

2012

TRI-STATE SPECIALTY POTATO VARIETY TRIAL REPORT

State Experiment Stations and
USDA-ARS Cooperating

Aberdeen, Idaho

Parma, Idaho

Klamath Falls, Oregon



2012 TRI-STATE SPECIALTY POTATO VARIETY TRIAL REPORT

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TABLE 1: 2012 Tri-State Specialty Potato Variety Trial - LOCATIONS, COOPERATORS, AND CULTURAL INFORMATION

Locations	Cooperators	Irrigation	Fertilizer	Planting	Vine Kill	Harvest	Days to	Days to	Herbicides	Insecticides	Fungicides
			N-P-K-S(lb/A)	Date	Date	Date	Vine Kill	Harvest			
Aberdeen Idaho (AB)	J. Stark P. Bain R. Novy J. Whitworth M. Chappell	Sprink.	190-280-300	3-May	16-Aug Mechanical	5-Sep	105	125	Outlook Prowl Metribuzin	Admire Pro	Penncozeb 75DF Echo
Parma Idaho (PA)	M. Thornton B. Buhrig O. Adams	Sprink.	135-160-100 3B,1Zn,1Cu	9-Apr	30-Jul Mechanical	1-Aug	112	114	Prowl Outlook Eptam	Leverage Movento Fumigation Vapam	Gavel Endura Luna Bravo
Klamath Falls Oregon (OR)	B. Charlton	Sprink.	193-116-250-132	24-May	10-Sep Reglone fb mechanical	18-Oct	109	147	Prowl Matrix	Admire Movento Fulfill Asana Endigo Assail Vydate C-LV	Moncut Ridomil Bravo Endura

TABLE 2: 2012 Tri-State Specialty Potato Variety Trial - CLONE, PARENTS, FLOWER COLOR, ENTERED BY, SEED SOURCE, STAND, AND STEM NO.

No	Clone	Parents		Flower Color	Entered by	Trial Year	Seed Source	STAND (%)			Mean Stand %	STEM NO.		Stems/Plant
		Female	Male					AB	PA	OR^		AB	PA	
1	Dk Red Norland	RedKote	ND626	Red-purple	Check	Ck	ID	88	96	94	93	3.4	4.4	3.9
2	A05173-6P	A99331-2RY	VC1075-1R	Dk Red-purple	ID	2	ID	97	99	68	88	3.4	3.9	3.6
3	NDA050237B-1R	ND028678-1RY	ND028770B-4R	Dk Red-purple	ID	3	ID	90	97	73	87	1.5	2.5	2.0
4	NDA8512C-1R	ND6694C-1R	ND5256-7R	Md Red-purple	ID	4	ID	97	97	74	89	1.6	3.2	2.4
5	A02267-5PY	Inca Gold	ND5256-7R	Dk Red-purple	ID	4	ID	95	97	92	95	2.7	3.7	3.2
6	A05173-2RY	A99331-2RY	VC1075-1R	Md Red-purple	ID	3	ID	93	98	88	93	3.3	3.7	3.5
7	AO03545-2*	A97521-3R	AO96747-2RY	Light purple	OR	1	OR	X	100	75	88	X	3.5	3.5
8	Yukon Gold	Norgleam	W5279-4	Pink	Check	Ck	OR	93	99	47	80	2.4	2.4	2.4
9	A02267-1Y	Inca Gold	ND5256-7R	Md Red-purple	ID	4	ID	95	99	75	90	2.2	2.8	2.5
10	A05182-7RY	ATND933331-2	A99433-5Y	White	ID	1	ID	93	100	75	89	5.9	2.8	4.4
11	A05197-1Y	A00286-3Y	COA99261-1RY	Med Red-purple	ID	1	ID	98	99	85	94	3.6	3.3	3.5
12	A05201-1Y	A99433-5Y	Provento	White	ID	2	ID	85	95	57	79	3.8	3.7	3.7
13	NDA070942-1CY*	AND02267-2RY	Dakota Rose	White	ID	2	ID	X	96	97	96	X	4.0	4.0
14	NDA081451CB-1CY	Dakota Diamond	ND039173CAB-2	White	ID	1	ID	98	99	98	98	4.2	5.0	4.6
15	OR04198-1*	POR02PG4-1	PA99P2-1	??	OR	1	OR	X	98	97	97	X	6.6	6.6
16	OR05112-1	POR03PG13-2	POR02PG26-6	Purple	OR	1	OR	90	100	82	91	3.4	3.4	3.4
17	POR02PG12-1	M1-7	All Blue	Light Purple	OR	1	OR	98	99	91	96	7.3	9.3	8.3
18	POR06PG24-2	POR02PG26-5	POR03PG14-4	??	OR	1	OR	88	100	83	90	5.3	4.1	4.7
19	POR07PG20-2	POR02PG60-1	POR03PG6-3	Purple	OR	1	OR	87	89	80	85	3.4	4.2	3.8
20	POR07PG3-1	POR01PG22-1	POR02PG37-2	Purple	OR	1	OR	93	96	94	94	4.1	5.6	4.8

