Slug: Ask the Master Gardener

Date: August 24, 2007

Contact: WSU/Skagit County Extension: 428-4270

Berry-Growing Best Practices

By Jason Miller

HEAD:

How to grow great berries

DEK:

Cultivar choice, vigilance are keys to success

BODY:

Almost without exception, berries love western Washington—sometimes a little too much. In the novel *Still Life with Woodpecker*, author Tom Robbins poked fun at our wild blackberries, imagining them marching on the home of a deposed royal family, an ever-advancing army of thorny green vines.

Fortunately for us, there are many varieties of cultivated berries that are far more docile, not to mention delicious—and most of them can be grown successfully here in Skagit County if a few simple guidelines are observed. Here are some quick tips to help your berries be all they can be.

Raspberries

Cultivars: Red raspberries (*Rubus idaeus*) thrive in the relatively cool climates of the Pacific Northwest. Two types are available: June-bearing types and fall-fruiting types. Winning June-bearing cultivars include Willamette, Meeker, Sumner and Chilliwack. Fall-fruiting raspberries include Autumn Bliss, Summit, Fall Gold (a yellow variety) and Heritage.

Planting and growing: Raspberries prefer well-drained, sandy loam soil at least 24 inches deep. Choose a site that gets full sun all day long. The ideal pH for raspberries is between 6.0 and 6.5; amend as necessary to raise or lower your soil's pH. Plant virus-free, certified nursery stock 30 inches apart, in rows spaced 8 to 10 feet apart. Install a post-and-wire trellis support; gently tie the canes to the wires as necessary.

Challenges: The worst disease problem to beset your raspberries will likely be a fungal disorder known as Phytophthora root rot. This nasty pathogen shows up when the soil is imperfectly drained or exhibits a high water table. Symptoms include wilting of first-year canes in the spring, and yellowing, drying and premature death of fruiting canes during harvest. The solution? Relocate the plantings to better soil, consider planting in raised beds, or select a cultivar that has greater genetic resistance to this pathogen.

Blackberries

Cultivars: Erect types include Arapaho, Kiowa, and Navaho; stiff canes stand erect and produce fruit that tends to be large, dark black, firm and very sweet. Semi-erect varieties include some thornless varieties, such as Chester Thornless, Hull Thornless, Smoothstem and Triple Treat. Trailing types (Rubus ursinus) are usually hybrids of

raspberries and wild blackberries, tend to be very vigorous and pack a taste to die for. Common cultivars include Loganberry, Boysenberry, Marionberry, Tayberry and Siskiyou. Trailing Evergreen (*Rubus laciniatus*), a non-native variety that came from Europe, may be invasive in wild areas.

Planting and growing: Choose a spot with full sun and avoid areas with standing water during winter. Plant in rows 8 to 10 feet apart, spacing individual plants according to cultivar. For example, space Boysenberries 4 feet apart within the row; space Marionberries 5 to 6 feet apart. Get a soil test and fertilize as directed by the test results. Trellis trailing varieties using end posts, "intermediary" boards (such as 2x4s) screwed to the end posts, and two 12-gauge wires set 18 inches apart, in either horizontal or vertical form. The first wire should be 3.5 feet above ground; the second at 5 feet.

Challenges: Leaf and cane spot are the most common diseases on trailing blackberries. Leaf spots vary from light to dark brown, then take on whitish centers with brown to red borders. Irregular, elongated purple blotches on canes can develop into cankers and girdle the canes. Promptly remove spent canes that have fruited, train first-year canes in August, and apply fungicide in the spring and fall.

Blueberries

Cultivars: Highbush blueberries (*Vaccinium corymbosum*) are ideal fruit-producing and ornamental specimen plants for Pacific Northwest gardens. Try Earliblue for swiftly maturing fruit that's great for desserts. Spartan is a very large variety that prefers well-drained soil. Patriot is a high-yielding type with good winter hardiness. Darrow is a late-maturing variety with the largest berries and a zingy flavor.

Planting and growing: An acid soil with a pH of 4.0 to 5.0 is the most important condition for growing blueberries successfully. If your soil test indicates a pH higher than this, use garden sulfur, dusting sulfur or flowers of sulfur to lower the pH. Mulching with peat moss will lower your soil's pH by one point. Heavily compacted soils benefit from the addition of rotted manure, compost, sawdust or peat moss. Grow your blueberries in full sun for optimum fruit production and quality, although they will perform adequately in a location that receives partial sun (yield will be less).

Challenges: Robins, starlings and finches can strip ripening blueberry plants totally clean of fruit if plants are left unprotected. Drape plastic bird netting over the bushes as the berries begin to turn blue. Cherry fruitworm larvae can be controlled by applying insecticides at blossom drop, then again two weeks later. To keep lecanium scale in check, prune out stems encrusted with scale populations and apply dormant oil spray when the temperature is above freezing. Mummyberry is a fungal disease that leaves affected fruit hard, white and inedible. Control it by raking the soil or mulch layer beneath the plants as leaf buds swell in early March; this interrupts the fungus' life cycle. Spraying a fungicide on the developing blossoms also can help to stop the progress of this disease.

