

**1993 Potato Quality Evaluations  
Prepared By  
Joseph A. Maga**

**Department of Food Science and Human Nutrition  
Colorado State University  
Fort Collins, CO 80523**

**Tel. (303) 491-6705  
Fax (303) 491-7252**

**Table 1**  
**1993 Potato Quality Evaluations**  
**Percent Solids**

<u>Field</u>	<u>Clone</u>	<u>% Solids</u>
1906	AC78069-17	21.4
1901	AC83064-1	18.4
1231	AC83064-6	18.7
1902	AC83068-1	16.7
1903	AC83172-1	20.1
1904	AC83306-1	17.9
1801	AC84028-4	19.4
1802	AC84487-1	19.1
0331	C080011-5	21.4
0831	C081082-1	18.9
1905	C082142-4	18.7
1803	C084074-2	19.0
1701	C085026-4	20.7
1457	ATLANTIC	21.0
CR41	CENTENNIAL RUSSET	20.0
CH31	CHIPETA	20.7
1458	NORCHIP	18.8
RR41	RANGER RUSSET	21.5
1614	RUSSET BURBANK	18.7
1616	RUSSET NUGGET	22.4
5431	SANGRE	16.2

**Table 2**  
**1993 Potato Quality Evaluations**  
**Enzymatic Browning**

<u>Field</u>	<u>Clone</u>	<u>30 min.</u>	<u>60 min.</u>	<u>90 min.</u>	<u>150 min.</u>
1906	AC78069-17	1	1	1	2
1901	AC83064-1	0	0	0.5	1
1231	AC83064-6	1	1	1	1.5
1902	AC83068-1	1	2	3	3
1903	AC83172-1	1	1	2	3
1904	AC83306-1	0	0	0.5	1
1801	AC84028-4	1	1	2	3
1802	AC84487-1	1	2	2.5	3
0331	C080011-5	0	0.5	0.5	1
0831	C081082-1	1	1	1	1.5
1905	C082142-4	1	1	1.5	2
1803	C084074-2	0	0	0	0.5
1701	C085026-4	1	1.5	1.5	2
1457	ATLANTIC	0	0	0.5	1.5
CR41	CENTENNIAL RUSSET	0.5	0.5	1	1.5
CH31	CHIPETA	0.5	0.5	0.5	1
1458	NORCHIP	1	1	2	2.5
RR41	RANGER RUSSET	1	1.5	2	3
1614	RUSSET BURBANK	0.5	1	1.5	2.5
1616	RUSSET NUGGET	1	1.5	2	2
5431	SANGRE	0.5	0.5	1	2

On a 0 to 3 point scale, with 0 being none and 3 being very dark.

**Table 3****1993 Potato Quality Evaluations****Total Glycoalkaloids**

<u>Field</u>	<u>Clone</u>	<u>mg/100g FWB</u>
1906	AC78069-17	9.2
1901	AC83064-1	7.7
1231	AC83064-6	7.5
1902	AC83068-1	8.2
1903	AC83172-1	8.0
1904	AC83306-1	8.9
1801	AC84028-4	7.7
1802	AC84487-1	7.6
0331	C080011-5	8.7
0831	C081082-1	9.7
1905	C082142-4	8.9
1803	C084074-2	8.9
1701	C085026-4	9.2
1457	ATLANTIC	10.7
CR41	CENTENNIAL RUSSET	9.9
CH31	CHIPETA	9.4
1458	NORCHIP	8.0
RR41	RANGER RUSSET	10.3
1614	RUSSET BURBANK	11.5
1616	RUSSET NUGGET	10.5
5431	SANGRE	10.1

Table 4

1993 Potato Quality Evaluations

Vitamin C

<u>Field</u>	<u>Clone</u>	<u>mg/100g FWB</u>
1906	AC78069-17	32
1901	AC83064-1	44
1231	AC83064-6	55
1902	AC83068-1	52
1903	AC83172-1	47
1904	AC83306-1	49
1801	AC84028-4	44
1802	AC84487-1	53
0331	C080011-5	51
0831	C081082-1	53
1905	C082142-4	40
1803	C084074-2	57
1701	C085026-4	55
1457	ATLANTIC	59
CR41	CENTENNIAL RUSSET	47
CH31	CHIPETA	53
1458	NORCHIP	51
RR41	RANGER RUSSET	46
1614	RUSSET BURBANK	58
1616	RUSSET NUGGET	46
5431	SANGRE	41

**Table 5****1993 Potato Quality Evaluations****Percent Protein**

<u>Field</u>	<u>Clone</u>	<u>% Protein DWB (N x 6.25)</u>
1906	AC78069-17	10.3
1901	AC83064-1	8.5
1231	AC83064-6	8.0
1902	AC83068-1	11.4
1903	AC83172-1	9.5
1904	AC83306-1	10.0
1801	AC84028-4	9.9
1802	AC84487-1	8.3
0331	C080011-5	11.7
0831	C081082-1	8.9
1905	C082142-4	10.3
1803	C084074-2	10.6
1701	C085026-4	11.1
1457	ATLANTIC	10.5
CR41	CENTENNIAL RUSSET	11.7
CH31	CHIPETA	11.3
1458	NORCHIP	12.3
RR41	RANGER RUSSET	10.5
1614	RUSSET BURBANK	10.7
1616	RUSSET NUGGET	13.4
<b>5431</b>	SANGRE	11.8

Table 6

1993 Potato Quality Evaluations

Subjective Baked Flavor

<u>Field</u>	<u>Clone</u>	<u>Baked Flavor Rating</u>
1906	AC78069-17	1
1901	AC83064-1	1
1231	AC83064-6	3
1902	AC83068-1	1
1903	AC83172-1	2
1904	AC83306-1	1
1801	AC84028-4	1
1802	AC84487-1	2
0331	C080011-5	1
0831	C081082-1	1
1905	C082142-4	1
1803	C084074-2	2
1701	C085026-4	1
1457	ATLANTIC	4
CR41	CENTENNIAL RUSSET	1
CH31	CHIPETA	3
1458	NORCHIP	4
RR41	RANGER RUSSET	1
1614	RUSSET BURBANK	1
1616	RUSSET NUGGET	1
5431	SANGRE	3

20-member trained panel using a 5-point scale with 1 being like a lot and 5 being dislike a lot.