Variety Fact Sheet

WISCONSIN SEED POTATO CERTIFICATION

Payette Russet

(A02507-2LB)

Parentage – EGAO9702-2 x GemStar Russet[1,2,3]

Breeder – Cross conducted at the University of Idaho Aberdeen Research and Extension Center in 2002[1,2]; released by the USDA-ARS and the Agricultural experiment Stations of Idaho, Oregon and Washington in 2015[1]

Maturity – Late[1,2,3]

Usage – Excellent for processing[1,3]; some fresh-pack application[1]

Plant – Erect to semi-erect, closed foliage making stems barely visible; stems have no pigmentation and moderately prominent wings[1,2]

Leaves –Closed silhouette, sparse leaf hairs, medium green color with non-pigmentated petioles[1,2]; narrow, ovate terminal leaflets with a pointed tips, heart-shaped bases and medium margin waviness; three to five pairs (avg. 4.1) of ovate primary leaflets with sharp points and blunt bases; three to nine pairs (avg. 6.5) of secondary and tertiary leaflets[1]

Flowers – Medium to large, white[1,2], pentagonal shape with pear-shaped, orange anthers; one to seven (avg. 4.2) flower stalks per plant; berry production only occurs if a male-fertile variety is in close proximity[1]

Tubers – Oblong, medium size, russeted, reddish brown skin[1,2,3]; average of eighteen medium deep eyes per tuber; white flesh[1,2]; long tuber dormancy; high specific gravity[1,3]; higher tuber protein content than standard russet varieties[3]

Strengths – Produce higher U.S. No. 1 yields; known for cold-sweetening resistance and low acrylamide formation; consistently produces lighter fry color than industry standards; extreme resistance to potato virus Y (all strains); resistant to common scab, late blight (foliar and tuber); moderately resistant to Verticillium wilt, hollow heart, early blight, corky ringspot, secondary growth and growth cracks[1,3]

Weaknesses – Late emergence and development can occur when planted early; can produce oversized tubers; moderately susceptible to potato virus X, soft rot and tuber net necrosis; susceptible to Fusarium dry rot, potato leafroll virus, shatter bruise[1,3], potato mop-top virus, internal brown spot, bacterial ring rot and weight loss in storage[1]

Photos[1,3]

References: [1]Novy, R. G. et al. 2017. Payette Russet: a Dual-Purpose Potato Cultivar with Cold-Sweetening Resistance, Low Acrylamide Formation, and Resistance to late Blight and Potato Virus Y. *American Journal of Potato Research* 94:38-53.
[2]http://www.inspection.gc.ca/english/plaveg/pbrpov/cropreport/pot/app00010278e.shtml [3]http://www.pvmi.org/varieties/Type/Payette%20Russet.htm

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