* Not grown in Aberdeen due to high PVY levels in seed

^30 day stand count

TABLE 3: 2012 Tri-State Specialty Potato Variety Trial - VINE CHARACTERISTICS

No	Clone	Vine Size ¹			Vine Maturity ²				
		AB	PA	Means	Size	AB	PA	Means	Maturity
1	Dk Red Norland	2.0	2.0	2.0	Small	2.1	2.0	2.1	Early
2	A05173-6P	2.8	3.3	3.0	Medium	3.8	4.0	3.9	Med--late
3	NDA050237B-1R	3.0	3.4	3.2	Med-large	4.5	2.6	3.6	Med--late
4	NDA8512C-1R	2.8	3.0	2.9	Medium	3.1	2.1	2.6	Med Early
5	A02267-5PY	2.8	3.6	3.2	Med-large	3.5	3.8	3.6	Med--late
6	A05173-2RY	2.5	3.0	2.8	Medium	4.0	4.0	4.0	Med--late
7	AO03545-2	X	2.3	2.3	Small	X	1.8	1.8	Early
8	Yukon Gold	2.5	2.8	2.6	Medium	3.1	2.1	2.6	Med Early
9	A02267-1Y	2.8	4.1	3.4	Med-large	3.3	3.3	3.3	Medium
10	A05182-7RY	2.3	3.3	2.8	Medium	3.9	3.5	3.7	Med--late
11	A05197-1Y	2.5	3.6	3.1	Med-large	3.3	3.3	3.3	Medium
12	A05201-1Y	2.5	3.9	3.2	Med-large	4.0	3.8	3.9	Med--late
13	NDA070942-1CY	X	4.0	4.0	Med-large	X	2.6	2.6	Med Early
14	NDA081451CB-1CY	2.8	3.3	3.0	Medium	3.4	3.0	3.2	Medium
15	OR04198-1	X	3.1	3.1	Med-large	X	3.0	3.0	Med Early
16	OR05112-1	1.8	3.3	2.5	Small	3.0	2.9	2.9	Med Early
17	POR02PG12-1	2.5	2.0	2.3	Small	2.8	2.0	2.4	Early
18	POR06PG24-2	3.0	4.9	3.9	Med-large	4.1	4.8	4.4	Late
19	POR07PG20-2	1.5	2.3	1.9	Small	3.1	3.3	3.2	Medium
20	POR07PG3-1	1.5	2.3	1.9	Small	2.5	2.1	2.3	Early

¹ 1.0-2.5=Small, 2.6-3.0=Medium, 3.1-4.0=Medium-Large, 4.1-4.5=Large, 4.6-5.0=Very Large

² 1.0-2.5=Early, 2.6-3.0=Medium-Early, 3.1-3.5=Medium, 3.6-4.0= Medium-Late, 4.1-4.5=Late, 4.6-5.0=Very Late

TABLE 4: 2012 Tri-State Specialty Potato Variety Trial - TOTAL YIELD AND SPECIFIC GRAVITY

No. Clone	TOTAL YIELD (CWT/A)					SPECIFIC GRAVITY				
	AB	PA	OR	Entry Mean	Rank	AB	PA	OR	Entry Mean	Rank
1 Dk Red Norland	387	648	371	469	14	1.069	1.072	1.060	1.067	15
2 A05173-6P	609	703	574	629	2	1.066	1.069	1.064	1.066	17
3 NDA050237B-1R	411	605	614	543	8	1.061	1.067	1.068	1.065	18
4 NDA8512C-1R	370	616	425	470	13	1.074	1.081	1.071	1.075	12
5 A02267-5PY	564	638	563	588	5	1.082	1.091	1.083	1.085	2
6 A05173-2RY	523	660	602	595	4	1.058	1.068	1.065	1.064	19
7 AO03545-2	X	512	355	434	16	X	1.085	1.086	1.086	1
8 Yukon Gold	453	552	314	440	15	1.087	1.086	1.082	1.085	3
9 A02267-1Y	532	687	619	613	3	1.069	1.078	1.074	1.074	13
10 A05182-7RY	492	628	644	588	6	1.070	1.077	1.084	1.077	10
11 A05197-1Y	576	514	605	565	7	1.079	1.076	1.078	1.078	8
12 A05201-1Y	484	574	440	499	11	1.078	1.089	1.082	1.083	5
13 NDA070942-1CY	X	530	499	515	9	X	1.073	1.061	1.067	16
14 NDA081451CB-1CY	680	659	673	671	1	1.081	1.084	1.089	1.085	4
15 OR04198-1	X	305	296	301	20	X	1.081	1.073	1.077	9
16 OR05112-1	457	594	449	500	10	1.062	1.055	1.065	1.061	20
17 POR02PG12-1	352	517	299	389	17	1.081	1.081	1.080	1.081	7
18 POR06PG24-2	379	417	366	387	18	1.078	1.087	1.081	1.082	6
19 POR07PG20-2	266	393	412	357	19	1.064	1.071	1.067	1.067	14
20 POR07PG3-1	414	607	465	495	12	1.074	1.081	1.073	1.076	11
Location Means	467	568	479	505		1.072	1.078	1.074	1.075	

TABLE 5: 2012 Tri-State Specialty Potato Variety Trial - YIELD < 4 OZ (CWT/A & %)

