Small Fruit Update

Providing Northwest berry growers with the information they need when they need it. The Small Fruit Update is sent out weekly during the growing season by Peerbolt Crop Management and is funded entirely by the Northwest berry growers and industry through their commissions and councils.

Variety Development Update for PNW Commercial Raspberry, Blackberry & Strawberry Growers

January 2, 2014

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Disseminating information for:

Washington
- Washington Red Raspberry Commission
- Washington Blueberry Commission
- Washington Strawberry Commission

Oregon
- Oregon Raspberry and Blackberry Commission
- Oregon Blueberry Commission
- Oregon Strawberry Commission

British Columbia
- Fraser Valley Strawberry Growers Association
- Raspberry Industry Development Council
- B.C. Blueberry Council

National
- North American Blueberry Council

Left to right: Cascade Harvest red raspberry, Columbia Star blackberry, Sweet Bliss strawberry, ORUS 3409-1 black raspberry

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Left to right: Cascade Harvest red raspberry, Columbia Star blackberry, Sweet Bliss strawberry, ORUS 3409-1 black raspberry
Introduction
The main purpose for this Variety Development Update is to make PNW commercial berry growers more aware of the opportunities they have to evaluate on their own farms, recently released varieties and advanced breeding program selections, that could be released in the near future. The genetics of whatever plants you’ve got in the ground are a primary factor in determining your capacity to grow and thrive as a profitable business, with expanding markets and environmentally acceptable growing practices. And, thanks to our three PNW public/industry supported variety development breeding programs, as well as expanding private variety development programs, your options are expanding.

On farm trials
- Any grower can set up test plots on their own farm of most of the material listed below. Most trials at this point come with a little paperwork stating that advanced selections tested will not be used for commercial purposes. Contact one of the wholesale nurseries for details.
- The raspberry and blackberry commissions in Oregon and Washington, as well as the Northwest Center for Small Fruits Research, are funding a pilot project setting up a network of industry supported regional on-farm grower trials for evaluating the most promising raspberry and blackberry advanced selections with information collected and shared with all of us.
- My company, Peerbolt Crop Management, is coordinating these industry sponsored trials. If you’re interested in participating or just want more information, get a hold of our office at 503-289-7287 or email at: info@peerbolt.com.

Related Resources
- Blueberries: I’d like to do something similar to this for blueberries. Given that we rely primarily on private and outside-of-the-PNW breeding programs for blueberries, information available varies from that available on raspberries, blackberries and strawberries. Plus, I just ran out of time. Maybe it can be done later if there’s interest. I did include blueberries in the Resources Section.
- If you’re looking for general listings of varieties presently available (including blueberries), go to the ‘General Cultivar Information’ in the Resource section.
- If you’re looking for Wholesale Nursery plant sources, go to the ‘Wholesale Nurseries’ in the Resource section.
- If you’ve got questions on the PNW variety development breeding programs, go to the ‘PNW Public Breeding Programs’ in the Resource section.
- If you’ve got questions about intellectual property and plant patenting, go to the ‘Plant Patenting’ in the Resource section. However you could also speak to folks at the wholesale nurseries and the breeding programs for more details on patent details.

Credits and CYA statements
- First: A big thanks to our public plant breeders Chad Finn, Pat Moore & Michael Dossett and to their very capable, dedicated staffs for all the work they put in. Their programs are a cornerstone resource for our industry.
- Most of the information below comes from these folks--our public program plant breeders and their staffs. Some additional comments reflect my own judgment and/or comments from growers.
- This is all based on ‘best available knowledge’. Most information is drawn from limited, fairly small research trials. That’s why they all need more evaluation.
- All descriptions are subject to modification, outright contradiction and/or validation based on commercial grower experience under a variety of conditions. Again, that’s why they all need more evaluation by growers.
- Keep these above precautions in mind when investing your own time and resources in plantings. Your investments are for the research and development of your own future products.
- Any errors are mine. Given the time of year, many of the main people involved haven’t had a chance to proof read it. However, given that it is posted on our website, we can make corrections easily & quickly. Please pass on any comments/corrections ASAP. They will be addressed.

Tom Peerbolt, SFU Editor
On Farm Trials Program

What is it?
- A network of regional on-farm grower trials for evaluating the most promising raspberry and blackberry advanced selections, along with some varieties that haven’t been widely planted and deserve another look.

