

Field Planting

Blueberries can be transplanted in coastal and southern California growing areas at any time during the year if irrigation is available. Temperatures are moderate enough to allow transplanting year around in all but the hotter drier inland areas where the hottest months of May through August should be avoided. The plants will need to be carefully watered following transplanting.

Blueberries should be grown on raised beds in all but the most freely draining sandy soils. This will help improve drainage and protect the plants from soil-borne diseases. Beds are typically 4 ft wide to allow root development in the entire bed area as that root system will eventually support a plant approximately 4 ft in diameter. Blueberries should be planted on 30" spacing between plants in the row by 10 ft spacing from center to center between rows. This will leave a space between beds of approximately 6 ft. Spacing between the rows depends on equipment needs to work, room for spray application, tractor widths, etc. If spraying and other labors will be done by hand, closer row spacing down to 7- 8 ft will increase yields on small acreages.

The preferred plants to establish in the field are typically 12-18 month old plants that include 2-4 small canes and are 12-18" high. Smaller plants – down to 6-month-old rooted cuttings or plants from tissue culture - have been successively used for direct field establishment but they require careful management and losses may be higher. Larger plants are more costly but they are less problematic overall and depending on growing conditions, may come into production earlier.

Plants may come from the nursery in pots, trays, or grow bags or they may arrive bare root. When planting plants, spread the roots carefully and plant at the same depth as in the nursery. If the root ball holds the shape of the pot or grow bag, carefully tease the roots out of the ball or cut into the ball on four sides and open the root ball up prior to planting. Plants should be planted at or slightly below (0.5") the level they grew at in the pot or nursery. Plants planted too deeply are more susceptible to soil diseases. If roots are not spread out of the shape of the grow bag or pot, roots will maintain the pot shape and J rooting will eventually close off the plant's conductive tissue. Plants may grow well for 3-5 years and abruptly collapse because the limited conductive system cannot keep up with the moisture needs in warm, dry weather.

The planting hole can be opened by hand on smaller plantings or using an auger off of the tractor PTO unit on larger plantings. The hole should be wider than deep and sphagnum peat moss should be incorporated into the soil in the hole at $\frac{1}{4}$ to $\frac{1}{3}$ of the hole volume. The pH of the peat may vary so use an acid peat moss at or around pH 5.0. The peat should be soaked in water prior to planting or special care should be taken to assure that the peat is wetted thoroughly when the plants are watered in. On clay or clay-loam soils there may be a benefit to adding additional wood waste in and expanded the planting hole and mixing with soil to aid drainage. After planting, the plants should be watered in well and the bed should be top-dressed with 2-3" of wood waste as a surface mulch and mulch should be renewed every 3-4 years as needed.

Woven weed fabric that mulches the soil surface but that is porous and allows infiltration of water can also be used as surface mulch down the row. In this case, the fabric aids with weed control and minimizes moisture loss from the soil surface. This type of mulching may be especially useful in certified organic production fields where labor costs for weed control can be particularly high.

Once plants are set, prune back smaller and lower branches of plants some to encourage new growth. Plants should initiate growth in 2-4 weeks – slower at cooler times of the year. The sphagnum peat at planting while adding significant costs, allows the plant to get established and begin new growth even where the surrounding soil pH may not be optimum. Do not skimp on planting and planting preparation because the plant responds by initiating rapid and vigorous new growth. If the plant does not initiate new growth check soil and water pH and or irrigation. Check that new shoot growth is green to dark green. Yellow or pale green new growth indicates that pH conditions are marginal and additional acidification of the soil or water is needed. Iron chelate may also be useful in aiding newly set plants to initiate new growth.