

2004  
TRI-STATE  
POTATO VARIETY TRIAL REPORT

State Experiment Stations and  
USDA-ARS Cooperating

Washington

Oregon

Idaho

## 2004 TRI-STATE POTATO VARIETY TRIAL REPORT

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Compiled by Peggy Bain

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TABLE 1: 2004 Tri-State Potato Variety Trial - LOCATIONS, COOPERATORS, AND CULTURAL INFORMATION

Locations	Cooperators	Trial	Irrigation	Fertilizer N-P-K-S(lb/A)	Planting Date	Vine Kill Date	Harvest Date	Days to Vine Kill	Days to Harvest	Herbicides	Insecticides	Fungicides
Aberdeen Idaho ( <b>ID</b> )	S. Love J. Whitworth R. Novy T. Salaiz P. Bain	Late	Sprink.	200-50-40	26-Apr	3-Sep	20-Sep	130	147	Sencor DF Spartan	Admire 2F	Bravo Equus Dithane DF
Hermiston Oregon ( <b>OR</b> )	D. Hane, A. Mosley L. Leroux	Late	Pivot	330-80-500-40	6-Apr	8-Sep	20-Sep	155	167	Eptam Matrix	MoCap Admire Asana Monitor Agrimek	Vapam Ridomil Gold Quadris Bravo Dithane Omega Maxim 4FS (seed)
Othello ( <b>EWA</b> ) Washington	M Pavek R. Knowles E. Driskill N. Fuller	Early	Sprinkler	218-320-120	5-Apr	30-Jul	9-Aug	116	126	Matrix Prowl	Platinum Vapam	Bravo Dithane Quadris
Othello ( <b>LWA</b> ) Washington	M Pavek R. Knowles E. Driskill N. Fuller Johnson Agri.	Late	Pivot	229-145-0-128	23-Apr	15-Sep	17-Sep	145	147	Sencor	Comite Monitor Asana	Echo Endura Omega Dithane

TABLE 2: 2004 Tri-State Potato Variety Trial - CLONE, PARENTS, FLOWER COLOR, ENTERED BY, SEED SOURCE, STAND, TUBER AND VINE CHARACTERISTICS, STEMS PER PLANT

No	Clone	Parents	Flower Color	Entered by	Use	Trial Year	Seed Source	Mean Stand %	Tuber		Vine		Stems/ Plant
									Shape	Skin	Size	Maturity	
1	Ranger Russet	Butte A6595-3	Med Red-purple	Check	Dual	Ck	OR	98	Long	Med Russet	Med-large	Late	2.4
2	Russet Burbank	Early Rose ?	White	Check	Dual	Ck	OR	95	Obl-Lng	Med Russet	Medium	Med Early	2.1
3*	Russet Norkotah	ND9687-5 Ru ND9526-4 Ru	White	Check	Fresh	Ck	OR	-	Round	Med Russet	Small	Med Early	2.3
4*	Shepody	Bake King F58050	Lt . Pink	Check	Proc	Ck	OR	-	Round	White	Med-large	Late	2.9
5	A95409-1	A89146-8 Ranger	Red-Purple	ID	Proc	2	OR	96	Oblong	Light Russet	Med-large	Late	2.3
6	A96023-6	A9045-7 A89512-3	Red-Purple	ID	Dual	1	ID	96	Obl-Lng	Med Russet	Med-large	Med--late	2.4
7	A96095-3	A88094-8 A91194-4	White	ID	Dual	1	ID	98	Obl-Lng	Med Russet	Small	Med Early	2.2
8	A96104-2	A88236-4 A89512-3	Red-Purple	ID	Dual	1	ID	97	Oblong	Med Russet	Medium	Medium	2.5
9	A98295-3TE	A93156-3 A86102-6	Red-Purple	ID	Dual	1	ID	95	Oblong	Med Hvy Rus	Small	Early	1.9
10	AO96164-1	A89384-10 A91194-4	White	OR	Dual	2	OR	96	Obl-Lng	Med Russet	Med-large	Medium	2.2
11	AOA95154-1	Bannock A89152-4	Med Red-purple	ID	Dual	2	OR	98	Obl-Lng	Med Russet	Med-large	Late	2.5
12	AOA95155-7	Bannock A89163-3LS	Red-Purple	ID	Dual	2	OR	96	Obl-Lng	Med Russet	Med-large	Late	2.3
13	COA96054-3	AC84437-2 AC88165-3	Red-Purple	ID	Dual	1	ID	94	Oblong	Light Russet	Med-large	Med--late	2.7
14	PA97B3-2	A8469-5 A77715-6	White	WA	Dual	1	ID/WA	97	Oblong	Light Russet	Small	Early	2.2

Early trial

VR=very resistant, R=Resistant, MR=Moderately resistant, MS=moderately susceptible, S=susceptible VS=very susceptible.

