

# HORT UPDATE

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Extension Horticulturist  
Oregon State University

**Inside this issue:**

Pesticide Safety Training	2
Spanish Pesticide Pre-License Training	2
PURS Due January 3	2
Soil Drenching Cherries with Soluble Potassium Silicate	5
Agendas:	
Mid-Columbia Cherry Day & MCAREC Cherry Research Symposium	3
HR Winter Hort Mtg	4
OHS Stone Fruit Section	8



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## Coming Attractions

### January 2009

27	OR Hort Society Stone Fruit Section <i>(agenda enclosed)</i>	Expo Center, Portland
27-29	2008 Northwest Ag Show	Expo Center, Portland

### February

4	Hood River Winter Horticulture Mtg. <i>(agenda enclosed)</i>	Pine Grove Grange, Hood River
5	Mid-Columbia Cherry Day and MCAREC Sweet Cheery Research Symposium <i>(agenda enclosed)</i>	Columbia Cinemas, The Dalles
6-7	Pesticide Pre-License Training in Spanish	Columbia Gorge Community College, The Dalles

### March

5	Pesticide Safety Training English & Spanish <i>(details included)</i>	Pine Grove Grange, Hood River
6	Orchard Managers' Meetings begin <i>(These meetings will continue on Friday mornings into May)</i>	The Dalles, <i>Location TBA</i>
6	Blueberry Pruning Tour <i>(Agenda to be announced-541-386-3433)</i>	Hood River

## Annual Meeting and MCAREC Research Symposium Combined

This year the Mid-Columbia Cherry Day, sponsored by Columbia Gorge Fruit Growers and the MCAREC Cherry Research Symposium will be combined into a single meeting. The meeting will be held Thursday, February 5 at Columbia Cinemas in The Dalles. Highlights include a banking panel addressing the question of how today's economic climate will affect your relationship with lenders. B.J. Thurlby, from NW Cherry Growers will discuss production trends in the PNW and the world and how today's economic climate will affect the sweet cherry market. In addition, Dr. Bob Spotts will give us the latest in the battle against bacterial canker and Dr. Todd Einhorn will talk about how horticultural practices affect cherry fruit quality and surface pitting.

## Pesticide Safety Training Sessions in English & Spanish

On Thursday, March 5, there will be an English-language pre-license and CORE training, from 8 am to noon. Immediately following, from 1 – 5pm, will be a Spanish-language CORE training. Pesticide recertification credits for each session have been applied for from both the ODA and WSDA. We expect that 4 credits will be given per session. Both sessions will be held at the Pine Grove Grange in Hood River. There is no charge for either training session. There is no exam session scheduled in conjunction with these training sessions. You may schedule a time to take the exam at the Columbia Gorge Community College (541-506-6011). For more information about these training sessions, call the OSU Extension Service in Hood River (541-386-3343).

## Pesticide Pre-License Training in Spanish

There will be a 10 hour pesticide pre-license training in Spanish held Friday, February 6th, 8 am to 2:30 pm and Saturday, February 7th, 8 am to 12:30 pm. In order to better assist those who have struggled with passing the ODA private applicators exam in the past, we are offering this in-depth class. This class was particularly designed for employees who need extra coaching in math and calibration skills to pass the exam.

The class is designed to:

- Provide basic review of the laws and institutions that regulate pesticides, pesticide labels, pest control methods, and pesticide safety.
- Promote safety on the job site with emphasis on personal as well as environmental health.
- Support those who may be interested in obtaining Pesticide Applicator Certification/License.
- Obtain recertification credits for those students who already have a certification/license.
- Train those working in: Agriculture, Nurseries, Landscaping, Exterminators, and other related fields.
- 

The cost of the two-day class is \$99, which includes all materials. Those completing the course will receive a certificate of completion. ODA pesticide license exams are scheduled for Saturday afternoon after class, at an additional cost of \$10.

