

**2003 POTATO CULTURAL
MANAGEMENT TRIALS**

**SAN LUIS VALLEY RESEARCH
CENTER**

COLORADO STATE UNIVERSITY

Samuel Essah, Research Scientist

Table 1. Total yield, tuber size distribution, and percent external and internal defects of established and advanced Russet Potatoes . Influence of Nitrogen rate. 2003

Planting Date: May 16th
 Vine Kill Date: September 11th
 Harvest Date: September 26th

Entry	Nitrogen Rate ¹ (lb/A)	Yield (Cwt/A)										External defects ³ (%)	Hollow heart ⁴ (%)
		Total	% of standard	< 4oz ²	4-8oz	8-10oz	10-12oz	12-16oz	> 16oz				
Norkotah (standard)	0	349.5	100	80.5	143.0	65.1	28.2	8.7	10.2	4.5	4.0		
	80	402.3	100	71.2	170.7	77.4	42.5	23.1	5.1	7.6	2.8		
	140	378.2	100	41.0	168.1	69.2	63.0	29.2	10.2	6.6	1.5		
	200	388.5	100	56.4	192.7	56.4	31.3	27.7	25.6	7.8	1.1		
	260	451.0	100	75.3	204.0	72.8	30.7	48.2	5.6	8.3	0.0		
AC93026-9RU	0	422.3	120.8	95.3	164.5	50.2	27.2	13.8	11.3	2.0	0.0		
	80	499.7	124.2	92.2	280.8	37.9	24.6	25.1	23.6	9.6	0.0		
	140	535.0	141.5	94.8	245.0	81.0	50.2	34.3	20.5	3.5	0.0		
	200	466.4	120.1	127.1	219.9	67.1	16.9	17.4	5.1	5.8	0.0		
	260	480.7	106.6	126.6	204.5	76.9	35.4	13.8	5.1	10.1	0.0		
CO93001-11RU	0	371.5	106.3	113.8	205.5	38.9	0.0	0.0	0.0	5.7	0.0		
	80	434.1	107.9	103.5	258.3	47.1	5.6	4.1	0.0	8.1	0.0		
	140	464.3	122.8	137.9	255.2	21.5	31.3	4.6	0.0	3.8	0.0		
	200	479.2	123.3	147.1	255.7	41.0	13.8	8.2	0.0	8.2	0.0		
	260	446.4	99.0	110.2	202.4	89.7	6.1	12.3	0.0	10.4	0.0		
CO93016-3RU	0	412.5	118.0	114.3	172.2	57.9	15.4	16.4	19.0	7.9	19.0		
	80	423.8	105.3	151.2	189.6	48.2	9.2	9.7	0.0	12.4	9.2		
	140	424.8	112.3	128.6	201.4	56.9	20.5	4.6	0.0	6.6	7.0		
	200	404.9	104.2	158.9	166.6	38.9	14.3	0.0	10.8	17.2	9.7		
	260	406.9	90.2	179.4	149.1	53.8	9.7	4.6	0.0	9.3	3.1		

¹ Residual nitrate nitrogen from soil and irrigation water = 48lb/ac.

² Size category in oz

³ External defects include misshapen, growth cracks, knobs, and greens

⁴ Observation made on 10 tubers >10oz

Table 2. Total yield, tuber size distribution, and percent external and internal defects of established and advanced Red Potatoes. Influence of Nitrogen Rate. 2003.
 Planting Date: May 16th
 Vine Kill Date: September 11th
 Harvest Date: September 26th