No. Clone	0-2 OZ or C's <1.34" (CWT/A)%					2-4 OZ or B's <2.25" (CWT/A)%				
	AB	PA	OR	Entry Mean	Rank	AB	PA	OR	Entry Mean	Rank
1 Dk Red Norland	9	10	5	8	20	32	30	27	30	20
	2	2	1	2	20	8	5	7	7	20
2 A05173-6P	47	22	8	26	16	160	57	44	87	16
	8	3	1	4	17	26	8	8	14	17
3 NDA050237B-1R	37	49	18	35	14	100	110	106	105	13
	9	8	3	7	13	24	18	17	20	13
4 NDA8512C-1R	25	27	13	22	17	112	85	64	87	15
	7	4	3	5	16	30	14	15	20	14
5 A02267-5PY	36	33	30	33	15	179	102	144	142	9
	6	5	5	5	15	32	16	26	25	12
6 A05173-2RY	16	21	8	15	18	50	68	58	59	18
	3	3	1	2	18	10	10	10	10	18
7 AO03545-2	X	69	52	61	8	X	125	21	73	17
	X	13	15	14	6	X	24	7	16	16
8 Yukon Gold	18	17	1	12	19	68	47	21	45	19
	4	3	0	2	19	15	8	7	10	19
9 A02267-1Y	34	65	12	37	13	126	140	83	116	12
	6	9	2	6	14	24	20	13	19	15
10 A05182-7RY	56	98	65	73	6	173	178	267	206	2
	11	16	10	12	7	35	28	41	35	4
11 A05197-1Y	89	56	16	54	11	321	131	98	183	3
	15	11	3	10	11	56	25	16	32	9
12 A05201-1Y	75	66	38	60	9	197	168	153	173	5
	16	11	9	12	8	41	29	35	35	3
13 NDA070942-1CY	X	66	33	50	12	X	175	150	162	6
	X	12	7	10	12	X	33	35	34	6
14 NDA081451CB-1CY	102	78	24	68	7	284	210	161	218	1
	15	12	4	10	10	42	32	24	33	8
15 OR04198-1	X	77	76	77	5	X	106	94	100	14
	X	25	26	26	3	X	35	32	34	7
16 OR05112-1	91	197	90	126	3	179	227	119	175	4
	20	33	20	24	5	39	38	26	34	5
17 POR02PG12-1	243	257	134	211	2	94	217	109	140	10
	69	50	45	55	2	27	42	37	35	2
18 POR06PG24-2	230	285	164	226	1	111	128	128	122	11
	61	68	45	58	1	29	31	35	32	10
19 POR07PG20-2	101	81	68	83	4	113	154	169	145	7
	38	21	16	25	4	42	39	41	41	1
20 POR07PG3-1	66	81	30	59	10	151	162	121	145	8
	16	13	6	12	9	36	27	26	30	11
Location Means	75	83	44	64		144	132	107	128	
	18	16	11	15		30	24	23	26	

TABLE 6: 2012 Tri-State Specialty Potato Variety Trial - YIELD US NO.1 4-6 OZ. AND 6-10 OZ. (CWT/A & %)

No. Clone	4-6 OZ (CWT/A)/%					6-10 OZ (CWT/A)/%				
	AB	PA	OR	Entry Mean	Rank	AB	PA	OR	Entry Mean	Rank
1 Dk Red Norland	56	61	93	70	18	158	264	127	183	3
	14	9	25	16	18	41	41	34	39	1
2 A05173-6P	178	204	107	163	6	174	295	167	212	1
	29	29	19	26	12	29	42	29	33	4
3 NDA050237B-1R	121	174	136	144	10	112	194	194	167	7
	29	29	22	27	11	27	32	32	30	5
4 NDA8512C-1R	135	158	129	141	11	77	281	147	168	6
	37	26	30	31	5	21	46	35	34	2
5 A02267-5PY	196	218	203	206	2	117	235	168	173	4
	35	34	36	35	1	21	37	24	27	8
6 A05173-2RY	116	183	101	133	12	180	250	174	201	2
	22	28	17	22	16	34	38	29	34	3
7 AO03545-2	X	144	99	121	14	X	118	28	73	15
	X	28	28	28	10	X	23	8	16	14
8 Yukon Gold	109	86	31	75	16	164	214	48	142	8
	24	16	10	17	17	36	39	15	30	6
9 A02267-1Y	178	194	188	187	3	145	243	129	172	5
	33	28	30	30	6	27	35	21	28	7
10 A05182-7RY	134	171	200	168	4	107	139	87	111	10
	27	27	31	28	9	22	22	14	19	10
11 A05197-1Y	124	160	215	166	5	30	136	160	109	11
	22	31	35	29	8	5	26	26	19	12
12 A05201-1Y	132	208	140	160	8	57	120	54	77	14
	27	36	32	32	4	12	21	12	15	15
13 NDA070942-1CY	X	167	133	150	9	X	120	94	107	12
	X	32	27	30	7	X	23	19	21	9
14 NDA081451CB-1CY	209	239	240	229	1	80	123	185	130	9
	31	36	36	34	2	12	19	27	19	10
15 OR04198-1	X	79	70	74	17	X	35	23	29	18
	X	26	24	25	13	X	12	8	10	16
16 OR05112-1	122	127	118	122	13	42	38	58	46	16
	27	21	26	25	14	9	6	13	9	17
17 POR02PG12-1	9	41	18	23	19	1	2	0	1	20
	3	8	6	6	19	0	0	0	0	20
18 POR06PG24-2	17	3	32	17	20	0	1	4	2	19
	4	1	9	5	20	0	0	1	0	19
19 POR07PG20-2	36	97	118	84	15	4	58	36	33	17
	13	25	29	22	15	2	15	9	9	18
20 POR07PG3-1	115	209	157	160	7	57	131	87	91	13
	28	34	34	32	3	14	22	19	18	13
Location Means	117	146	126	130		89	150	99	111	
	24	25	25	25		18	25	19	21	

TABLE 7: 2012 Tri-State Specialty Potato Variety Trial - YIELD US NO.1 >10 OZ. AND CULL (CWT/A & %)

