

# Fruit and Nut Review

## Blueberries

There are two general types of cultivated blueberries: highbush and rabbiteye. The native range of the highbush blueberry extends from Wisconsin eastward to Maine and southward to North Carolina. The rabbiteye is native to the Gulf Coast states and fruits well from eastern North Carolina, southward to central Florida, and westward to eastern Texas and Arkansas.

Rabbiteye blueberries are vigorous and productive throughout Mississippi. They are far easier to grow than highbush types in our environment. Their linear growth may exceed 10 feet. Flowering usually occurs in late February to mid-March. The berries are at first light green, then red (hence the name rabbiteye) and turn light blue when ripe in June or July. The flower buds for the following year form on new growth in late summer and fall. Blueberry bushes are deciduous and lose their leaves in the winter, but some varieties may retain some leaves.

### Soil and Climate

The native soil in which blueberries thrive is a moist, well-drained soil rich in organic matter with a pH of 4.5 to 5.5. The closer this combination is duplicated in the home garden, the more vigorous and productive rabbiteye blueberries are. Do not plant in soils that hold water for long periods of time (more than about 24 hours).

Blueberry roots lack root hairs that are common on most other plants, but the entire root system is fine and fibrous. The root system is confined to the upper 8 to 10 inches of the soil and is a weak competitor for water and nutrients. Weed control is extremely important if plantings are to achieve their potential. Blueberries tolerate partial shade, but full sun is preferred.

### Rabbiteye Varieties

There are many varieties of rabbiteye blueberries. Planting two or more varieties for cross-pollination ensures fruit set and earlier ripening. Blooming intervals of most varieties overlap enough to ensure adequate cross-pollination.

#### *Early Season Varieties*

**Austin**—Plants are moderately vigorous, productive, and upright. Berries are large in size, blue in color, firm, have dry scars, good flavor, and good shelf life. Ripens May to early June.

**Brightwell**—Berries are medium in size and blue in color, with small dry scars and good flavor. Plant growth is vigorous, upright, and produces enough new canes to renew the plant.

**Climax**—Upright open plants. Berries are large in size, medium-dark blue in color, have a small scar, and good flavor. Concentrated ripening period. Ripens May to early June.

**Premier**—Ripens two to three weeks before Tifblue. Large fruit with good flavor. Plants are vigorous, upright, disease-resistant, and productive.

**Alapaha**—Ripens late May to early June. Plants are productive and vigorous. Berries are medium-sized with good flavor. Similar ripening time to Climax.

## *Mid- to Late-Season Varieties*

**Tifblue**—Bush is vigorous and widely adapted. Fruit is large, round, light blue, sweet, and very firm with a small, dry scar. Berries appear to be ripe several days before full flavor develops. Berries remain on the plant several days after fully ripe. Tifblue is the most productive of all rabbiteye varieties and is the standard to which rabbiteyes are compared. Ripens early June.

**Powderblue**—Plant is vigorous, disease-resistant, and productive. Ripens similar to Tifblue with better fruit color and more foliage. Resist cracking in periods of excess rain.

**Columbus**—Blooms and ripens just ahead of Tifblue. Plants are productive and vigorous. Berries are large but are resistant to rain-related cracking.

**Ochlocknee**—Blooms with Tifblue and ripens in early July, about 5–7 days after Tifblue. Plants are productive and vigorous. Berries are medium to large with good flavor. They are resistant to cracking.

## *Southern Highbush Varieties*

A new category of blueberries has been developed for southern production. These varieties combine the late blooming date and shorter ripening period of the northern highbush and the low chill hours and adaptability to the southern environment of the rabbiteye.

This combination results in a blueberry plant that blooms late to escape the possibility of frost damage to the flowers but matures its fruit by mid-May, at least two weeks earlier than rabbiteye. Southern highbush varieties include the following:

**Biloxi**—Relatively low chilling variety. Recommended for southern areas of Mississippi. Plants are upright, vigorous, and productive. Fruit is medium in size, has good color, flavor, and firmness with a small picking scar. Ripens late April. Use Misty as pollinator.

**Jubilee**—Upright, vigorous, productive plants. Medium-sized fruit with good color, flavor, firmness, and small picking scar. Ripens early May.

**Rebel**—Blooms and ripens about 3 days before Star. Prone to frost damage due to early flowering. Plants are productive and vigorous. Berries are large with light blue color. Good berry firmness, but flavor is neutral.

