



March 15

Women in Agriculture Conference "Change Happens: Make It An Opportunity"

www.brownpapertickets.com/event/508260

April 7

Product Development for Value-Added Food Processing

agbizcenter.org

May 5-9

Principles & Practice of Cider Making

agbizcenter.org



May 12-16

Advanced Cider Making Course

agbizcenter.org

May 28

Cooking For a Healthy Future

<http://www.k12.wa.us/childnutrition/>

Lisa Wasko DeVetter brings fresh leadership to Small Fruit Horticulture Program

From the cranberry bogs of Wisconsin to the vineyards of the Midwest, Lisa Wasko DeVetter has a history of bringing together disparate interests in sustainable small fruit production. That's one reason the native Iowan was recently selected to join the WSU Mount Vernon faculty as an Assistant Professor of Research and Extension. DeVetter completed her Ph.D. project in January 2014 at the University of Wisconsin-Madison on cranberry yield. As Small Fruit Horticulture Program leader, she will be expanding her experience into the Pacific Northwest fruit production community and its vast fields of blueberries, raspberries, blackberries and other small fruit crops.

Collaborative Vision

"The position is perfectly aligned with my professional vision of building a high-impact research and



extension program in small fruit production and physiology," Wasko DeVetter said. "One critical component will be the establishment of a research and extension program that is high-impact, complementary to other existing programs, and meets the needs of stakeholders. Accomplishing this will require building relationships and bringing together relevant groups that are representative of the small fruit industry."

According to Wasko DeVetter, collaboration is key to developing a Small Fruit Horticulture Program that meets the needs of its stakeholders by partnering research with extension activities.

"The research opportunities are attractive, given my interests in investigating sustainable production practices through an approach that takes account of the integrated nature of biological, environmental, economic, and social systems that affect fruit production," she said. "This position is well-poised for success, given the support of the industries, university system, and other potential collaborative bodies."

Wasko DeVetter is well prepared for the job, having earned a B.S. in biology and horticulture and an M.S. in horticulture and soil science at Iowa State University

Farm Family Background

"My first experience with horticulture was at my grandmother's farm, located in northwestern Iowa," she said. "By the time I got my B.S., I came to the realization that I could actually study what I had a passion for – fruit crops. Moreover, I could contribute to promoting sustainability within small fruit horticulture through a career in research and extension."

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Vegetable Horticulture grad students dig into greener options for local produce markets

Whether you're in the lunchroom or out on the farm, the graduate students in the WSU Mount Vernon Vegetable Horticulture Program are looking for ways to help bring some healthier produce choices to your plate. The three master's degree candidates and one doctoral students are all

working on projects designed to help local growers provide more affordable, nutritional, and naturally disease-resistant vegetables to the community. And according to Vegetable Horticulture Program Leader Carol Miles, the potential benefits are widespread from farm to market to table.

"The research projects my students are conducting reflect our community's desire to reduce the use of pesticides, increase the profitability for farmers while maintaining affordability for consumers and providing families with access to healthy, locally produced vegetables," Miles said. *continued page 3*

Skagit County Master Gardeners Know and Grow Workshops:

March 18

**Growing for the Future:
Seed Starting 101, with
Kevin Jones, Jordan
Nursery**



April 15

**Passion for Perennials—
What's Beautiful for
Skagit Gardens**



May 13

**Vegetables—Grow What
You Eat**



June 17

**Growing Roses in Skagit
Valley**

All workshops are held in
the Sakuma Auditorium
from 1:00 to 2:30pm.

Lisa Wasko DeVetter *continued from page 1*

Wasko DeVetter's M.S. work in Iowa focused on evaluating alternative weed management practices in vineyard production systems and their effects on weed control, grapevine production and soil quality, plant productivity, fruit quality, and soil quality."

Passion for Fruit Production

"These experiences have left me with a broad understanding and appreciation for the many scales and nuances influencing fruit production," she said. "Having these diverse experiences will help me better serve the industry through a diverse and systems-based approach to research."