Entry	Nitrogen Rate ¹ (lb/A)	Yield (Cwt/A)										External ³ Defects (%)	Hollow ⁴ Heart (%)
		Total	% of standard	< 4oz ²	4-8oz	8-10oz	10-12oz	12-16oz	> 16oz				
Sangre(standard)	0	510.9	100	127.6	240.4	64.6	31.8	16.4	6.1	4.7	0.0		
	80	515.0	100	114.3	187.6	131.2	34.8	30.2	0.0	2.9	0.0		
	140	490.4	100	94.3	267.5	47.1	45.6	9.2	11.8	4.1	0.0		
	200	526.8	100	121.5	251.1	81.0	34.8	25.6	0.0	9.8	0.0		
	260	480.7	100	106.6	246.0	58.4	32.8	11.3	10.2	8.2	0.0		
CO93037-6R	0	478.1	93.6	172.7	211.1	45.6	27.7	5.1	0.0	7.0	0.0		
	80	498.6	96.8	176.3	258.8	47.7	28.7	8.2	0.0	6.9	0.0		
	140	521.7	106.4	123.0	221.9	76.9	29.7	10.2	0.0	4.9	0.0		
	200	436.6	82.9	164.0	182.4	38.9	30.2	5.1	0.0	6.6	0.0		
	260	461.2	95.9	163.0	225.0	56.4	7.2	16.9	0.0	4.8	0.0		

Yield (Cwt/A) - Based on tuber diameter

Entry	Nitrogen Rate ¹ (lb/A)	2-4"			> 4"			> 2" but < 10oz		> 2" and > 10oz
		< 2"	2-4"	> 4"	< 2"	2-4"	> 4"	> 2" but < 10oz	> 2" and > 10oz	
Sangre	0	53.3	426.4	0.0	371.0	54.8				
	80	45.1	446.4	0.0	377.2	69.2				
	140	45.1	413.1	6.1	363.3	58.9				
	200	50.7	455.1	0.0	398.2	55.9				
	260	50.2	410.5	0.0	357.2	53.8				
C O93037-6R	0	67.1	385.4	0.0	357.7	29.7				
	80	63.0	401.8	0.0	387.4	14.3				
	140	74.8	421.8	0.0	382.8	39.5				
	200	84.6	335.7	0.0	295.2	35.9				
	260	77.9	362.3	0.0	338.7	24.1				

¹Residual nitrate nitrogen from soil and irrigation water = 48lb/ac.

²Size category in oz.

³External defects include misshapen, growth cracks, knobs, and greens.

⁴Observation made on 10 tubers > 10oz.

Table 3. Total yield, tuber size distribution, and percent external and internal defects of established and advanced Russet Potatoes. Influence of seed piece spacing 2003.
 Planting Date: April 28th
 Vine Kill Date: September 2nd
 Harvest Date: September 18th

Entry	Seed spacing (in)	Yield (Cwt/A)										External defects ² (%)	Hollow heart ³ (%)
		Total	% of standard	< 4oz ¹	4-8oz	8-10oz	10-12oz	12-16oz	> 16oz				
Norkotah(standard)	6	441.2	100	68.2	184.5	38.4	53.8	46.1	21.0	8.0	0.9		
	9	455.6	100	49.7	176.3	72.3	73.3	46.6	35.4	6.4	0.0		
	12	452.5	100	36.9	111.2	86.1	79.4	81.0	42.5	5.8	0.0		
	15	452.0	100	34.8	105.6	59.4	95.8	93.3	42.0	5.7	0.0		
Nugget	6	449.4	101.9	186.5	227.5	13.3	7.2	0.0	0.0	3.9	0.0		
	9	409.0	89.8	89.2	179.9	45.1	30.7	22.5	0.0	3.5	0.0		
	12	390.5	86.3	83.5	206.5	45.6	13.3	22.5	5.1	1.8	0.0		
	15	422.8	93.5	106.1	165.0	47.7	16.9	26.6	5.1	2.3	0.0		
AC93026-9RU	6	558.6	126.6	167.1	293.6	34.8	21.0	22.5	5.1	0.9	0.0		
	9	530.4	116.4	127.1	239.8	71.7	36.9	25.6	5.1	7.2	0.4		
	12	482.2	106.6	108.6	216.3	51.2	47.1	33.8	7.2	0.9	0.0		
	15	499.2	110.4	70.7	170.1	78.4	27.7	69.7	23.6	1.6	0.0		
CO93001-11RU	6	487.9	110.6	152.7	287.0	24.1	6.1	0.0	0.0	5.2	0.0		
	9	467.9	102.7	95.3	253.2	60.5	23.6	16.4	5.6	2.9	0.0		
	12	418.7	92.5	58.9	205.0	80.5	36.9	16.4	5.6	10.3	0.0		
	15	460.2	101.8	77.4	153.7	88.1	46.1	42.5	34.3	7.8	0.0		
CO93016-3RU	6	488.4	110.7	150.7	260.3	39.5	13.8	7.7	0.0	4.3	0.0		
	9	456.6	100.2	113.8	227.0	63.0	25.6	3.6	5.1	6.0	1.8		
	12	496.1	109.6	73.3	182.4	108.6	58.4	48.7	5.1	4.0	0.8		
	15	482.2	106.7	63.5	211.1	101.0	48.2	26.1	14.9	5.1	5.1		

