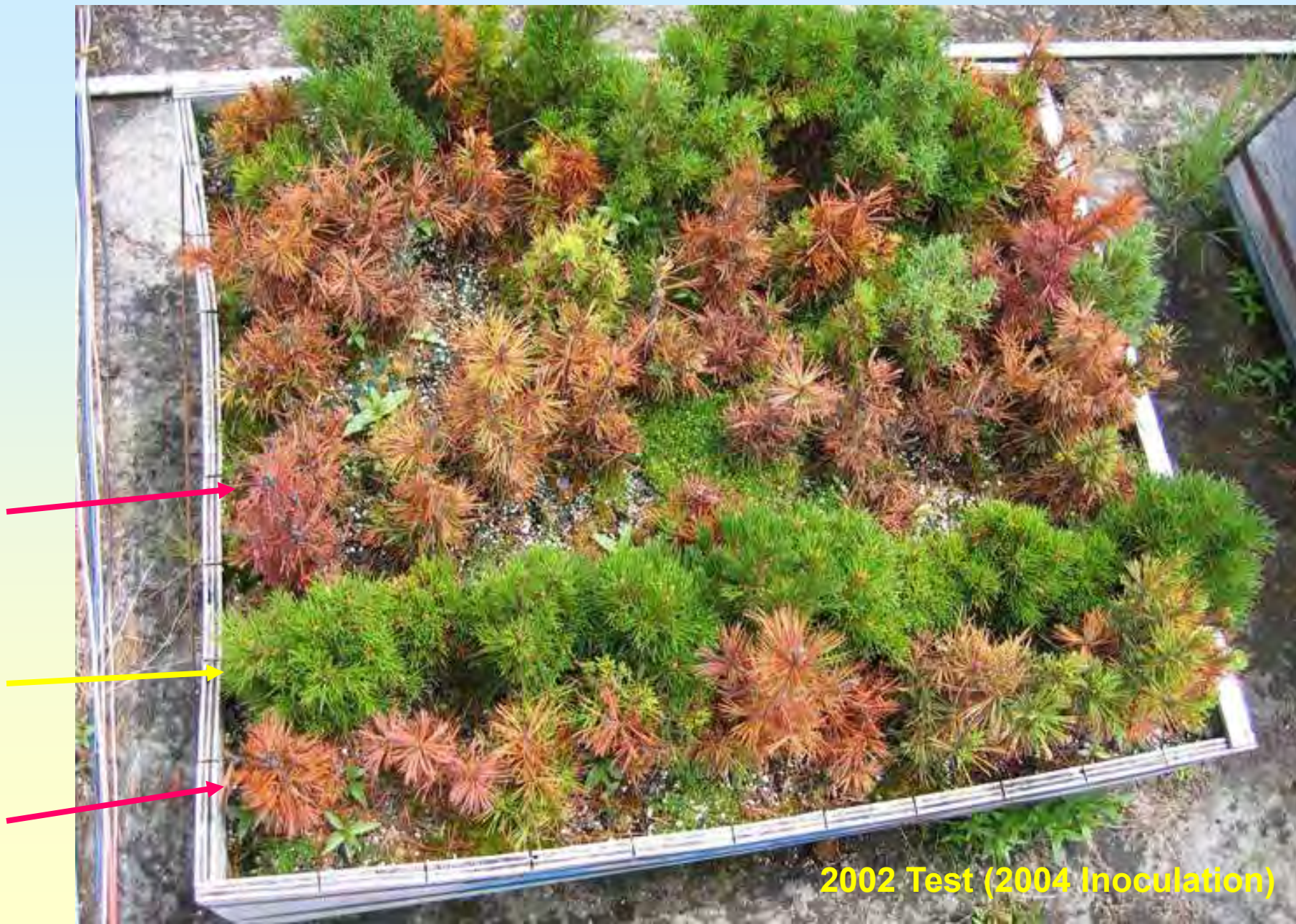








Family variation in rust resistance in whitebark pine



2002 Test (2004 Inoculation)

2003 Inoc results from “exotics”

seedlot	comment	sample size	C %	CF %	SCG %
3156	Skimikin SO PT	66	98	2	0
3537	Puckle SO PT	23	100	0	0
2391	coastal PT 145	34	100	0	0
3289	interior PT 1079	22	100	0	0
3580	Porter bulk (Cow)	68	99	0	1
HO61	griffithi back X	63	51	27	22
HO62	griffithi back X	41	24	56	22
HO63	griffithi back X	15	73	13	13
JO 80	peuce X	46	76	0	24
JO 81	peuce X	17	65	0	35
JO 82	peuce X	23	83	0	17
JO 83	peuce X	11	73	9	18

2003 Inoc results from “P. sibirica”

seedlot	sample size		CF%
A4-6A		42	74
		39	64
		68	78
T5-10		38	53
		42	64
		56	80
TY2-3		57	93
TY4-4		8	62
ER2-6		22	59
		27	85
		43	86
TU4-6		35	97
		36	83
		36	74
En5-2		24	92
		31	84
		32	87