**Friday, February 6th, 8 am to 2:30 pm**

**Saturday, February 7th, 8 am to 12:30 pm**

**The class meets at: Columbia Gorge Community College**

**Building 3, Room 3.203**

**400 East Scenic Drive**

**The Dalles, OR**

**Class size is limited - reserve your space by calling (541) 506-6011**

*The class is sponsored by OSU, Wasco County Extension and Columbia Gorge Community College.*



## PURS Due January 31

The Pesticide Use Reporting System (PURS) forms are due by January 31.

PURS must be submitted on-line as no other options are allowed. Go to <http://oregon.gov/ODA/PEST/> and follow the PURS link on the left of the page.

# Mid-Columbia Cherry Day and MCAREC Sweet Cherry Research Symposium

Sponsored by  
Columbia Gorge Fruit Growers  
Mid-Columbia Agricultural Research  
and Extension Center  
Oregon State University  
Wasco County Extension

**February 5, 2009**

Columbia Cinemas  
1717 W. 7th St.  
The Dalles, OR  
(behind K-Mart)

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
7:40	Coffee and Donuts	Brandt's Fruit Trees
8:00	Welcome and Introduction	Lynn E. Long, OSU Extension
8:05	An Update on What's Happening at MCAREC	Dr. Peter Shearer, OSU MCAREC
8:20	Production Trends in the PNW and the World and How Today's Economic Climate Will Affect the Sweet Cherry Market	B.J. Thurlby, Andrew Willis, Keith Hu, NW Cherry Growers
9:05	How Today's Economic Climate Will Affect Your Relationship with Lenders	Dave Wagenblast, Columbia River Bank; Rob Crum, Farm Credit; Brad Pickering, Center Pointe Community Bank- Facilitated by Tim Dahle
9:35	How the Economy is Impacting OSU and the Department of Horticulture	Dr. Anita Azarenko, OSU
9:50	Break	Sponsored by Brandt's Fruit Trees
10:05	Presentation of Annual Cooperators Award	Jeff Heater, President CGFG
10:10	Future Direction and Vision for Sweet Cherry Research at MCAREC	Dr. Todd Einhorn, OSU MCAREC
10:30	Understanding Poor Fruit Set in Cherries	Dr. Anita Azarenko, OSU
11:00	How to Attract and Protect Pollinators in the Orchard	Matthew Shepherd, Xerces Society
11:30	How to Improve Orchard Soils	Dr. Andrew Moldenke, OSU
12:00	Lunch	Sponsored by OSU MCAREC
1:00	Variety, Rootstock and Training System Interactions	Lynn Long, OSU Extension
1:25	Potassium, GA and Cherry Pitting: Exploring Ways to Reduce the Damage	Kristi Deschuyttrer, OSU MCAREC
1:45	Effects of Horticultural Practices on Cherry Fruit Quality and Surface Pitting	Dr. Todd Einhorn, OSU MCAREC
2:10	Spray Drift Management: New Technology, Vegetative Buffers and Efficacy	Kelly Wallis, OSU MCAREC
2:30	The Latest in the Battle with Bacterial Canker	Dr. Bob Spotts, OSU MCAREC



Mid-Columbia Agricultural  
Research and Extension Center

Extension Service  
Wasco County

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541-386-2030

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## 2009 Hood River Winter Horticulture Meeting

Wednesday, February 4, 2009  
Pine Grove Grange, Hood River, OR

**7:30 AM Coffee and Donuts Provided by Our Sponsors\***

- 8:00 Welcome**  
Steve Castagnoli, OSU Extension Service, Hood River
- 8:15 Integrated Areawide Codling Moth Management - the Dee Flat Project**  
Steve Castagnoli, OSU Extension Service, Hood River
- 8:45 Strategies for Using New Insecticides for Codling Moth Control**  
Jay Brunner, WSU Tree Fruit Research & Extension Center, Wenatchee
- 9:30 Managing San Jose Scale in Orchards**  
Peter Shearer, OSU Mid-Columbia Agricultural Research & Extension Center, Hood River

