

BERRY COMMISSIONS News



A grower newsletter for the
Oregon Raspberry & Blackberry Commission
and the Oregon Strawberry Commission



National Berry Crop Initiative

Specialty crops; such as, fruits, vegetables, nuts, and berries, account for 50 percent of all crop-based agriculture, according to the USDA's National Agriculture Statistics Service. Small fruits, including blackberries, raspberries, strawberries, blueberries, table grapes, cranberries, and currants, are high value horticultural crops used in both fresh and processed fruit markets. Berry crops have the potential to improve vision, fight cancer, and treat infections, but more research, education, and extension efforts are needed to determine the potential health benefits of these crops and to help inform producers and consumers about the benefits.

The USDA Cooperative State Research, Education, and Extension Service (CSREES), led by Thomas Bewick, National Program Leader for Horticulture, and the National Berry Crop Initiative are working together to develop a strategic research and extension plan for berry crops. The National Berry Crop Initiative (NBCI) is a partnership of grower groups, researchers and government formed to develop a strategic research and extension plan for the continued growth and sustainability of berry crop production in the United States. The steering committee members representing the PNW berry crops include former OSC chair, Ron Fujii; Tom Peerbolt, ORBC and WRRRC Research Coordinator; Henry Bierlink, WRRRC Administrator; and Philip Gütt, ORBC, OSC and NCSFR Administrator. Other steering committee members represent a variety of regional and state berry organizations including the California Strawberry Commission, US Highbush Blueberry Council, North American Bramble Growers Association, Florida Strawberry Association, North American Strawberry Growers, Wild Blueberry Commission, and the Cranberry Institute. The group has been holding conference calls for several months and the collaborative interaction is already leading to increased communication between berry groups with the recognition that we have many things in common and shared goals towards which we can work together.

The strategic plan will help inform state and federal funding agencies on how to best serve this group of stakeholders. So far, the group has developed a draft strategic plan that lists assumptions about the future, goals and objectives.

Vision Statement: By 2020, the American berry crop industry will triple consumer use of berry crops while increasing the current market share against international sources. Increased berry consumption will contribute to improvement in human health and nutrition, prosperity for rural communities and sustainability of the berry crop industry.

Mission Statement: In order to achieve our vision, the National Berry Crop Initiative will insure outcome-based funding for prioritized, world-class research

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National Berry Crop Initiative

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and Extension programs in human health aspects of berry crops, crop production and product utilization. NBCI will become a world leader in identifying and responding to trends that affect the sustainability of the berry crop industries. Leadership and funding will be provided through creative public-private partnerships among government, academic, non-profit, and private sector partners accountable for research, development and adoption of business, environmental and socially responsible practices in the American berry crop industry.

A workshop to refine the draft strategic plan will be held immediately prior to the annual meeting of the North Central Coordinating Committee 022 (NCCC022, formerly NCR022) in Geneva, NY. NCCC022 is a multi-state working group focused on small fruit research and extension. The workshop will bring together growers, industry representatives, and research and extension faculty from across the country. Dates for the workshop are October 25-26, 2005.



ORBC & OSC Annual Meetings to be Held at the Oregon Horticultural Society Annual Meeting

The Oregon Horticultural Society (OHS) Annual Meeting will take place at the Red Lion Hotel Vancouver at the Quay on January 31, February 1 and 2, 2006. The ORBC & OSC Annual Meeting and luncheon will be on Tuesday, January 31. The meeting is held in conjunction with the Northwest Ag Show, which takes place at the nearby Expo Center.

The OHS meeting consists of five program sections, some held in conjunction with their respective commodity commission meetings. Credit hours will be awarded as approved by the Oregon and Washington Departments of Agriculture. Most sessions begin at 9:00 a.m. and end at 3:30 p.m.



Chemeketa Community College Ag Programs

offer many workforce development opportunities during Fall Term 2005. Please call 503-399-5139 or 503-589-7946 to register for classes.

