

Gardening Tips for Growing Berries and Small Fruits

The following information was gleaned from a Guilford County Master Gardener Workshop led by Extension Associate Connie Fisk a specialist in Muscatine grapes stationed in Duplin County, NC. A great deal more information is available from the website of the Southern Region Small Fruit Consortium – www.smallfruits.org and from bulletins from your local Extension Service or by visiting by visiting the NC Cooperative Extension Service website www.ces.ncsu.edu.

- ***Blueberries***, according to the June, 1999 edition of Prevention Magazine, help stop aging, help you live longer, and help keep your mind sharp. They are a superfood – low in calories and rich in antioxidants and nutrients fighting cataracts, glaucoma, varicose veins, hemorrhoids, peptic ulcers, heart disease and cancer. Blueberry wine contains 38% more of the antioxidant, anthocyanins which are highly touted for cardioprotection. Blueberries also improve night vision and protect against macular degeneration. O’Neal is an excellent Southern Highbush Blueberry released by NCSU in 1987– it doesn’t grow as large as Rabbiteye varieties and has a more ornamental growth habit, is self-pollinating, and produces early before the birds are out in full force. It is good for eastern and Piedmont NC. It is possible to utilize various NCSU varieties to produce blueberries from mid-May to early August in eastern NC (a bit later in the Piedmont). Recommended Rabbiteyes include Climax, Powderblue, Premier, Ira, Robeson, Columbus, and Tifblue. Mountain residents should consider Northern highbush varieties for cold hardiness. The pH recommended for highbushes is 4.0 to 5.0 and 4.5 to 5.3 – adding sulfur is recommended and a light amount of an organic azalea fertilizer such as Espoma Hollytone. Avoid liming. Newly planted bushes should be pruned dramatically to 3-4 upright shoots and reducing height by one-half or more. Six highbushes are recommended for a family of four and will produce about 8 pounds per bush per season. Blueberries require 1 to 2 inches of rain or irrigation equivalent a week during the growing season.
- ***Strawberries*** are rich in Vitamin C and manganese, high in anti-oxidant phenols, high in anti-cancer elgitanin acid, and they are more potent than carrots for promoting good eye health. While they are sweet and wonderful, one cup is only 55 calories. Chandler and Sweet Charlie are the strawberry plants of choice at the demonstration farm at Central Carolina Community College in Pittsboro. Other varieties touted by NCSU include Atlas, Appolo, Titan, Earlibelle, and Earliglow. Everbearing varieties perform well only in NC in the mountains. Strawberries should be planted in the spring and will produce ½ to 2 pounds per plant in soil in raised beds with pH of 5.8 to 6.5. Strawberries last from 1 to 4 years, but commercial growers plant each year for best production. Plant spacing should be 1-2 feet between plants and 3-4’ between rows. Mulch with pine or wheat straw in December and provide frost protection as needed in March and April. Berries do not turn redder

when picking, so gardeners should pick only fully ripe berries – harvesting about three times a week. They require 1 to 1.5 inches per week from mid-June to mid-August. Botrytis/grey mold is the biggest disease problem. Avoid planting where there is excessive moisture or where tomatoes or potatoes have been grown.

- ***Muscadine Grapes*** are fat-free, high in fiber, and loaded with anti-oxidants especially elegiac acid (cancer prevention) and rezveratrol (lowers cholesterol and helps reduce coronary disease and aging). Carlos is the most popular Scuppernong in NC, is self-fertile, vigorous, high yielding, and refrigerates well. Noble is a popular muscadine with stable red pigments that don't turn brown and is popular for making jellies, juice, and wine. Muscadines tend to suffer from a boron deficiency, and mature vines can be supplemented with simple Borax at 2 tablespoons mixed with fertilizer per 20x20 foot area. If leaves yellow – it is a sign of magnesium deficiency and should be supplemented with Epsom salt. Pruning vines correctly in February-March is critical to good production – consult your local Extension Service for advice. Plants should be set out in mid-Spring 20 feet apart in rows that are 10 feet apart. Developing an effective trellis system is also important to successful production. Grapes will begin producing in three years and at maturity will produce 50 to 100 pounds per vine. Vines last 15 to 20 years.
- ***Raspberries*** are among the top performing superfoods with properties that help prevent cancer, irritable bowel syndrome, macular degeneration, and yeast infection. It is 50% higher in antioxidants than strawberries and is also high in Vitamin B, C, and manganese. Unfortunately, raspberries are difficult to grow in Eastern and Piedmont North Carolina due to being soft and highly perishable, prone to disease, and poor producers in warmer climates. NCSU is on the cutting edge of developing varieties better suited to our heat and humidity – so stay tuned. In the NC Mountains there are a number of varieties performing well with the potential of selecting varieties for continuous harvest throughout late spring to early summer. Domanred, Southland, Caroline and Heritage are fairly good varieties for the Piedmont, and in the Coastal Plains Domanred is the best variety to try for withstanding heat. Remove flowers the first year. They prefer a pH of 6.5 in well-drained raised beds and should be planted in the spring after the danger of frost three feet apart and ten feet between rows. Consult your Extension office or bulletin for pruning and trellising recommendations. They need at least one inch of rain or irrigation equivalent during the growing season. Raspberries are prone to a number of disease and insect problems, and good cultural practices are needed. Yield varies widely according to variety, region, and site.
- ***Blackberries*** have antioxidants which combat oxidative stress, cancer, and cardiovascular. This caneberry/bramble presents a number of choices – trailing, semi-trailing, and erect and thornless or thorny. Among the NCSU recommended erect, thornless varieties (with greater cold hardiness than trailing) are Navajo, Arapaho, Apache, and Ouachita. Blackberries can be planted in spring or fall in eastern and central NC and spring in the

mountains 3-4 feet apart in a full sun location. Each plant can produce 10 to 20 pounds of fruit, so, four-to-six plants should be adequate for the average family of four. They require a lot of water – two gallons per day and should be fed with a balanced fertilizer in March for established plantings. Pruning and trellising is important – so, contact your Extension Service or consult their bulletins for advice. Pick when berries are dull black, or if you want to refrigerate, pick when they are shiny black (will be less sweet but will store better).

- *Kiwis* contain more Vitamin C than the equivalent amount of oranges. They have been shown to help prevent respiratory illness in children, helps reduce the symptoms of arthritis, and helps prevent cardiovascular disease, macular degeneration, and cancer. It is also high in Vitamin E and is a great source of dietary fiber. The kiwi that we can grow is not the fuzzy kind you generally find in the grocery store which requires a more tropical climate to ripen. We can grow the smaller fruiting hardy kiwi with Issai the favorite among NC growers. Anna and Ken's Red are also good varieties. A male vine is necessary for fertilization with a ratio of 1 male to 8 females needed. Plant in the spring after the danger of frost. There are few pest or disease concerns, so, this is a fruit that is popular with organic growers. Kiwis grow very large and siting and trellising are important considerations along with pruning – consult the Extension Service for advice.