Strawberries

Cultivars: Strawberries (Fragaria ananassa) adapt better to Washington climates than any other small fruit crop. Good choices for June-bearing cultivars include Hood, Benton, Shuksan and Rainier. Day-neutral varieties (a.k.a. "everbearing") include Tillikum, Selva and Tristar.

Planting and growing: Strawberries share the same soil requirements as raspberries: well-drained soil that receives full sun all day long. Choose certified, virus-free planting stock and plant so that the crown (the swollen growing region from which leaves and roots sprout) is at soil level. Plant June-bearing varieties in rows; plant day-neutral cultivars in hills. Keep the plants well weeded.

Challenges: Infection of home garden strawberries by virus diseases is the most important factor limiting plant life span. The most common control measure is to dig out infested plants and replace them with certified nursery stock. Root rot can be a problem in poorly drained soil. Verticillium wilt is another concern. As for insects, keep an eye out for root weevils, aphids and spider mites: Control with a liquid insecticide. And of course, slugs. Smash the adults and set out insecticidal baits between the plants.

FOR MORE INFORMATION:

See WSU Extension Bulletin EB1640 *Growing Small Fruits in the Home Garden*. This and other bulletins can be purchased or previewed at: http://pubs.wsu.edu/

SIDEBAR 1:

Sidebar 1 head:

Growing berries in western Washington

Sidebar 1 body:

WHAT: "Growing Berries in Western Washington" — a free WSU Know & Grow

workshop, with in-depth info on how to get the most out of your berry crop, presented by WSU/Skagit County Extension Master Gardeners, in partnership with the WSU/Northwestern Washington Research and

Extension Center

WHEN: 1:00 to 2:30 p.m. Tuesday, August 21

WHERE: WSU-NWREC Auditorium and WSU Discovery Garden, 16650 State

Route 536, Mount Vernon

SPEAKERS: WSU Whatcom County Extension Integrated Pest Management

Coordinator Colleen Burrows and WSU Skagit County Extension Master

Gardener Peggy Van Allen

Got a great topic that you'd like to see addressed at a future WSU Know & Grow workshop? Contact Ellen Cooley, WSU Master Gardener program coordinator, at ellenc@co.skagit.wa.us or (360) 428-4270.

SIDEBAR 2:

Sidebar 2 head:

Think outside the crops

Sidebar 2 body:

Several less-common berry varieties perform well in the Pacific Northwest. If your palette is up for a little adventure, try these tasty options.

Lingonberries (*Vaccinium vitis-idea*) is a low-growing, evergreen groundcover that produces bright red, tart berries that mature in August and September. The berries are favored for use in preserves and syrups; use them as substitutes for true cranberries.

Currants (*Ribes sativum*) and **gooseberries** (*Ribes grossularia*) are shrubby bushes bearing abundant berries that are yummy when processed, and aren't as fussy about their soil pH as blueberries.

American elderberries (*Sambucus canadensis*) grow 6 to 16 feet tall and produce an abundance of purplish black berries.

Juneberries (*Amelanchier alnifolia*), a.k.a. serviceberry, saskatoon and shadbush, look like dark purple blueberries. Harvest them early for great preserves.

Highbush cranberries (*Viburnum trilobum*), also called the American cranberry bush, produce tasty scarlet fruit that can be used as a substitute in cranberry sauce if you strain out the large seeds first.

Evergreen huckleberries (*Vaccinium ovatum*) produces blackish berries that are particularly good as preserves.



PHOTO CAPTION (Filename: Berries01_photo by Jason Miller):

A commercial favorite, Tulameen raspberries perform equally well in backyard gardens. Photo courtesy Jason Miller.



PHOTO CAPTION (Filename: Berries02_photo by Jason Miller):

A blackberry/raspberry cross, Marionberries are jet black when ripe and a favorite for jams and pies. Photo courtesy Jason Miller.



$PHOTO\ CAPTION\ (Filename:\ Berries 03_photo\ by\ Jason\ Miller):$

A blackberry/raspberry cross, Tayberries' succulent flavor is worth braving its thorny, trailing vines. Photo courtesy Jason Miller.



PHOTO CAPTION (Filename: Berries04_photo by Jason Miller):

This gardener trellises his raspberries and blackberry/raspberry varieties with 12-gauge wire strung between 4x4 posts. Horizontal 4x4s prevent the vertical posts from bowing inward from the tension of the wires, and are turned to shed rain. Photo courtesy Jason Miller.



GREAT TEASER PHOTO OPTION (well, I think so!):

Filename: Berries05_photo by Jason Miller)

Image description: Three large strawberries in hand.

[No caption provided; contact Jason Miller if one is desired; strawberry variety shown is 'Maxim']

Primary references:

- WSU Extension bulletin: "Growing Small Fruits for the Home Garden," EB1640
- WSU Extension bulletin: "Blackberries in Western Washington," by Jim Kropf

Secondary references:

- "Blueberries: Planting and Care Made Simple" handout, Windmill Gardens, 5816 162nd Ave. East, Sumner, WA 98390, www.windmillgarden.com
- "Blackberries" handout, Windmill Gardens, 5816 162nd Ave. East, Sumner, WA 98390, www.windmillgarden.com

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This column is written by Washington State University/Skagit County certified Master Gardeners. Questions may be submitted to WSU/Skagit County Extension, 306 S. First Street, Mount Vernon, WA 98273-3805.