- **Spanish in Agriculture**
Tuesdays, 7-9 pm, Nov. 1-Dec. 6.
- **Ethanol Production**
Saturday, Oct. 8, 9 am-4 pm.
- **Farm Business Management Technology Training-Quickbooks for Farmers**
Monday-Friday, 5-9 pm., Oct. 24-28.
- **Micro-Irrigation for Vineyards, Hops, Orchards, and Berries**
Thursday, Nov. 10, 9 am.-4 pm.
- **Farm Business Management Technology Training- Excel for Farmers**
Monday-Friday, 5-9 pm., Dec. 12-16.
- Plus many other courses, including pesticide safety, viticulture, winemaking, horticulture, and landscaping.

Good Agricultural Practices (GAPs)

for Fruit and Vegetable Production
November 16, 2005
238 Wiegand Hall • OSU Campus
Corvallis, Oregon

Workshop Objectives

This workshop provides participants better understanding of microbial risk and contamination of fruits and vegetables on the farm. The focus is on how to develop and implement Good Agricultural Practices (GAPs) to enhance food safety, as well as provide information about third-party certification and audition.

Audience

- * Fruit and vegetable growers
- * Quality assurance and food safety specialists in the fresh fruit and vegetable industry
- * Third-party auditors, managers, supervisors and quality assurance personnel

Registration

\$80 per person (includes materials and lunch)
http://oregonstate.edu/dept/foodsci/extservices/gaps_regform.htm

For More Information, please contact:
Yanyun Zhao 541-737-9151
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Crop Insurance Programs Aid Northwest Farmers

- by David Paul -

Federal crop insurance coverage, which is delivered by private sector insurance companies, has grown significantly in the Spokane region from just over \$300 million in 1994 to more than \$2.1 billion currently.

More than 21,500 policies are currently insuring in excess of 5 million acres in Idaho, Oregon and Washington. More than \$352 million in loss payments have been made over the last four years to producers in the Northwest.

The Federal crop insurance program is administered by the Department of Agriculture's Risk Management Agency.

This growth is largely due to new and innovative products such as Adjusted Gross Revenue (known as AGR) and AGR Lite, increases in subsidies approved by Congress, focused educational efforts through our many partnerships, our insurance industry partners, and expansion and improvements of our existing programs such as the new multiple peril apple policy in effect for 2005.

The Aug. 26 edition of the Capital Press included an article titled, "Farmers want RMA to act on their claims." We understand and appreciate the concerns. The small numbers of claims referenced in the article are related to policies that were originally insured by American Growers Insurance Co.

When the policyholders' claims were denied by American Growers Insurance, the company was sued and brought into arbitration in accordance with the terms of the policy. Prior to the completion of the arbitrations, American Growers Insurance was placed into liquidation by a Nebraska court. When this liquidation occurred, the Federal Crop Insurance Corp., as regulator of the industry and signatory to the standard reinsurance agreement with American Growers Insurance, stepped in as authorized under the agreement and took over the policies to ensure that all policyholders were properly paid under the terms of their policy.

When FCIC took over the policies, it notified the policyholders who had outstanding arbitration claims that upon request, the Risk Management Agency, on behalf of FCIC, would accept requests for review of their claims.

If the claim was accepted for review, Risk Management Agency would evaluate the claim and decide whether the policyholder had a legitimate claim under the terms of the policy. This decision would be made independent from any past decision made by the company and would instead be a determination made by Risk Management Agency. There-

fore, under the terms of the policy, if a policyholder disagreed with the government's determination the decision could be appealed through the administrative appeals process, not through arbitration.

The subject policyholders requested reviews of their policies between April 27 and May 31, 2005, and have been accepted for review by Risk Management Agency.

The Aug. 26 article referenced concerns by Sens. Maria Cantwell and Patty Murray as related to the claim payments. Risk Management Agency appreciates the concerns the senators have for their constituents and have communicated that we are working as hard as we can to investigate and review these cases (resulting from the liquidation of American Growers Insurance) and that the policyholders will be notified of the agency's determination as quickly as possible.

The offices of Sens. Cantwell and Murray, like many others in the region, have communicated to Risk Management Agency their strong support of the AGR and AGR Lite insurance plans referenced in the Capital Press article. These insurance plans are streamlined whole-farm revenue protection programs that provide protection against loss of revenue due to any unavoidable natural perils or market fluctuations that cause a loss in revenue during the insurance year.

Most farm-raised crops, animals and animal products are eligible for protection under this plan. More than 500 producers and 80 different commodities are currently covered by an AGR or AGR Lite policy in the Northwest.