**9:55 AM Break - Juice Provided Courtesy of Tree Top**

- 10:15 Review of Fire Blight Management**  
Ken Johnson, OSU Dept of Botany & Plant Pathology, Corvallis
- 10:40 Can Early Pathogen Detection Improve Fire Blight Control?**  
Ken Johnson, OSU Dept of Botany & Plant Pathology, Corvallis
- 11:00 Administering MCAREC and the Tree Fruit Entomology Program: Where are we going?**  
Peter Shearer, OSU Mid-Columbia Agricultural Research & Extension Center, Hood River
- 11:20 The Hood River Backyard Fruit Tree Program**  
Steve Castagnoli, OSU Extension Service, Hood River
- 11:45 Columbia Gorge Fruit Growers Elections and Project Updates**  
CGFG Board of Directors and Committee Chairs

**12:00 PM Lunch Provided – Thank You Sponsors!**

- 1:00 Developing a Hands-on Pesticide Handler Training Program in Oregon**  
Tim Stock, OSU Integrated Plant Protection Center, Corvallis
- 1:20 Advances in Management of Pear Russet**  
David Sugar, OSU Southern Oregon Research & Extension Center, Central Point
- 1:40 Promoting Pear Fruit Size**  
David Sugar, OSU Southern Oregon Research & Extension Center, Central Point
- 2:00 Improving Efficiency in Pear Orchards: the MCAREC Horticulture Research Program**  
Todd Einhorn, OSU Mid-Columbia Agricultural Research & Extension Center, Hood River
- 2:30 Adjourn**

**\*2009 Winter Horticulture Meeting Sponsors: Arysta LifeScience, Bryant Pipe & Supply, CenterPointe Community Bank, Chamberlin Distributing, Columbia Reach Pack, Columbia River Bank, Diamond Fruit, Duckwall-Pooley Fruit, Farm Credit Services, GS Long, Hood River Supply, Nichino America, Sheppard's, Stadelman Fruit, Tree Top, Underwood Fruit, Valley Ag Service, Wilbur-Ellis, and Wilson Orchard & Vineyard.**

*ODA & WSDA Pesticide Recertification Credits have been applied for.*



Agriculture, Family and Community Development, 4-H Youth, Forestry, Energy and Extension Sea Grant Programs. Oregon State University, United State Department of Agriculture, and Hood River County cooperating. The Extension Service offers its programs and materials equally to all people.

## Soil Drenching Cherries with Soluble Potassium Silicate

### Clive Kaiser, OSU Extension Umatilla County

The effects of up to four soil drenches of 1% soluble potassium silicate, applied evenly under the drip area of the tree, every three weeks from flowering, at a rate of 0.25 gallons per square yard of canopy diameter on several aspects of fruit quality of sweet cherries were investigated by OSU Extension Faculty Clive Kaiser, Lynn Long, Anita Azarenko and Matthew Whiting at several different locations across the Pacific Northwest in 2007 and 2008. In 2007, 'Bing' fruit from trees on 'Mazzard' rootstock in Hood River were significantly firmer (409.4 mm.g-1) than untreated check fruit (385.5 mm.g-1) but fruit TSS (sugar) levels were slightly lower (19.15% Brix) compared to untreated check fruit (19.99% Brix). Similarly in Corvallis, 'Stardust' fruit treated with soluble potassium silicate were significantly larger than untreated check fruit, irrespective of rootstock cultivar. In 2007, in most instances soluble potassium silicate soil drenching did not have any significant effect on fruit cracking (which averaged ~15%) with the exception of 'Stardust'/'MM14', which actually resulted in more fruit cracking (which averaged ~35%) than the untreated check. Clearly rootstock effects are something that need to be further investigated and caution is advised regarding the use of soluble potassium silicate in orchards on 'MM14' rootstocks.

