



## Fresh Market Red and Purple-Skinned Potato Varieties for Commercial Production in Northeast Florida<sup>1</sup>

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The production qualities of potato varieties are of interest to growers, state and county faculty, regulatory agency personnel, home gardeners, and others. This information may be used to compare variety performance among farms, to develop production regulations, or to compare standard varieties with new varieties.

Potatoes are produced on approximately 40,000 acres in Florida. The largest concentration of potato acreage (20,000 acres) is in Flagler, Putnam, and St. Johns counties in northeast Florida. The majority of acreage in northeast Florida is planted in chipping potato varieties. However, red and white-skinned fresh market potatoes are also grown. Potato planting begins in this area in late December and continues through early March. Potatoes are harvested from late April through June.

The information presented in this report is averaged from trials over the last four years at the Hastings REC located in St. Johns County. Calculating averages over a multi-year period normalizes data to account for climatic and seed source differences. Potato production characteristics

for the same variety vary greatly around the state of Florida. Hence, these values only represent what may be expected in northeast Florida production areas. Yields from experimental plots can be higher than those from commercial fields because of the greater control over production practices. This information should be considered a guideline for production qualities rather than viewed in absolute terms.

The standard red-skinned potato varieties in Florida are Red LaSoda and LaRouge. There is no standard for purple-skinned potatoes. Purple-skinned varieties can be grown successfully for specialty or farmers markets. The varieties and clones listed in this report either are currently in production, under advanced variety evaluation, or standards in other regions of the United States. The number of trials in which the variety has been evaluated is listed in parentheses following the variety name. All potato varieties were produced using IFAS recommended production practices (Hochmuth et al., 2001) and rated using the Florida potato variety classification system (Table 1). Season length from planting to harvest was approximately 100 days. Tubers noted as “marketable” were USDA grades A1, A2, and A3.

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**The use of trade names in this publication is solely for the purpose of providing specific information. It is not a guarantee or warranty of the products named, and does not signify that they are approved to the exclusion of others of suitable composition.**

The attributes of a good fresh market red-skinned potato variety are disease resistance in the plant, abundant tuber production, low tuber specific gravity, low incidence of physiological and disease defects in the tuber, and a bright skin color.

### Variety Information

**All Blue (2).** All Blue is a unique potato for the specialty market. Average total and marketable yield were 234 and 144 cwt/acre, respectively. Potato tuber skin color is blue to purple with a slightly netted to moderately smooth texture. Tuber flesh color is mottled blue. Tuber shape is oblong with an eye depth of intermediate to deep. Overall external tuber appearance has been noted as poor. Plant type at full flower is spreading with a good canopy. Plant maturity at harvest has been rated as yellow and dying. In two trials, no internal tuber defects have been observed. Average specific gravity for All Blue tubers was 1.062.

**Cherry Red (5).** Average total and marketable yield were 233 and 194 cwt/acre, respectively. Potato tuber skin color is red with a slightly netted texture. Tuber flesh color is white to cream. Tuber shape is round to oblong with an eye depth of intermediate to deep. Overall tuber appearance has been noted as fair to good. Plant type at full flower is upright with a fair canopy. Plant maturity at harvest has been rated between yellow and dying and completely dead. Hollow heart has been observed in 0.25% of all tubers tested. Average specific gravity for Cherry Red tubers was 1.069.

**Chieftan (7).** Average total and marketable yield were 311 and 279 cwt/acre, respectively. Potato tuber skin color is pink to red with a slightly netted to moderately smooth texture. Tuber flesh color is white. Tuber shape is round to oblong with an eye depth of intermediate to deep. Overall tuber appearance has been noted as fair. Plant type at full flower is spreading with a fair canopy. Plant maturity at harvest has been rated as yellow and dying. Over all tests, corky ringspot viral disease and internal browning were each observed in 1.0% of tubers. Average specific gravity for Chieftan tubers was 1.066.