TABLE 3: 2004 Tri-State Potato Variety Trial - TOTAL YIELD (CWT/A) - EARLY AND LATE HARVEST

No.	Clone	Total Yield - Early Harvest (CWT/A)			Total Yield - Late Harvest (CWT/A)			Entry Mean	Rank
		(EWA)	Entry Mean	Rank	(ID)	(OR)	(LWA)		
1	Ranger Russet	426	<b>426</b>	<b>13</b>	566	991	569	<b>709</b>	<b>2</b>
2	Russet Burbank	509	<b>509</b>	<b>9</b>	514	1010	569	<b>698</b>	<b>3</b>
3	Russet Norkotah	467	<b>467</b>	<b>12</b>	.	-	-	-	-
4	Shepody	520	<b>520</b>	<b>7</b>	.	-	-	-	-
5	A95409-1	584	<b>584</b>	<b>2</b>	506	1020	640	<b>722</b>	<b>1</b>
6	A96023-6	491	<b>491</b>	<b>10</b>	489	932	659	<b>693</b>	<b>5</b>
7	A96095-3	528	<b>528</b>	<b>5</b>	546	778	623	<b>649</b>	<b>10</b>
8	A96104-2	485	<b>485</b>	<b>11</b>	550	972	570	<b>697</b>	<b>4</b>
9	A98295-3TE	580	<b>580</b>	<b>4</b>	331	593	307	<b>410</b>	<b>12</b>
10	AO96164-1	582	<b>582</b>	<b>3</b>	560	894	531	<b>662</b>	<b>8</b>
11	AOA95154-1	510	<b>510</b>	<b>8</b>	537	990	538	<b>688</b>	<b>6</b>
12	AOA95155-7	371	<b>371</b>	<b>14</b>	460	1022	504	<b>662</b>	<b>7</b>
13	COA96054-3	522	<b>522</b>	<b>6</b>	374	990	602	<b>655</b>	<b>9</b>
14	PA97B3-2	626	<b>626</b>	<b>1</b>	365	1022	498	<b>628</b>	<b>11</b>
<b>Location Means</b>		<b>514</b>	<b>514</b>		<b>483</b>	<b>935</b>	<b>551</b>	<b>656</b>	
<b>LSD (.05)</b>								<b>119</b>	

TABLE 4: 2004. Tri-State Potato Variety Trial - YIELD OF U.S. #1'S (CWT/A &amp; %) - EARLY AND LATE HARVEST

No.	Clone	U.S. No. 1's - Early Harvest (CWT/A)/%			U.S. No. 1's - Late Harvest (CWT/A)/%			Entry Mean	Rank
		(EWA)	Entry Mean	Rank	(ID)	(OR)	(LWA)		
1	Ranger Russet	343	<b>343</b>	<b>12</b>	501	817	504	<b>607</b>	<b>2</b>
		81	<b>81</b>	<b>8</b>	89	82	89	<b>87</b>	<b>3</b>
2	Russet Burbank	314	<b>314</b>	<b>13</b>	332	489	404	<b>408</b>	<b>11</b>
		62	<b>62</b>	<b>14</b>	65	48	71	<b>61</b>	<b>12</b>
3	Russet Norkotah	413	<b>413</b>	<b>9</b>	-	-	-	-	-
		88	<b>88</b>	<b>3</b>	-	-	-	-	-
4	Shepody	424	<b>424</b>	<b>6</b>	-	-	-	-	-
		81	<b>81</b>	<b>7</b>	-	-	-	-	-
5	A95409-1	525	<b>525</b>	<b>1</b>	457	962	587	<b>669</b>	<b>1</b>
		90	<b>90</b>	<b>1</b>	90	94	92	<b>92</b>	<b>1</b>
6	A96023-6	415	<b>415</b>	<b>7</b>	419	780	552	<b>584</b>	<b>5</b>
		84	<b>84</b>	<b>5</b>	86	84	84	<b>84</b>	<b>7</b>
7	A96095-3	388	<b>388</b>	<b>10</b>	488	596	571	<b>552</b>	<b>8</b>
		73	<b>73</b>	<b>11</b>	89	77	92	<b>86</b>	<b>5</b>
8	A96104-2	373	<b>373</b>	<b>11</b>	462	811	384	<b>552</b>	<b>7</b>
		77	<b>77</b>	<b>9</b>	84	83	67	<b>78</b>	<b>11</b>
9	A98295-3TE	414	<b>414</b>	<b>8</b>	279	504	209	<b>331</b>	<b>12</b>
		71	<b>71</b>	<b>12</b>	84	85	68	<b>79</b>	<b>10</b>
10	AO96164-1	483	<b>483</b>	<b>2</b>	446	836	438	<b>573</b>	<b>6</b>
		83	<b>83</b>	<b>6</b>	80	94	82	<b>85</b>	<b>6</b>
11	AOA95154-1	440	<b>440</b>	<b>5</b>	479	880	436	<b>598</b>	<b>3</b>
		86	<b>86</b>	<b>4</b>	89	89	81	<b>86</b>	<b>4</b>
12	AOA95155-7	232	<b>232</b>	<b>14</b>	409	918	435	<b>587</b>	<b>4</b>
		63	<b>63</b>	<b>13</b>	89	90	86	<b>88</b>	<b>2</b>
13	COA96054-3	462	<b>462</b>	<b>4</b>	310	880	435	<b>542</b>	<b>9</b>
		89	<b>89</b>	<b>2</b>	83	89	72	<b>81</b>	<b>8</b>
14	PA97B3-2	473	<b>473</b>	<b>3</b>	270	918	370	<b>519</b>	<b>10</b>
		76	<b>76</b>	<b>10</b>	74	90	74	<b>79</b>	<b>9</b>
<b>Location Means</b>		<b>407</b>	<b>407</b>		<b>404</b>	<b>783</b>	<b>444</b>	<b>544</b>	
<b>LSD (.05)</b>		<b>79</b>	<b>79</b>		<b>84</b>	<b>84</b>	<b>80</b>	<b>82</b>	<b>143</b>