Why do it?
- To improve the quality and amount of information available on these advanced selections and varieties involved.
- To get good, practical variety information out to all Northwest growers and processors as quickly as possible.

The overall goal: Accelerate the commercialization of our genetic resources.

Funded by
- The Washington Red Raspberry Commission
- The Oregon Raspberry and Blackberry Commission
- The Northwest Center for Small Fruits Research (USDA)

Project Coordinator
- Tom Peerbolt, Peerbolt Crop Management
  503-970-0922 or click here to email

If you’d like more information or are interested in participating:
- Contact Lora Liegel at the Peerbolt Crop Management Office:
  503-289-7287 or click here to email
Processing Raspberries

Berries in photos below all harvested on July 13, 2013 in the Enfield Farms test plantings in Lynden, WA

Cascade Harvest (WSU 1507)  Rudi  Meeker

2012 On Farm Trial Selections
Click here for more information on the onfarm trial project.

Cascade Harvest (WSU 1507)

Why a grower would be interested: Cascade Harvest produces very high quality, good flavored fruit with very good root rot tolerance and RBDV resistance. It has great potential as a main season processing berry but we still need to evaluate it in the larger on farm trials to see how it’ll perform under various conditions, if it yields consistently, and how commercial-sized samples perform going through the IQF tunnels.

- **Patent status:** Patented applied for by WSU in 2013.
- **Availability:** From Pat Moore: “Limited number in 2014 from Northwest Plants and Norcal”. Other suppliers might have it also. Check around as always--The earlier the better.
- **Harvest timing:** Starts 2-5 days before and finishes about 1-4 days before Meeker.
- **Expected market niche:** Processing but might work for fresh market.
- **Machine Harvestable:** In numerous test plantings it has demonstrated excellent machine harvestability.
- **Fresh market prospects:** Large fruit, ability to hand harvest at an early stage and excellent fresh flavor may lend it to fresh market uses.
- **Fruit potential for IQF processing:** Looks like it’ll be very good for IQF fruit. Fruit integrity after passing through IQF tunnels needs more evaluation.
- **Yields:** Look good but we need more experience in the larger trials.
- **Flavor:** Soluble solids are similar to Meeker. Acids are similar or less than Meeker. Very pleasant sweet flavor.
- **Fruit Quality (size, appearance, flavor, etc.):** Attractive conical fruit with good firmness. Larger than Meeker. Color is somewhat lighter than Meeker.
- **Pest & disease issues:** Root rot resistant and RBDV resistant.
- **Comparison to standard (Meeker):** Much better fruit quality and disease resistance. Yields and processing characteristics need to be evaluated further. Lighter color could be a concern for some uses.

Rudi

Why a grower would be interested: Early & concentrated harvest. Machine harvests well with heavy picks. Could fit a niche for an early crop that would end about a week before Meeker.

- **Patent status:** Patented. Click here for details.
- **Availability:** It’s been out for a few years and planted commercially. Most sources should have it.
- **Machine Harvestable:** Has a good track record with many growers. Machine harvests very well.
- **Harvest timing:** Very early. A few days before Willamette & a week before Meeker. Concentrated harvest.
- **Fruit potential for IQF processing**: Very good IQF fruit quality.
- **Yields**: Very good.
- **Fruit Quality (size, appearance, flavor, etc.)**: Good color. Berry size about the same as Meeker. Was on the small size in some of the trials.
- **Pest & disease issues**: Root rot susceptibility seems variable. Has performed well on some sites but doesn’t hold up to high pressure. At this point, not a good risk on heavier soils. It is susceptible to RBDV.
- **Comparison to standard (Meeker)**: Looks comparable in yields and maybe fruit quality although that still needs some testing. The early and concentrated harvest is what sets it apart.

**WSU 1912**

*Why a grower would be interested*: Has some very good processing fruit characteristics: Machine harvestable, good root rot tolerance, attractive fruit with good flavor.
- **Availability status**: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Harvest timing**: Starts a little earlier than Meeker.
- **Machine Harvestable**: In numerous test plantings it has demonstrated excellent machine harvestability.
- **Fruit potential for IQF processing**: Very promising for IQF fruit quality.
- **Yields**: Very good.
- **Fruit Quality (size, appearance, flavor, etc.)**: Good color and firmness. Looked a little smaller than Meeker in some initial on farm trials.
- **Pest & disease issues**: Good root rot tolerance.
- **Comparison to standard (Meeker)**: Too early to say.

