

# Berries

## Blueberries in Home Gardens

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Blueberries are a popular small-fruited plant in Tennessee. The fruit can be eaten fresh or used in jams, preserves, pies, with ice cream and in blueberry muffins and pancakes. Once established, plants are not difficult to maintain. Establishment, however, can be laborious. Plants can be easily grown in existing home landscapes and provide fruit while adding beauty to the landscape. Birds are usually the most troublesome pest after plants begin to fruit. After planting, the first good fruit yield will generally occur after three to five years. However, the length of time to fruiting will vary with the age of the transplants, rate of growth and health of the plant.

### True Blueberry Characteristics

Blueberries are woody perennials that produce fruit on upright growing shoots. Fruit is borne on terminal buds of fruiting wood. Plants may attain a height of 10 to 12 feet if left unpruned. The fruit is usually light to dark blue and may be covered with a waxy bloom. The blossom end of the fruit usually has a pentagonal or hexagonal blossom scar. Plants are seldom killed by winter temperatures.

True blueberries are very different from the "garden huckleberry," sometimes mistakenly called a blueberry. The garden huckleberry is a herbaceous plant that grows semi-prostrate to prostrate and seldom attains a height greater than 3 feet. Its fruit usually contains many small

seeds arranged much like a tomato. Huckleberry plants seldom survive winter temperatures.

### Types of Blueberries

There are two main types of blueberry plants: rabbiteye and highbush. Rabbiteye are native to the southern United States. They are commonly grown in states south, west and east of Tennessee. They survive better in drier, warmer temperatures than highbush types and perform better when good soil moisture levels are maintained. Fruiting plants bloom early enough to be susceptible to frosts. Fruit matures later and is usually slightly smaller and sweeter than highbush types. Plant foliage is covered with a waxy cuticle which reduces water loss. Rabbiteye types can be grown without irrigation, but a mulch for moisture control is necessary.

Highbush blueberries are native to the northern United States. They do well in the higher elevations of Tennessee, under good rainfall and where excessively high temperatures do not occur. It is not recommended that they be grown in the warmer, lower elevations of the state without irrigation. They have a high water loss rate and require consistent and frequent irrigation throughout the growing season. Highbush types bloom later than the rabbiteye types and are less susceptible to frost. Fruit matures earlier than the rabbiteye and is usually not as sweet.

## Site Selection

Avoid depressions in the ground which may be frost pockets. Avoid sites that are water logged in the winter. Blueberries do not grow well in heavy clay soil or in soil with poor drainage. Plants will quickly die in areas of standing water. If possible, plant in the higher areas of the garden or yard or build a raised bed of soil and plant there.

## Soil Preparation

If possible, determine the planting site the summer before planting. Kill any existing vegetation by tilling the soil or by using recommended herbicides. Take a soil sample from the prepared area to determine the soil pH. Contact the county Extension office for soil test boxes and sampling information. The ideal pH for blueberries is in the 4.8 to 5.2 range. If it is necessary to reduce the pH, apply sulfur in accordance with instructions from the Soil Testing Laboratory. Apply sulfur several weeks before the intended planting date to allow equilibration.

At planting, mix about two gallons of wet peat moss with the soil from the planting hole. Peat moss is used to provide better moisture around roots and enable quicker establishment of new plants.

## Fertility

Proper soil fertility is critical for blueberries and all crops. With soil samples, a soil testing lab can determine which fertilizers your soil needs. This information will be mailed to you with instructions for proper blueberry fertilization. Place fertilizer evenly over the root zone. Do not over fertilize! Young plants can be killed by over fertilization. Fertilization should not occur until plants have had their first flush of growth. Budbreak is an appropriate time for fertilization. Smaller amounts of fertilizer can also be applied six and 12 weeks following budbreak. Contact your county Extension office for additional information on fertilization.

## Varieties

Some of the better-performing rabbiteye varieties are Tifblue, Garden Blue, Climax, Southland, Bluebelle and Brightblue. The better-performing highbush types are

Blueray, Herbert, Coville, Bluecrop, Berkeley and Jersey. See factsheet SP284-A, *Small Fruit Varieties for Home Gardens*, for a more detailed description of these varieties.

## Planting Considerations

Blueberries should be planted while dormant, usually from November through March. Plants should be spaced 5 or 6 feet apart in the row. At full growth, they produce a hedge at this spacing. Between-row spacing should be at least 10 to 12 feet to prevent complete overlapping at full growth. Dig holes larger than the existing root system and insert the plants. Be sure the roots are not crowded or doubled under the plant. If container-grown plants are used, be sure the roots of pot-bound plants are cut once or twice to allow better root spread and development. Place roots into the hole and firmly pack soil and peat around them. Either bare-root or one- to two-gallon container-grown plants may be planted with satisfactory results.

It is important that two or more varieties are planted for cross-pollination. The varieties may be alternated within the row or planted in alternate rows. Once planting is done, remove any prostrate growth and tip some of the existing wood. This shapes the plant and encourages new wood development so the plant will thicken and become established quickly. All flower buds should be removed at the time of planting. This encourages good root development.

Water the plants to settle soil around the roots and add a 6-inch sawdust mulch on top of the soil surface. Maintain the mulch throughout the growing period. Sawdust will help maintain the soil pH. For best growth, plants should be watered frequently until the root system becomes well established.

## Productivity and Viability

Blueberries are perennials and are comparable to apples in their productive period. It could be 20 to 30 years before a new planting is needed. Once established, disease and winter injury do not appear to be major problems. Take soil samples periodically (every two years) to monitor pH and keep it in the desired range.



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