TABLE 5: 2004 Tri-State Potato Variety Trial - YIELD &gt; 12 OZ (CWT/A &amp; %) - EARLY AND LATE HARVEST

No.	Clone	U.S. No. 1's > 12 OZ - Early Harvest (CWT/A)/%			U.S. No. 1's >12 OZ - Late Harvest (CWT/A)/%			Entry Mean	Rank
		(EWA)	Entry Mean	Rank	(ID)	(OR)	(LWA)		
1	Ranger Russet	96	<b>96</b>	<b>8</b>	184	406	90	<b>227</b>	<b>4</b>
		23	<b>23</b>	<b>8</b>	33	41	16	<b>30</b>	<b>4</b>
2	Russet Burbank	35	<b>35</b>	<b>11</b>	81	154	20	<b>85</b>	<b>11</b>
		7	<b>7</b>	<b>11</b>	16	15	4	<b>12</b>	<b>11</b>
3	Russet Norkotah	131	<b>131</b>	<b>7</b>	-	-	-	-	-
		28	<b>28</b>	<b>7</b>	-	-	-	-	-
4	Shepody	243	<b>243</b>	<b>2</b>	-	-	-	-	-
		47	<b>47</b>	<b>2</b>	-	-	-	-	-
5	A95409-1	274	<b>274</b>	<b>1</b>	252	691	211	<b>385</b>	<b>1</b>
		47	<b>47</b>	<b>1</b>	50	68	33	<b>50</b>	<b>1</b>
6	A96023-6	22	<b>22</b>	<b>12</b>	67	227	56	<b>117</b>	<b>8</b>
		5	<b>5</b>	<b>12</b>	14	24	9	<b>16</b>	<b>9</b>
7	A96095-3	169	<b>169</b>	<b>6</b>	311	349	197	<b>286</b>	<b>2</b>
		32	<b>32</b>	<b>5</b>	57	45	32	<b>44</b>	<b>2</b>
8	A96104-2	55	<b>55</b>	<b>10</b>	185	167	18	<b>123</b>	<b>6</b>
		11	<b>11</b>	<b>10</b>	34	17	3	<b>18</b>	<b>7</b>
9	A98295-3TE	169	<b>169</b>	<b>5</b>	18	52	3	<b>24</b>	<b>12</b>
		29	<b>29</b>	<b>6</b>	5	9	1	<b>5</b>	<b>12</b>
10	AO96164-1	187	<b>187</b>	<b>3</b>	231	386	84	<b>234</b>	<b>3</b>
		32	<b>32</b>	<b>4</b>	41	43	16	<b>33</b>	<b>3</b>
11	AOA95154-1	14	<b>14</b>	<b>13</b>	124	194	30	<b>116</b>	<b>9</b>
		3	<b>3</b>	<b>13</b>	23	20	6	<b>16</b>	<b>8</b>
12	AOA95155-7	0	<b>0</b>	<b>14</b>	130	233	66	<b>143</b>	<b>5</b>
		0	<b>0</b>	<b>14</b>	28	23	13	<b>21</b>	<b>5</b>
13	COA96054-3	172	<b>172</b>	<b>4</b>	117	194	40	<b>117</b>	<b>7</b>
		33	<b>33</b>	<b>3</b>	31	20	7	<b>19</b>	<b>6</b>
14	PA97B3-2	92	<b>92</b>	<b>9</b>	33	233	59	<b>108</b>	<b>10</b>
		15	<b>15</b>	<b>9</b>	9	23	12	<b>15</b>	<b>10</b>
<b>Location Means</b>		<b>119</b>	<b>119</b>		<b>144</b>	<b>274</b>	<b>73</b>	<b>164</b>	
<b>LSD (.05)</b>		<b>22</b>	<b>22</b>		<b>28</b>	<b>29</b>	<b>12</b>	<b>23</b>	
								<b>124</b>	

