Growing Grapes

By Kathy Wolfe

October 11, 2013



There's something for everyone

Juice, jelly, raisins, wine or straight from the vine, grapes have something for everyone. Grapes can and are successfully being grown in our maritime Puget Sound region, and it may just be time for you to try some at your home.

The first recorded planting in our area was by American Civil War veteran Lambert Evans on Stretch Island in southern Puget Sound in 1870. As of 1995 Puget Sound was designated an American Viticultural Area (AVA) by Gerard Bentryn of Bainbridge Island, a pioneer in the development of Puget Sound-friendly grapes. This area extends from the Canadian border to just south of Olympia.

Washington State University (WSU) has been a leader in Pacific Northwest viticulture. From 2000-2009, Gary Moulton, retired extension fruit specialist with WSU's Northwestern Washington Research and Extension Center (NWREC) in Mount Vernon conducted research testing variety and root stock trials. Carol Miles, PhD, Associate Professor of Vegetable Horticulture at WSU, conducted research on organic grape vineyards from 2008-2011.

How can grapes grow in our rainy climate? Although most areas in our region average somewhere between 20"–50" of rain, (Seattle averaging 38"), there is generally less rain during the growing season here than in most European grape-growing regions such as Northern Germany, Champagne and Northern Burgundy.

With our long days, little haze or cloud cover, clean air and nice breezes to keep mildew at bay, we have a lovely place to grow grapes. Our challenge is that the annual heat units here are less than many wine growing regions, ranging from 1400 to 2400 grow degreedays, so choosing the best varietals is important for the development of optimal ripeness, flavor and acidity in the vines.

Popular table grape varieties include Canadice, Swenson Red, New York Muscat, Interlaken, Himrod, Reliance, Lynden, Mars, Jupiter, Venus and Saturn, among others.

Wine grapes currently being grown in the Puget Sound region include whites such as Chardonnay, Chasselas, Gewurztraminer, Madeleine Angevine, Madeleine Sylvaner, Müller-Thurgau, Pinot Gris and Siegerrebe.



Gary Moulton, a retired WSU fruit specialist, stands beside a garden shed totally covered by a single grapevine that will reward him with 100 or more pounds of Interlaken grapes this season. *Photo by Christine Farrow / WSU Skagit County Master Gardeners*.

Among the reds being grown here are Leon Millot, Marechal Foch, Pinot Noir and Regent. Most vines are grown on rootstock as opposed to the own-rooted vines of Eastern Washington. Rootstock helps improve cluster size. Choosing variety and rootstock combinations which work best in our cool climate conditions has been an important part of research done in the last decade.

Raising the sugar content - or Brix - in grape varieties, especially for wine, has been another research focus. By thinning grape clusters, researchers found a good way to improve Brix numbers in some varieties. Combining geography, geology and climate of the place (heat, rain, sunshine, elevation, slope, aspect, soil), with the plant's genetics creates a unique flavor and characteristic of the fruit of an area. This is called "terroir," from the French "terre," or land.

When growing either table or wine grapes, a sunny spot with warmth and air circulation is a must. South, southwest or westerly facing slopes are generally best. Grapes are trained on wires or trellises (different systems for table and wine grapes) and generally planted in north/south facing rows. Spacing between rows should be about nine feet. Individual plants should be placed 7- 8 feet apart. Grass is devigorating to vines, so removal is beneficial for enhanced heat retention.



Left: As **Canadice** ripens in late summer, the clusters change from bright green to a soft pink. For the best flavor, wait until early October to pick them. **Center: Grapes** provide summer shade and autumn color for a home landscape and are a delicious and healthy fruit to eat fresh from the vine or preserve as juice, jelly or jam. **Right: Pinot Noir Presoce** ripens a little earlier than other wine grapes, making it a good choice for our maritime climate. *Photos by Christine Farrow / WSU Skagit County Master Gardeners*.

Grapes prefer well-drained, sandy or gravelly soils for heat retention. Well-established plants can't be transplanted, so it is important to choose your site well and prepare the soil thoroughly before planting. To maximize soil heat, avoid areas prone to early spring frost.