**WSU 1948**

*Why a grower would be interested*: Has some very good processing fruit characteristics: Machine harvestable, good root rot tolerance, attractive fruit with good flavor. Good fruit size and yields.
- **Availability status**: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Harvest timing**: Same as Meeker.
- **Machine Harvestable**: In numerous test plantings it has demonstrated excellent machine harvestability.
- **Fruit potential for IQF processing**: Very promising for IQF fruit quality.
- **Yields**: Very good.
- **Fruit Quality (size, appearance, flavor, etc.)**: Fruit looks very good. Attractive, good color and firmness
- **Pest & disease issues**: Good root rot tolerance.
- **Comparison to standard (Meeker)**: Too early to say.

**2013 On Farm Trial Selections**

![Lewis](image1.png)  ![Squamish](image2.png)
Lewis

**Why a grower would be interested:** Originally released in 1998, it never got a real good look from the Northwest industry. It’s one of the parents of Wakefield, a very successful proprietary variety. Seems like it deserves another look in field trials.

- **Patent status:** Not Patented.
- **Availability status:** Check with the nurseries. Probably limited supplies right now since it’s been out of the market for a few years & the nurseries have not had demand for it.
- **Harvest timing:** Starts a week after Meeker.
- **Expected market niche:** Has potential for processing market but also has fruit quality to work for fresh. One grower compared it to Coho fruit quality and harvest timing but with better root rot tolerance (*on his site*).
- **Fruit potential for IQF processing:** Looks to be very good.
- **Yields:** Look to be excellent.
- **Fruit Quality (size, appearance, flavor, etc.):** ‘Outstanding’ (Chad Finn).
- **Pest & disease issues:** Root rot tolerance not known but reported to be decent.
- **Comparison to standard (Meeker):** Fruit size and firmness should be better than Meeker. Color is lighter. Will know a lot more in a couple of years when trials mature.

Squamish (BC 92-9-15)

**Why a grower would be interested:** Just released from the B.C. program. Primarily being discussed as a replacement for Malahat. It ripens a few days later than Malahat but earlier than just about everything else. It machine harvests well and needs to be evaluated in commercial settings for potential processing uses as well as fresh market.

- **Patent status:** Patent pending.
- **Availability status:** Quite a few acres are going into the ground in B.C. already. Check with the nurseries. While there’s some growing demand the nurseries are most likely having difficulty knowing how much they should be propagating for this year.
- **Harvest timing:** Early. Just a few days later than Malahat.
- **Expected market niche:** Early fresh market but might work for processed.
- **Fruit potential for IQF processing:** It has potential but needs to be evaluated over the next few seasons.
- **Yields:** Expected to be excellent.
- **Fruit Quality (size, appearance, flavor, etc.):** Excellent size and flavor.
- **Pest & disease issues:** Not known to be root rot tolerant but looks to be better than Malahat.
- **Comparison to standard:** Comparing it to Malahat it looks to be superior so far for fresh production. Not enough information to compare it to any processing variety standards.

2014 On Farm Trial Selections

These four selections are at an early stage in our onfarm trial project—they’ll be planted this coming spring. However they are available for any grower to trial on their own.

**WSU 1980**

**Why it’s in the 2014 trials:**

- **Strengths:** Machine harvests well, firm fruit, potential for IQF and fresh market.
- **Unknowns/concerns:** Little information on disease resistance yet. Light color could limit some uses

- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Expected market niche:** Possible IQF processing raspberry. Also possible for fresh market.
- **Harvest timing:** Later than Meeker both starting and ending.
- **Yields:** Could be comparable to Meeker.
- **Fruit color:** Lighter than Meeker.
- **Fruit flavor:** Soluble solids and acidity similar to Meeker
WSU 2122

Why it’s in the 2014 trials:

- **Strengths:** Potential high yield, machine harvests easily, good processing color, firm fruit
- **Unknowns/concerns:** Long season, late season, similar to Wakefield, little information on disease resistance
  - **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
  - **Expected market niche:** Processing raspberry, potential for IQF.
  - **Harvest timing:** Later than Meeker both starting and ending. Similar to Wakefield.
  - **Yields:** Only a subjective rating – possibly higher than Meeker.
  - **Fruit color:** Darker than Meeker, lighter than Willamette.
  - **Fruit flavor:** Soluble solids and acidity similar to Meeker.
Processing Blackberries

Berries in photos below all harvested on June 28, 2013 in the OSU test plantings in Aurora, OR

2013 On Farm Trial Selections
Click here for more information on the onfarm trial project.

Columbia Star (ORUS 3447-1)
Why a grower would be interested: It’s got amazing potential as a main stream IQF blackberry. Only observable concern is the lack of commercial sized plantings and commercial experience. Need to get it field tested ASAP.
- Availability status: Available for 2014. Check with the nurseries. While there’s demand the nurseries are most likely having difficulty knowing how much they should be propagating for this year. The sooner you let them know the better.
- Thornless.
- Harvest timing: A few days later than Marion.
- Fruit potential for IQF processing: Machine harvests very well. Excellent IQF potential.
- Yields: Better than Marion.
- Fruit Quality (size, appearance, flavor, etc.): Excellent. Larger than Marion. Flavor profile is very similar to Marion.
- Pest & disease issues: Doesn’t show any major issues yet.
- Comparison to Marion: Thornless with great potential to have larger, excellent quality fruit.
- Overall rating of commercial potential: Excellent.

Newberry
Why a grower would be interested: Newberry is being sold in California as ‘Ruby Boysen’. Wholesalers have found it firm enough and attractive enough to fit this market. A quote from one is, “Different than others so it sells.” Very vigorous.
- Patent status: Not patented.
- Availability status: Available for 2014. Check with the nurseries. The sooner you let them know the better.
- Click here for HortScience article with detailed information.
- Thorny.
- Harvest timing: Marion timing.
- Fruit potential market: Fresh or machine harvest for processing uses.
- Yields: Very high yielding.
- Fruit Quality (size, appearance, flavor, etc.): Large fruit with Boysen color and look but flavor is not the same as Boysen.
ORUS 2707-1

Why a grower would be interested: If we didn’t have ‘Columbia Star’ to be evaluating, this selection would be getting a lot more interest. It’s got a lot of potential as a main season commercial blackberry.

- Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- Thornless.
- Harvest timing: Marion timing.
- Fruit potential for IQF processing: Appears to machine harvests well.
- Yields: Better than Marion.
- Fruit Quality (size, appearance, flavor, etc.): Excellent flavor profile with IQF quality fruit.
- Pest & disease issues: Doesn’t show any major issues yet.
- Comparison to Marion: Thornless with great potential to have larger, excellent quality fruit.
- Concerns: Looks like it can sunburn and soften in heat; Shows tendency to ‘purple’ like Marion; like Marion is susceptible to RBDV.

2014 On Farm Trial Selections

ORUS 2635-1

Why a grower would be interested: This is a trailing blackberry that has a very erect growing habit. It has the potential to provide a variety that could be trained more economically. It machine harvests but it’s thorniness could make it more acceptable for the fresh market.

- Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- Thorny
- Harvest timing: About the same as Marion
- Yields: Excellent. About 50% higher than Marion.
- Fruit Quality (size, appearance, flavor, etc.): Nice flavor. Size is larger than Marion.

ORUS 3172-1

Why a grower would be interested: This thornless selection ripens two weeks later than Marion and has comparable fruit quality and yields. Identified in a grower trial as a selection of interest, it has the potential to offer a season extension option for growers.

- Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- Thornless
- Harvest timing: Two weeks later than Marion.
- Fruit potential for IQF processing: Looks good so far.
- Yields: Comparable to Marion.
- Fruit Quality (size, appearance, flavor, etc.): Very high quality fruit about the same size as Marion.

ORUS 4024-3 (Tayberry type likely to be named & patented)

Why a grower would be interested: Distinctive glossy, maroonish red colored fruit that Tayberry has. Great potential as a fresh market berry but it also looks like it’d machine harvest and could probably be processed for jam or maybe wine(?).

- Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- Thorny
- Harvest timing: Marion timing.
- Fruit potential for IQF processing: Appears to machine harvests well.
- Yields: Similar to Marion.
- Fruit Quality (size, appearance, flavor, etc.): Excellent flavor profile. Larger than Marion.
- Pest & disease issues: Doesn’t show any major issues yet.
Vintage

Why a grower would be interested: When compared to the industry standard, Heritage, Vintage has better color, flavor, texture and firmness. Yields are better than or comparable to Heritage.

- Patent Status: Patented; Released in 2011.
- Availability status: Shouldn't be a problem.
- Type: Primocane fruiting.
- Harvest timing: One week later the 'Heritage'.
- Yields: Has ranged in trials from a little higher to a little lower than 'Heritage'.
- Fruit Quality (size, appearance, flavor, etc.): Excellent fruit flavor and quality. Firm, glossy, bright beautiful appearance. 30% bigger than 'Heritage'.
- Pest & disease issues: Phytophthora susceptible.
ORUS 1142-1

*Why a grower would be interested:* The main reason to consider testing ORUS 1142-1 is how early it ripens. Fruit quality is excellent. It is susceptible to root rot.

- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Type:** Floricane fruiting.
- **Harvest timing:** *Very early:* 13 days ahead of Malahat and Meeker. 3 days ahead of Cascade Dawn.
- **Fruit potential for IQF processing:** Appears to machine harvest but included only in fresh market trials because of earliness of harvest.
- **Yields:** Reported to be comparable to Meeker.
- **Fruit Quality (size, appearance, flavor, etc.):** Firm, glossy, bright beautiful fruit; can be picked firm pink with good flavor.
- **Pest & disease issues:** Showed susceptibility to Phytophthora in WSU plantings in Puyallup.
- **Comparison to standards (Marion, Boysen, etc.):** Fruit size and firmness should be better than Meeker.

**Additional--Recently released**

**Cascade Gold (2010 WSU release)**

*Why a grower would be interested:* Very large, firm yellow raspberry with excellent flavor that ripens in late July. It’s a main season fresh market golden raspberry. Releases easily.

- **Patent status:** Not patented.
- **Availability:** From Pat Moore: “Plants available from Norcal and Lassen Canyon”. Other suppliers might have it also. Check around. As always--The earlier the better.
- **Harvest timing:** Starts and ends 7-10 days before Meeker.
- **Fruit Quality (size, appearance, flavor, etc.):** Well balanced flavor. Large and firm fruit.
- **Pest & disease issues:** RBDV resistant. Susceptible to Phytophthora root rot.

**2014 On Farm Trial Selections**

**ORUS 4090-1**

*Why a grower would be interested:* This has fruit that is much nicer than the standard, ‘Heritage’. Berries are larger, brighter and better flavored with similar to better yields.

- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Type:** Primocane fruiting.
- **Harvest timing:** Similar to ‘Heritage’.
- **Yields:** Higher than ‘Heritage’.
- **Fruit Quality (size, appearance, flavor, etc.):** Excellent flavor. Larger than ‘Heritage’.
- **Pest & disease issues:** Unknown.
2013 On Farm Trial Selections

Onyx (Patented; Released in 2010)

Why a grower would be interested: Excellent firm fresh market fruit that has potential to be shipped for wholesale sales.
- Availability status: Shouldn't be a problem.
- Thorny
- Fruit potential: Fresh market. Ships well wholesale.
- Harvest timing: One week after Marion.
- Yields: Similar to Marion.
- Fruit Quality (size, appearance, flavor, etc.): Larger than Marion. Excellent, sweet flavor. Firm.

ORUS 1793-1 (Scheduled to be named & patented)

Why a grower would be interested: Identified by commercial fresh packers from trials as having exceptional fruit that has great flavor and firmness. Potentially can be shipped.
- Northwest Concern: Winter injured by late 2006 freeze to about the same extent as Marion. Might be more commercial in California for that reason.
- Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- Thorny
- Fruit potential: Fresh market.
- Harvest timing: 2-3 days before Marion.
- Yields: Similar to Marion.
- Fruit Quality (size, appearance, flavor, etc.): Larger than Marion. Excellent, sweet flavor. Firm.