At WSU Mount Vernon, she plans to engage the community while learning more about Pacific Northwest fruit production and settling into life here with husband David DeVetter and their six-month old daughter, Robin. They got an early

introduction during a visit December 5-6 to the Small Fruit Conference and Lynden Agriculture Show at the Northwest Washington Fairgrounds in Lynden.

"It was nice to match the faces to the names of some of the people I'll be working with here," she said. "One of my first tasks will be to collect input from associated industries, colleagues, and other peers as to what are the primary areas in need of research. With this information, I will move forward on building a program that addresses those needs."

Research projects she is considering include investigating alternative practices to fumigation; evaluating the impacts of production practices on plant productivity, fruit quality, and soils; assessing the economic viability of production practices; investigating methods to enhance pollination and fruit set; and developing approaches



for effective cane management in raspberry production.

"Additionally, I want to contribute to enhancing the pathology component of the program through strategic collaborations," said Wasko DeVetter. "I also want to develop informative resources for growers, which include a small fruits website, workshops, field days, conferences, and other opportunities for professional development."

DeVetter began her position as Associate Professor of Research and Extension on March 1, 2014.

Soil Quality Network Workshop

Workshop highlights importance of quality soils to farmers, consumers

Approximately 125 Pacific Northwest farmers, researchers, agriculture professionals and students got their hands dirty at the "Practical Soil Health for Farmers" workshop, hosted February 12 2014, by WSU Mount Vernon.

The workshop was part of the Soil Quality Network, a three-year project that began in 2012 and is funded by the Western Sustainable Agriculture Research and Education Professional Development Program. The network was designed to create a database, develop a website, and train agricultural professionals in soil quality assessment and strategies to support farmers.

According to workshop coordinator Caitlin Price Youngquist, graduate student in the WSU Mount Vernon Plant Breeding Program, the event featured such topics as field assessment of soil quality, cover crops, compost, and plant disease resistance – all important factors for building and maintaining healthy, productive, and profitable soils.

"We designed this workshop to provide practical information about soil health for farmers in northwestern Washington State and to provide an opportunity to network and

share ideas and solutions," Youngquist said.

The workshop presenters were WSU faculty members, including: David Granatstein, sustainable agriculture specialist with the WSU Center for Sustaining Agriculture and Natural Resources in Wenatchee, where he has conducted several studies on soil quality; Chad Kruger, director of the WSU Center for Sustaining Agriculture and Natural Resources who also works on climate change and renewable energy issues; ; Doug Collins, *continued page 4*



The Scope on... Vegetable Horticulture grad students

Here's a glimpse of the current research projects:

Dry Beans

Kelly Atterberry was born and raised in Anacortes, WA. She studied Herbal Science at Bastyr University in Kenmore and later received her B.S. Her M.S. project here focuses on education K-12 students regarding the nutrition of pulse crops and promoting dry bean consumption. Pulse refers to the edible seeds of grain legumes including chickpeas, dry beans, dry peas and lentils. Pulse crops are a highly valued food due to their high protein and essential amino acid content.

More information: kelly.atterberry@wsu.edu



Tomatoes

Fairuz Buajaila joined the Horticulture Program this spring as a Ph.D. student. She was born and raised in Al Beida, Libya, and received her B.S. in 2003 in Agricultural Sciences from Omar AL Mukhtar University. She earned her M.S. in Horticulture in 2008 from the same university with a project titled, "Effect of Organic and Inorganic Nitrogen Fertilizer on Growth, Yield and Quality of Eggplant." her Ph.D. project here will focus on tomato production under high tunnels and will test application rates and timing of different types of fertilizer.

"My research will investigate reducing the use of chemical nitrogen fertilizers and testing the use of compost to adequately meet the plant's nutrient needs while maintaining fruit quality for tomatoes in high tunnels."

More information: fbujaila@yahoo.com



Leafy Greens

Charlene Grahn grew up in the Pine Barrens of Central New Jersey and earned her B.A. in Biology at Reed College in Portland. She has worked on various projects at botanical gardens, small-scale organic farms, and ornamental plant nurseries. She spent several years selling local produce through farmer's markets and food co-ops in New Jersey. Her passion for growing and increasing access to sustainably produced food brought her to the Vegetable Horticulture Program. Her M.S. project focuses on improving the production and sales of leafy greens for direct-market farmers in Washington state.