TABLE 6: 2004 Tri-State Potato Variety Trial - YIELD &lt; 4 OZ (CWT/A &amp; %) - EARLY AND LATE HARVEST

No.	Clone	Yield < 4 OZ - Early Harvest (CWT/A)/%			U.S. No. 1's < 4 OZ - Late Harvest (CWT/A)/%			Entry Mean	Rank
		(EWA)	Entry Mean	Rank	(ID)	(OR)	(LWA)		
1	Ranger Russet	26	<b>26</b>	<b>5</b>	18	35	63	<b>39</b>	<b>3</b>
		6	<b>6</b>	<b>6</b>	3	4	11	<b>6</b>	<b>3</b>
2	Russet Burbank	49	<b>49</b>	<b>10</b>	49	81	146	<b>92</b>	<b>11</b>
		10	<b>10</b>	<b>10</b>	10	8	26	<b>15</b>	<b>8</b>
3	Russet Norkotah	29	<b>29</b>	<b>6</b>	-	-	-	-	-
		6	<b>6</b>	<b>7</b>	-	-	-	-	-
4	Shepody	15	<b>15</b>	<b>2</b>	-	-	-	-	-
		3	<b>3</b>	<b>2</b>	-	-	-	-	-
5	A95409-1	14	<b>14</b>	<b>1</b>	12	24	50	<b>29</b>	<b>1</b>
		2	<b>2</b>	<b>1</b>	2	2	8	<b>4</b>	<b>1</b>
6	A96023-6	55	<b>55</b>	<b>13</b>	38	54	99	<b>64</b>	<b>6</b>
		11	<b>11</b>	<b>13</b>	8	6	15	<b>10</b>	<b>6</b>
7	A96095-3	41	<b>41</b>	<b>8</b>	14	32	50	<b>32</b>	<b>2</b>
		8	<b>8</b>	<b>8</b>	3	4	8	<b>5</b>	<b>2</b>
8	A96104-2	47	<b>47</b>	<b>9</b>	44	119	181	<b>115</b>	<b>12</b>
		10	<b>10</b>	<b>11</b>	8	12	32	<b>17</b>	<b>11</b>
9	A98295-3TE	18	<b>18</b>	<b>3</b>	48	66	98	<b>71</b>	<b>8</b>
		3	<b>3</b>	<b>3</b>	15	11	32	<b>19</b>	<b>12</b>
10	AO96164-1	34	<b>34</b>	<b>7</b>	19	37	84	<b>47</b>	<b>4</b>
		6	<b>6</b>	<b>5</b>	3	4	16	<b>8</b>	<b>4</b>
11	AOA95154-1	54	<b>54</b>	<b>12</b>	36	68	99	<b>68</b>	<b>7</b>
		11	<b>11</b>	<b>12</b>	7	7	18	<b>11</b>	<b>7</b>
12	AOA95155-7	116	<b>116</b>	<b>14</b>	15	76	64	<b>52</b>	<b>5</b>
		31	<b>31</b>	<b>14</b>	3	7	13	<b>8</b>	<b>5</b>
13	COA96054-3	24	<b>24</b>	<b>4</b>	38	68	165	<b>90</b>	<b>10</b>
		5	<b>5</b>	<b>4</b>	10	7	27	<b>15</b>	<b>9</b>
14	PA97B3-2	51	<b>51</b>	<b>11</b>	68	76	119	<b>88</b>	<b>9</b>
		8	<b>8</b>	<b>9</b>	19	7	24	<b>17</b>	<b>10</b>
<b>Location Means</b>		<b>41</b>	<b>41</b>		<b>33</b>	<b>61</b>	<b>101</b>	<b>65</b>	
<b>LSD (.05)</b>		<b>9</b>	<b>9</b>		<b>8</b>	<b>7</b>	<b>19</b>	<b>11</b>	<b>32</b>



TABLE 7: 2004 Tri-State Potato Variety Trial - SPECIFIC GRAVITY - EARLY AND LATE HARVEST