In 2008, potassium silicate soil drenching had no effect on fruit TSS levels at any of the sites investigated. However, potassium silicate soil drenching again resulted in significantly firmer 'Bing' / 'Mazzard' fruit (329 g.mm-1) from Milton-Freewater after two weeks storage in regular atmosphere at 35°F. The same was true for fruit from 'Royal Rainier' / 'Citation' rootstock (289 g.mm-1) and 'Sandra Rose' / 'Gisela 6' (322 g.mm-1), except the latter was not significantly different from the untreated check (318 g.mm-1). Where stem pull force is concerned, in 2008, fruit from both 'Royal Rainier' / 'Citation' rootstock and from 'Sandra Rose' / 'Gisela 6' rootstock, decreased most significantly for check fruit between the day of harvest and after two weeks in regular atmosphere storage at 35°F. In contrast, stem pull force of similar fruit from trees, soil-drenched with soluble potassium silicate, were significantly higher on the day of harvest and also after storage in regular atmosphere for two weeks at 35°F. A similar result was found for 'Bing'/'Mazzard' fruit in Milton-Freewater. Consequently, we conclude that regular soil-drenching of cherry trees with soluble potassium silicate during the growing season has the potential to increase cherry fruit firmness and stem pull force without affecting fruit size or TSS negatively. Furthermore, soluble potassium silicate applications have different effects on both scion and rootstock cultivars and in some instances resulted in larger fruit than untreated check trees. It is imperative that these rootstock and cultivar differences be further elucidated in the future.



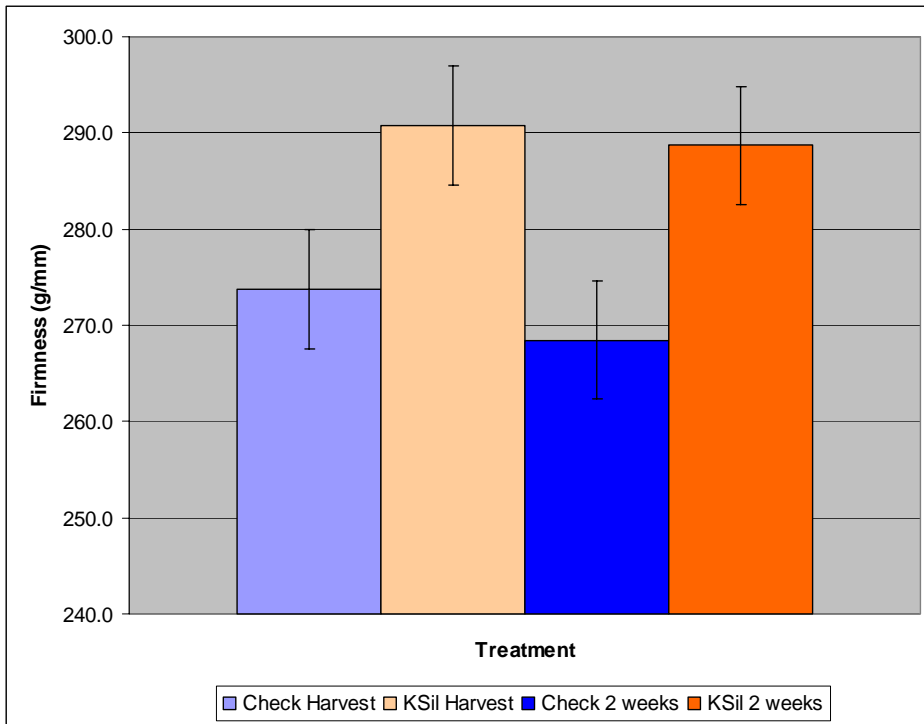


Figure 1. Average Firmness (g.mm-1) of 'Royal Rainier' fruit from trees on 'Citation' rootstock in The Dalles, treated with or without soluble potassium silicate (KSil), on the day of harvest or stored for two weeks at 35°F.

