

## FRESH MARKET POTATO VARIETIES FOR SMALL SCALE POTATO GROWERS

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Important criteria when considering which potato variety to grow include: 1) Do my customers want to buy it? 2) Does the variety grow well on my farm? 3) Is disease-free seed of the variety readily available?

As Cornell's potato breeder, I can provide some insight into the second and third criteria. Whether or not a customer wants to buy your potatoes is, of course, up to them.

A good place to look at seed availability, from a national perspective, is a summary that the certification section of the Potato Association of America puts together each year. You can download a list of certified seed produced the prior year from <https://www.potatoassociation.org/research-2/seed/>. This document lists how much seed of each variety was produced in each state. If you want to find out who produced the seed in each state, you'll need to go to each state's seed potato certification website. E.g., [https://www.maine.gov/dacf/php/seed\\_potato/index.shtml](https://www.maine.gov/dacf/php/seed_potato/index.shtml) for Maine or email [pma2@cornell.edu](mailto:pma2@cornell.edu) to request a directory for New York. Seed of over 400 varieties was produced in the USA in 2019. The top 40 varieties represent 90% of seed acreage, so are relatively easy to source. It can nevertheless be a challenge to procure seed of minor varieties.

Varieties to consider growing in NY, and why:

### **Russets**

Most long russet potato varieties do not perform well in NY. If you grow Russet Burbank, for example, you are likely to harvest a lot of misshapen tubers. Two new russet varieties – Reveille Russet from Texas A&M, and Caribou Russet from the University of Maine – have nevertheless performed well in small scale trails at Cornell, and merit a try if you want to grow russets. The Cornell breeding program does not develop russet varieties, so there are no local russet varieties to choose from. Although not a russet, if your customer wants a potato for fresh fries, Cornell's variety Waneta is an excellent choice. Originally developed for chipping, Waneta's oblong tubers can nevertheless grow quite large, and the fry color out of cold storage is considerably lighter than from any russet.

### **Reds**

The most widely grown red in the USA, by far, is Red Norland. Early maturing and resistant to skinning, it makes an excellent default choice for a red. Red Maria, developed at Cornell, yields considerably more than Red Norland, but matures later and has more netted skin, which limits

where it can be sold. NY118 is a smooth pink-skinned variety from Cornell that grows well on muck soils.

### **Yellows**

Yukon Gold remains the most popular yellow variety, although it is prone to hollow heart and reacts with unsightly necrotic rings after infection with the (increasingly common) necrotic strain of potato virus Y. Cornell varieties Lehigh and Keuka Gold both yield 20+% more than Yukon Gold in NY, but the skin of both is more netted than Yukon Gold. European breeding companies have introduced many smooth-skinned yellow varieties into the US, e.g., Gala, Cascada, Alegria, Agata, and Satina but I have not evaluated any firsthand to know how well they perform in NY. Cornell's NY149, resulting from a cross between Yukon Gold and Keuka Gold, has yellow flesh and pink eyes and smooth skin like Yukon Gold, but the tubers are smaller than Yukon Gold. Yield of NY149 is similar to Yukon.

### **Round whites**

While popular in the Northeastern USA and Canada, round white fresh market clones are not widely grown elsewhere. Cornell's variety Eva has very attractive shape and smooth skin, and yields well in NY; as of 2017 it was the #7 variety in Canada. Cornell's white varieties Algonquin and Salem also yield well in NY. A new variety from Cornell, Upstate Abundance, produces good yields of golf-ball-sized potatoes with bright white skin. The Canadian variety Envol matures very early. Although I haven't tested Envol, given feedback from other researchers, consider it worth a try. AC Chaleur is another early maturing white that I haven't tested, but is widely grown in Northeastern Canada. The brightest white variety I've ever seen is Whitney, from the Dutch company HZPC. Seed of Whitney is available in Canada, but seed is not yet produced in the USA.

### **Specialty**

Adirondack Blue and Adirondack Red have purple skin/purple flesh and red skin/red flesh, respectively. Both were developed at Cornell and perform reasonably well in NY. NY171 produces long, smooth white tubers with attractive purple splashes around the eyes. Seed of NY171 is currently only available from the Cornell breeding program.