No. Clone	>10 OZ (CWT/A)%					CULLS (CWT/A)%				
	AB	PA	OR	Entry Mean	Rank	AB	PA	OR	Entry Mean	Rank
1 Dk Red Norland	101	266	103	157	1	31	17	17	22	7
	26	41	28	32	2	8	3	4	5	10
2 A05173-6P	20	101	183	101	4	31	24	64	40	3
	3	14	32	16	4	5	3	11	6	4
3 NDA050237B-1R	39	78	137	85	5	2	1	23	9	20
	10	13	22	15	5	0	0	4	1	20
4 NDA8512C-1R	17	49	32	33	8	4	16	41	20	10
	4	8	7	6	8	1	3	10	5	13
5 A02267-5PY	11	48	19	26	9	25	2	29	19	12
	2	8	3	4	11	4	0	5	3	16
6 A05173-2RY	105	130	182	139	3	57	7	80	48	1
	20	20	30	23	3	11	1	13	8	1
7 AO03545-2	X	44	2	23	11	X	13	28	20	9
	X	9	1	5	9	X	2	8	5	9
8 Yukon Gold	70	181	175	142	2	24	8	38	23	6
	15	33	56	35	1	5	1	12	6	6
9 A02267-1Y	12	40	85	45	6	38	6	79	41	2
	2	6	14	7	6	7	1	13	7	2
10 A05182-7RY	10	42	5	19	12	13	1	21	12	19
	2	7	1	3	12	3	0	3	2	19
11 A05197-1Y	5	31	79	38	7	6	0	38	15	15
	1	6	13	7	7	1	0	6	2	18
12 A05201-1Y	1	11	13	8	15	21	1	42	21	8
	0	2	3	2	14	4	0	10	5	11
13 NDA070942-1CY	X	0	22	11	13	X	2	68	35	4
	X	0	4	2	13	X	0	14	7	2
14 NDA081451CB-1CY	0	9	18	9	14	4	0	46	17	13
	0	1	3	1	16	1	0	7	3	17
15 OR04198-1	X	3	6	4	16	X	6	27	16	14
	X	1	2	2	15	X	2	9	6	7
16 OR05112-1	2	0	7	3	17	22	5	57	28	5
	0	0	2	1	17	5	1	13	6	5
17 POR02PG12-1	0	0	0	0	19	5	0	38	14	17
	0	0	0	0	18	1	0	13	5	11
18 POR06PG24-2	0	0	0	0	19	22	0	37	20	11
	0	0	0	0	18	6	0	10	5	8
19 POR07PG20-2	0	1	0	0	18	12	2	21	12	18
	0	0	0	0	18	5	1	5	4	14
20 POR07PG3-1	14	23	39	25	10	12	1	31	15	16
	3	4	8	5	9	3	0	7	3	15
Location Means	24	53	55	43		21	6	41	22	
	5	9	11	8		4	1	9	5	

TABLE 8: 2012 Tri-State Specialty Potato Variety Trial - AVERAGE TUBER SIZE AND SHAPE

No. Clone	Average Tuber Size (oz)				Tuber Shape ¹			(Length/Width Ratio)			
	AB	PA	OR	Entry Means	AB	Entry Means		AB	PA	OR	Entry Means
1 Dk Red Norland	7.0	7.5	5.5	6.6	3.0	3.0	Blocky	1.15	1.20	1.15	1.17
2 A05173-6P	3.9	5.9	5.9	5.2	2.5	2.5	Oval	0.97	1.36	1.35	1.23
3 NDA050237B-1R	3.8	4.6	4.4	4.2	1.9	1.9	Round	1.08	1.12	1.04	1.08
4 NDA8512C-1R	3.8	5.1	4.3	4.4	2.5	2.5	Oval	1.17	1.23	1.14	1.18
5 A02267-5PY	3.9	4.8	2.9	3.9	1.3	1.3	Round	0.93	1.06	0.97	0.99
6 A05173-2RY	5.9	5.6	5.3	5.6	3.6	3.6	Oblong	1.24	1.34	1.31	1.30
7 AO03545-2	X	3.4	2.4	2.9	X	X	X	X	1.25	1.31	1.28
8 Yukon Gold	5.2	6.6	8.2	6.6	2.8	2.8	Blocky	1.07	1.20	1.28	1.18
9 A02267-1Y	3.9	4.1	3.8	3.9	2.1	2.1	Oval	1.15	1.13	1.24	1.17
10 A05182-7RY	3.1	3.3	2.7	3.0	2.3	2.3	Oval	1.13	1.20	1.13	1.15
11 A05197-1Y	2.8	3.8	4.6	3.7	1.5	1.5	Round	1.04	1.22	1.17	1.14
12 A05201-1Y	2.9	3.4	2.9	3.1	1.3	1.3	Round	1.04	1.17	1.09	1.10
13 NDA070942-1CY	X	3.4	3.1	3.3	X	X	X	X	1.07	1.03	1.05
14 NDA081451CB-1CY	3.0	3.4	3.9	3.4	1.1	1.1	Round	1.03	1.13	1.14	1.10
15 OR04198-1	X	2.6	1.9	2.3	X	X	X	X	1.14	1.31	1.23
16 OR05112-1	2.6	1.8	2.6	2.4	4.0	4.0	Oblong	2.46	2.37	2.75	2.53
17 POR02PG12-1	1.3	1.6	1.7	1.5	1.8	1.8	Round	1.13	1.23	1.43	1.26
18 POR06PG24-2	1.7	1.3	1.7	1.6	5.0	5.0	Long	2.19	2.19	2.51	2.30
19 POR07PG20-2	1.9	2.6	2.1	2.2	1.0	1.0	Round	1.03	1.03	1.03	1.03
20 POR07PG3-1	3.0	3.5	3.2	3.2	2.0	2.0	Round	0.93	1.04	0.93	0.96
Location Means	3.5	3.9	3.7	3.7	2.3	2.3		1.22	1.28	1.32	1.30

