



Blueberries in Your Garden

Blueberries are traditionally grown in the northern U.S. and Canada using northern highbush cultivars. These plants need more than 600 chilling hours and acidic soils to be successful.

Chilling Hours

Chilling hours are the accumulated number of hours between 32°F and 45°F needed to produce fruit. The San Joaquin Valley has between 600-1,200 chilling hours. In some years, when chilling hours are low, northern highbush cultivars fail to produce fruit.

In the San Joaquin Valley, the cultivar that is most successful is the southern highbush blueberry. Varieties of this cultivar are available locally at nurseries and garden centers.

Although the southern highbush cultivar is the more successful of the two in our area, northern highbush cultivars are also available. This is because they sometimes do well and are requested by gardeners who are willing to take the risk.

Most cultivars listed in this publication are southern

highbush. Those marked with an asterisk are northern highbush. The blueberry guide at the end of this article lists varieties of each cultivar that are available for sale in Stanislaus County.

Soil pH

Underneath our feet, a series of complex relationships between minerals and soil particles continuously occur. These relationships help determine soil pH, which is why amending your soil once will only temporarily change the pH.

Blueberries thrive when soil pH is between 4.8-5.2. Soils in our area range from 6-7.5.

Take or send a soil sample to a laboratory to determine your soil pH as well as its texture. Texture is the percentage of clay, sand and silt in your soil. Also ask for recommendations on how to acidify your soil.

Plan on amending your soil 4-6 months ahead of time before planting. Before planting, follow the laboratory recommendations, or use these instructions.

- For Sandy soil, use elemental sulfur at a

rate of four pounds per 100 square feet.

- For clay soil, add elemental sulfur at a rate of 7 pounds per square feet.

Along with recommended fertilizers, add organic matter to enhance drainage.

Maintenance

About one month after planting, use a 10-10-10 fertilizer like ammonium sulfate. This fertilizer contains elemental sulfur, which will help keep the soil acidified. Use about 1 oz. (1 ½ tbsp) per plant, sprinkling it within 6 inches of the plant. Avoid directly applying it on the crown or stems.

Using a soil test kit, test your soil every few months to determine if you need to acidify your soil. If new leaves on your blueberry plants turn yellow and have green veins, reapply an acidifying fertilizer such as ammonium sulfate.

Never use a fertilizer that has nitrogen in a “nitrate” form, as nitrates may be toxic to blueberry plants. Check the back of the box or ask for a certified nursery person’s assistance.

Location

Plant blueberries in a sunny location with afternoon shade. Plant in raised beds that are 8-18 inches high and 3-4 feet wide. Space plants 8-10 feet apart and cover the roots with 1-2 inches of coil. Lightly firm the soil around the plants and water thoroughly.

Containers

If the previous instructions sound like too much work, don't despair. Ed Laivo, a local tree and berry expert from Dave Wilson Nursery, believes using containers is the best way to grow blueberries.

He recommends a mix of $\frac{1}{3}$ pathway bark ($\frac{1}{4}$ " size), $\frac{1}{3}$ coarse peat moss, and $\frac{1}{3}$ forest humus. Combine these three amendments plus 2 tablespoons of soil sulfur to create the perfect soil environment. Place containers in a location with afternoon shade. Just remember, containers dry out quickly, so keep them well-watered during hot weather.

To maintain the soil in your containers, fertilize berries monthly with an acid-based fertilizer during the growing season.

Availability

Blueberry plants can be ordered from local nurseries September-November and arrive in January as bare root

plants. In some cases, not all bare root plants are sold, so they are repotted and sold in late winter and early spring.

Planting and Watering

All blueberry plants are self fertile but will have more berries if planted with another variety. They do not need much space and can be planted as close as 2 $\frac{1}{2}$ feet together.

Blueberry plants have shallow, fibrous roots that need adequate drainage and aeration. They are very susceptible to drought injury. For optimum health they should receive 1-2 inches of water per week from May through September. During July and August, water two times per week to prevent them from drying out. In containers, do not let the container soil mix dry out.

The balance between adequate moisture and too much water is important, as blueberries are susceptible to root rot. The best method of watering in the ground is to use mini sprinkler irrigation. A drip system can also be used, with a line running on each side of the plants.

Pruning

It will take at least three years for a blueberry plant to become established enough to bear a crop. Prune off diseased and damaged wood

during the first three dormant seasons. After their third year, continue to prune them annually.

Blueberry plants have a naturally bushy form that has numerous canes. Limit the number of canes to a maximum of 6-8 canes for older bushes. Remove 1-2 canes yearly so that the oldest canes are no more than 4-6 years old.

Also, prune out suckers and weak wood, especially from the top part of the plant.

Harvest

Blueberries begin maturing in early May and finish by early July, depending on variety.

Nutrition

Blueberries are famous for containing antioxidants as well as vitamins and minerals. They are low in calories and high in fiber. And planting your own bushes will ensure a plentiful supply of berries at a low cost.

1 cup fresh blueberries provides:

9 mg Calcium
9 mg Magnesium
9 mg Folate
3.6 g Fiber
114 mg Potassium

Blueberry Guide

Blueberry	Ripening Time	Description
Blue Crop*	Mid	Large, light blue berries are firm and flavorful. Tolerates hot summers when soil is amended well. 4-6 feet tall at maturity. 800 chilling hours.
Blueray*	Mid	Very large, light blue berries have firm fruit. Plants are highly productive. Best northern highbush for hot climates. 4-6 feet tall at maturity. 800 chilling hours.
Misty	Early	Small to medium sized berries with sweet tart flavor. 4-6 feet tall at maturity. 150 chilling hours.
O'Neal	Early	Large, blue berries have a sweet flavor. 4-6 feet tall at maturity. 200 chilling hours.
Ozark Blue	Mid	Large, light blue and firm. 5-6 ½ feet tall at maturity. 400 chilling hours. <i>*northern/southern cross</i>
South Moon	Mid	Large, sky-blue berries are firm and have an outstanding flavor. This variety is the author's favorite. 5-6 feet tall at maturity. 500 chilling hours.
Sunshine Blue	Mid	Medium berries are sweet. Plant has showy pink flowers that fade to white and a large crop of berries. 3 feet tall at maturity. 150 chilling hours.
Top Hat	Mid	Small berries are slightly larger than peas. More of an ornamental than producer. Great for planters and for use as a bonsai specimen. 1-2 feet high and wide at maturity.

*Northern highbush varieties

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