"My project seeks to identify varieties of leafy greens well suited for baby-leaf salad mix production in northwest Washington," Grahn said. "By increasing the number of varieties that can be grown successfully in Skagit and Whatcom counties, we will increase the availability of fresh local greens for consumers in the region."

More information: charlene.grahn@wsu.edu



Watermelon

Jesse Wimer was born and raised in Moscow, Idaho. He received a B.A. in history from the University of Idaho. His M.S. project here involves grafting watermelon onto disease-resistant rootstocks in order to determine the optimal healing regime for successful watermelon grafting and identify which rootstocks are most resistant to soil-borne diseases, specifically Verticillium wilt. Soil-borne diseases are becoming increasingly problematic for the state's watermelon growers due to the phasing out of soil fumigation, making new and sustainable methods of disease control (such as grafting) more lucrative and viable. Jesse is also investigating the potential of watermelon grafting as an economic enterprise for Washington state.

"Grafting watermelon for disease resistance could allow for decreased pesticide usage in watermelon production systems," Wimer explained. "Reduced chemical applications would be healthier for the environment and for the consumers who eat the produce."

More information: jesse.wimer@wsu.edu



Vegetable Horticulture Faculty Advisor Carol Miles can be reached at milesc@wsu.edu

The Grain Gathering 2014

Formerly the Kneading
Conference West

August 21-23

Keynotes:

Dan Barber

Chef and co-owner of Blue Hill
Restaurant and Blue Hill at Stone
Barns in New York

Jeffrey Hamelman

A Certified Master Baker and direc-
tor of the King Arthur flour bakery
in Norwich, Vermont

Naomi Duguid

Traveler, writer, photographer and
cook; co-author of six award-
winning books of food and travel



The
Grain Gathering

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WSU Mount Vernon NWREC

Soil Quality Network Workshop *continued from page 2*

extension specialist with
WSU's Small Farms Program,
which focuses on soil quality
and fruit and vegetable produc-
tion; Mark Mazzola, research
plant pathologist with the U.S.
Department of Agriculture's
Agriculture Research Service
Tree Fruit Laboratory in We-
natchee; and Chris Benedict,
regional agriculture specialist
for WSU based in Bellingham
who works with cover crops in
western Washington. WSU
Mount Vernon Vegetable
Seed Pathology Program
Leader Lindsey du Toit teamed
up with Youngquist to present
"Biosolids Compost Use on
Vegetable Seed Crops,

Potatoes, and Small Grains."

Du Toit specializes in the epi-
demiology and management of
diseases affecting Pacific North-
west vegetable seed crops;
while Youngquist, as part of her
Ph.D. project in the WSU
Mount Vernon Plant Breeding
Program, is conducting a re-
search trial in which biosolids
compost produced by the
Town of La Conner was ap-
plied on land used to grow
potatoes, wheat, barley, and
spinach seed. The impacts of
that compost application on
soil quality, crop yield and crop
quality will then be measured.

Quality hands-on learning was
the key to the workshop, ac-
cording to Youngquist.

"Growers in Skagit County
requested more training in the
area of soil quality, and we are
pleased to have been able to
offer a full-day workshop led by
such a great team of WSU
researchers and Extension
educators," she said.

More workshop information is
available at [http://
smallfarms.oregonstate.edu/soil-
quality-network/workshops](http://smallfarms.oregonstate.edu/soil-quality-network/workshops).



Research team receives national award for work on Biodegradable mulches

A team of WSU Mount Vernon
researchers/faculty members
was recently recognized for its
work on biodegradable
mulches. Vegetable Pathology
Professor Debbie Inglis and
Vegetable Horticulture Profes-
sor Carol Miles were awarded
the NIFA Partnership Award
for Innovative Programs and
Projects at the Association of
Public and Land-grant Universi-
ties annual meeting, held No-
vember 10-12, 2013, in Wash-
ington, DC.