¹Tuber size category in oz

²External defects include misshapen, growth cracks, knobs, and greens

³Observation made on 10 tubers >10oz

Table 4. Total yield, tuber size distribution, and percent external and internal defects of established and advanced Red Potatoes. Influence of seed piece spacing. 2003.

Planting Date: April 28th
 Vine Kill Date: September 2nd
 Harvest Date: September 18th

Entry	Seed spacing (in)	Yield (Cwt/A)										External defects ² (%)	Hollow heart ³ (%)
		Total	% of standard	< 4oz ¹	4-8oz	8-10oz	10-12oz	12-16oz	> 16oz				
Sangre (Standard)	6	583.2	100	162.5	262.9	82.5	44.1	17.4	0.0	3.6	0.0		
	9	583.7	100	116.3	268.0	128.6	34.8	12.8	0.0	4.9	0.0		
	12	550.4	100	78.4	215.2	66.1	68.7	75.8	22.0	1.7	0.0		
	15	540.7	100	85.6	208.1	84.0	72.3	51.8	20.5	4.0	1.6		
CO93037-6R	6	562.7	96.5	288.0	226.0	24.1	5.1	4.6	0.0	3.2	0.0		
	9	488.4	83.7	229.6	220.4	19.5	3.1	0.0	0.0	5.2	0.0		
	12	557.6	101.3	180.9	251.1	36.9	13.3	8.2	0.0	3.9	0.0		
	15	524.3	97.0	166.0	220.4	52.8	24.1	40.0	0.0	5.8	0.0		
Yield (Cwt/A) - Based on tuber diameter													
		< 2"	2- 4"	> 4"	> 2" but <10oz	>2"and>10oz							
Sangre	6	79.9	477.6	0.0	428.4	49.2							
	9	48.7	501.7	0.0	443.8	57.4							
	12	41.5	487.4	0.0	318.8	170.1							
	15	40.0	479.7	0.0	325.4	154.3							
CO93037-6R	6	149.6	387.9	0.0	379.2	8.7							
	9	108.6	354.1	0.0	350.0	~ 4.1							
	12	96.3	437.7	0.0	419.2	18.4							
	15	66.6	427.4	0.0	368.5	58.9							

¹Tuber size category in oz

²External defects include misshapen, growth cracks, knobs, and greens.

³Observation made on 10 tubers > 10oz

Table 5. Total yield, tuber size distribution, and percent external and internal defects of established and advanced Russet and Red Potatoes.
 Influence of Vine Kill Date. 2003
 Planting Date: April 28th

Entry	Vine kill (days after planting)	Yield (Cwt/A)										External ² defects (%)	Hollow ³ heart (%)
		Total	% of standard	< 4oz ¹	4-8oz	8-10oz	10-12oz	12-16oz	> 16oz				
RUSSETS	100	265.2	100	66.1	132.2	32.3	20.8	6.1	0.0	8.5	0.0	0.0	
	120	405.1	100	52.3	111.5	95.3	23.1	19.2	21.5	11.2	3.4	0.0	
Nugget	100	234.5	88.4	75.3	146.8	9.2	0.0	0.0	0.0	4.0	0.0	0.0	
	120	382.8	94.5	126.1	166.8	54.6	21.5	0.0	7.7	3.9	0.6	0.0	
AC93026 -9RU	100	293.6	110.7	137.6	50.0	4.6	11.5	0.0	0.0	12.2	0.0	0.0	
	120	484.3	119.6	66.9	222.2	58.4	86.9	30.7	0.0	7.8	0.0	0.0	
CO93001-11RU	100	323.6	122.0	73.8	229.1	11.5	0.0	0.0	0.0	9.0	0.0	0.0	
	120	428.2	105.7	40.0	229.1	47.7	73.8	6.9	0.0	9.2	0.0	0.0	
CO93016 -3RU	100	325.2	122.6	134.5	149.1	16.1	14.6	0.0	0.0	15.3	0.0	0.0	
	120	436.6	107.8	129.1	205.2	70.0	10.8	11.5	0.0	16.9	2.1	0.0	
REDS													
Sangre (standard)	100	312.9	100	99.9	187.6	8.5	4.6	0.0	0.0	10.1	0.0	0.0	
	120	535.0	100	83.8	254.4	72.3	56.9	37.7	16.9	5.3	0.0	0.0	
CO93037 - 6R	100	236.8	75.7	167.6	53.8	9.2	0.0	0.0	0.0	11.8	0.0	0.0	
	120	525.8	98.3	159.9	216.8	46.1	53.8	22.3	7.7	12.2	0.0	0.0	