**Dark Red Norland (3).** Average total and marketable yield were 225 and 199 cwt/acre, respectively. Potato tuber skin color is red with a slightly netted to moderately smooth texture. Tuber flesh color is white. Tuber shape is round to oblong with an eye depth of intermediate to shallow. Overall tuber appearance has been noted as fair to good. Plant type at full flower is decumbent with a good canopy. Plant maturity at harvest has been rated as completely dead. Over all tests, corky ringspot viral disease was observed in 1.0% of tubers. Average specific gravity for Dark Red Norland tubers was 1.061.

**LaRouge (2).** LaRouge is a standard red-skinned variety grown in Florida. Average total and marketable yield were 239 and 208 cwt/acre, respectively. Potato tuber skin color is red to pink with a smooth to moderately smooth texture. Tuber flesh color is white. Tuber shape is round to oblong with an eye depth of intermediate. Overall tuber appearance has been noted as fair. Plant type at full flower is spreading with a fair canopy. Plant maturity at harvest has been rated between yellow and dying and completely dead. Internal browning in tubers has been observed in 0.50% of tubers tested. Average specific gravity for LaRouge tubers was 1.067.

**Norland (4).** Average total and marketable yield were 269 and 213 cwt/acre, respectively. Potato tuber skin color is red with a slightly netted to moderately smooth texture. Tuber flesh color is white to cream. Tuber shape is round to oblong with an eye depth of intermediate. Overall tuber appearance has been rated as fair to good. Plant type at full flower is decumbent with a fair canopy. Plant maturity at harvest has been rated between yellow and dying and completely dead. Internal browning in tubers has been observed in 0.34% of tubers tested. Average specific gravity for Norland tubers was 1.064.

**Pontiac (2).** Average total and marketable yield were 337 and 298 cwt/acre, respectively. Potato tuber skin color is red to pink with a moderately smooth to smooth texture. Tuber flesh color is white. Tuber shape is mostly round with an eye depth of intermediate to deep. Overall tuber appearance has been noted as fair to poor. Plant type at full flower is spreading with a good canopy. Plant maturity at

harvest has been rated as yellow and dying. Heat sprouts have been noted with this variety at harvest. In two trials, no internal tuber defects have been observed. Average specific gravity for Pontiac tubers was 1.061.

**Red LaSoda (9).** Red LaSoda is a standard red-skinned potato grown in Florida. Average total and marketable yield were 361 and 304 cwt/acre, respectively. Potato tuber skin color is red to pink with a smooth to moderately smooth texture. Tuber flesh color is white to cream. Tuber shape is round to oblong with an eye depth of intermediate to deep. Overall external tuber appearance has been noted as fair. Plant type at full flower is upright with a fair canopy. Plant maturity at harvest has been rated as yellow and dying. Over all trials, hollow heart and internal browning have been observed in 0.34 and 0.10 % of all tubers tested. Average specific gravity for Red LaSoda tubers was 1.060.

**Redsen (4).** Average total and marketable yield were 131 and 100 cwt/acre, respectively. Potato tuber skin color is red to pink with a smooth to moderately smooth texture. Potato flesh color is white. Tuber shape is round to oblong with an eye depth of intermediate to shallow. Overall tuber appearance has been noted as good. Plant type at full flower is spreading with a poor canopy. Plant maturity at harvest has been rated between yellow and dying and completely dead. Internal browning has been observed in 0.25% of tubers tested. Average specific gravity for Redsen tubers was 1.068.

**Rideau (4).** Average total and marketable yield were 339 and 296 cwt/acre, respectively. Potato tuber skin color is red to pink with a slightly netted to moderately smooth texture. Tuber flesh color is white. Tuber shape is mostly oblong with an eye depth of intermediate to shallow. Overall tuber appearance has been noted as fair to good. Plant type at full flower is upright with a fair canopy. Plant maturity at harvest has been rated between moderately mature and yellow and dying. In four trials, no internal tuber defects have been observed. Average specific gravity for Rideau tubers was 1.065.

