

Lady Liberty (Niagara, NY152)

Pedigree: B38-14 x Marcy

Developers: Cornell University

Plant Variety Protection: In Progress

MORPHOLOGY

Plant: Intermediate to large vine, white flowers

Tubers: Round to oval, intermediate depth eyes

AGRONOMICS

Maturity: Medium to late maturity

Yield Potential (US#1) cwt/A*: 503 (240 - 833)

Specific Gravity*: 1.079 (1.068 - 1.096)

SNAC OTF Chip color*: 1.5 (1.0 – 3.0)

Seed Spacing: 10"

Dormancy: Full season

Strengths: Tolerance to common scab, low incidence of raw internal tuber defects, very minor stem end reaction, above average tuber set and high yield potential. Excellent fry color from 46°F in through June.

Weaknesses: Thinner skin, average to below average specific gravity, susceptible to Ro1 golden nematode. Some incidence of hollow heart, susceptibility to black spot bruising.

UTILIZATION

Lady Liberty should be grown with average (10 in.) in row spacing to promote a smaller tuber size profile and decrease the percentage of oversized tubers. This variety has a high yield potential under Snowden fertility management strategy with four nitrogen applications totaling 250 to 300 units during the growing season. Lady Liberty maintains high chip quality during storage with an airflow rate of 1 to 1.2 cfm/cwt.

*Data reflects the mean with range in parenthesis from 69 trials over 8 years

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Lady Liberty tubers grown in 2019 at 4-L Farms.



2017 Bulk Planting at Crooks Farms, Inc. Lady Liberty (left) and Mackinaw (right).



Chips processed on July 1st, 2019, stored at 46°F

Lady Liberty Data Summary

Category	# Trials	Average	Range
US # 1 Yield (Cwt/A)	69	503	240 - 833
Total Yield (Cwt/A)	69	574	336 - 892
% US No. 1	69	87	61 - 96
% B Size ¹	69	11	1 - 39
% A Size ¹	69	85	61 - 94
% Oversize ¹	69	3	0 - 24
% Pickouts	69	1	0 - 5
Specific Gravity	69	1.079	1.068 - 1.096
SNAC Chip Color OTF ²	69	1.5	1.0 - 3.0
Common Scab ³	64	1.2	0.0 - 2.5
Vine Vigor ⁴	69	3.0	1.0 - 4.0
Vine Maturity ⁵	69	3.0	1.5 - 4.0
% Hollow Heart	68	8	0 - 60
% Vascular Discoloration	68	4	0 - 50
% Internal Brown Spot	68	1	0 - 17
% Brown Center	68	1	0 - 10

¹B size < 1 7/8", A size 1 7/8" - 3 1/4", Oversize > 3 1/4"

²Out of the Field Rating from 1 (excellent) to 5 (very poor), values < 2 are acceptable

³Common Scab Rating Scale from 0 (no scab) to 5 (severe scab)

⁴Vine Vigor Rating Scale from 1 (slow emergence) to 5 (early emergence)

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

This variety was evaluated between 2014 and 2021