¹Size category in oz.

²External defects include misshapen, growth cracks, knobs, and greens.

³Observation made on 10 tubers >10oz.

Table 6. Total yield, tuber size distribution, and percent external and internal defects of established and advanced Russet and Red Potatoes. Influence of Three Nitrogen Application Rates. 2003.
 Planting Date: May 20th
 Vine Kill Date: September 11th
 Harvest Date: September 29th

Entry	Nitrogen Rate ¹ (lb/A)	Yield (Cwt/A)										External defects ³ (%)
		Total	% of standard	< 4oz ²	4-8oz	8-10oz	10-12oz	12-16oz	> 16oz			
RUSSETS	0	338.9	100	103.8	143.7	40.7	31.5	6.1	0.0	2.6		
	80	455.8	100	50.7	229.1	86.1	53.0	26.1	0.0	4.7		
	160	462.7	100	87.6	200.6	59.2	25.4	50.7	25.4	6.8		
CO94035-15RU	0	377.4	111.4	157.6	188.3	15.4	5.4	0.0	0.0	2.9		
	80	470.5	103.2	83.8	252.9	67.6	15.4	41.5	0.0	7.3		
	160	419.7	90.7	91.5	242.1	52.3	10.0	12.3	0.0	8.6		
CO94084-12RU	0	404.3	119.3	90.7	195.3	74.6	31.5	0.0	0.0	5.0		
	80	525.0	115.2	47.7	324.4	82.3	30.7	19.2	8.5	3.2		
	160	440.5	95.2	71.5	222.9	73.8	43.0	12.3	8.5	6.1		
REDS												
Sangre (standard)	0	445.9	100	149.1	229.1	33.1	20.0	0.0	0.0	2.0		
	80	499.7	100	90.7	246.8	66.1	50.7	26.1	0.0	0.6		
	160	535.0	100	133.8	242.1	93.8	30.7	19.2	0.0	1.5		
CO94019-1R	0	353.6	79.3	118.4	196.8	20.8	5.4	0.0	0.0	6.1		
	80	459.7	92.0	121.5	289.8	36.9	0.0	0.0	0.0	1.6		
	160	502.7	94.0	89.2	282.9	93.0	20.8	13.8	0.0	3.2		

¹Residual nitrate nitrogen from soil and irrigation water = 52lb/ac.

²Size category in oz.

³External defects include misshapen, growth cracks, knobs, and greens.

Table 7. Total yield, tuber size distribution, and percent external defects of Purple flesh and a Red flesh Specialty potato. Influence of Nitrogen application rate. 2003

Planting Date: May 20th

Vine Kill Date: September 11th

Harvest Date: September 29th

Entry	Nitrogen Rate ¹ (lb/A)	Yield (Cwt/A)								External ³ defects (%)	
		Total	% of standard	< 4oz ²	4-8oz	8-10oz	10-12oz	12-16oz	> 16oz		
All Blue (standard)	0	402.0	100	255.2	134.5	0.0	0.0	0.0	0.0	0.0	1.1
	80	436.6	100	270.6	151.4	5.4	0.0	0.0	0.0	0.0	4.4
	160	399.7	100	206.8	145.3	42.3	0.0	0.0	6.9	0.0	8.5
CO944165-3P/P	0	312.1	77.6	232.2	71.5	0.0	0.0	0.0	0.0	0.0	3.2
	80	392.8	90.0	322.9	53.8	0.0	0.0	0.0	0.0	0.0	0.9
	160	408.2	102.1	277.5	118.4	0.0	0.0	0.0	0.0	0.0	2.2
CO94183-1R/R	0	385.1	95.8	214.5	156.0	0.0	5.4	0.0	0.0	0.0	8.9
	80	514.3	117.8	218.3	262.1	13.1	4.6	0.0	0.0	0.0	6.8
	160	462.0	115.6	216.0	206.8	25.4	0.0	0.0	0.0	0.0	10.9

