Growing Healthy Blueberries

by Carole Jacobson

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Prevent diseases, outsmart pests, enjoy delicious berries

You see blossoming blueberry bushes, but I see pies, cobbles, muffins, sauces, jam!

The highbush blueberry, like azaleas and rhododendrons, come from the same plant family, Ericaceae. Blueberries enjoy our moderate northwestern temperatures and 140-day growing season. It is important to know your soil pH, since an acidic soil (pH 4.0-5.0) is the most important condition for blueberry growth. Many pH testing kits and professional services can be purchased locally.

Best Planting Practices

To achieve maximum fruit production, plant blueberries in full sunshine. Avoid planting in a known cold area of your garden so spring blossoms are free from potential frost. If your garden beds include heavy, compacted soils, add organic matter by digging in aged manure or compost. Wood-chip mulch will help retain soil moisture and limit weeds.

You can enjoy larger fruit by planting at least two different cultivars. The Highbush blueberry is either self-pollinated or cross-pollinated; but the fruit will be larger if the flowers are pollinated from a different cultivar.

Best Blueberry Varieties for NW Gardens:

Recommended WSU cultivars, or varieties, of blueberry plants:

Earliblue	Spartan	Patriot	Bluejay
Bluecrop	Berkeley	Darrow	Elliott

Blueberry plants should be fertilized depending on their age. Each spring apply recommended amounts of nitrogen fertilizer for ideal plant health and fruit production (see Infobox.) Five to seven year-old bushes can bear four to five pounds of fruit per plant! As the fruit ripens, drape a net over the bushes to block the ravages of hungry birds.

Water Wisely to Prevent Disease

Ripening blueberries require 1.5 inches of water during our summer dry season. Watering the fruit and foliage can lead to a higher incidence of disease. Drip irrigation is an excellent way to direct water to the plant roots, while conserving water and reducing utility bills.

Be aware of the diseases and insects that may affect berries you've planned on for pies. If the berry becomes white, shriveled hard and inedible, it has Mummyberry, a fungal disease. Investigate the purchase of Mummyberry resistant cultivars such as: Bluecrop, Bluejay, Elliott, and Spartan. Un-raked berries and a very wet spring are optimal conditions for this disease, so pick up dropped fruit long before the flower buds swell.

The gray fungal spores of Botrytis blossom blight are another byproduct of long wet springs. Avoid Botrytis by pruning in spring so the bush has a combination of old and new canes, no deadwood, and plenty of air circulating between branches.

Blueberry blossoms beckon the bees in mid-May on bushes at the WSU Mount Vernon Northwestern Research & Extension Center. Remove any aphids with a water spray or soapy water solution before their honeydew grows mold. **Photo by Scott Terrell/Skagit Valley Herald**

Blueberry shock virus sounds worse than it is. Although the infection occurs during springtime bloom, no symptoms are seen until the following year when there is severe flower and leaf drop. New leaves will grow, but no more flowers that year. The plant usually recovers and produces as well as ever. So don't panic, just wait patiently.

Aphids leave a sticky honeydew on the fruit and leaves. Aphids can be rinsed away using plain water or several drops of dishwashing liquid per gallon of water. Lecanium scale stunts the bushes and leaves them covered in honeydew and mold. Just prune out the highly infested stems. To avoid spreading the disease, don't compost these trimmings. If you have yard waste pickup service, toss these infested branches in the bin and let the commercial-scale composting system take care of them.

Spotted Wing Drosophila – A New Threat to NW Fruit

A new threat, not only to blueberries, but to all NW soft fruit, is the Spotted Wing Drosophila, (SWD.) This is an exotic vinegar or fruit fly. The female SWD lays her eggs into ripe soft fruit for the larva to consume.

Gardeners look for SWDs by placing traps near the fruit (see InfoBox.) To find out if your fruit is infested with SWDs, place fruit in a plastic zip-bag, and crush lightly. Add sugar-water (1 quart water to 1/4 cup sugar). SWD larva will separate from the fruit pulp and float to the top. Allow time for the pulp to settle, then check for larva with a hand lens. To limit spread of SWD, pick all infested fruit and dispose in the garbage. Do not compost or add to yard waste bins.

If you do find evidence of SWD in your fruit, contact Don McMoran, Agriculture & Natural Resources Educator at WSU Skagit County Extension. He can be reached at 428-4270 ext. 225 or donaldm@co.skagit.wa.us. McMoran is working with Dr. Lynell Tanigoshi, of the WSU Mount Vernon Northwestern Washington Research & Extension Center, to manage SWD in commercial, organic and home garden settings. SWD could do great damage to Skagit County's

commercial berry crops, as well as home gardens. Last year the pest was found in nine Washington State counties! Trapping and reporting any SWDs you find is important – please do your part.

With all the extra diligence needed this year, you can still anticipate and enjoy every bite of blueberry dessert.

Easy-to-Make SWD Traps

To trap adult flies, place traps near your blueberry bushes. Just take:

- Heavy plastic 16 oz. or 32 oz. cups with lids.
- Drill six 3/8 - 3/16-inch holes in the sides.
- Add 1-2 inches of apple cider vinegar.
- Place a piece of yellow sticky flypaper on underside of lid.
- Replace vinegar and sticky paper weekly.

Blueberry bushes have shallow root systems, which means they need frequent watering. The container in the foreground is an easy-to-make fly trap intended to capture the spotted-wing Drosophila fruit fly, which may invade Skagit Valley fruit crops this year. The WSU agriculture service encourages home fruit growers to put out fly traps and check them weekly this summer. **Photo by Scott Terrell/Skagit Valley Herald.**

Resources:

- Photographs of SWD at all stages of its lifecycle: http://swd.hort.oregonstate.edu/.
- Blueberries: Organic Production, National Sustainable Agriculture Information Service/USDA: www.attra.org/attra-pub/blueberry.html
- Growing Small Fruits for the Home Garden, WSU: http://cru.cahe.wsu.edu/CEPublications/eb1640/eb1640.html#blueberries
- Plant Disease Control for Blueberries, OSU Extension: http://plant-disease.ippc.orst.edu/plant_searchResults.cfm?search_str=blueberry&host_alpha=Select&host_text=blueberry&submit=++Go!++