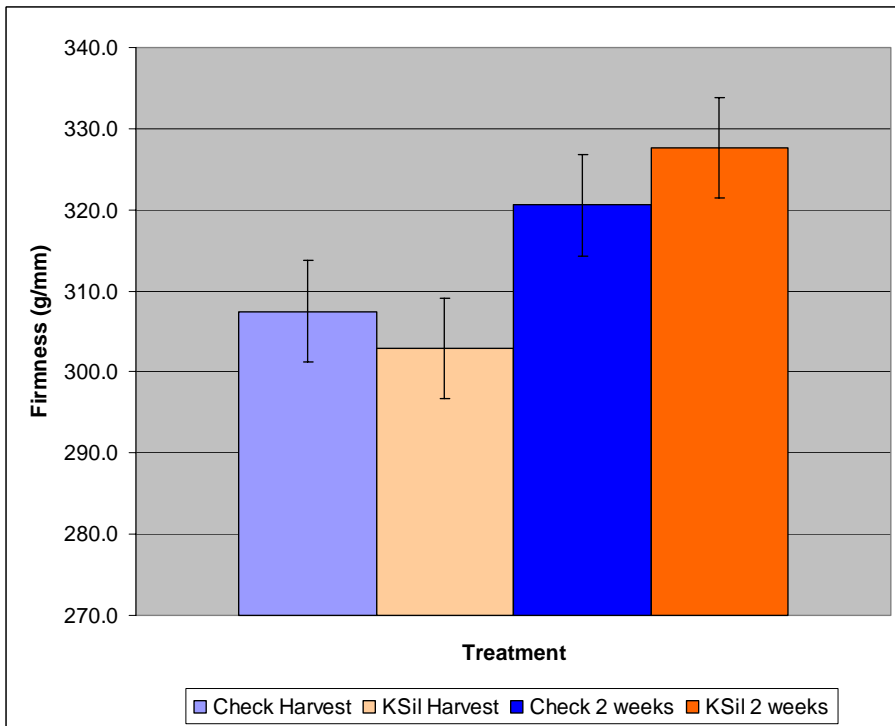


Figure 2. Average Firmness (g.mm-1) of 'Bing' fruit from trees on 'Mazzard' rootstocks in Milton-Freewater, treated with or without soluble potassium silicate (KSil), on the day of harvest or stored for two weeks at 35°F.

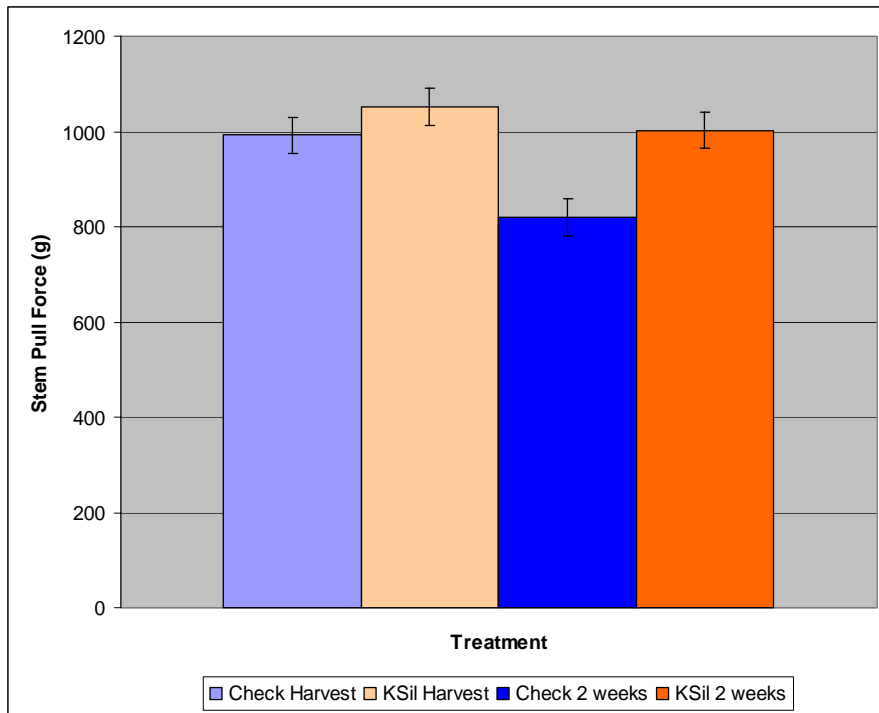


Figure 3. Average Stem Pull Force (g) of 'Sandra Rose' fruit from trees on 'Gisela 6' rootstocks in The Dalles, treated with or without soluble potassium silicate (KSil), on the day of harvest or stored for two weeks at 35°F.

