



IDAHO POTATOES

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IDAHO RUSSET POTATO SIZE AND GRADE SUMMARY - 1999 CROP

The statistics in this publication were obtained from the 1999 Potato Objective Yield Survey. The Idaho Agricultural Statistics Service would like to thank all growers who allowed the enumerators to dig samples in their fields. Without the voluntary cooperation of the farmers themselves, obtaining valid and timely agricultural statistics would be much more difficult. Because the samples of potatoes were dug by hand, the size and grade statistics in this document do not reflect harvesting or handling damage.

The survey results showed a decrease in the percentage of Russet potatoes that were ten ounces or larger. For the 1999 crop, 26.3 percent of the potatoes were at least ten ounces, while 28.5 percent reached that size in 1998. Of the Russet potatoes in the 1999 sample, 82.6 percent met the 2.0 inch or 4 oz. minimum size and grade requirements for U.S. No. 1 potatoes. Processing grade, with a 1.5 inch minimum, accounted for 17.1 percent of the 1999 crop.

PROCEDURE

The 1999 Potato Objective Yield Survey consisted of 294 samples located throughout Idaho in fields selected in an unbiased and random manner. The selection of sample fields was based on all known potato acreage planted in 1999, with each acre having an equal chance of being chosen. As a result, growers with large acreages were more likely to be selected to participate in this survey. Several sample fields with varieties other than Russet were selected, but only the reports with Russet potatoes were used to compile the data in Tables 1 and 2. For each sample field, two plots were systematically located using computer generated random numbers. Each plot consisted of a twenty-foot section of a row. Digging of all samples occurred immediately preceding harvest or when all vines had died and growth of the tubers was no longer possible. Three hills of potatoes from each twenty-foot row section were carefully dug, counted, weighed, and then graded according to U.S.D.A. standards. Potatoes less than 1.5 inches in diameter were excluded from this procedure. To measure the harvest loss, post-harvest gleanings were taken for every fourth sample. The gleaning area consisted of two 3-by-6-foot plots, located five paces and five row space equivalents beyond the plots where the potato hills were dug. All potatoes and potato pieces, except whole potatoes under 1.5 inches in diameter, were collected, weighed, and graded. Geographic distribution of the 1999 usable sample fields is shown in the following table.

<u>AREA</u>	<u>COUNTIES</u>	<u>NO. OF SAMPLE PLOTS</u>
Southwest	Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley & Washington	33
Southcentral	Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka & Twin Falls	84
Eastern	Bannock, Bear Lake, Bingham, Bonneville, Franklin, Jefferson, Madison, Oneida & Power	126
Eastern Seed Counties	Butte, Caribou, Clark, Custer, Fremont, Lemhi & Teton	51
IDAHO TOTAL		294

