

Mountain Gem Russet (A03158-2TE)

Pedigree: A98292-2 x A98104-4

Developers: crossed and selected by USDA-ARS Aberdeen Idaho Potato Breeding Program

Plant Variety Protection: Yes

MORPHOLOGY

Plant: Medium size, erect vines, white flowers

Tubers: Oblong to long; russet skin with white flesh; intermediate depth eyes

AGRONOMICS

Maturity: Medium

Yield Potential (US#1) cwt/A*: 481 (300 - 616)

Utilization: fresh market, early processing

Specific Gravity*: 1.074 (1.064 – 1.084)

Seed Spacing: 9-10"

Dormancy: Short to moderate

Strengths: Resistant to tuber late blight, common scab, and soft rot. Mountain Gem Russet has acceptable fry quality in 48°F storage with processing potential, and a high percent of U.S. No. 1 tubers.

Weaknesses: Susceptible to shatter bruise, growth crack, PVY, and foliar late blight. This variety has a shorter dormancy, approximately 120 days at 42°F.

UTILIZATION

Mountain Gem Russet is a medium maturing fresh and processing russet potato variety suitable for production above the 45th parallel in Michigan. It has a larger tuber size profile and lower tuber set, with the potential for oversized tubers and higher hollow heart incidence under high nitrogen conditions. Growers can use a Silverton Russet nutrient management strategy to manage tuber size.

*Data reflects the mean with range in parenthesis from 29 trials in five years

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2016 Walther Russet Trial

Mountain Gem Russet Data Summary

Category	# Trials	Average	Range
US # 1 Yield (Cwt/A)	29	481	300-616
Total Yield (Cwt/A)	29	584	517-769
% US No. 1	29	82	68-95
% B Size ¹	29	10	3-20
% A Size ¹	29	63	37-93
% Oversize ¹	29	16	0-46
% Pickouts	29	7	0-21
Specific Gravity	29	1.074	1.064-1.084
Common Scab ²	29	0.3	0.0-2.5
Vine Vigor ³	29	2.8	1.0-4.5
Vine Maturity ⁴	28	3.2	1.5-4.5
% Hollow Heart	29	14	0-70
% Vascular Discoloration	28	8	0-30
% Internal Brown Spot	23	1	0-23
% Brown Center	23	0	0-10

¹B size < 4 oz., A size 4 - 10 oz., Oversize > 10 oz.

²Common Scab Rating Scale from 0 (no scab) to 5 (severe scab)

³Vine Vigor Rating Scale from 1 (slow emergence) to 5 (early emergence)

⁴Vine Maturity Rating Scale from 1 (dead vines) to 5 (vigourous, flowering vines)

This vareity was evaluated between 2013 and 2018.