

Information Resources for Highbush Blueberry Growers in Vermont Vern Grubinger, Vegetable and Berry Specialist, University of Vermont Extension

The following resources address key issues associated with growing highbush blueberries.

Production Guides

Overview of growing blueberries from UMaine Extension covers the basics.

The New England Small Fruit Management Guide provides crop-specific information on blueberries, and other crops, along with general guidance on cultural practices. https://ag.umass.edu/fruit/ne-small-fruit-management-guide/highbush-blueberries

The slightly dated but excellent Highbush Blueberry Production Guide is at https://ecommons.cornell.edu/handle/1813/66931



Varieties

Here is a <u>list of blueberry varieties</u> suggested for northern New England by UMaine Extension. In coldest locations consider a mix of half-high and hardy highbush varieties. (Half-highs are cross of low bush aka wild, and highbush.). Here's another <u>list of blueberry varieties</u> from UNH Extension. This site provides information on <u>half-high varieties</u> developed by U. MN.

If you can plant at least three different varieties that may enhance pollination and yield. Select only the hardiest varieties, rated zone 3 or 4, to avoid winter injury. A mix of early, mid- and late-ripening varieties will extend the harvest season. Note that late varieties are most susceptible to SWD (spotted wing drosophila damage) so you may want to avoid these

Here's a <u>list of nurseries</u> selling different varieties, from Cornell, though may be a bit out of date. Some sources used by local growers include <u>Nourse Farms</u>, MA; <u>Degrandchamps</u>, MI; <u>Elmore Roots</u>, Wolcott VT and <u>St. Lawrence Nursery</u> in Upstate NY.

Soil Testing

Before planting it is critical to take soil test(s) to determine if the pH is in the optimal range of 4.8 - 5.2. Test results also include major nutrient levels (P and K) that are best added prior to planting. Cost is \$17 per sample, sampling instructions are on UVM ag testing lab web site.

You should sample several different areas if there are different soil types or management histories in the planting. Do not mix soils from different histories of management/soil types, as the average may represent neither very well. https://pss.uvm.edu/ag_testing/?Page=soils.html

Apply sulfur, if needed, to the strips where blueberries roots will grow (when full mature). Also apply P, K, Mg to the strips as needed based on soil test. In established plantings apply sulfur to the surface at a maximum of 400 lb/acre in fall and spring as needed. Here is info on how much total S is needed to change soil pH:

https://www.canr.msu.edu/uploads/files/Lowering_Soil_pH_with_Sulfur.pdf



Tissue testing

To optimize fertilization, use leaf analysis. It's much more instructive than soil tests for understanding what perennial fruits plant actually need. This lab has had fast turn around: https://dairyone.com/analytical-services/agronomy-services/plant-tissue-testing-services/ Cost is \$30 per sample, and your results will include Cornell recommendations. Best time to sample n July 15 - Aug 15. The web site also provides sampling instructions.

Nitrogen fertilization

Until you have leaf analysis results, follow this info for N fertilization. You can substitute soybean meal at 3x the rate of ammonium sulfate if you want to use an organic fertilizer: https://www.canr.msu.edu/news/time_to_fertilize_blueberries

Irrigation

Consider laying two drip lines. One line may suffice at first when plants are small, but eventually two per row, on each side of the crop, will be needed to assure an even supply of water to the entire root zone. Irrigating to supply water consistently can enhance crop yield especially in seasons with low rainfall in summer. If you need help designing the irrigation system, many growers use Brookdale Fruit Farm irrigation supply in NH. http://www.brookdalefruitfarm.com/irrigation/

Mulching

Acquire lots of wood chip mulch from reputable sources (to avoid getting contaminants such as trash or non-woody materials). Apply mulch all around plants well beyond the canopy, and do not apply it deeply close up to canes. Ideally this is done every year or at least every other year, 3-4 inches deep, before forsythia blooms (to cover up any mummyberry fruiting bodies).

Frequent mulching helps suppress weeds, conserve moisture and prevent competition with grass in the alleyways – keep the mulched area wider than the canopy to avoid that competition



Pruning

In established planting the first step is usually to cut out 2 to 4 of the largest, oldest canes to make room for younger canes. Canes should be cut right at ground level, which will require a large set of loppers, or power pruners. Then do some finer pruning. Here are articles on pruning: https://polk.extension.wisc.edu/files/2014/02/Blueberry-Pruning-Rejuvenation.pdf https://www.uvm.edu/vtvegandberry/factsheets/pruningblueberries.html

Pest Management

To get familiar possible insect pest and diseases to scout/monitor for the New England small fruit management guide is a good place to start: https://ag.umass.edu/fruit/ne-small-fruit-management-guide/highbush-blueberries

This is a comprehensive guide to blueberry insects, diseases and IPM /scouting practices: https://www.canr.msu.edu/blueberries/uploads/files/BlueberryGuide-online-FINAL.pdf

Netting

Consider netting systems to manage birds and spotted wing drosophila (invasive fruit fly that attacks soft fruit in late summer/fall). These <u>webinar slides</u> show a variety of different grower netting systems for SWD (which also exclude birds).

For general SWD info: https://www.uvm.edu/vtvegandberry/SWDInfo.html

Other resources

Links blueberry enterprise budgets and much more can be found at: https://www.uvm.edu/extension/horticulture/commercial

Information resources for all types of horticultural growers in Vermont are described at: https://www.uvm.edu/vtvegandberry/factsheets/InformationResourcesVermontGrowers.pdf