In excess of \$35 million in loss payments have been made since AGR was started in select areas of the region beginning in 2001.

Risk Management Agency strives to serve the region's agriculture producers and will continue to assess and improve the structure of the federal crop insurance program in order to meet their needs.

Dave Paul is the regional director for the U.S. Department of Agriculture's Risk Management Agency in Spokane, Washington.



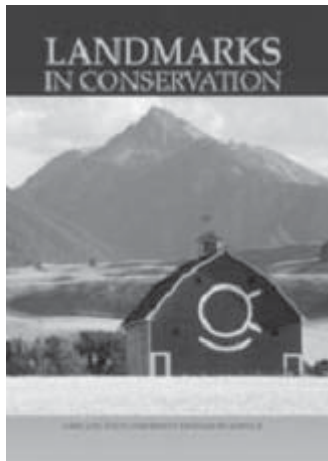
Berry News





DVD Project Helps Land Managers Plan For The Future

- by Steve Dodrill -
SOURCES: Bill Braunworth & Sara Magenheimer



CORVALLIS - Rural land managers reflect on their past and plan for the future in a new DVD produced by the Oregon State University Extension Service.

“Landmarks in Conservation” is designed to help rural landowners, farmers, ranchers and foresters devise sustainable natural-resource management plans for their operations. The interactive multimedia project utilizes both DVD and web technologies.

“This project draws on the experiences of nearly 30 land managers from across our state,” said Bill Braunworth, agriculture program leader for the OSU Extension Service. “It demonstrates the importance of resource management planning, whether you operate a five-acre farm near Portland or a 100,000-acre ranch in southeast Oregon.”

The DVD and its companion website are a cooperative effort funded by the OSU Extension Service, the USDA Natural Resources Conservation Service and a private gift to the OSU Foundation. The DVD holds nearly two hours of video clips, while the website serves as a gateway to more than 120 print, video and online resources.

“We are excited about the scope and potential impacts of this project,” said Sara Magenheimer, public affairs specialist with the Natural Resources Conservation Service. “It presents technical, research-based information in an understandable, user-friendly fashion.”

The project’s non-linear structure helps educators customize classroom, workshop or field instruction to meet the needs of specific audiences. It also empowers individuals to select the learning pace, media formats and content that work best for their own situation.

“The insights and stories of these Oregon land managers are really what bring this project to life,” Braunworth said. “They help viewers understand that connection between healthy natural resources and a profitable, sustainable operation.”

“Landmarks in Conservation” (DVD-1) is available from OSU Extension and Experiment Station Communications for \$19.95 per copy plus \$4 shipping and handling. Discounts are available when purchasing 10 or more copies.

To order the DVD:

Visit: <http://extension.oregonstate.edu>

Call toll-free at 1-800-561-6719

Fax your request to 541-737-0817



~ Newsletter Ads ~

The Berry Commissions News accepts advertisements and inserts on a first come, first served basis. Space is limited. Ad size is a maximum of 1/4 page and inserts are generally limited to one 8 x 11 inch sheet. Ad space in the newsletter is currently free of charge. Printing costs do apply for inserts and must be paid by the advertiser in advance. All ads and inserts must be relevant to the berry industry and are subject to approval. Inserts must be prepared and ready for printing by the advertiser.



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Berry Growers Express Interest in Whole-Farm Insurance Plan

SPOKANE, Washington, September 26, 2005—Berry growers are becoming aware of a new risk management tool that insures a farm against unexpected revenue fluctuations. A Federally subsidized insurance plan called Adjusted Gross Revenue Lite (AGR-Lite) covers most farm-raised crops (including all berry types), animals and animal products and is available for growers throughout the Pacific Northwest.

Brent Searle, Special Assistant to the Director with the Oregon Department of Agriculture, recently stated “Crop insurance and other risk management tools are important for all growers to consider. But USDA will never be able to develop a crop-specific policy option for every type of the 200 plus commodities we produce here.”

AGR-Lite was developed by the Pennsylvania Department of Agriculture (PDA) and the “whole farm” insurance product is proving to be a welcome answer to the difficulty of developing individual policies. The Western Center for Risk Management Education at Washington State University, worked with PDA and the U.S. Department of Agriculture’s Risk Management Agency (RMA) to gain approval to expand this innovative insurance program to Alaska, Idaho, Oregon, and Washington for the 2005 crop year.