¹Residual nitrate nitrogen from soil and irrigation water = 52lb/ac

²Size category in oz

³External defects include misshapen, growth cracks, knobs, and greens

Table 8. Total yield, tuber size distribution, and percent external defects of Yukon Gold and yellow flesh specialty potatoes. Influence of Nitrogen Application Rate. 2003.

Planting Date: May 20th
 Vine Kill Date: September 11th
 Harvest Date: September 29th

Entry	Nitrogen Rate ¹ (lb/A)	Yield (Cwt/A)										External defects ³ (%)
		Total	< 4oz ²	4 - 8oz	8 - 10oz	10 - 12oz	12 - 16oz	> 16oz				
Yukon Gold	0	313.6	55.3	153.7	82.3	9.2	0.0	0.0	6.5			
	80	446.6	50.0	213.7	93.0	24.6	48.4	0.0	11.8			
	160	453.5	67.6	160.7	116.1	56.1	40.0	0.0	4.1			
VC0967-2 R/Y	0	403.6	210.6	163.7	16.9	0.0	0.0	0.0	3.0			
	80	536.6	186.0	299.0	20.8	10.0	6.1	0.0	2.1			
	160	534.3	183.0	282.9	33.8	9.2	6.9	0.0	1.1			
VC0967-5R/Y	0	364.3	174.5	149.9	26.1	4.6	0.0	0.0	1.1			
	80	420.5	177.6	202.2	23.1	10.0	0.0	0.0	3.6			
	160	450.5	113.8	281.3	12.3	16.1	6.1	7.7	2.4			
VC1002-3W/Y	0	349.0	266.0	67.6	3.8	0.0	0.0	0.0	3.3			
	80	407.4	319.0	99.9	16.1	0.0	0.0	0.0	5.6			
	160	369.8	292.1	63.0	0.0	0.0	0.0	0.0	2.7			

¹ Residual nitrate nitrogen from soil and irrigation water = 52lb/ac.

² Size category in oz.

³ External defects include misshapen, growth cracks, knobs, and greens.

Agronomic trial on Colbert Farms

Table 9. Total yield and tuber size distribution of established and advanced Russet Potatoes. Influence of seed piece spacing. 2003.
 Planting Date: May 1st
 Vine Kill Date: August 27th
 Harvest Date: September 16th

Entry	Seed spacing (in)	Yield (Cwt/A)									
		Total	% of standard	< 4oz ¹	4 -8oz	8 -10oz	10 - 12oz	12 - 16oz	> 16oz		
RUSSET	9	245.2	100	96.9	129.1	8.5	0.0	0.0	0.0	0.0	
	15	240.6	100	79.2	96.9	24.6	30.0	0.0	0.0	0.0	
Norkotah (standard)	9	375.1	153.0	99.9	154.5	32.3	35.4	37.7	0.0	0.0	
	15	315.2	131.0	72.3	122.2	46.1	24.6	41.5	0.0	0.0	
AC95405-2RU	9	309.0	126.0	193.7	101.5	3.8	0.0	0.0	0.0	0.0	
	15	299.0	124.3	153.0	143.0	60.7	0.0	6.1	0.0	0.0	
CO95007-1RU	9	414.3	169.0	264.4	130.7	0.0	0.0	0.0	0.0	0.0	
	15	319.0	132.6	169.1	130.7	8.5	0.0	0.0	0.0	0.0	
CO95086-8RU	9	199.9	81.5	87.6	89.2	16.1	0.0	0.0	0.0	0.0	
	15	315.2	131.0	116.1	144.5	40.0	6.9	0.0	0.0	0.0	
CO95172-3RU	9	289.0	117.9	156.0	110.7	59.2	0.0	0.0	0.0	0.0	
	15	234.5	97.5	114.5	96.9	16.9	0.0	0.0	0.0	0.0	

