



YES YOU CAN SUCCESSFULLY GROW BLUEBERRIES IN WESTERN COLORADO: If you take into consideration the soil requirements of the plant.

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The Northern Highbush blueberry (*Vaccinium corymbosum*) is an acid soil loving plant requiring a soil with a pH no higher than 5.0. A pH of 4.5 is preferred. Soils of Western Colorado are alkaline (basic) ranging from 7.3 to above 8. Western Colorado's soils are well buffered, meaning there is virtually no way to drop the pH down to what is required by blueberries. To overcome this problem the following steps are recommended in order to have success with blueberries.

1. Use straight sphagnum peat moss as the planting medium. Do not add any native soil.
 - a. Blueberries do best in a soil medium (i.e. peat moss) with a pH of between 4.5 and 5.0. The soils in western Colorado range from 7.5 to 8.5. Since pH is based on log 10 our soils would need to be acidified by a factor of 1000 if the native soil has a pH of 7.5, and by a factor of 10,000 if the native soil has a pH of 8.5. Acidifying our native soils is not only impractical but impossible. More on acidifying our native soils is available at <http://www.coopext.colostate.edu/TRA/PLANTS/alksoil.shtml>.
 - b. If your soil is very well drained your blueberries can be planted in a hole as described by Joel Reich, CSU Extension Agent, Boulder County. His technique can be found at <http://frontrangefoodgardener.blogspot.com/2010/01/blueberry-growing-intense-in-colorado.html>.
 - c. If you have clay soil you need to plant ABOVE ground. Digging a hole in poorly drained soil and filling it with peat moss will result in root rot as well as make it much more difficult to maintain the proper pH of the planting medium.
 - i. If the blueberry plants are bare-root, they can be planted directly in the bale of peat. Poke holes in the bottom of the bale of peat moss to encourage drainage.
 - ii. If the blueberry plants are container grown, balled-and-burlapped (B&B), or balled-and-potted, the plants will need to be removed from the containers, any burlap and twine removed, and the root ball cut every three

inches around the circumference of the ball to help encourage the roots to grow into the peat moss.

1. Place the plant on the site where you want it to grow and heap peat moss around the root ball up to the same height as the root ball.
 2. You can build the wall of this raised bed before or after you plant your blueberries.
- d. If you have a salty soil, you will need to install a salt barrier between the planting medium for the blueberries and the native soil. Neglecting this barrier will result in salts moving into the root zone of your blueberries causing their death. Contact us at the Mesa County Extension office (970 244-1836) for details on how this barrier needs to be constructed. The CSU Extension offices in Mesa, Delta, and Montrose counties can test the salt level of your soil for free.
 - e. After planting prune out any dead and broken branches and stems. Avoid the tendency to prune any more as root establishment is best when the plant has as many leaves as possible. You can prune to shape the plant and encourage light penetration after the plants are established.
 - f. Keep the peat moss from drying out. Once dried, peat moss is very difficult to moisten and by that time the plant will most likely be dead.
 - g. Our water is very basic with a pH of up to 8.1. To help keep the planting medium acidic, add two tablespoons of vinegar per gallon of water every time you water.
 - h. Apply two inches of mulch over the planting area. Keep this several inches away from the base of the plant. Bark mulch is preferred.
2. Planting two varieties of Northern Highbush blueberries will increase pollination and yield but is not absolutely necessary.
 3. Winter protection is best provided by ensuring the peat moss is watered occasionally in the winter, unless you live in an area where snow covers the ground. A layer of bark mulch helps counteract the freezing and thawing of the peat moss during the winter.
 4. The year after planting, annual pruning should begin. Removing 1/3 to 1/2 of the stems in spring is recommended. This will produce vigorous shoots that are needed for the next year's crop. Thin out the stems to encourage such growth. The fat buds at the tips of last year's shoots are the flower bud.
 5. Fertilize with an acid fertilizer such as Rhododendron or Azalea fertilizer. Apply 2 tablespoons of a 10-20-10 (or similar fertilizer) in late spring the year following planting. In future years the amount of fertilizer you apply should be based on the age of the plant with 1 ounce of fertilizer being applied per year of age. Never apply more than 8 ounces per plant. Split the application in half and apply 1/2 in early spring and the remainder in late spring. If possible dissolve the fertilizer in water before applying. If applied dry it must be watered in.