NZ 9607R-4

Why a grower would be interested: Major potential advantage of this selection is that comes on late and is comparable in yield and fruit size to Chester Thornless. It’s firm. A concern is flavor…but then it’s competing with Chester which is not the greatest tasting blackberry…
- Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- Harvest timing: Late. A few days after Chester.
- Yields: Comparable to Chester Thornless.
• Fruit Quality (size, appearance, flavor, etc.): Comparable to Chester Thornless.

2014 On Farm Trial Selections

ORUS 1939-4

Why a grower would be interested: Identified by commercial fresh packers from trials as having the fruit qualities for being able to ship and sell long distance wholesale. Held up well in 2006 freeze.

• Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
• Thorny
• Fruit potential: Fresh market. Ships well wholesale.
• Harvest timing: One week after Marion.
• Yields: 20% greater than Marion.
• Fruit Quality (size, appearance, flavor, etc.): Much Larger than Marion. Excellent, sweet flavor. Glossy and firm.

ORUS 3447-2

Why a grower would be interested: This is a sibling of newly released ‘Columbia Star’. It has a lot of the same qualities as ‘Columbia Star’ only the fruit is huge! About 50% larger than ‘Columbia Star’. Might be just a great novelty berry given it’s great size as well as excellent fruit quality.

Other Selections of note available for test planting

ORUS 2711-1

Why a grower would be interested: Late season fresh market with erect growing habit. Firm fruit with very good flavor. Has done well in California trials with low sun burn. Came through 2 degree temperatures in Arkansas.

• Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
• Thornless
• Type: Floricane fruiting that’s 75% Eastern type (erect growing habit) & 25% ‘Triple Crown’.
• Harvest timing: Late July-early August. Ripens 3 weeks after Marion & 1 weeks before ‘Navaho’.
• Yields: Very good.
• Fruit Quality (size, appearance, flavor, etc.): Larger than Chester. Very good fruit flavor and quality. Firm.
ORUS 2816-3

**Why a grower would be interested:** Late season fresh market with erect growing habit & firm fruit.
- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Thornless**
- **Type:** Floricane fruiting that’s 75% Eastern type (erect growing habit) & 25% Western type (trailing growth habit).
- **Harvest timing:** Ripens 4 weeks after Marion & about the same as ‘Navaho’.
- **Yields:** Very good.
- **Fruit Quality (size, appearance, flavor, etc.):** Larger than Chester. Very good fruit flavor and quality. Firm.

ORUS 2816-4

**Why a grower would be interested:** Late season fresh market with erect growing habit & firm fruit.
- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Thornless**
- **Type:** Floricane fruiting that’s 75% Eastern type (erect growing habit) & 25% Western type (trailing growth habit).
- **Harvest timing:** Late July-early August. Ripens 3 weeks after Marion & 1 weeks before ‘Navaho’.
- **Yields:** Very good.
- **Yields:** Very good.
- **Fruit Quality (size, appearance, flavor, etc.):** Larger than Chester. Very good fruit flavor and quality. Firm.

ORUS 3636-1

**Why a grower would be interested:** Very early ripening selection that shows promise as a compliment to Obsidian and Metolius in the early season fresh market blackberry window.
- **Thorny**
- **Harvest timing:** Very early.
- **Yields:** Very good yields.
- **Fruit Quality (size, appearance, flavor, etc.):** Excellent.

Click here to go back to the top of this newsletter.

Black Raspberries (Blackcaps)

2013 On Farm Trial Selections

ORUS 3735-3

**Why a grower would be interested:** These blackcap selections are most likely not yet at the stage of being commercially viable but might be of interest to a grower as a test planting to evaluate the commercial viability of this new genetic material.
- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Type:** Floricane fruiting.
- **Fruit potential:** Probably most potential is as a fresh market berry but will test machine harvestability in 2014.
- **Yields:** Higher than ‘Munger’.
- **Fruit Quality (size, appearance, flavor, etc.):** Looks good, needs evaluation.
- **Pest & disease issues:** Unknown.

2014 On Farm Trial Selections

ORUS 3735-3 See above. Will be included in 2014 trials in larger numbers than in 2013 trials.
ORUS 3409-1
- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Type:** Has both an early floricane & a late primocane crop.
- **Fruit potential:** Probably most potential is as a fresh market berry only from the primocane crop.
- **Yields:** Looks good, needs evaluation.
- **Fruit Quality (size, appearance, flavor, etc.):** Looks good, needs evaluation.
- **Pest & disease issues:** Unknown.