**Misty**—Blooms and ripens about the same time as Biloxi. Berries are light in color with a good scar and firmness. Plants are vigorous and upright. Ripens late April. Use Biloxi as pollinator.

**O'Neal**—Ripens early with large, high-quality fruit of medium blue color with good picking scar and flavor. Bloom often begins in the fall and continues during warm periods until normal bloom time. Ripens late April to early May.

**Ozarkblue**—Exceptional yields with good fruit size and quality. Recommended for planting in the upper part of the South because it requires a period of 800 to 1,000 chill hours. Ozarkblue has consistently fruited in variety trials when most other southern highbush and rabbiteye cultivars have had partial to total crop losses to spring freezes and frost. Pollinate with Summit.

**Santa Fe**—Plants are vigorous and upright. Flowers later than rabbiteye and ripens late April in south Mississippi. Fruit is medium-sized with excellent scar, flavor, and firmness. The color is blue to black-blue. Branches are stout rather than twiggy and easy to prune.

**Star**—Fruit is large and easy to harvest because of a concentrated ripening period. Fruit has excellent scar, firmness, good color, and good flavor. The plant leafs strongly before the first flowers open. The recommended pollinator is Southmoon. Ripens late April to early May.

**Summit**—A mid- to late-season southern highbush cultivar. Fruit is firm and large with excellent color, flavor, and picking scar. Resistant to cracking, tearing, and stemmings. Excellent performance in postharvest studies. Plant is semi-upright with medium vigor. Ozarkblue is a good pollinator.

## **Planting**

Buy two-year-old plants in time for transplanting during the dormant season, which is usually from early November through February. Place bareroot plants in moist sand or sawdust until they can be planted. Do not allow the roots to dry out. Keep container plants well-watered.

Around the home, consider working rabbiteye blueberries into plantings of azaleas, camellias, gardenias, or other acid-loving shrubs. Mix one-fourth to one-half bushel of sphagnum peat moss into the soil at each planting hole. Set the plants one-half to one inch deeper than they grew in the nursery, and cut the plants back to eight inches above the soil.

To conserve moisture and discourage weeds, mulch with pine needles, pine bark, or similar material. If occasional but temporary flooding or soil saturation will be a problem, ridge the rows or raise the planting site. Plant two or more varieties to ensure cross-pollination and good fruit set.

## Growth and Care

Water thoroughly each week throughout the growing season. Never let the roots dry out. Too much fertilizer damages rabbiteye bushes, especially young, newly established plants. Normally, fertilizer is not applied the first year.

In the second season, apply two ounces of a complete acid-forming fertilizer (such as azalea or camellia food) to each plant in early spring, just before flowering. In the third season, double the second-year recommendation. After the third year, increase the amount by two ounces per year through the fifth year. After the fifth year, base fertilizer applications on soil analysis. Blueberry soils need a consistent moisture level for a fertilizer program to be effective. A good organic mulch and deep watering are recommended.

Insects and diseases are typically minor issues for homeowners growing blueberries. Occasional applications of insecticides or fungicides may be necessary. Check with your local MSU Extension office for recommendations.

## Mulching

Mulch is recommended for acidifying and cooling the soil, conserving soil moisture, and controlling weeds. Provide a deep mulch (approximately six inches) and extend it at least two feet from the crown of the plant. This is extremely important the first two years as the plants are becoming established. Blueberry plants do not compete well with weeds. They can be killed or severely stunted due to presence of aggressive weed species.

Pine needles, leaves, and grass clippings can be used as mulch. Do not use barnyard manure. If weeds grow through the mulch, remove them by hand.

## Pruning

Rabbiteye blueberry bushes can support and develop heavy crops, so prune lightly. On young plants, remove only low branches on which fruit will touch the soil; thin and top the growing, center branches to keep bushes at a reasonable height for harvesting.

On old plants, thin out the canes to make picking easy. Prune or remove tall shoots and remove old wood with low vigor. Pruning is normally done right after harvest—before August 1. The next season's crop forms on wood produced in late summer and fall.

## Harvesting

Depending on location and cultivar, rabbiteye blueberries begin to ripen in mid-May to June and are ready for harvesting after they have turned a uniform light blue. Redness indicates the berry is not fully ripe. By planting several varieties, you can extend the harvest season over an eight- to nine-week period. Once the berries begin to ripen, harvest every five to seven days.

Refrigerate harvested berries, but don't wash the berries until you are ready to use them. Blueberries keep well in the freezer. Rinse frozen berries in cold water just before using.

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