No. Clone	Specific Gravity - Early Harvest		Specific Gravity - Late Harvest				
	EWA	Rank	ID	OR	LWA	Entry Mean	Rank
1 Ranger Russet	1.077	<b>12</b>	1.089	1.072	1.078	<b>1.080</b>	<b>3</b>
2 Russet Burbank	1.082	<b>6</b>	1.082	1.071	1.068	<b>1.074</b>	<b>9</b>
3 Russet Norkotah	1.079	<b>9</b>	-	-	-	-	-
4 Shepody	1.080	<b>8</b>	-	-	-	-	-
5 A95409-1	1.084	<b>4</b>	1.085	1.070	1.079	<b>1.078</b>	<b>6</b>
6 A96023-6	1.078	<b>11</b>	1.083	1.062	1.073	<b>1.073</b>	<b>11</b>
7 A96095-3	1.075	<b>13</b>	1.077	1.060	1.071	<b>1.069</b>	<b>12</b>
8 A96104-2	1.080	<b>7</b>	1.082	1.068	1.073	<b>1.074</b>	<b>8</b>
9 A98295-3TE	1.085	<b>3</b>	1.083	1.067	1.070	<b>1.073</b>	<b>10</b>
10 AO96164-1	1.079	<b>10</b>	1.085	1.078	1.072	<b>1.078</b>	<b>5</b>
11 AOA95154-1	1.083	<b>5</b>	1.090	1.078	1.085	<b>1.084</b>	<b>2</b>
12 AOA95155-7	1.075	<b>14</b>	1.080	1.074	1.076	<b>1.077</b>	<b>7</b>
13 COA96054-3	1.088	<b>2</b>	1.092	1.080	1.086	<b>1.086</b>	<b>1</b>
14 PA97B3-2	1.089	<b>1</b>	1.088	1.072	1.078	<b>1.079</b>	<b>4</b>
<b>Location Means</b>	<b>1.081</b>		<b>1.085</b>	<b>1.071</b>	<b>1.076</b>	<b>1.077</b>	
<b>LSD (0.5)</b>						<b>0.005</b>	

TABLE 8: 2004 Tri-State Potato Variety Trial - AVERAGE TUBER SIZE, AND TUBER SHAPE

No. Clone	Average Tuber Size (oz)					Tuber Shape (1-5, 1 = round, 5 = long)				
	WA E	ID L	OR L	WA L	Entry Late only	WA E	ID L	OR L	WA L	Entry Means
1 Ranger Russet	7.9	9.0	10.3	6.5	<b>8.6</b>	4.0	4.0	4.7	4.0	<b>4.2</b>
2 Russet Burbank	6.6	7.3	7.8	4.7	<b>6.6</b>	3.5	4.0	3.7	3.3	<b>3.6</b>
3 Russet Norkotah	7.7	-	-	-	<b>7.7</b>	3.3	-	-	-	<b>3.3</b>
4 Shepody	10.6	-	-	-	<b>10.6</b>	3.0	-	-	-	<b>3.0</b>
5 A95409-1	10.2	10.8	13.0	7.6	<b>10.5</b>	2.8	3.8	3.3	3.0	<b>3.2</b>
6 A96023-6	5.8	7.0	8.0	5.9	<b>7.0</b>	4.3	4.0	4.7	3.0	<b>4.0</b>
7 A96095-3	8.6	11.5	10.7	7.5	<b>9.9</b>	3.8	4.0	3.9	3.8	<b>3.9</b>
8 A96104-2	6.8	7.8	6.4	4.3	<b>6.2</b>	2.8	3.3	3.3	2.5	<b>3.0</b>
9 A98295-3TE	9.8	5.5	6.4	4.3	<b>5.4</b>	4.0	3.3	4.1	3.0	<b>3.6</b>
10 AO96164-1	8.5	10.1	9.3	5.9	<b>8.4</b>	3.8	4.5	3.2	3.0	<b>3.6</b>
11 AOA95154-1	5.8	7.4	6.4	5.3	<b>6.4</b>	3.3	3.8	4.1	3.0	<b>3.5</b>
12 AOA95155-7	4.4	8.7	9.3	6.3	<b>8.1</b>	3.8	4.3	3.2	3.0	<b>3.6</b>
13 COA96054-3	8.6	7.2	7.5	4.6	<b>6.4</b>	2.8	3.8	4.2	2.3	<b>3.3</b>
14 PA97B3-2	7.3	5.8	7.6	5.0	<b>6.1</b>	3.1	3.0	4.4	3.0	<b>3.4</b>
<b>Location Means</b>	<b>7.8</b>	<b>8.2</b>	<b>8.6</b>	<b>5.6</b>	<b>7.5</b>	<b>3.4</b>	<b>3.8</b>	<b>3.9</b>	<b>3.1</b>	<b>3.6</b>
<b>LSD (0.5)</b>					<b>1.3</b>					<b>NS</b>

TABLE 9: 2004 Tri-State Potato Variety Trial - EXTERNAL DEFECTS - GROWTH CRACKS, SECOND GROWTH, SHATTER BRUISE, SCAB - MEANS OF LOCATIONS