ORUS 3013 & 3217-1
- **Availability status:** Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
- **Fruit potential for IQF processing:** Appears to machine harvest well.
- **Yields:** Yields are much higher than Munger over two years of testing.
- **Fruit Quality (size, appearance, flavor, etc.):** Similar to Munger.

June Bearing Strawberries

Puget Crimson (Released 2010)
- **Why a grower would be interested:** Excellent flavor, large size, high yielding strawberry. Durable plant. Harvest timing is late - about a week later than Totem. Suitable for processing uses but late timing might work against that use. Excellent fresh market berry.
- **Patent status:** Patented by WSU.
- **HortScience Description:** [Click here](#).
- **Availability:** Shouldn't be a problem. Check with suppliers.
- **Harvest timing:** About a week later than Totem. Similar to Puget Summer.
- **Market Niche:** Late season, fresh market strawberry.
- **Yields:** Very good.
- **Fruit Quality (size, appearance, flavor, etc.):** Large size with red to dark red interior. Full, excellent strawberry flavor.

Valley Red
- **Why a grower would be interested:** High yielding with medium sized, uniform fruit with dark red internal and external color. Well adapted for processing uses.
- **Patent status:** Not patented.
- **Availability:** Shouldn't be a problem. Check with suppliers.
- **Harvest timing:** A little earlier to about the same as Totem.
• Market Niche: Processing.
• Yields: Greater than Totem.
• Fruit Quality (size, appearance, flavor, etc.): Fruit size larger than Totem, comparable to Puget Reliance. Caps, dark, very uniform size. Good flavor.

Sweet Bliss

Why a grower would be interested: Released in 2011 from the USDA/OSU breeding program. Sweet Bliss has performed very well in many trials in Oregon, Washington and B.C. It can be used for either fresh or processed production. High yields, medium-large fruit with excellent flavor.
• Patent status: Not patented.
• HortScience Description: Click here.
• Availability: Shouldn’t be a problem. Check with suppliers.
• Harvest timing: About a week earlier than Totem.
• Market Niche: Fresh or processed.
• Yields: Higher than Totem.
• Fruit Quality (size, appearance, flavor, etc.): Large fruit. Very sweet, full strawberry flavor.

Sweet Sunrise

Why a grower would be interested: Very early ripening, vigorous strawberry with excellent quality fruit that can be used for either fresh or processed production. Very large berry size similar to Tillamook in size. 50% greater yields than Totem. Held up well to weevil infestation.
• Availability: Shouldn’t be a problem. Check with suppliers.
• Harvest timing: Very early. Can be 10-14 days earlier than Totem.
• Market Niche: Fresh or processed.
• Yields: Similar to Tillamook. Can be 50% greater than Totem.
• Fruit Quality (size, appearance, flavor, etc.): Full, balanced sweet to acid strawberry flavor.

Charm

Why a grower would be interested: Charm is a potential Hood replacement in commercial ice cream uses with dark internal colored fruit. Excellent plant vigor and yields similar to Tillamook. Fruit size is similar to Totem. Consistent, reliable yields—Charm has been the highest or second highest yielding genotype in every trial it’s been in.
• Availability: Shouldn’t be a problem. Check with suppliers.
• Harvest timing: Same as Totem and Hood.
• Market Niche: Processing.
• Yields: Much higher than Totem. About the same as Tillamook.
• Fruit Quality (size, appearance, flavor, etc.): Totem size fruit with yields much higher.

ORUS 2427-4

Why a grower would be interested: Has been very high performing in B.C. trials with high yields and vigorous plants.
• Patent status: Not yet released.
• Availability status: Available for 2014 grower test trials with signed grower agreement to not propagate or produce fruit in commercial quantities.
• Harvest timing: Same as Totem.
• Market Niche: Fresh or processed.
• Yields: Excellent. Similar to Tillamook.
• Fruit Quality (size, appearance, flavor, etc.): Very large, Tillamook sized fruit.