**Super Red Norland (4).** Average total and marketable yield were 253 and 203 cwt/acre, respectively. Potato tuber skin color is red to pink

with a smooth to moderately smooth texture. Tuber flesh color is white to cream. Tuber shape is round to oblong with an eye depth of intermediate to deep. Overall tuber appearance has been noted as fair to good. Plant type at full flower is upright with a fair canopy. Plant maturity at harvest has been rated between yellow and dying and completely dead. Hollow heart, brown rot, and internal browning was observed in 2.0, 0.34, and 0.34% of tubers tested. Average specific gravity for Super Red Norland tubers was 1.064.

**B1758-3 (3).** Average total and marketable yield were 318 and 279 cwt/acre, respectively. Potato tuber skin color is red with a slightly netted to moderately smooth texture. Tuber flesh color is white. Tuber shape is mostly round with an eye depth of intermediate to shallow. Overall tuber appearance has been noted as fair to good. Plant type at full flower is upright with a fair canopy. Plant maturity at harvest has been rated as yellow and dying. Over all tests, internal browning was observed in 1.3% of tubers tested. Average specific gravity for B1758-3 tubers was 1.066.

**B1758-4 (3).** Average total and marketable yield were 296 and 261 cwt/acre, respectively. Potato tuber skin color is red with a smooth to moderately smooth texture. Tuber flesh color is white. Tuber shape is round to oblong with an eye depth of intermediate to deep. Overall tuber appearance has been noted as fair to good. Plant type at full flower is upright with a fair canopy. Plant maturity at harvest has been rated between yellow and dying and completely dead. Over all tests, internal browning was observed in 0.34% of tubers tested. Average specific gravity for B1758-4 tubers was 1.062.

## References

Hochmuth, G.J., C. M. Hutchinson, D. N. Maynard, W. M. Stall, T. A. Kucharek, S. E. Webb, T. G. Taylor, S. A. Smith, and E. H. Simonne. 2001. Potato Production in Florida. *In: Vegetable Production Guide for Florida*. Edited by: D.N. Maynard and S.M. Olson. University of Florida and Vance Publishing.

Table 1. Florida Potato Variety Classification System

Plant Characteristics						
Rating Code	Early Depth	Plant Size Full Flower	Vine Maturity	Plant Type	Vine Maturity At Harvest/Vine Kill	
1	No Emergence	Very Small	Very Early	Decumbent – Poor	Dead	
2	Leaves in Rosette	--	Early	Decumbent – Fair	--	
3	Plants < 2"	Small	--	Decumbent – Good	Yellow and Dying	
4	Plants 2" to 4"	--	Medium Early	Spreading – Poor	--	
5	Plants 4" to 6"	Medium	Medium	Spreading – Fair	Moderately Mature	
6	Plants 6" to 8"	--	Medium Late	Spreading – Good	--	
7	Plants 8" to 10"	Large	--	Upright – Poor	Starting to Mature	
8	Plants 10" to 12"	--	Late	Upright – Fair	--	
9	Plants > 12"	Very Large	Very Late	Upright - Good	Green and Vigorous	

  

Tuber Characteristics						
Rating Code	Internal Flesh Color	Skin Color	Skin Texture	Tuber Shape	Eye Depth	Overall Appearance
1	White	Purple	Part. Russet	Round	Very Deep	Very Poor
2	Cream	Red	Heavy Russet	Mostly Round	--	--
3	Light Yellow	Pink	Mod. Russet	Round to Oblong	Deep	Poor
4	Medium Yellow	Dark Brown	Light Russet	Mostly Oblong	--	--
5	Dark Yellow	Brown	Netted	Oblong	Intermediate	Fair
6	Pink	Tan	Slightly Netted	Oblong to Long	--	--
7	Red	Buff	Mod. Smooth	Mostly Long	Shallow	Good
8	Blue	White	Smooth	Long	--	--
9	Purple	Cream	Very Smooth	Cylindrical	Very Shallow	Excellent