No. Clone	Growth Cracks <sup>1</sup>		Second Growth <sup>1</sup>		Shatter Bruise <sup>1</sup>			Scab <sup>1</sup>	
	Early	Late	Early	Late	Early	Late	AB <sup>2</sup>	Early	Late
1 Ranger Russet	4.5	4.8	4.5	5.0	5.0	5.0	2.7	5.0	4.9
2 Russet Burbank	2.6	3.8	2.6	3.8	5.0	4.0	2.7	5.0	5.0
3 Russet Norkotah	4.7	-	4.7	-	5.0	-	-	5.0	-
4 Shepody	4.1	-	4.1	-	5.0	-	-	5.0	-
5 A95409-1	4.5	4.9	4.5	5.0	5.0	4.4	2.6	5.0	4.4
6 A96023-6	4.9	4.9	4.9	4.9	4.0	4.2	2.6	5.0	4.5
7 A96095-3	3.8	4.9	3.8	5.0	5.0	5.0	2.6	5.0	4.0
8 A96104-2	4.0	4.9	4.0	4.9	5.0	4.5	2.5	5.0	5.0
9 A98295-3TE	3.1	4.8	3.1	5.0	5.0	3.7	2.5	5.0	5.0
10 AO96164-1	4.8	4.8	4.8	4.9	5.0	2.9	2.1	5.0	4.9
11 AOA95154-1	5.0	4.8	5.0	5.0	5.0	3.7	2.9	5.0	4.8
12 AOA95155-7	3.6	4.5	3.6	4.8	5.0	3.9	2.7	5.0	5.0
13 COA96054-3	5.0	5.0	5.0	5.0	5.0	3.9	2.7	5.0	4.6
14 PA97B3-2	4.3	4.9	4.3	4.9	5.0	4.0	3.0	5.0	4.8
<b>LSD (.05)</b>		<b>0.4</b>		<b>NS</b>					<b>NS</b>

<sup>1</sup> Score 1-5, with 1=severe, 5=none.

<sup>2</sup> Aberdeen shatter scores obtained from bruise evaluation conducted using a shatter chamber [1-5(none)].

TABLE 10: 2004 Tri-State Potato Variety Trial - INTERNAL DEFECTS - HOLLOW HEART PLUS BROWN CENTER, INTERNAL BROWN SPOT, VASCULAR DISCOLORATION/NET NECROSIS, BLACKSPOT - MEANS OF LOCATIONS

No.	Clone	Percent Hollow Heart plus Brown Center		Percent Internal Brown Spot		Percent Net Necrosis/ Vascular Discoloration		Blackspot Bruise <sup>1</sup>		
		Early	Late	Early	Late	Early	Late	Early	Late	AB <sup>2</sup>
1	Ranger Russet	0.0	0.3	0.0	0.8	n/a	4.5	4.0	2.0	2.2
2	Russet Burbank	40.0	7.9	10.0	13.9	n/a	2.5	4.0	3.0	2.8
3	Russet Norkotah	3.0	-	0.0	-	n/a	-	4.0	-	-
4	Shepody	0.0	-	0.0	-	n/a	-	4.0	-	-
5	A95409-1	0.0	0.0	2.6	0.3	n/a	0.5	3.0	3.0	2.6
6	A96023-6	5.0	0.0	5.0	10.8	n/a	0.5	5.0	2.0	3.0
7	A96095-3	0.0	0.0	0.0	0.3	n/a	6.0	4.0	3.0	2.3
8	A96104-2	0.0	1.7	0.0	0.3	n/a	1.5	4.0	5.0	3.1
9	A98295-3TE	0.0	0.0	0.0	0.3	n/a	2.5	3.0	5.0	3.2
10	AO96164-1	0.0	0.0	2.9	0.3	n/a	0.5	4.0	4.0	2.9
11	AOA95154-1	0.0	0.0	0.0	16.7	n/a	2.5	5.0	4.0	2.9
12	AOA95155-7	0.0	1.7	3.7	0.7	n/a	0.5	5.0	5.0	4.2
13	COA96054-3	0.0	1.0	0.0	1.0	n/a	0.0	4.0	2.0	2.9
14	PA97B3-2	0.0	0.0	0.0	0.0	n/a	0.5	2.0	3.0	2.5
<b>Means</b>		<b>3.4</b>	<b>1.0</b>	<b>1.7</b>	<b>3.8</b>		<b>1.8</b>	<b>3.9</b>	<b>3.4</b>	<b>2.9</b>
<b>LSD (.05)</b>			<b>NS</b>		<b>NS</b>		<b>NS</b>			

<sup>1</sup> Score 1-5, with 1=severe, 5=none.

<sup>2</sup> Aberdeen blackspot scores from an abrasive peel test [1-5(none)].