¹ 1.0-2.0=Round, 2.1-2.5=Oval, 2.6-3.5=Blocky, 3.6-4.0=Oblong, 4.1-5.0=Long

TABLE 9: 2012 Tri-State Specialty Potato Variety Trial - EYE DEPTH, TUBER SKIN AND FLESH COLOR

No. Clone	Eye Depth ¹				Skin Color ²					Flesh Color ²				
	AB	PA	OR	Entry Means	AB	PA	OR	Entry Means		AB	PA	OR	Entry Means	
1 Dk Red Norland	2.8	2.9	4.0	3.2	3.0	2.4	2.0	2.5	Red	1.0	1.0	1.0	1.0	White
2 A05173-6P	2.8	3.3	4.0	3.3	4.8	1.4	1.6	2.6	Pink	1.0	1.9	1.5	1.5	White
3 NDA050237B-1R	4.0	3.9	4.0	4.0	4.3	3.8	4.3	4.1	Red	1.0	1.0	1.0	1.0	White
4 NDA8512C-1R	3.5	3.3	4.0	3.6	3.8	3.0	3.6	3.5	Red	1.0	1.0	1.0	1.0	White
5 A02267-5PY	2.3	2.5	3.9	2.9	4.3	4.1	3.1	3.8	Purple	3.0	2.5	2.5	2.7	Yellow
6 A05173-2RY	4.5	3.4	4.0	4.0	2.0	1.4	1.6	1.7	Pink	2.5	1.8	1.4	1.9	Yellow
7 AO03545-2	X	3.0	4.0	3.5	X	1.1	3.0	2.1	Red	X	1.8	1.8	1.8	Yellow
8 Yukon Gold	3.8	3.1	4.3	3.7	1.3	1.0	1.5	1.3	Yellow	3.5	3.0	2.0	2.8	Yellow
9 A02267-1Y	3.2	1.8	4.0	3.0	1.3	1.0	2.3	1.5	Yellow	3.0	2.6	2.0	2.5	Yellow
10 A05182-7RY	3.2	2.4	4.1	3.2	1.5	1.6	1.0	1.4	Rose/White	3.3	2.9	2.0	2.7	Yellow
11 A05197-1Y	4.5	3.5	4.0	4.0	1.0	1.5	1.5	1.3	Yellow	3.3	2.6	2.8	2.9	Yellow
12 A05201-1Y	3.8	3.4	3.1	3.4	1.3	1.0	2.8	1.7	Yellow	4.0	3.9	2.3	3.4	Yellow
13 NDA070942-1CY	X	3.0	3.8	3.4	X	1.0	1.0	1.0	Pink	X	2.0	2.0	2.0	Yellow
14 NDA081451CB-1CY	4.0	2.9	4.0	3.6	1.0	1.0	1.9	1.3	Yellow	3.3	3.1	2.1	2.8	Yellow
15 OR04198-1	X	2.1	3.4	2.8	X	2.0	4.0	3.0	Yellow	X	5.0	4.9	4.9	Yellow
16 OR05112-1	4.5	3.4	4.0	4.0	1.3	2.8	1.0	1.7	Yellow	3.0	2.0	1.9	2.3	Yellow
17 POR02PG12-1	3.3	2.1	3.5	3.0	1.0	1.8	1.3	1.3	White	3.0	2.0	1.9	2.3	White
18 POR06PG24-2	4.5	3.8	4.5	4.3	2.0	1.0	2.9	2.0	Yellow	3.5	2.5	2.3	2.8	Yellow
19 POR07PG20-2	3.3	2.8	4.1	3.4	1.3	1.0	2.1	1.5	Pink	4.3	4.4	4.5	4.4	Yellow
20 POR07PG3-1	3.0	3.0	4.0	3.3	1.3	1.0	1.4	1.2	Yellow	4.0	3.1	2.9	3.3	Yellow
Location Means	3.6	3.0	3.9	3.5	2.1	1.7	2.2	2.1		2.5	2.2	1.8	2.1	

¹ Scale of 1-5; 1=deep, 5=shallow² Scale of 1-5 with higher number more intense color.

TABLE 10: 2012 Tri-State Specialty Potato Variety Trial - TUBER APPEARANCE, UNIFORMITY, MERIT

