

## Successful Blueberry Production

Blueberries are members of the heath family such as azaleas, rhododendrons, and heather. These plants are shallow rooted, having no dominant tap root. Thus the root zone is normally 6-12 inches, although they can penetrate much farther in deep, well aerated soil.

**Variety selection:** There are three main types—Northern Highbush (zones 4-7), Southern Highbush (zones 7-9), and Rabbiteye (zones 7-9). The highbush reach about six feet in size while the Rabbiteye varieties are around 8-10 feet. Highbush have thinner skins, and are perhaps a bit sweeter than the thicker skinned Rabbiteye which as a result may keep up to several days at room temperature. Within their range, rabbiteye types are easier to grow than highbush which have a lower pH requirement and more diligent irrigation. There are a number of different varieties within each category. Rabbiteye types need at least two varieties in a planting for pollination, but this is not necessary for the highbush types. Two common rabbiteye varieties are Climax (early season) and Tifblu (mid-season). Different varieties have different ripening seasons, so combining varieties can give season extension; other variations pertain to plant habit and vigor, ease of care, soil requirements, berry size and properties, consistency in bearing from year to year, time of bloom, etc. Keep in mind that new improved varieties are currently being introduced. New rabbiteye varieties include Titan with its largest-yet berry size and Vernon, a replacement for Climax.

**Site and soil preparation:** What is your objective in planting blueberries? If it is landscaping then they can successfully fit into just about any scheme if proper measures are taken, but here we will assume that fruit production is of primary concern—and in this case you want to work with nature as far as possible. Root aeration is important, so the site should be well drained, never subject to standing water, even for a few hours in times of maximum rains with no resulting tight soils in dry weather. Weeds and grass should be kept away, as these directly compete with blueberries which are also shallow rooted. When you have selected the site, place a minimum of ½ bushel (4 gallons) of peat moss, pine bark fines (soil conditioner), composted leaves, or composted sawdust on each planting site and work it into top 8 inches of the root zone soil area. This will provide a slightly mounded area of growing medium. The more light, the more fruit, but be sure they have sufficient water during periods of intense sun. Avoiding shade will also contribute to well-proportioned plants.

**Planting:** Space the plants 5-6 feet in rows 12-14 feet apart, planting in the mounded areas. If the plants are bare root, rake back a flat area in the center of each mound deep and wide enough to accommodate the fanned out roots, then, holding the trunk, rake 3-4 inches of soil back over the roots, pack by stepping on, and wet the soil. If the plants are potted, it is not necessary to break up the root ball—simply dig a hole large enough to accommodate it in the center of the mound and plant the same depth as it originally was in the pot. Once planted, thoroughly water the planting site. Important: During planting of bare root plants never allow the roots to dry out, freeze, or be exposed to direct sunlight.

**Water:** Blueberry plants need and do best at all stages of growth with irrigation. The root zone should always be kept moist but not soggy, so how you water them will depend on all the other current factors such as drainage, water table, mulching, rainfall, humidity, plant size, fruit load, time of year, etc. A top acidifying mulch (see below under pH) of 4 inches or so of sawdust, bark, leaves, pine straw, or chips that is free from weed seeds is very helpful as a means of keeping the root zone moist as well as to suppress weeds. Rodents are not usually a resulting problem. This mulch need not be decomposed, but will gradually break down and provide an ideal growing medium in the root zone. Once the plants become large, their falling leaves as well as the shade of the plants themselves become useful adjuncts.

**pH:** Although blueberries are not inherently “acid loving,” due to certain requirements (mainly of iron which needs acid soil for good uptake), a soil pH of 4-5.5 is best for rabbiteye varieties, while for highbush varieties it should be no more than 5. Using an acidifying fertilizer such as ammonium or potassium sulfates will assist in bringing the pH down in a safer manner than trying to alter the soil with chemicals. The material listed to add at planting (see above) is acid, and the mulching material also breaks down in an acid reaction and the roots will seek out and stay within this acidified root zone. To this end, avoid mulching with grass clippings or using manure as these have more of an alkaline reaction. Also, if the water for irrigation is alkaline this must be corrected. Check with your local horticultural agent for remedies.

**Fertilizers:** Any neutral or acidifying fertilizer such as for azaleas is adequate for blueberries. Fertilize in several small doses March-July. In addition to regular fertilizer, blueberries require calcium which is often deficient in acid soils

and is best supplied with a pound of gypsum at planting that should thereafter be supplied every few years. Avoid lime. In some cases, well mulched mature plants may do well no fertilizer. Avoid cow and horse manure as these are alkaline.

**Pruning:** At planting, and for the next two years thereafter prune off the fruiting wood to stimulate growth. After 5-6 years it is best to remove 20% of the oldest twiggy canes annually which will keep the center of the plant open and limit berry production to young, healthy canes while helping to allow light penetration to the center of the bush. A large dense bush will only have berries in the outer periphery. For rabbiteye blueberries, it also is desirable to prune to a manageable height—the sweetest berries are on the top.

**Pest control:** Although the highbush varieties, due to their thin skins, have at times been subject to infestation, in general blueberries have been relatively pest free. This changed in 2008 with the import of a new fruit fly, the *spotted winged drosophila* with its sharp ovipositor that can penetrate the thicker skin of the rabbiteye varieties as well as other types of berries and fruit. Control however has seemed to be successful for us by attracting hummingbirds (which eat insects as well as nectar) with feeders hung out early enough to encourage nesting in the area, and continued long enough to encourage their return the next year. Nectar producing plants are also helpful.

**Frost:** Blueberries are susceptible to late frost during bloom; the fully opened corollas being quite susceptible. Planting later blooming types is thus sometimes beneficial, but for adequate protection in the eastern U.S. with its fluctuating temperatures, sprinklers are usually employed. However check with your local agency or university website for procedures and considerations. Damage may result if this method is used incorrectly.

Keep in mind that these recommendations may be varied in many ways to suit the many objectives of commercial, home use, landscape, etc. May you be blessed with the fruits of the earth at harvesttime.

Happy growing

The Chuljian family

*For any further questions, feel welcome to contact us at [sonlitmeadowsfarm@gmail.com](mailto:sonlitmeadowsfarm@gmail.com)*