

Cranberries

The cranberry is a Native American fruit. Its native range extends in temperate climate zones from the East Coast to the Central U. S. and Canada and from Southern Canada in the north to the Appalachians in the south.

The plant is a low-growing, trailing, woody vine with a perennial habit. Cranberries produce stems or runners from one to six feet long. During the growing season, the leaves are dark green and glossy, turning reddish-brown during the dormant season. The vines form a thick mat over the surface of a cultivated bed.

Short vertical upright branches, known as uprights, form from the buds along the runners. The uprights have a vertical (non-trailing) growth habit and form the terminal buds that contain the flower buds. Most of the fruit is formed from the flowers on the uprights, with some berries arising from flowers on the runner ends.

Where To Grow Your Cranberries

The plants thrive on the special combination of soils and hydrology found in wetlands. Natural bogs evolved from glacial deposits that left kettle holes lined with impermeable materials. These kettles became filled with water and decaying matter, creating the ideal environment for cranberries. Growing cranberries commercially also requires a surrounding network of support acres — the fields, forests, streams, and ponds that make up the cranberry wetlands system. Many Massachusetts cranberry bogs, particularly those in Plymouth County, are built on bogs that had been mined for iron ore, while most of those on Cape Cod were developed in natural peat bogs.

Cranberry bog soil is unique in that it consists of alternating layers of sand and organic matter. Dead leaves accumulate over the course of time and sand is added to the bed surface every 2-5 years to encourage upright production and maintain productivity. In contrast to normal agricultural soils, cranberry soil requires no tilling, remains undisturbed over time, and little mixing of sand and organic matter occurs.

Cranberry beds should be established on a base material which will retard vertical movement of water. This will supply the so-called *impermeable layer* which will allow the bed to hold a flood for harvest, winter protection, etc. Examples of base materials are peat, clay, and heavy packed topsoil (loam). A minimum of four inches of sand should be applied above the base layer of the bed prior to planting. Sand with at least a 60-70% coarse particle content is best. Higher amounts of coarse

CRANBERRY QUICK GUIDE

Latin Name

Vaccinium oxycoccu

Type

Shrub

Site and Soil

Sunny (part shade is OK). See soil preparation

Plant to Harvest Time

2 years

How Many?

2kg (4.5lbs) per plant



particles were correlated with higher yields in Massachusetts research studies. Most likely the benefit is in providing adequate drainage. Proper drainage is essential for good root development and aeration as well as for the prevention of *Phytophthora* root rot. Sand pH is also important. It should range between 4.0 and 5.0 or you will have to add sulfur to adjust. Get a sample tested for pH before planting.

When and How To Plant Cranberries

You should plan to visit the site from where you want to buy your vine, sometime during the fall (prior to the year you intend to plant). Ask for previous years' production records to insure that you will be getting good vine. Normally, vines are planted at the density of one ton per acre. However, if planting is late (June or July) and/or growing conditions are severe, or if you want more rapid establishment, then a higher density (e.g. 1.5 tons or more per acre) may be warranted. Unrooted cuttings are the standard planting material but rooted cuttings (plugs) or tissue culture plants have been used effectively.

Cranberries can be planted in the fall through October and early November or in the spring between April 15th to May 31st. Summer planting of 3 year old rooted plants is also possible, so long as plants are shipped two day air.

If you want a large plot, then follow the instructions below. If you want a specimen plant in a single location, give each plant about a 2 foot by 2 foot spacing and still follow the directions for prepping the soil. Either way, you will be able to get a plant to spread into the area you want to have it grow.



Sandy Soils - If your soil is already sandy remove topsoil down 8 inches, add a 6 mil plastic liner, poke plenty of holes in the plastic, and add 4 bales (3.8 cu.ft) of peat moss for every 50 square feet. Mix in bone meal (1/2 lb), rock phosphate (1 lb) and bloodmeal (1 lb) for every 50 sq. ft. Wet peatmoss with garden hose, or wait until natural rain moistens the peat. Wetting the peatmoss will be hard. Be patient and add water in a mist, slowly. Mix the peat often to help absorb water.

Clay or Silt Soils - If your soil is clay or silty, dig out a garden area 8 inches deep, directly add the peat without the plastic liner. Follow directions as above for adding peatmoss, fertilizer and water. Space one year plugs 1 ft x 1 ft, or closer, with root ball two inches below surface. Four inch pots can be spaced 2 ft by 2 ft, and six inch pots 3 ft x 3 ft.

Care For Your Cranberries

Water the cranberry plants like you would other garden plants. It is a common myth that cranberries need to be in very saturated conditions. Peatmoss does need to be moist to the touch, but **not** saturated.

Apply a fish emulsion fertilizer (2-4-2) at a rate of 1/2 gallon every 4 weeks or one 1/4 lb application of a complete fertilizer (10-10-10) in late June every year. If the bed is overrun with runners, cut them back on



fertilizer and trim back the runners. Test the soil every other year by contacting your Extension Office.

Weed the garden every month. Every two years during the spring, add a ½ inch of sand over the bed; this will help root the runners and produce more uprights. Sanding also helps reduce the germination of weeds.



Cranberries are self pollinating; two varieties are not needed. Bumble bees and honeybees benefit pollination, so while you are protecting your plants from frost, be sure to allow them to do their work during the day. [See *Protecting your Plants*]

In the third year of the cranberry plant's life, prune the runners and the older uprights as needed in the spring before growth begins; this will ensure coverage of healthy uprights and minimize the long runners.

Cranberry Picking or Harvesting

Harvest berries by hand when red, from late September to late October. Berries cannot stand a frost below 30°F so it is best to pick them before a hard frost or protect them with covers. One 5ft X 5ft bed may yield up to 5 lbs of fruit in the third and fourth year of production.