No. Clone	Appearance ¹			Uniformity ¹			Merit Score ¹			
	AB	PA	Entry Means	AB	OR	Entry Means	AB	PA	OR	Entry Means
1 Dk Red Norland	2.5	2.4	2.4	2.8	4.0	3.4	3.0	2.4	1.0	2.1
2 A05173-6P	1.5	3.6	2.6	2.8	4.1	3.4	2.3	3.6	3.5	3.2
3 NDA050237B-1R	3.3	3.3	3.3	2.8	4.4	3.6	3.4	3.3	4.0	3.5
4 NDA8512C-1R	2.5	3.1	2.8	3.5	3.9	3.7	3.5	3.1	1.0	2.5
5 A02267-5PY	2.3	3.4	2.8	2.8	4.1	3.4	2.7	3.4	1.0	2.3
6 A05173-2RY	3.3	3.6	3.4	2.7	4.3	3.5	2.7	3.6	2.5	2.9
7 AO03545-2	X	2.5	2.5	X	4.0	X	X	2.5	1.0	1.8
8 Yukon Gold	3.0	3.9	3.4	2.5	4.5	3.5	2.5	3.9	3.0	3.1
9 A02267-1Y	4.8	3.5	4.1	3.3	4.0	3.6	3.8	3.5	4.0	3.8
10 A05182-7RY	4.1	3.0	3.6	3.5	4.5	4.0	3.7	3.0	2.5	3.1
11 A05197-1Y	3.7	2.8	3.2	3.5	4.1	3.8	3.4	2.8	2.0	2.7
12 A05201-1Y	3.4	2.8	3.1	4.5	4.5	4.5	4.0	2.8	2.5	3.1
13 NDA070942-1CY	X	2.6	2.6	X	3.9	X	X	2.6	1.0	1.8
14 NDA081451CB-1CY	3.9	3.3	3.6	4.8	4.4	4.6	4.0	3.3	1.0	2.8
15 OR04198-1	X	4.1	4.1	X	3.8	X	X	4.1	1.0	2.6
16 OR05112-1	2.9	3.5	3.2	2.3	4.0	3.1	1.8	3.5	1.0	2.1
17 POR02PG12-1	3.0	2.8	2.9	3.0	4.0	3.5	2.7	2.8	2.0	2.5
18 POR06PG24-2	3.5	3.8	3.6	4.3	4.5	4.4	3.3	3.8	4.0	3.7
19 POR07PG20-2	3.4	3.5	3.5	3.8	4.6	4.2	3.8	3.5	3.0	3.4
20 POR07PG3-1	3.0	3.6	3.3	2.3	4.1	3.2	2.6	3.6	2.5	2.9
Location Means	3.2	3.2	3.2	3.2	4.2	3.7	3.1	3.2	2.18	2.8

¹ Scale of 1-5; 5=best

otato Variety Trial - EXTERNAL DEFECTS

No. Clone	Skinning ¹				Shatter ¹				Greening ¹				Scab ¹		
	AB	PA	OR	Entry Means	AB	PA	OR	Entry Means	AB	PA	OR	Entry Means	AB	PA	Entry Means
1 Dk Red Norland	3.0	3.1	4.5	3.5	3.8	4.8	4.5	4.3	5.0	5.0	4.3	4.8	4.5	5.0	4.8
2 A05173-6P	3.8	3.5	4.4	3.9	4.8	4.8	4.0	4.5	5.0	5.0	3.9	4.6	4.0	5.0	4.5
3 NDA050237B-1R	2.8	2.8	4.5	3.3	4.8	5.0	4.3	4.7	5.0	5.0	4.4	4.8	4.0	5.0	4.5
4 NDA8512C-1R	3.5	2.9	3.9	3.4	3.2	2.0	2.6	2.6	5.0	5.0	4.1	4.7	4.0	5.0	4.5
5 A02267-5PY	4.3	3.8	4.0	4.0	4.8	5.0	4.0	4.6	4.8	5.0	4.4	4.7	3.8	5.0	4.4
6 A05173-2RY	2.3	2.8	4.3	3.1	4.0	5.0	4.4	4.5	4.8	5.0	3.4	4.4	4.8	5.0	4.9
7 AO03545-2	X	3.1	4.0	3.6	X	5.0	3.0	4.0	X	5.0	4.0	4.5	X	5.0	5.0
8 Yukon Gold	3.8	2.9	4.6	3.8	5.0	5.0	4.4	4.8	4.0	4.8	4.6	4.5	2.5	4.5	3.5
9 A02267-1Y	5.0	3.0	5.0	4.3	5.0	5.0	4.0	4.7	2.8	4.5	3.1	3.5	3.8	4.5	4.1
10 A05182-7RY	4.3	2.9	5.0	4.0	5.0	5.0	4.3	4.8	4.8	5.0	4.0	4.6	4.5	5.0	4.8
11 A05197-1Y	4.3	1.6	4.9	3.6	4.8	5.0	4.1	4.6	5.0	5.0	4.4	4.8	3.9	5.0	4.4
12 A05201-1Y	4.0	2.0	4.9	3.6	5.0	5.0	4.4	4.8	4.8	5.0	4.1	4.6	4.0	5.0	4.5
13 NDA070942-1CY	X	1.4	4.6	3.0	X	5.0	3.6	4.3	X	5.0	4.0	4.5	X	5.0	5.0
14 NDA081451CB-1CY	3.9	2.3	4.9	3.7	5.0	5.0	4.0	4.7	4.8	5.0	3.6	4.5	4.0	5.0	4.5
15 OR04198-1	X	4.5	5.0	4.8	X	5.0	4.4	4.7	X	5.0	4.4	4.7	X	4.8	4.8
16 OR05112-1	4.3	3.8	5.0	4.3	5.0	5.0	4.4	4.8	4.8	5.0	3.6	4.5	4.3	5.0	4.6
17 POR02PG12-1	3.0	2.5	4.5	3.3	4.5	5.0	3.0	4.2	4.8	4.8	4.5	4.7	3.5	5.0	4.3
18 POR06PG24-2	3.3	2.8	5.0	3.7	5.0	5.0	4.5	4.8	4.5	5.0	4.4	4.6	4.3	5.0	4.6
19 POR07PG20-2	4.3	3.5	5.0	4.3	4.6	5.0	4.4	4.7	4.8	5.0	4.1	4.6	4.5	4.5	4.5
20 POR07PG3-1	3.3	2.4	4.5	3.4	5.0	5.0	3.8	4.6	4.5	4.8	4.1	4.5	3.2	4.3	3.7
ion Means	3.7	2.9	4.6	3.3	4.7	4.8	4.0	4.5	4.6	4.9	4.1	4.5	4.0	4.9	4.5