TABLE 2-- IDAHO RUSSET POTATOES: SIZE (NET WEIGHT BASIS) AND GRADE -- 1998 CROP ^{1/}

AREA AND GRADE	1 1/2" 1 5/8"	1 5/8" 1 7/8"	1 7/8" 2"	2" or 4-6 oz	6-7 oz	7-8 oz	8-9 oz	9-10 oz	10-11 oz	11-12 oz	12-13 oz	13-14 oz	14 oz and over	Total
	Percentages (%)													
SOUTHCENTRAL COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	22.1	8.8	8.3	7.4	5.1	5.6	5.0	3.6	2.6	9.8	78.3
Processing Grade (1 1/2" min.)	1.8	6.4	4.6	0.7	0.2	0.4	0.4	0.7	0.4	0.7	0.4	0.2	3.5	20.4
Other	-	0.1	0.1	0.5	0.1	0.1	-	-	-	0.1	-	0.1	0.2	1.3
TOTAL	1.8	6.5	4.7	23.3	9.1	8.8	7.8	5.8	6.0	5.8	4.0	2.9	13.5	100.0
EASTERN COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	25.7	8.8	8.4	6.8	5.5	5.6	3.6	2.6	2.4	8.3	77.7
Processing Grade (1 1/2" min.)	2.2	6.4	4.5	1.2	0.3	0.6	0.4	0.6	0.5	0.3	0.5	0.5	3.3	21.3
Other	-	-	0.1	0.2	0.1	0.1	0.1	0.1	-	0.1	0.1	-	0.1	1.0
TOTAL	2.2	6.4	4.6	27.1	9.2	9.1	7.3	6.2	6.1	4.0	3.2	2.9	11.7	100.0
EASTERN SEED COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	31.1	8.0	6.6	6.6	3.3	2.5	2.0	1.3	1.2	7.2	69.8
Processing Grade (1 1/2" min.)	3.7	9.3	6.2	1.8	0.6	0.2	0.4	0.7	0.8	0.5	0.8	0.4	3.0	28.4
Other	0.1	0.3	0.5	0.3	0.1	-	-	-	0.2	-	-	-	0.3	1.8
TOTAL	3.8	9.6	6.7	33.2	8.7	6.8	7.0	4.0	3.5	2.5	2.1	1.6	10.5	100.0
TOTAL OTHER COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	25.0	8.7	8.2	7.0	5.2	5.2	3.9	2.9	2.3	8.7	77.1
Processing Grade (1 1/2" min.)	2.2	6.7	4.7	1.1	0.3	0.5	0.4	0.7	0.5	0.4	0.5	0.4	3.3	21.7
Other	-	0.1	0.1	0.4	0.1	0.1	-	-	0.1	0.1	-	-	0.2	1.2
TOTAL	2.2	6.8	4.8	26.5	9.1	8.8	7.4	5.9	5.8	4.4	3.4	2.7	12.2	100.0
10 SOUTHWEST COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	24.5	8.5	8.9	6.4	7.0	3.9	3.7	5.1	2.0	7.5	77.5
Processing Grade (1 1/2" min.)	2.6	6.4	4.4	1.1	0.8	0.8	0.9	0.2	0.4	0.2	0.5	0.5	2.3	21.1
Other	-	-	0.2	0.1	0.2	-	-	-	-	-	0.6	-	0.3	1.4
TOTAL	2.6	6.4	4.6	25.7	9.5	9.7	7.3	7.2	4.3	3.9	6.2	2.5	10.1	100.0
STATE														
U.S. No. 1 ^{2/}	-	-	-	25.0	8.7	8.2	7.0	5.3	5.1	3.9	3.1	2.3	8.6	77.2
Processing Grade (1 1/2" min.)	2.3	6.7	4.7	1.1	0.3	0.5	0.4	0.6	0.5	0.4	0.5	0.4	3.2	21.6
Other	-	0.1	0.1	0.3	0.1	0.1	-	-	0.1	0.1	0.1	-	0.2	1.2
TOTAL	2.3	6.8	4.8	26.4	9.1	8.8	7.4	5.9	5.7	4.4	3.7	2.7	12.0	100.0

1/ Percentages shown adjusted to allow for harvesting loss. 2/ 2" or 4-oz. minimum.

