

BLUEBERRY PLANTS: FAQ's

Q: How winter hardy are they?

A: Five of the varieties of blueberry plants I sell are considered “half-highs” and most were bred by the U of M to produce large sweet fruit yet reliably survive typical Minnesota winters. They are a cross between the low-growing bushes you see in northern MN with small tart berries, and the high-bush blueberries typical of Michigan and Oregon that have large berries and large bushes. Half-high blueberry bushes in 2009-2010 include St. Cloud, Polaris, Northblue, Northland, and Chippewa.

I also carry several high bush varieties that are quite winter hardy and are shipped to Canada regularly. Highbush varieties for 2009-2010 are named Patriot, BlueGold, BlueCrop, Draper, Jersey. High bush plants will give you a much higher yield than half-high bushes in most winters in Minnesota, but in winters where it is -25 degrees for any length of time, they will experience die-back on their tips and the yield will be low.

Q: How big will they grow?

A: Most of the half-high blueberry plants grow to about 3 feet by 3 feet. Some will get a bit taller, but not much wider than 3 feet. High bush varieties will grow from 4 feet to 6 feet tall and 3 to 4 feet wide.

Q: Do they spread like raspberries?

A: No, they grow into an upright bush. You may get some lower branches that propagate around the base of the plant, but they do not sucker like raspberries.

Q: How much sun do they need?

A: Blueberry plants are most happy with full sun. Full sun is generally considered 6 hours of sun per day. Bushes will still grow under partial shade, but they won't grow as well and they will not produce many berries.

Q: What kind of soil do they require?

A: Open porous soils such as sandy loams with a high organic matter content are best. They also like an acidic soil. If the soil is sandy and has little organic matter, add 1 ½ to 2 cu. feet of peat (ask your nursery if they know the pH of the peat – if not, go with “Canadian” peat) per plant to the soil upon planting. Be sure to mix peat in thoroughly with the soil so the water will not wick off the peat. Clay soil will also work if you mix in a lot of compost to improve drainage. Poor drainage will cause problems for blueberry plants

The pH of the soil would optimally be from 4.5 to 5.2. It does not have to be perfect the first few years if you have incorporated acid peat into the planting hole – the plant will be fine with its own reserves for several years. I believe good organic matter in the soil is as important as a very low pH. The best planting medium ratio I have found is: 1/3 peat (for acidity), 1/3 compost (for drainage & nitrogen); 1/3 your own soil (for microbes, etc.)

Q: How else can I make the soil acid?

A: At some point you need to get a soil test to assess your soil pH and adjust it for optimum long-term blueberry production. If your soil test shows a pH above 5.5, you can use pelletized sulfur (get it at a feed mill or nursery) to lower the pH. It is slow acting, so apply it in the fall. Just scratch it in around the drip line of the plant (not too deep, blueberries have shallow roots). Sulfur and acid peat are good organic mediums for decreasing the pH. Other products designed for rhododendrums (i.e., Miracid) also will probably work, but I can't vouch for them since I don't use these products. Good acidic material to use for mulch include pine needles or oak leaves. Use these needles/leaves only as a mulch – do not incorporate them into the soil or they will use up nitrogen as they break down. Wood chips will work as a mulch if you don't have needles/leaves.

Q: How should I water them?

A: Provide 2 inches of water every 10 days (or an inch a week). The plants have shallow roots, so watering deeply and then waiting long periods is not a good idea. Also (and this is important), blueberries set their fruit in the fall, so make sure they get plenty of water in the fall. Frequently, the fall in Minnesota is dry and summer has wound down so plants don't get watered enough. Water stress in the fall will make for fewer blueberries.

Q: What about nutrients?

A: Feed *lightly* with nitrogen every spring. Use a nitrogen source that has low pH. If you use compost or manure as a mulch, add pelletized sulfur to it the previous fall (compost and manures often have a high pH).

Q: When can I plant?

A: Planting can be done in either spring or fall, but spring offers beneficial rain. The plants I offer are in large pots and can be planted safely at any time.

Q: How far apart and how deep should I plant?

A: Space plants about 3-4 feet apart. Holes should be at least 1 1/2 foot deep and about 3 feet in diameter.

Q: Why should I take the blossoms off when I plant?