¹Tuber size category in oz

Agronomic Trial on Colbert Farms

Table 10. Total yield and tuber size distribution of established and advanced Red and White Potatoes. Influence of seed piece spacing. 2003.
 Planting Date: May 1st
 Vine Kill Date: August 27th
 Harvest Date: September 16th

Entry	Seed spacing (in)	Yield (Cwt/A)								
		Total	% of standard	< 4oz ¹	4 -8oz	8 -10oz	10 - 12oz	12 - 16oz	> 16oz	
Sangre (standard)	9	389.0	100	238.3	126.1	7.7	5.4	0.0	0.0	
	15	294.4	100	138.4	65.3	18.4	0.0	13.	0.0	
VC1075-1R	9	286.7	73.7	244.5	40.0	0.0	0.0	0.0	0.0	
	15	359.0	121.9	294.4	60.0	0.0	0.0	0.0	0.0	
Whites										
Chipeta	9	358.2	100	128.4	139.9	21.5	31.5	30.7	0.0	
	15	387.4	100	110.7	206.0	33.1	10.0	0.0	16.1	
AC94296-5W	9	274.4	76.6	85.3	133.8	30.7	16.9	6.9	0.0	
	15	269.8	69.6	61.5	127.6	38.4	20.0	11.5	0.0	
CO95051-7W	9	280.6	78.3	96.9	159.9	7.7	0.0	0.0	0.0	
	15	295.2	76.2	76.1	164.5	33.8	4.6	0.0	0.0	
CO95070-7W	9	199.8	55.8	164.5	38.4	0.0	0.0	0.0	0.0	
	15	173.7	44.8	122.2	39.2	0.0	0.0	0.0	0.0	

¹Tuber size category in oz

Agronomic Trial on Colbert Farms

Table 11. Total yield and tuber size distribution of Yukon Gold and yellow flesh specialty potatoes. Influence of seed piece spacing. 2003.
 Planting Date: May 1st
 Vine Kill Date: August 27th
 Harvest Date: September 16th

Entry	Seed spacing (in)	Yield (Cwt/A)							
		Total	< 4oz ¹	4 - 8oz	8 - 10oz	10 - 12oz	12 - 16oz	> 16oz	
Yukon Gold	9	235.2	79.2	129.9	27.7	0.0	6.1	0.0	
	15	262.9	53.8	112.2	57.7	21.5	7.7	16.9	
VC1009-1W/Y	9	535.0	321.3	189.9	4.6	0.0	0.0	0.0	
	15	357.5	261.4	77.6	8.5	0.0	0.0	0.0	
VC1015-1R/Y	9	398.2	183.7	139.1	33.8	13.8	0.0	0.0	
	15	301.3	120.7	155.3	30.7	10.8	0.0	0.0	
VC1015-7R/Y	9	356.7	102.2	205.3	30.7	18.4	0.0	0.0	
	15	298.2	66.9	158.4	36.9	14.6	6.1	0.0	

¹Tuber size category in oz

Agronomic trial on Mike Mitchell farms

Table 12. Total yield and tuber size distribution of established and advanced Russet Potatoes. Influence of seed piece spacing. 2003.

