

Soil Preparation

Blueberries do not tolerate poor drainage and root rot disease, and overall poor vigor will adversely affect blueberries in poorly drained soils. Blueberries should be planted on raised beds in most soil situations. In well drained sandy soils, beds may not be needed, but organic matter should be added. For sandy soils, apply 5 tons per acre of compost or dried manure in 3-4 ft-wide bands over the rows and incorporate the material to a 6-8" depth with a disk or rotovator. This organic material may be combined with sulfur additions used to acidify the soil.

For clay loam or clay soils, additional soil amendment material should be incorporated into the raised bed to help improve porosity, aeration, and drainage. Coarse wood waste, saw dust, or rice hulls are used successfully in California as a soil amendment. In extreme examples - as in Florida where pine bark mulch is plentiful - the plants are established in windrows or pure mulch. In California, liberal amounts of coarse wood waste are routinely applied and incorporated into the soil for blueberries on heavy soils. A minimum of 100 cubic yards of coarse wood waste should be applied and incorporated in a band of 3-4 ft wide over the row. Some growers have also successfully used wood waste filling a V-slit opened in a raised bed and the plants established in the furrow. As with the compost additions in sandy soils, the wood waste can be combined with the sulfur applied to acidify the soil.



The soil should be sampled and analyzed by a reliable soil testing laboratory prior to planting. The soil analysis will determine the optimum amounts of major and minor elements to apply. All of the major and minor elements with the exception of nitrogen should be incorporated into the beds using fertilizer in granular form prior to planting. This will be the most cost-effective method of assuring adequate fertility for the new blueberry planting. It is only necessary to add fertilizer, sulfur, and other amendments in the 4-ft-wide strip of bed centered over the plant row.

The optimum amounts of major and minor nutrients, the sulfur required for acidifying the soil, and any woody amendments can be incorporated into the beds when the beds are prepared prior to planting. This can be done as early as possible prior to plant establishment to allow time for the sulfur to acidify the soil. Preparing the beds ahead of time will also allow time for initial weed control. Irrigate the beds and then allow 2-3 weeks for weeds to emerge and spray with glyphosate (Roundup) or a similar broad-spectrum systemic herbicide. Repeat this a second time and few, if any, further weeds should emerge if the soil surface is not disturbed. At planting, only disturb the soil in the planting holes and mulch the entire surface after planting and few weed problems will follow.

Soils should be retested every 3-4 years for nutrient availability. Additional amounts of major or minor nutrients may be required in later years. Fertilizers can be applied to established plantings by incorporating granular fertilizer under the surface mulch (more economical) or injecting through the irrigation system (greater ease of application and more rapid availability).

