

Sweet Potatoes

While not a common crop in New Hampshire, the sweet potato has gained some interest among growers in the southern part of the state. Sweet potato, *Ipomoea batatas*, is a tender, warm-season vegetable that requires a long frost-free growing season to mature large, useable roots. Sweet potato is actually native to Central and South America, and is one of the most important food crops in tropical and subtropical countries, where both the roots and tender shoots are eaten as a vital source of nutrients. In this country, commercial production is mainly in the southern states, particularly North Carolina and Louisiana.



Sweet potatoes, which are related to the morning glory, grow on trailing vines that quickly cover the soil, rooting at the nodes along the way. Though orange-fleshed varieties are most common today, white or very light yellow-fleshed types were once considered the finest types for “sophisticated” people. Some white-fleshed types are still available, though they may be hard to find outside the Deep South.

In recent years, work at Cornell and other northeastern states has raised more interest in this crop as a viable alternative. Since they do require such a long growing season (100-120 frost free days, depending on variety) certain production practices are required. Typically plastic mulch and floating row covers have been recommended to warm the soil early and keep the air temperature higher around the plants themselves. Or Extension Vegetable Specialist, Becky Grube studied a variety of different mulches and row covers to see if one was better than another. She also has conducted variety trials over the past few years looking at sixteen different varieties, with flesh color ranging from white (O’Henry) to deep orange (Georgia Jet and Darby). There are definitely differences between both the production and quality of the various varieties in this part of the country.

Since we are a little colder here, than in Durham, I decided to look at only 4 varieties that are supposed to do well in cooler areas. Among them were Georgia Jet, Vardaman, Beauregard and Centennial.

Georgia Jet (is prized for its cold-tolerance and high productivity, even in regions with short growing seasons. Starts to produce a harvest in just 40 days. Yields medium- to late-maturing No. 1 spuds. Attractive red skin and deliciously moist, rust-orange flesh packed with vitamin A. However it does have a tendency to crack which leads to yield and quality losses.

Beauregard (100 days to harvest), light purple skin, dark orange flesh, extremely high yielder, at least in Louisiana (!!!). Dr. Otho Wells, our retired vegetable specialist, said that this variety is probably the one that we see at the grocery stores. No wonder since this variety dominates production acres in the south (Louisiana). Centennial (100 days) have an orange skin and a creamy flesh texture with a medium orange color, and are a good keeper. The fourth variety I chose was Vardaman (110 days) which has a golden skin, orange flesh and purplish foliage.

Since sweet potatoes are sensitive to cold soils and frost, we didn’t plant until early June. We used a new plastic (“Solar Mulch”) and then placed floating row covers over the row soon after planting was completed. The covers also help minimize insect damage from flea beetles. These insects can do major damage if they are not controlled or excluded from the plants.

Harvesting was easy for me because Donna and Kris did all the work!!! I just picked up what they dug. We used pitch forks, being careful not to stab too many potatoes!!!

Since sweet potatoes continue growing until frost, we waited almost to the first frost before digging them.

Proper curing can be a problem in the cool fall season. Ideally, the roots should be allowed to dry on the ground for 2 to 3 hours, then placed in a warm room for curing (85°F and 85 percent humidity (if possible) for 10 to 14 days and then stored in a cool (55°F) location. Sweet potatoes should be handled as little as possible to avoid scuffing and bruising.

Summer 2006 Grafton County Yield and Quality Data

Lbs/50 plants (50 ft of row)

Variety	Total	Good	Poor	% Good
Beauregard	47.2	46.2	1.0	98
Georgia Jet	67.0	46.8	20.2	70
Centennial	33.0	25.2	7.8	76
Vardaman	25.6	17.0	8.6	66

Yield and quality was determined by grading the potatoes based on cracking, rots and other non desirable traits. Although the Georgia Jet variety out yielded all the others, the quality was lower. Cracking is a major issue with this variety and with all the rainy weather we had this season, cracking was common. Beauregard, although it was slightly lower in “good” yield, seemed to be a much nicer potato. In Becky’s trial Beauregard ranked second, but ahead of the varieties we grew here. The yield in Durham (for Beauregard) was 40% higher than the yield we had here, but our yields for the other 3 varieties were the higher than the yields at the Durham site. One reason for this may be that Beauregard is more sensitive to cooler temperatures. After all, it’s a Louisiana native!!!!

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