¹ Scale of 1-5; 5=best

TABLE 12: 2012 Tri-State Specialty Potato Variety Trial - INTERNAL DEFECTS

No. Clone	Percent Hollow Heart plus Brown Center				Percent Internal Brown Spot			Percent Net Necrosis/ Vascular Discoloration		
	AB	PA	OR	Entry Means	PA	OR	Entry Means	PA	OR	Entry Means
1 Dk Red Norland	2.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	5.0	2.5
2 A05173-6P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	5.0
3 NDA050237B-1R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.3
4 NDA8512C-1R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.3
5 A02267-5PY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	6.3
6 A05173-2RY	0.0	0.0	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
7 AO03545-2	X	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	1.4
8 Yukon Gold	0.0	0.0	5.0	1.7	0.0	0.0	0.0	0.3	0.0	0.1
9 A02267-1Y	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 A05182-7RY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 A05197-1Y	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 A05201-1Y	0.0	0.0	2.5	0.8	0.0	0.0	0.0	0.3	0.0	0.1
13 NDA070942-1CY	X	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 NDA081451CB-1CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.0	2.6
15 OR04198-1	X	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.3
16 OR05112-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	3.8
17 POR02PG12-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 POR06PG24-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	2.5	6.1
19 POR07PG20-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	5.0	3.3
20 POR07PG3-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Location Means	0.1	0.0	0.5	0.2	0.0	0.0	0.0	0.7	2.8	1.7

TABLE 13: 2012 Tri-State Specialty Potato Variety Trial - SOLIDS, ANTIOXIDANTS, VITAMIN C,
AND GLYCOALKALOIDS - ABERDEEN

Clone	Solids Oven Dry (%)	Antioxidants ug/g (%FWB)	Vitamin C (mg/100g FWB)	Glycoalkaloids (mg/100gFWB)
1 Dk Red Norland	18.26	451.9	25.24	3.08
2 A05173-6P	17.85	364.0	26.88	6.91
3 NDA050237B-1R	16.09	374.2	15.89	3.31
4 NDA8512C-1R	19.42	516.1	23.03	5.44
5 A02267-5PY	21.48	418.1	30.18	7.32
6 A05173-2RY	17.43	438.0	25.46	1.88
7 AO03545-2	x	x	x	x
8 Yukon Gold	21.33	276.1	34.09	4.43
9 A02267-1Y	18.72	362.7	20.46	3.81
10 A05182-7RY	18.44	255.7	22.11	3.59
11 A05197-1Y	20.54	558.7	28.22	4.98
12 A05201-1Y	21.00	409.2	29.75	4.77
13 NDA070942-1CY	x	x	x	x
14 NDA081451CB-1CY	21.30	223.1	24.32	4.06
15 OR04198-1	x	x	x	x
16 OR05112-1	16.56	612.8	20.00	10.07
17 POR02PG12-1	20.96	572.6	21.69	8.52
18 POR06PG24-2	20.09	679.1	28.77	10.43
19 POR07PG20-2	17.54	821.8	37.97	3.14
20 POR07PG3-1	18.86	305.9	22.57	3.10
Means	16.29	381.99	21.83	4.44

FWB = fresh weight basis DWB = dry weight basis

Glycoalkaloids: The 2009 Lenape check from Aberdeen was 42.5 mg/100g

TABLE 14: 2012 Tri-State Specialty Potato Variety Trial - RHIZOC/BRUISE RATINGS FROM KLAMATH FALLS

No. Clone	Rhizoc ¹	Impact Bruise ²
	OR	OR
1 Dk Red Norland	4.6	7.5
2 A05173-6P	4.9	5.0
3 NDA050237B-1R	2.8	10.0
4 NDA8512C-1R	4.0	15.0
5 A02267-5PY	4.3	7.5
6 A05173-2RY	5.0	12.5
7 AO03545-2	3.0	15.0
8 Yukon Gold	2.4	15.0
9 A02267-1Y	4.8	15.0
10 A05182-7RY	4.6	2.5
11 A05197-1Y	4.8	15.0
12 A05201-1Y	4.6	20.0
13 NDA070942-1CY	3.9	12.5
14 NDA081451CB-1CY	2.3	5.0
15 OR04198-1	1.6	5.0
16 OR05112-1	4.3	5.0
17 POR02PG12-1	4.0	20.0
18 POR06PG24-2	3.5	12.5
19 POR07PG20-2	4.8	17.5
20 POR07PG3-1	4.5	15.0
Location Means	3.9	11.6

¹ Scale of 1-5; 5=none

² this is all bruise as a percent of 10 tubers evaluated for internals includes shatter, white-knot, blackspot as general category