TABLE 11: 2004 Tri-State Potato Variety Trial - FRENCH FRY COLOR (00-4.0(darkest)), AND PERCENT SUGAR ENDS

No. Clone	Fry 45°					Fry 40°			% Sugar Ends		
	ID <sup>1</sup>	HRM <sup>2</sup>	LWA <sup>3</sup>	Mean	Rank	ID <sup>1</sup>	LWA <sup>3</sup>	Mean	ID	HRM	Entry Mean
1 Ranger Russet	1.3	1.3	2.0	<b>1.5</b>	<b>8</b>	2.9	4.0	<b>3.5</b>	38	13	<b>26</b>
2 Russet Burbank	1.2	1.9	3.0	<b>2.0</b>	<b>11</b>	3.2	4.0	<b>3.6</b>	46	30	<b>38</b>
3 Russet Norkotah	-	-	-	-	-	-	-	.	-	-	-
4 Shepody	-	-	-	-	-	-	-	.	-	-	-
5 A95409-1	1.6	1.6	3.0	<b>2.1</b>	<b>12</b>	3.3	4.0	<b>3.7</b>	50	8	<b>29</b>
6 A96023-6	1.5	1.6	2.0	<b>1.7</b>	<b>9</b>	2.6	2.0	<b>2.3</b>	25	3	<b>14</b>
7 A96095-3	0.6	0.8	1.0	<b>0.8</b>	<b>5</b>	2.8	2.0	<b>2.4</b>	33	3	<b>18</b>
8 A96104-2	1.0	1.2	2.0	<b>1.4</b>	<b>7</b>	2.6	3.0	<b>2.8</b>	9	5	<b>7</b>
9 A98295-3TE	1.8	1.8	2.0	<b>1.9</b>	<b>10</b>	4.0	4.0	<b>4.0</b>	67	10	<b>39</b>
10 AO96164-1	1.4	0.4	0.0	<b>0.6</b>	<b>1</b>	1.8	0.0	<b>0.9</b>	33	3	<b>18</b>
11 AOA95154-1	0.4	1.8	0.0	<b>0.7</b>	<b>4</b>	1.3	0.0	<b>0.7</b>	14	10	<b>12</b>
12 AOA95155-7	0.4	0.4	1.0	<b>0.6</b>	<b>1</b>	2.3	1.0	<b>1.7</b>	17	3	<b>10</b>
13 COA96054-3	1.5	0.4	1.0	<b>1.0</b>	<b>6</b>	3.3	2.0	<b>2.7</b>	29	5	<b>17</b>
14 PA97B3-2	0.3	0.5	1.0	<b>0.6</b>	<b>1</b>	2.6	2.0	<b>2.3</b>	0	13	<b>7</b>
<b>Location Means</b>	<b>1.1</b>	<b>1.1</b>	<b>1.5</b>	<b>1.2</b>		<b>2.7</b>	<b>2.3</b>	<b>2.5</b>	<b>30</b>	<b>9</b>	<b>19</b>

<sup>1</sup> Samples held for 1 week cool down period - 7 weeks at storage temperature.

<sup>2</sup> Samples held for 1 week cool down period - 7 weeks at storage temperature.

<sup>3</sup> Samples held for 63 days at 44 or 40°F - For complete postharvest results see <http://www.wsu.edu/~fullern>

TABLE 12: 2004 Tri-State Potato Variety Trial - DISEASE EVALUATIONS, METRIBUZIN REACTION

No. Clone	Vert. Wilt/ Early Dying		Early Blight AB <sup>1</sup>	Late Blight		Common Scab AB <sup>1</sup> (%)	Net Necrosis		Corky Ringspot PROSSER <sup>5</sup> (%)	Root- knot S	Erwinia Soft Rot AB <sup>1</sup> 0-5	Metr. Reaction AB <sup>6</sup>
	AB <sup>1</sup>	HERM <sup>2</sup>		Foliar CORV <sup>3</sup>	Tuber CORV <sup>3</sup> % by Wt.		AB <sup>1</sup>	HERM <sup>2</sup>				
	0-9	0-9	0-9	0-9	% by Wt.	(%)	(%)	(%)	(%)			
1 Ranger	3.2	4.8	3.3	8	95	3.7	0	10	70.0	S	3.5	MS
2 R. Burbank	7.2	8.3	3.8	9	45	1.0	3	0	42.5	S	2.9	VR
3 R. Norkotah	8.8	--	4.0	9	85	1.7	--	--	35.0	S	--	VR
4 Shepody	4.8	--	4.5	9	60	3.3	5	--	50.0	S	4.6	VS
5 A95409-1	5.0	--	4.3	--	--	1.7	--	0	42.5	S	4.3	MR
6 A96023-6	-	4.6	-	9	23	--	--	3	77.5	S	--	VR
7 A96095-3	5.5	6.8	4.5	9	23	2.3	--	5	87.5	S	4.6	MR
8 A96104-2	2.3	4.8	3.2	9	60	1.7	--	0	52.5	S	2.9	MR
9 A98295-3TE	-	9.0	-	--	--	--	4	0	0.0	S	--	MS
10 AO96164-1	4.2	7.0	3.5	8	35	1.3	8	5	72.5	S	4.8	MR
11 AOA95154-1	-	2.0	-	9	17	--	2	8	95.0	S	--	VR
12 AOA95155-7	1.7	3.8	2.0	9	48	2.3	3	0	82.5	S	3.7	R
13 COA96054-3	3.0	6.9	3.0	9	68	3.0	6	0	37.5	S	4.6	MR
14 PA97B3-2	7.0	8.6	5.5	9	43	2.5	--	0	0.0	S	--	MR
<b>MEANS</b>	<b>4.8</b>	<b>6.0</b>	<b>3.8</b>	<b>8.8</b>	<b>50.2</b>	<b>2.2</b>	<b>4</b>	<b>2.5</b>	<b>53</b>		<b>4.0</b>	
<b>LSD (.05)</b>	<b>1.9</b>		<b>1.5</b>			<b>1.5</b>					<b>1.4</b>	