Plant grafted grapes to promote early ripening and better resistance to root diseases. Apply organic matter to soil in the spring or fall before you plant your vines. Compost should be worked into the entire area, not just each hole. Organic mulches cool the soil, so avoid using them. Dark colored poly mulches or dark gravel mulches warm soil and keep weeds down. The planting depth should be the same as it is in the nursery pot.

It will take 2-3 years before your first harvestable crop and 5-6 years for grapes to reach full production maturity. Plants have been known to live for 50-100 years if properly cared for, so bring both your patience and your longevity to this project.

Use only fertilizers with very low nitrogen after the first year, because grapes can grow aggressively and deprive the soil of nutrients. Annual applications of lime and sulfurpotassium-magnesium with micronutrients are beneficial.

Irrigation is especially important in the first year. Pruning and training canes is dependent on the training system you choose. More tips on planting, staking and pruning will be discussed at Gary Moulton's talk at the Master Gardener Know and Grow, October 15th.

Birds love grapes, so you might want to net the plants. Grapes ripen all at the same time, but color varies with each cultivar. Learn what to look for with each variety at maturity.

Watch for color change in the stem that supports the cluster as it will change from green to brown. The seeds also darken as the berry matures.

The best way to judge ripeness in table grapes is a taste test, picking a grape from the tip of the cluster as they are the last to ripen. When growing wine grapes, use a refractometer to measure sugar content (known as Brix) to determine when to harvest them.

Watch the weather around harvest time. Rain can cause cracking or splitting and increase fruit rot. The best quality is obtained when berries are harvested following two to three days of no rain. Use pruning shears to harvest clusters. Don't leave ripe grapes on the vine as they deteriorate quickly. Store in the refrigerator in vented plastic bags.

There is much more information to learn before you can become an expert. The Washington State University Extension publications are a good resource and, by all means, come to Gary Moulton's class to learn more and begin your grape gardening adventure.



Interlaken is one of the best green seedless grape varieties for growing in Skagit County. When fully ripe, the grape has a sweet tangy flavor, similar to a Concord. Photo by Christine Farrow / WSU Skagit County Master Gardeners



Know and Grow Workshop: Table and Wine Grapes

What: WSU fruit specialist Gary Moulton will discuss proven methods for

growing the best wine and table grapes in the Puget Sound climate in this

WSU Know & Grow workshop.

When: 1 - 2:30 PM, Tuesday, October 15^{th}

Where: WSU Northwestern Research & Extension Center, Sakuma Auditorium,

16650 Highway 536 (Memorial Highway), Mount Vernon

Cost: Free, drop in

Info: Call 360-428-4270, ext. 0 for more information or go to

http://skagit.wsu.edu/MG

Grape Varieties

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RESOURCES:

- "Grapes for Puget Sound." Melissa Hansen. Good Fruit Grower. June 2011. http://www.goodfruit.com/Good-Fruit-Grower/June-2011/Grapes-for-Puget-Sound/
- "Growing Wine Grapes in the Puget Sound AVA." Focus on Farming 2010. Steve Snyder. Hollywood Hill Vineyards.
 http://www.co.snohomish.wa.us/documents/County_Services/FocusOnFarming/snyder.pdf
- "Successful Wine Grape Growing in Cooler Climates." Cloud Mountain Farm Center. http://www.cloudmountainfarmcenter.org/pdfguides/SuccessfulGrapeGrowinginCoolerClimates.pdf
- "Growing Table Grapes." Bernadine C. Strik. Oregon State University Extension Service. http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/21285/ec1639.pdf
- Grape Research. WSU Extension Service. http://extension.wsu.edu/maritimefruit/Pages/Grapes.aspx
- Pruning Grapes. Seattle Tilth. http://seattletilth.org/learn/resources-1/almanac/february/pruning-grapes
- "Growing Grapes in the Pacific Northwest." Lon Rombough. Home Orchard Society. http://www.homeorchardsociety.org/article/33/
- "Three Great Table Grapes to Grow in the Pacific Northwest." Vern Nelson. Oregon Live. February 25, 2012. http://www.oregonlive.com/hg/index.ssf/2012/02/vern_nelson_three_great_table_1.htm