TABLE 15: 2012 Tri-State Specialty Potato Variety Trial - SUMMARY

Clone	Total Yield	% 4-10 oz	% 2-6 oz (premium)	Tuber Size	Specific Gravity	Fresh Merit	Comments
1 Dk Red Norland	469	55	23 lowest	7 biggest	1.067	2.1 poor	Typical, big, faded, bronzing, high cullage
2 A05173-6P	629	59	40	5	1.066	3.2 fair	Deep ends, purple shine, growth crack
3 NDA050237B-1R	543	57	46	4	1.065	3.5 fair	Dark red skin, not very uniform, round, low skin defects, ATS
4 NDA8512C-1R	470	65 highest	50	4	1.075	2.5 fair	Bright dark red, round, some russeting, shattered, high cullage
5 A02267-5PY	588	62	60	4	1.085	2.3 fair	Deep eyes, slightly misshapen, bronzing, high cullage
6 A05173-2RY	595	56	32	6	1.064	2.9 fair	Elongated, pink splash, pointy
7 AO03545-2	434	44	44	3	1.086 highest	1.8 poor	Average, misshaped, wide size range, high cullage
8 Yukon Gold	440	47	27	7 biggest	1.085	3.1 fair	Typical, yellow, smooth, big
9 A02267-1Y	613	58	49	4	1.074	3.8 good	White/purple eyes, oval, small, smooth, nice size profile
10 A05182-7RY	588	48	63	3	1.077	3.1 fair	Nice, champagne, misshaped, unique color, low skin defect
11 A05197-1Y	565	48	62	4	1.078	2.7 fair	Inconsistent eye splash, low yield, badly skinned
12 A05201-1Y	499	47	67 highest	3	1.083	3.1 good	Average size, shiny, skinned, heat sprouts, ATS
13 NDA070942-1CY	515	51	64	3	1.067	1.8 poor	Low yield, pointy, tan, nice shape, unique color
14 NDA081451CB-1CY	671 highest	54	67 highest	3	1.085	2.8 good	Nice size, shiny, misshapen, smooth, little russeted, high cullage
15 OR04198-1	301	35	59	2	1.077	2.6 highest	Low yield, small tubers, misshapen, champagne color, bad rhizoc
16 OR05112-1	500	34	59	2	1.061 lowest	2.1 poor	Russeted, long, faded, misshapen, curved fingerling
17 POR02PG12-1	389	6	41	2 smallest	1.081	2.5 poor	Tiny, buff, misshapen, little pointy, growth crack
18 POR06PG24-2	387	5 lowest	36	2	1.082	3.7 good	Fingerling, misshapen, high packout
19 POR07PG20-2	357 lowest	31	63	2	1.067	3.4 good	Champagne color, small, skin checking, ATS
20 POR07PG3-1	495	50	62	3	1.076	2.9 fair	Deep eyes, white/pink eyes, misshapen, fingerling, high set

ATS - attached stolons

TABLE 16: 2012 Tri-State Specialty Potato Variety Trial - LOCATION COMMENTS

Clone	ABERDEEN	PARMA	KLAMATH FALLS
	Comments	Comments	Comments
1 Dk Red Norland	Typical	Big, faded	Bronzing, high cullage
2 A05173-6P	Deep ends, purple shine varies, ATS	Big, unique, folded ends, growth crack	Smooth, low skin defects, color issues?
3 NDA050237B-1R	Nice red, skinned, pretty when washed, ATS	Not very uniform, dark red skin, round	Smooth, shiny, low skin defects, some rhizoc
4 NDA8512C-1R	Nice, red, some russetting, shattered, ATS	Bright dark red, round	Bronzing, shatter bruise, poor skin, high cullage >60%
5 A02267-5PY	Deep ends, heat sprouts, round purple, ATS	Slightly misshapen, average, nice shape	High bronzing, high cullage >70%
6 A05173-2RY	Enlongated, GC, "hot lips", w/dk pink splash, ATS	Pointy, splashy skin	Smooth, low skin defect, ugly color
7 AO03545-2	X	Faded, misshapen, nice, red, wide size range	Bronzing, misshapen, shatter bruise, high cullage
8 Yukon Gold	Typical	Good skin, tan, flat, misshaped	Smooth, big, typy, keep
9 A02267-1Y	European look, white/purple eyes, oval,ATS	Pointed ends, lumpy, misshapen, shiny, yellow	Smooth, typy, low skin defect, keep
10 A05182-7RY	Nice, champagne/pink eyes, some misshaped and green	Average, prolific, shiny	Small, typy, low skin defect, ugly color
11 A05197-1Y	Small, round, w/pink eyes, not consistent	Low yield, misshapen, badly skinned	Inconsistent eye-splash, flat, Yukon look-alike
12 A05201-1Y	Small, round, nice, uniform, heat sprouts, ATS	Nice size profile, average, shiny	Small, typy, lenticels, nothing special
13 NDA070942-1CY	X	Low yield, pointy, tan, nice shape, unique color	Rot, misshapen, ugly color
14 NDA081451CB-1CY	Nice size and shape, skin a little russetted, ATS	Shiny, prolific, small, round	Smooth, rhizoc, high cullage
15 OR04198-1	X	Low yield, small tubers, misshapen, champagne color, growing	Sprouts, rhizoc, high cullage
16 OR05112-1	Russetted, long, yam like, curved fingerling	Ugly, long, curvy, misshapen	End rot
17 POR02PG12-1	Tiny, buff, GC, few enlongated	Small, prolific, little pointy, round	Shatter bruise, poor
18 POR06PG24-2	Fingerling, white/pink eyes	Small, two tone, fingerlings	Nice, typy, low defects, high packout
19 POR07PG20-2	Champagne, smal, round, skin checking, ATS	Low yield, small, round, prolific	Sprouts, smooth, low skin defects, MH30?
20 POR07PG3-1	Deep ends, white/pink eyes, misshapen, skinned, ATS	Shiny, misshapen, high set	Smooth, sprouts, shatter bruise

ATS - attached stolons

2012 Tri-State Specialty Potato Variety Photos

Taken at Parma, Idaho