Planting Date: April 30th

Vine Kill Date: September 10th

Harvest Date: September 24th

Entry	Seed spacing (in)	Yield (Cwt/A)									
		Total	% of standard	< 4oz ¹	4 -8oz	8 -10oz	10 - 12oz	12 - 16oz	> 16oz		
RUSSET	9	325.9	100	83.0	139.9	48.4	35.4	5.4	7.7		
	15	334.4	100	73.8	144.5	68.4	30.7	11.5	0.0		
Norkotah (standard)	9	462.8	142.0	145.3	198.3	81.5	10.7	20.8	0.0		
	15	473.5	141.6	83.0	289.8	59.2	13.8	13.1	0.0		
Nugget	9	461.2	141.5	275.2	169.1	3.1	0.0	0.0	0.0		
	15	452.8	135.4	157.6	190.6	50.0	13.8	23.1	0.0		
AC95405-2RU	9	495.0	151.9	223.7	231.4	12.3	8.5	0.0	0.0		
	15	485.8	145.3	173.7	237.5	174.5	0.0	0.0	0.0		
CO95007-1RU	9	379.7	116.5	116.1	186.0	40.7	9.2	12.3	0.0		
	15	207.6	62.1	50.7	98.4	29.2	15.4	0.0	7.7		
CO95086-8RU	9	567.3	174.1	206.0	234.5	52.3	24.6	30.7	0.0		
	15	475.1	142.1	106.9	242.1	50.7	32.3	13.1	16.9		

¹Tuber size category in oz

Agronomic Trial on Mike Mitchell Farms

Table 13. Total yield and tuber size distribution of established and advanced Red and White Potatoes. Influence of seed piece spacing. 2003.
 Planting Date: April 30th
 Vine Kill Date: September 10th
 Harvest Date: September 24th

Entry	Seed spacing (in)	Yield (Cwt/A)								
		Total	% of standard	< 4oz ¹	4 -8oz	8 -10oz	10 - 12oz	12 - 16oz	> 16oz	
Reds	9	522.0	100	137.6	261.4	70.7	35.4	0.0	0.0	
	15	471.2	100	84.6	229.8	72.3	36.1	38.4	0.0	
VC1075-1R	9	616.5	118.1	334.4	249.1	14.6	0.0	0.0	0.0	
	15	567.3	120.4	289.0	238.3	16.9	4.6	6.1	0.0	
Whites										
Chipeta	9	578.0	100	81.5	257.5	99.2	67.6	63.0	0.0	
	15	518.9	100	55.3	199.9	102.2	73.0	70.7	7.7	
AC94296-5W	9	579.6	100.3	146.1	291.3	67.6	36.1	25.4	0.0	
	15	505.0	97.3	73.8	315.2	51.5	46.1	6.1	0.0	
CO95051-7W	9	405.9	70.2	88.4	236.8	53.8	5.4	6.9	0.0	
	15	441.2	85.0	60.0	251.4	56.9	38.4	18.4	0.0	
CO95070-7W	9	369.0	63.8	202.9	116.8	0.0	0.0	0.0	0.0	
	15	382.1	73.6	183.0	164.5	24.6	0.0	0.0	0.0	

¹Tuber size category in oz

Agronomic Trial on Mike Mitchell Farms

Table 14. Total yield and tuber size distribution of Yukon Gold and yellow flesh specialty potatoes. Influence of seed piece spacing. 2003.

Planting Date: April 30th
 Vine Kill Date: September 10th
 Harvest Date: September 24th

Entry	Seed spacing (in)	Yield (Cwt/A)							
		Total	< 4oz ¹	4 - 8oz	8 - 10oz	10 - 12oz	12 - 16oz	> 16oz	
Yukon Gold	9	444.3	93.8	181.4	54.6	45.4	37.7	25.4	
	15	443.5	73.0	181.4	70.7	56.9	43.8	10.0	
VC1009-1W/Y	9	699.5	318.2	348.2	8.5	5.4	6.1	0.0	
	15	683.4	199.9	402.0	46.1	15.4	7.7	0.0	
VC1015-1R/Y	9	593.4	202.9	309.8	47.7	6.1	18.4	0.0	
	15	634.2	92.2	289.0	108.4	72.3	43.0	16.9	
VC1015-7R/Y	9	310.6	116.8	158.4	24.6	4.6	0.0	0.0	
	15	243.7	106.9	113.0	7.7	10.0	0.0	0.0	

¹Tuber size category in oz

Agronomic trial on L BAR S Ranch (Larry Scott).