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Resources

General Cultivar Information

Oregon
- Blackberry Cultivars, OSU Publication (January, 2014)
- Raspberry Cultivars, OSU Publication (February, 2014)
- Blueberry Cultivars, OSU Publication (February, 2014)
- Strawberry Cultivars, OSU Publication (February, 2014)

British Columbia
- Red Raspberry Varieties, BC Berries Production Guide (Updated April, 2012)
- Blackberry Varieties, BC Berries Production Guide (Updated June, 2012)
- Blueberry Varieties, BC Berries Production Guide (Updated April, 2012)
- Strawberry, BC Berries Production Guide (Updated April, 2012)
  - June Bearing Varieties
  - Dayneutral Varieties

Washington
- Red Raspberry Cultivars, Washington Red Raspberry Commission

Wholesale Raspberry, Blackberry & Strawberry Nurseries
Not all of these sources will have cultivars and/or selections identified in this newsletter. Check for availability. Advanced selections not yet named will be available only in limited numbers. The sooner you contact the nursery the more likely you’ll be able to get what you want.

- North American Plants, Inc., McMinnville, OR
  Suppliers of blackberry, raspberry and blueberry tissue culture plants. Along with regular commercial orders for named cultivars, they can supply a limited number of plants of many of the advanced selections mentioned above for on-farm trials on request.

- Northwest Plant Company, Lynden, WA
  Suppliers of raspberry tissue culture and root stock plants and blackberry tissue culture plants. Along with regular commercial orders for named cultivars, they can supply a limited number of plants of many of the advanced selections mentioned above for on-farm trials on request.

- Sakuma Brothers, Mt. Vernon, WA / NORCAL Nursery, Red Bluff, CA
  Suppliers of raspberry tissue culture and root stock plants and blackberry tissue culture plants. Along with regular commercial orders for named cultivars, they can supply a limited number of plants of many of the advanced selections mentioned above for on-farm trials on request.
  NORCAL Nursery also is a major commercial supplier of both June bearing and Day-neutral strawberries.

- Lassen Canyon Nursery, Manteca, CA
  Suppliers of raspberry and blackberry tissue culture and root stock plants. Along with regular commercial orders for named cultivars, they can supply a limited number of plants of many of the advanced selections mentioned below for on-farm trials on request.
  Lassen Canyon Nursery also is a major commercial supplier of both June bearing and Day-neutral strawberries.

Other Nursery Sources of Named Cultivars
- Nourse Farms
Suppliers of all berries. Nourse Farms, based in Massachusetts but also has operations in Washington State. They have a very extensive availability list with many fresh market caneberry cultivars available from small to very large numbers.

- **Spooner Farms**, Puyallup, WA
  Suppliers of wholesale raspberry and strawberry root stock plants.

### Pacific Northwest Public Breeding Programs

**USDA-ARS & OSU Cooperative Breeding Program**
- Dr Chad Finn, USDA Research Geneticist. [Click here](#) for contact information.
- Dr Bernadine Strik, OSU Berry Horticulturist. ([Click here](#)) for contact information
- [Click here](#) for information on the field trials at the OSU Center in Aurora, OR.

**WSU Raspberry & Strawberry Breeding Program**
- Dr Pat Moore, WSU Plant Breeder. [Click here](#) for contact information.

**British Columbia Berry Breeding Program**
- Dr Michael Dossett, Berry Breeder ([Michael.Dossett@AGR.GC.CA](mailto:Michael.Dossett@AGR.GC.CA))

### Pacific Northwest Plant Patent Information

**Oregon: OSU Office of Technology**
- [Click here](#) for a list of berry cultivars patented or in the process.
- OSU IP & Licensing Manager: Berry Treat ([berrytreat@oregonstate.edu](mailto:berrytreat@oregonstate.edu))

**Washington: WSU Technology Licensing**
- Technology licensing Associate: Tom Kelly ([kellytj@wsu.edu](mailto:kellytj@wsu.edu)) 509-335-3691
  - Intellectual Property Specialist: Plant variety releases

**British Columbia: Okanagan Plant Improvement Corporation (PICO)**
- [Click here](#) for berry cultivars patented or in the process.

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### Archived Small Fruit Updates

(For older Updates [click here](#))
- 50-SFU12-10-13  48-SFU11-26-13  46-SFU11-12-13

This document is a guide and not intended as a recommendation or endorsement.
Consult with your supplier, field representative, or pest consultant.