A: Blueberry plants are not considered mature until around 5 years of age. If you strip the blossoms off the first year (or two) and allow all of the energy to go into root development, many people say you will get more berries in the long run. The plants I sell are 2 ½ years old and I have not seen the benefit in stripping the blossoms off of this age plant, but many growers recommend that you do. Blueberry plants can last 20-30 years if well cared for.

Q: What kind of pests will harm them?

A: There are very few insect pests that will harm blueberry plants. Pests of the larger variety however, do like to munch on these plants. Birds of course like the berries. Shortly before the berries turn blue, you can cover plants with bird netting. This is usually an effective remedy for the birds – just be sure to take it back off and put it away after you've picked enough berries. Be aware that sometimes the birds get caught in the

netting, so if you are a bird lover, you might want to check it daily. Other pests include deer and rabbits. The deer seem to only be interested in the fall, and they go for the small twiggy branches. The bird netting you used in July is effective against deer also. They don't like to get tangled up in it.

Rabbitswell. Rabbits like the small branches close to the ground, and they generally eat them in the winter (they set their fruit in the fall and they are most tender then). There are a multitude of home remedies to take care of rabbits that have varying degree of effectiveness. I've found dogs and cats work well, as does getting the plants to a large enough size that the rabbits don't go for it any more. If your plant is small and you have a bad rabbit problem, maybe you want to grow it in a large pot close to the house until it is several years old, or cover them in the fall, or build a large fence. Rabbits have consistently been the most common complaint among my customers.

Q: How many berries will they produce?

A: Depending on variety, the amount of sun and the lack of stress in the fall, half-high bushes can produce from 3 to 12 pounds of fruit per bush. The older they are the more they should produce if well cared for. High bush varieties can produce 10-20 pounds of fruit per bush.

Q: Why do I need to have two different varieties?

A: Most varieties need to be cross-pollinated by the bees. Even those that are self-pollinated benefit greatly by a different variety nearby as a cross pollinator.

Q: Which varieties are the best?

A: Well depends on what part is most important to you (i.e., highest yield, landscaping fit, most hardy, etc). Here is a brief description of the varieties I sell:

BLUEBERRY VARIETIES 2008 (listed in order of when they bear fruit - early to late)

Polaris: Earliest maturing of the U of M half-high varieties (early July); aromatic strongly flavored medium berries on a upright bush (about 4 feet by 4 feet); very cold hardy; 3 to 8 pounds of fruit at maturity.

Patriot: Early highbush variety; Fruit is extra large with very good flavor; Released by University of Maine and is very vigorous; adapts to many different soil types; Grows to 4-6 feet tall with 10-20 pounds of fruit at maturity. Fiery orange fall color.

St. Cloud: Ripens early to mid-season (mid-July); some say this is the sweetest berry, small to medium firm fruit; bush is about 3 feet by 3 feet; U of M variety.

Northblue: berries mature following St. Cloud (mid-July); smaller spreading bush (about 2 1/2 feet x 3 feet; largest fruit of the half-highs with a flavor more similar to the wild berries; dark blue; very ornamental plant; very hardy (to -35 degrees F); 3 to 9 pounds

Northland: Mid-season variety developed by Michigan State Univ.; Flavorful light-blue berries, similar to wild berries; excellent winter hardiness (to -30 degrees F); consistent crops; grows to about 4 feet tall. 10 to 15 pounds per bush at maturity

Draper: Newer cultivar from Michigan State; highly productive; upright 4-5 foot bush; large firm flavorful fruit; concentrated fruit set.

Bluecrop: Old standard of excellence in high-bush varieties; Medium to large light blue berries with good subacid flavor; 4-6 feet at maturity; needs pruning; 10-20 pounds fruit

Bluegold: Cold hardy highbush; compact round bush up to 4 feet by 4 feet; heavy fruiting habit; firm large flavorful berries; leaves are gold in fall.

Chippewa: developed for climate of northern MN; light blue, large, sweet berries; latest season for the half-high varieties (late July – mid August); more columnar upright bush than most (about 4 1/2 feet tall by 2 1/2 feet wide). 3 to 8 pounds per bush at maturity

Jersey: One of oldest varieties; easy to grow; heavy fruiting and late season; large bush up to 6 feet; medium, very sweet berries; reliable producer

Nelson: Ripens latest of all to extend the season (August - mid September); large, light blue fruit with great flavor; Vigorous bush and high yields.

** One more tip: For bigger sweeter berries on any of the varieties, add potassium (foliar spray) when the berries are first starting