Table 15. Total yield and tuber size distribution of established and advanced Russet Potatoes. Influence of seed piece spacing. 2003.
 Planting Date: May 5th
 Vine Kill Date: September 4th
 Harvest Date: September 23rd

Entry	Seed spacing (in)	Yield (Cwt/A)									
		Total	% of standard	< 4oz ¹	4 -8oz	8 -10oz	10 - 12oz	12 - 16oz	> 16oz		
Norkotah (standard)	9	280.6	100	126.1	141.4	3.1	5.4	0.0	0.0		
	15	301.3	100	69.2	173.7	36.9	15.4	0.0	0.0		
Nugget	9	196.8	70.1	136.8	46.1	4.6	5.4	0.0	0.0		
	15	279.0	92.6	146.1	84.6	15.4	4.6	20.0	0.0		
AC95405-2RU	9	508.1	181.1	387.4	98.4	3.8	0.0	0.0	0.0		
	15	397.4	131.9	348.2	38.4	0.0	0.0	0.0	0.0		
CO95007-1RU	9	327.5	116.7	303.6	14.6	0.0	0.0	0.0	0.0		
	15	307.5	102.1	255.2	41.5	0.0	0.0	0.0	0.0		
CO95086-8RU	9	269.8	96.2	169.1	89.2	4.6	0.0	0.0	0.0		
	15	228.3	75.8	73.0	88.4	15.4	0.0	0.0	0.0		
CO95172-3RU	9	349.0	124.4	269.1	73.8	0.0	10.8	0.0	0.0		
	15	257.5	85.5	190.6	51.5	7.7	0.0	0.0	0.0		

¹Tuber size category in oz

Agronomic Trial on L BAR S Ranch (Larry Scott).

Table 16. Total yield and tuber size distribution of established and advanced Red and White Potatoes. Influence of seed piece spacing. 2003.
 Planting Date: May 5th
 Vine Kill Date: September 4th
 Harvest Date: September 23rd

Entry	Seed spacing (in)	Yield (Cwt/A)								
		Total	% of standard	< 4oz ¹	4 -8oz	8 -10oz	10 - 12oz	12 - 16oz	> 16oz	
Reds	9	327.5	100	236.8	85.3	0.0	0.0	0.0	0.0	
	15	384.4	100	212.9	136.8	8.5	9.2	0.0	0.0	
VC1075-1R	9	318.2	97.2	261.4	50.0	0.0	0.0	0.0	0.0	
	15	270.6	70.4	206.0	60.0	0.0	0.0	0.0	0.0	
Whites										
Chipeta	9	382.8	100	156.8	183.0	21.5	4.6	7.7	0.0	
	15	306.7	100	119.9	153.7	12.3	5.4	0.0	0.0	
AC94296-5W	9	359.0	93.8	230.6	119.2	0.0	0.0	0.0	0.0	
	15	330.5	107.8	170.7	128.4	12.3	10.0	0.0	0.0	
CO95051-7W	9	313.6	81.9	134.5	169.1	0.0	0.0	0.0	0.0	
	15	299.8	97.8	88.4	138.4	12.3	4.6	0.0	0.0	
CO95070-7W	9	298.3	77.9	190.6	94.6	4.6	0.0	0.0	0.0	
	15	412.0	134.3	240.6	146.1	12.3	0.0	0.0	0.0	

¹Tuber size category in oz

Agronomic Trial on L BAR S Ranch (Larry Scott).

Table 17. Total yield and tuber size distribution of Yukon Gold and yellow flesh specialty potatoes. Influence of seed piece spacing. 2003.
 Planting Date: May 5th
 Vine Kill Date: September 4th
 Harvest Date: September 23rd

Entry	Seed spacing (in)	Yield (Cwt/A)							
		Total	< 4oz ¹	4 -8oz	8 -10oz	10 - 12oz	12 - 16oz	> 16oz	
Yukon Gold	9	385.1	86.9	160.7	62.3	35.4	34.6	0.0	
	15	436.6	77.6	161.4	36.9	64.6	24.6	17.7	
VC1009-1W/Y	9	332.9	280.6	41.5	4.6	0.0	0.0	0.0	
	15	354.4	302.9	40.0	0.0	0.0	0.0	0.0	
VC1015-1R/Y	9	415.0	331.3	76.9	0.0	0.0	0.0	0.0	
	15	528.9	329.8	184.5	4.6	0.0	0.0	0.0	
VC1015-7R/Y	9	278.3	183.0	85.3	4.6	0.0	0.0	0.0	
	15	95.3	32.3	33.8	0.0	0.0	0.0	0.0	

¹Tuber size category in oz