<sup>1</sup> Evaluations made at Aberdeen, Idaho by Jonathan Whitworth; scale as indicated with highest number being most severe.

<sup>2</sup> Evaluations made at Hermiston, Oregon by Dan Hane; scale as indicated with highest number being most severe.

<sup>3</sup> Evaluations made at Corvallis, Oregon by Al Mosley; scale as indicated with highest number being most severe.

<sup>5</sup> Evaluations made at Prosser, Washington by Chuck Brown:

<sup>6</sup> Evaluations made at Aberdeen, Idaho by Steve Love: R=resistant, MR=moderately resistant, MS=moderately susceptible, S=suceptible.

<sup>6</sup> Metribuzin Reaction measured at Aberdeen, Idaho By Steve Love

R=resistant, MR=moderately resistant, MS=moderately susceptible, S=suceptible.

TABLE 13: 2004 Tri-State Potato Variety Trial - MERIT SCORES (1-5(best))

No.	Clone	Process						Fresh					
		Early WA	ID	OR	WA	MEANS	RANK	Early WA	ID	OR	WA	MEANS	RANK
1	Ranger Russet	3.0	4.2	4.0	3.0	<b>3.7</b>	<b>4</b>	1.0	4.3	3.0	3.0	<b>3.4</b>	<b>1</b>
2	Russet Burbank	2.0	3.7	1.0	2.0	<b>2.2</b>	<b>12</b>	1.0	2.8	1.0	2.0	<b>1.9</b>	<b>11</b>
3	Russet Norkotah	3.0	-	-	-	-	-	4.0	-	-	-	-	-
4	Shepody	4.0	-	-	-	-	-	2.0	-	-	-	-	-
5	A95409-1	4.0	3.7	3.0	3.0	<b>3.2</b>	<b>9</b>	4.0	3.3	2.0	5.0	<b>3.4</b>	<b>1</b>
6	A96023-6	4.0	4.0	1.0	4.0	<b>3.0</b>	<b>10</b>	2.0	3.8	1.0	3.0	<b>2.6</b>	<b>8</b>
7	A96095-3	3.0	4.0	4.0	3.0	<b>3.7</b>	<b>5</b>	2.0	3.8	3.0	3.0	<b>3.3</b>	<b>4</b>
8	A96104-2	3.0	4.2	3.0	3.0	<b>3.4</b>	<b>7</b>	2.0	3.8	2.0	1.0	<b>2.3</b>	<b>10</b>
9	A98295-3TE	4.0	2.0	2.0	3.0	<b>2.3</b>	<b>11</b>	4.0	2.5	2.0	1.0	<b>1.8</b>	<b>12</b>
10	AO96164-1	5.0	4.5	3.0	4.0	<b>3.8</b>	<b>2</b>	3.0	3.0	2.0	4.0	<b>3.0</b>	<b>6</b>
11	AOA95154-1	4.0	5.0	1.0	5.0	<b>3.7</b>	<b>5</b>	2.0	4.5	1.0	3.0	<b>2.8</b>	<b>7</b>
12	AOA95155-7	1.0	4.0	4.0	4.0	<b>4.0</b>	<b>1</b>	1.0	3.3	3.0	4.0	<b>3.4</b>	<b>1</b>
11	COA96054-3	5.0	3.5	4.0	4.0	<b>3.8</b>	<b>2</b>	2.0	2.8	3.0	4.0	<b>3.3</b>	<b>4</b>
12	PA97B3-2	4.0	3.0	3.0	4.0	<b>3.3</b>	<b>8</b>	3.0	2.0	2.0	3.0	<b>2.3</b>	<b>9</b>
<b>Location Means</b>		<b>3.5</b>	<b>3.8</b>	<b>2.8</b>	<b>3.5</b>	<b>3.4</b>		<b>2.4</b>	<b>3.3</b>	<b>2.1</b>	<b>3.0</b>	<b>2.7</b>	