TABLE 1 -- IDAHO RUSSET POTATOES: SIZE (NET WEIGHT BASIS) AND GRADE -- 1999 CROP ^{1/}

AREA AND GRADE	1 1/2" 1 5/8"	1 5/8" 1 7/8"	1 7/8" 2"	2" or 4-6 oz	6-7 oz	7-8 oz	8-9 oz	9-10 oz	10-11 oz	11-12 oz	12-13 oz	13-14 oz	14 oz and over	Total
	Percentages (%)													
SOUTHCENTRAL COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	27.3	11.4	9.6	7.9	6.8	5.3	4.4	1.9	2.7	8.5	85.8
Processing Grade (1 1/2" min.)	1.7	5.6	3.8	0.5	0.1	0.2	0.2	0.1	0.1	0.2	-	0.1	1.2	13.8
Other	-	-	-	0.1	-	-	-	-	0.2	-	-	-	0.1	0.4
TOTAL	1.7	5.6	3.8	27.9	11.5	9.8	8.1	6.9	5.6	4.6	1.9	2.8	9.8	100.0
EASTERN COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	28.8	10.4	8.6	6.1	5.0	4.2	3.9	3.1	2.2	8.0	80.3
Processing Grade (1 1/2" min.)	1.6	6.2	4.9	0.9	0.2	0.3	0.4	0.1	0.3	0.1	0.4	0.5	3.7	19.6
Other	-	-	-	0.1	-	-	-	-	-	-	-	-	-	0.1
TOTAL	1.6	6.2	4.9	29.8	10.6	8.9	6.5	5.1	4.5	4.0	3.5	2.7	11.7	100.0
EASTERN SEED COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	31.6	10.2	8.5	6.5	5.9	3.5	2.5	3.3	1.8	6.3	80.1
Processing Grade (1 1/2" min.)	2.1	6.9	5.4	0.9	0.1	0.1	0.3	0.3	0.4	0.2	-	0.2	2.6	19.5
Other	-	0.1	0.1	0.1	0.1	-	-	-	-	-	-	-	-	0.4
TOTAL	2.1	7.0	5.5	32.6	10.4	8.6	6.8	6.2	3.9	2.7	3.3	2.0	8.9	100.0
TOTAL OTHER COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	28.7	10.8	9.0	6.9	5.8	4.5	3.9	2.7	2.3	7.9	82.5
Processing Grade (1 1/2" min.)	1.7	6.1	4.5	0.7	0.1	0.2	0.3	0.2	0.3	0.1	0.2	0.3	2.5	17.2
Other	-	0.1	0.1	0.1	-	-	-	-	-	-	-	-	-	0.3
TOTAL	1.7	6.2	4.6	29.5	10.9	9.2	7.2	6.0	4.8	4.0	2.9	2.6	10.4	100.0
10 SOUTHWEST COUNTIES														
U.S. No. 1 ^{2/}	-	-	-	19.2	7.9	8.6	6.7	7.0	6.2	6.0	5.6	3.1	15.5	85.8
Processing Grade (1 1/2" min.)	1.4	3.4	3.0	0.3	-	0.1	0.2	0.4	0.1	0.5	-	-	4.6	14.0
Other	-	0.1	-	-	-	-	-	0.1	-	-	-	-	-	0.2
TOTAL	1.4	3.5	3.0	19.5	7.9	8.7	6.9	7.5	6.3	6.5	5.6	3.1	20.1	100.0
STATE														
U.S. No. 1 ^{2/}	-	-	-	27.8	10.5	8.9	6.9	5.9	4.6	4.1	2.9	2.4	8.6	82.6
Processing Grade (1 1/2" min.)	1.7	5.9	4.4	0.7	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.3	2.8	17.1
Other	-	-	-	0.1	0.1	-	-	-	0.1	-	-	-	-	0.3
TOTAL	1.7	5.9	4.4	28.6	10.7	9.1	7.2	6.1	4.9	4.2	3.1	2.7	11.4	100.0

1/ Percentages shown adjusted to allow for harvesting loss. 2/ 2" or 4-oz. minimum.

**TABLE 3 - ALL POTATOES: AVERAGE NUMBER OF TUBERS PER HILL & HILLS PER ACRE
1998 & 1999 CROPS**

AREA	NUMBER OF SAMPLES		AVERAGE NUMBER OF TUBERS PER HILL		AVERAGE NUMBER OF HILLS PER ACRE	
	1998	1999	1998	1999	1998	1999
Southwest	32	33	8.1	8.5	12,051	12,684
Southcentral	76	84	9.3	9.3	12,080	12,510
Eastern	144	126	7.9	8.1	12,068	12,088
Seed Co.'s	31	51	7.7	9.3	12,825	11,928
STATE	283	294	8.3	8.7	12,160	12,229

TABLE 4 - ALL POTATOES: QUANTITY LEFT IN FIELD AFTER HARVEST - 1998 & 1999 CROPS

AREA	1998 CROP		1999 CROP	
	NUMBER OF SAMPLES	CWT. PER ACRE	NUMBER OF SAMPLES	CWT. PER ACRE
Southwest	4	17	5	13
Southcentral	21	20	16	35
Eastern	32	21	36	29
Seed Co.'s	7	19	13	23
STATE	64	28	70	32