The award is one of five Na-
tional Institute of Food and
Agriculture awards honoring
outstanding contributions from
land-grant universities and co-
operating institutions and or-
ganizations supported by NIFA
under the U.S. Department of
Agriculture. Inglis leads and Miles is co-
project director of the *Biode-
gradable Mulches for Specialty*



Catherine Woteki, USDA Under Sec-
retary for Research, Education, and Eco-
nomics, presents the NIFA Award to
Dr. Debbie Inglis (center) and Dr. Carol
Miles (right)

*Crops Produced Under Protective
Covers* project, which focuses
on alternative production and
disposal methods for the plastic
under which several hundred
thousand acres of U.S. crops
are grown in order to control
weeds, conserve soil moisture,
increase crop yields, modify soil
temperature, and shorten har-
vest.

Their research team is working
on development, testing and
adoption of alternatives to
plastic in order to reduce the
environmental challenges it
poses in the soil. The transdis-
ciplinary team includes scien-
tists specializing in biological
systems engineering, econom-
ics, horticulture, plant pathol-
ogy, sociology, soils and textiles
science from six institutions in
several states.

"Conception, design and man-
agement of these large multi-
disciplinary projects that in-
clude research, extension and
outreach requires amazing
efforts from faculty members;
and we are thrilled to see the
success of the project acknowl-
edged by the primary U.S. De-
partment of Agriculture funding
agency," said Scot Hulbert,
WSU Chair of the Department
of Plant Pathology. "This is an
exceptional example of what
we are trying to achieve in our
research and extension efforts
at WSU."



Spring is a wonderful time to visit our volunteer gardens, open from dawn to dusk seven days a week!



Gardens are maintained by:

- Skagit County Master Gardeners
- Native Plant Society
- Western WA Fruit Research Foundation



Vegetable seed pathologist addresses spinach seed production at international conference in China

WSU Vegetable Seed Pathology Program Leader Lindsey du Toit recently shared her research and professional observations regarding spinach seed production at the 2013 International Spinach Conference, held December 10-12 in Guangzhou, China.

A vegetable seed pathologist and WSU Mount Vernon faculty member, du Toit is one of 16 leading international experts who were invited to the conference to address issues in global spinach production, spinach breeding, disease and pest management, and genomics. Her WSU research and extension program focuses on the etiology, biology and management of diseases that affect Pacific Northwest vegetable seed crops, primarily the small-seeded spinach, brassicas, carrot, onion, radish and table beet.

The three-day event in China included formal presentations geared to spinach industry representatives, including seed growers, producers and shippers; researchers; extension agents; and pest management professionals.

Du Toit gave two presentations. The first, "Spinach Production in the U.S.A.," provided a general overview.

"Northwest Washington and the Willamette Valley in West-

ern Oregon are critical for the United States and the rest of the world with regard to seed production," du Toit said.

"These are the only places suitable for seed production because of the unique climatic conditions – cool, dry summers and long summer days – needed to grow high-quality commercial seed."

Her second talk addressed the question, "Doubling the Capacity for Spinach Seed Production in the U.S.A.: A Dream or Reality?" In answer, she credited the research of Emily Gatch, who earned a Ph.D. this year after working with du Toit for several years on a project aimed at managing Fusarium wilt in spinach seed crops. Fusarium wilts are common vascular wilt fungal diseases that affect a wide range of plant species around the world and can pose a significant threat to crops. The fungus that causes spinach Fusarium wilt specifically causes this disease on spinach only.

"The work we have been doing prior to and as part of Emily's Ph.D. showed that we can do more, perhaps double, seed production in Washington state," du Toit said.



The spinach conference included a field day highlighting a variety of crops which drew a crowd of nearly 10,000 visitors to Guangzhou, the third largest city in China with a population of nearly 13 million. While there, du Toit also spoke at Southern China Agricultural University, addressing vegetable seed production in the Pacific Northwest and seed pathology. "It was a quick trip," she said, "but it gave me the chance to share my research, help others find out more about what we're doing here in the Northwest United States, and learn from the work others in the industry are doing all over the world."

Du Toit's trip was sponsored by conference organizers, the University of Arkansas Division of Agriculture and Dale Bumpers College of Agricultural, Food and Life Sciences; and the Chinese government.

