

Raspberry Production in High Tunnels in NC

(Taken in part from <http://content.ces.ncsu.edu/southeast-regional-caneberry-production-guide/tunnel-production>)

Research conducted at the Upper Mountain and Piedmont Research Stations in Laurel Springs and Salisbury NC, have shown that raspberries and blackberries can be produced in high tunnels, especially in the higher elevation regions of the state.

High tunnels are semi-permanent structures made of steel pipe arches and covered with polyethylene plastic to create a protected environment for plants. Raspberries especially benefit from high tunnel protection, which can extend the harvest season, improve fruit quality and yield, and enable growers to harvest fruit when it is raining (Figure 1).



Figure 1. Raspberries and blackberries at Upper Mountain Research Station, in a high tunnel in Laurel Springs, NC.

“Mirror image” cultivar trials (same cultivars inside and outside of the tunnels) were conducted in 2008-2010 and 2010-2012 at both research stations. When compared to field-grown raspberries outside of the tunnels, tunnel-grown yields were up to 30% greater or more, depending upon location and growing conditions (Figures 2 and 3).

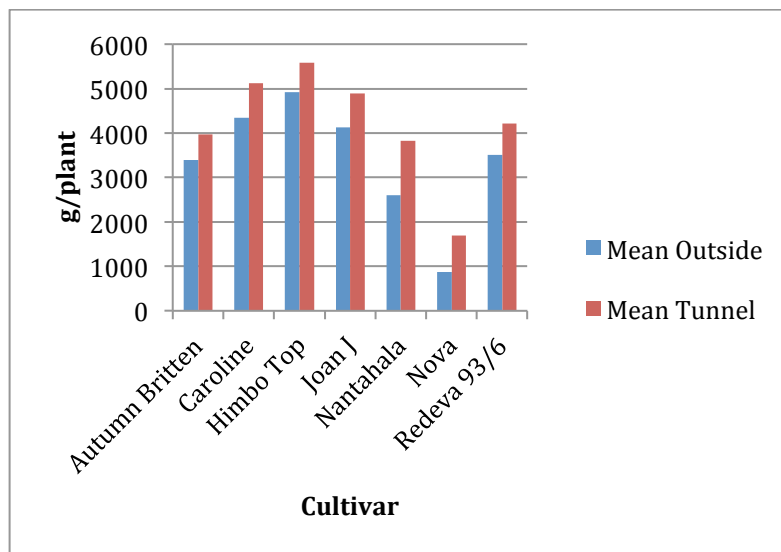


Figure 2. Marketable yield (g/plant) of several primocane-fruiting raspberries grown in Laurel Springs NC, at the Upper Mountain Research Station 2010-2012. (4500 grams is about 5 lbs./plant).

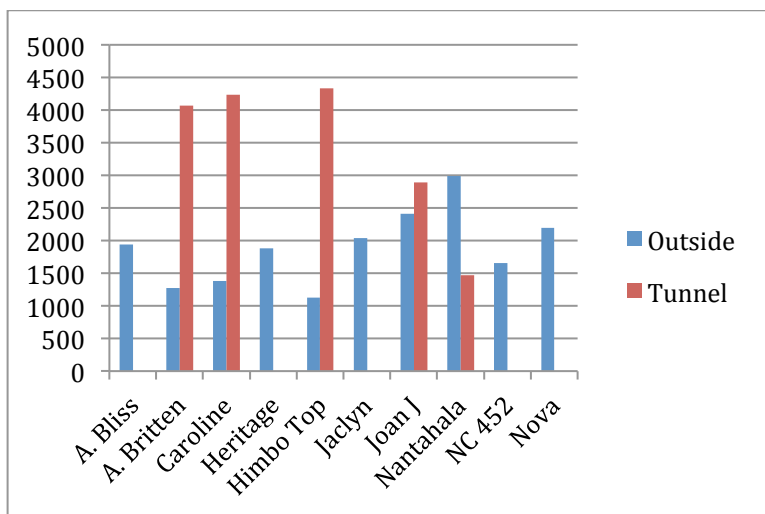


Figure 3. Marketable yield (g/plant) of several primocane-fruiting raspberries grown in Salisbury NC, at the Piedmont Research Station 2008-2010. (4500 grams is about 5 lbs./plant).

‘Nantahala’, was not the highest yielding cultivar, but had the best post harvest quality of all the cultivars we tested. It also did very well in taste tests when compared to other cultivars. Although it ships well, it would also do well for local markets. Nantahala was developed by NC State University and is available from several nurseries (Figure 4).



Figure 4. Nantahala red raspberry fruit raspberry.

List of resources:

- <https://rubus.ces.ncsu.edu/spotlight/caneberry-production-guide/>
- <http://www.fruit.cornell.edu/berry/production/pdfs/hightunnelsrasp2012.pdf>
- http://extension.psu.edu/business/ag-alternatives/horticulture/fruits/red-raspberry-production/extension_publication_file
- http://coststudyfiles.ucdavis.edu/uploads/cs_public/9e/28/9e286208-f8d8-4a6c-bbcc-d6d04d0f61d3/raspberryc2012.pdf
- <https://rubus.ces.ncsu.edu/rubus-blackberry-and-raspberry-budgets-pricing/>

Where to get Nantahala:

- For nurseries that carry Nantahala in smaller quantities, we suggest you do a web search on “Nantahala red raspberry”
- For large amounts of plants contact: Agristarts Nursery, <https://www.agristarts.com>

For more information contact:

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