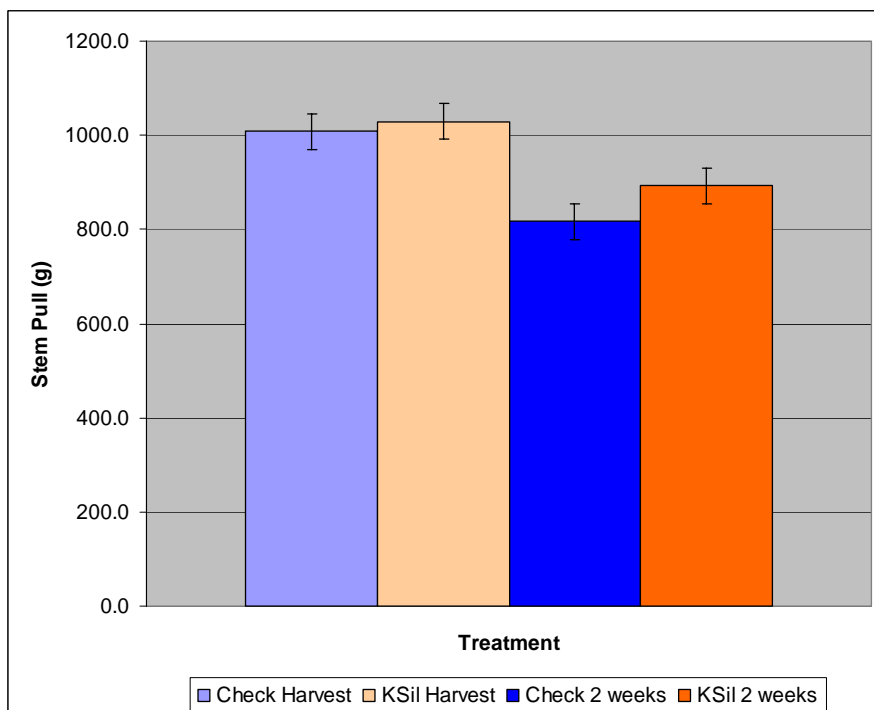


Figure 4. Average Stem Pull Force (g) of 'Bing' fruit from trees on 'Mazzard' rootstock in Milton-Freewater, treated with or without soluble potassium silicate (KSil), on the day of harvest or stored for two weeks at 35°F.

# Oregon Horticultural Society

## Stone Fruit Section-January 27



***Expo Center, Portland***  
***Chairman: Jeff Olsen,***  
***Extension Horticulturist, Oregon State University***

**The Potential for Producing Organic Stone Fruits in OR**  
*Jeff Olsen*  
*OSU Extension Horticulturist*

**Reducing the Risk of Pesticide Resistance  
in Cherry Pests in Oregon**  
*Dr. Clive Kaiser*  
*OSU Extension Horticulturist*

**East Meets West:**

**New Directions in Stone Fruit Pest Management**  
*Dr. Peter Shearer*  
*Entomologist and Superintendent*  
*of the OSU Mid-Columbia Research and Extension Center*

**Cherry Promotion Update & Market Outlook**  
*Tom Klevay*  
*Diana Fruit Co. Inc.*

**Practices That Impact Cherry Quality**  
*Dr. Todd Einhorn*  
*Horticulturist, OSU Mid-Columbia Research and Extension Center*

**Specialty Crops: The New Recognition for Horticulture  
in the National Political Arena**  
*Dr. John Clark*  
*University of Arkansas,*  
*President of the American Society for Horticultural Science*