LADY LIBERTY (NY152)

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Parentage: B3814 x Marcy

Breeder: Walter S. De Jong, Cornell University

- Chipper
- Medium to late maturity
- Round tuber with netted skin
- Tuber dormancy is approximately 4 weeks longer than Atlantic
- Yield is equal to Atlantic and often 5 to 15% higher than Snowden
- Higher tuber set than Atlantic
- Higher percentage of undersize, a very desirable size profile suitable for the small size snack pack market
- Lower than average internal defects
- Low level of external defects
- Varying levels of hollow heart is a concern; occasionally high counts have been observed
- Moderate to good resistance to common scab
- Low bruise susceptibility
- Has a marker suggesting PVY resistance
- Susceptible to race Ro1 of Golden Nematode
- Average specific gravity, less than Atlantic
- Good heat and drought tolerance
- Very minor stem end reaction



2-Year Average Production Data from Dryland Variety Trials (2018 & 2019)

- Trialled at 180lbs N/ac and a 10" spacing
- Average total yield 417.2 cwt/acre, 2.9% greater than Atlantic
- Average marketable yield 340.8 cwt/acre, 7.2% less than Atlantic
- Higher tuber set 11 vs 7
- Smoother tuber type with only 2.1% rough, good tolerance to growth crack and scab
- No incidence of hollow heart was measured though other trials have indicated varying levels of hollow heart
- Higher incidence of sunburn than Atlantic due to its thinner skin
- Average specific gravity, less than Atlantic, 1.0795 vs 1.0861
- Canopy senescence prior to top kill was similar to Atlantic
- Excellent chip colour from both 50°F (10°C) and 45°F (7.2°C) continuing into June and July
- Similar to slightly lower sugar concentration compared to Lamoka

Note:

- Higher tuber set results in an increased percentage of tubers <2 ½" (56.7%) compared to Atlantic (37.9%) as well as a decreased percentage of tubers >2 ½" (36.5 vs. 68.7%). This results in a more desirable size profile for chip production
- Good hilling practices are important to combat the risk of sunburn

Seasonal Average Chip Color

(Agtron readings)

Table 1(a): Lady Liberty vs Snowden at 50°F

Year	Variety	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	AVG
2018	Lady Liberty		64	70	69	68	67	67	65	64	64	66.4
2018	Snowden		66	68	70	68	69	67	68	63	61	66.7
2019	Lady Liberty		69	71	68	65	68	66	62	65	67	66.7
2019	Snowden		65	66	69	67	71	68	68	64	64	66.9

Table 1(b): Lady Liberty vs Snowden at 45°F

Year	Variety	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	AVG
2018	Lady Liberty			68	69	71	69	67	67	73	62	68.3
2018	Snowden			66	69	71	69	70	66	71	62	68
2019	Lady Liberty			65	67	68	69	67	65	67	67	66.9
2019	Snowden			65	61	64	69	68	67	64	66	65.5





^{**}Based on information provided by the breeder, trial data collection by NBDAAF and from commercial fields. Observations and results may vary slightly depending on location and crop season growing conditions**