“AGR-Lite insures your whole-farm revenue against low returns due to unavoidable natural disasters and market fluctuations that affect income from commodities produced during the insurance year,” according to Dave Paul, director of RMA’s Spokane Regional Office. Paul added “And with the maximum coverage increased from \$250,000 to \$1 million for 2006 (approved by the Federal Crop Insurance [FCIC] Board), more producers are able to participate.”

Paul added, “Our goal has been to provide regional producers with the best possible risk management choices. With AGR-Lite, farmers now have the opportunity to purchase insurance covering all their farm production—even commodities for which crop insurance was not previously available.”

AGR-Lite benefits include:

- Whole farm gross revenue protection with a single policy. The plan can also be used in conjunction with other Multi-Peril Crop Insurance (MPCI) coverage plans. When producers purchase both, the AGR-Lite premium will be reduced.
- Is based on a producer’s five-year historical tax form information and an annual farm report to provide a level of guaranteed revenue for the insurance period.

- Almost all commodities are eligible for protection including crops, greenhouse production, animals and byproducts (e.g.: milk, honey).

- Premium Subsidy: The government will pay a portion of the premium for the AGR-Lite policy that equals 48 percent, 55 percent, and 59 percent of the total premiums for the coverage levels of 80 percent, 75 percent, and 65 percent, respectively.

- Producers can select from three coverage levels and two payment rates depending on the number of commodities produced. AGR-Lite liability is calculated by multiplying the approved adjusted gross revenue by the coverage level and payment rate percentage selected by the producer. The coverage level will determine when indemnity payments begin. The payment rate will determine how much the producer will be paid for each dollar lost under the coverage level. Coverage levels and payment rates can vary with the number of commodities produced and are selected by the producer from the Special Provisions of Insurance. A producer selects one amount of coverage that will cover all commodities.

Loss Payment Example

Assumptions:

- Approved AGR-Lite Income: \$500,000
- Coverage and Rate: 80% coverage at 90% payment rate
- Loss Inception Point: $(\$500,000 \times .8) \$400,000$
- AGR-Lite Coverage: $(\$400,000 \times .9) \$360,000$ asset protection

Loss Scenario:

- Adjusted gross income of \$215,000 (revenue to count).
- \$400,000 coverage - \$215,000 revenue to count = \$185,000 loss of revenue.
- $\$185,000 \times 90\text{-percent payment rate} = \$166,500$ indemnity due the insured.
- If a 75-percent payment rate had been selected, the indemnity due would have been \$138,750

This summary is for general illustration purposes only. An overview presentation and discussion on AGR-Lite is tentatively planned by satellite transmittal on November 4. Additional information will be announced shortly.

The sales closing date for AGR-Lite for the 2006 insurance year is March 15, 2006. Crop insurance is sold and delivered solely through private crop insurance agents. Producers are encouraged to contact a local multi-peril crop insurance agent as soon as possible to learn additional details. A list of crop insurance agents is available at all USDA Service Centers throughout the United States or on the World Wide Web at:

<http://www3.rma.usda.gov/tools/agents/>.



Raspberry & Blackberry News

Notes from the 2005 International Berry Health Benefits Symposium

- by Tom Walters -

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The Symposium, held June 13-14 in Corvallis, Oregon was truly international; speakers came from Canada, Finland, Spain, New Zealand and Austria. There were even speakers from Ohio State University, or as the conveners teased "OSU East". In fact, the keynote address was given by Dr. Gary Stoner of Ohio State. Dr. Stoner reviewed his group's outstanding feeding trials, which have shown that diets supplemented with black raspberries, blackberries or strawberries prevented about half of the esophageal tumors in rats. In another test, black raspberries and strawberries prevented tumor development even when tumors had already been initiated. Their group has also shown that black raspberries prevent the development of colon cancer in rats. Preliminary studies indicate that the berry anthocyanins are very active in inhibiting cancer. They are continuing to explore the mechanisms of this cancer inhibition, and have also begun clinical studies to evaluate these benefits in preventing human cancer.

Dr. Ron Wrolstad reviewed for us the relationship between anthocyanins, total phenolics and antioxidant activity in blueberries, blackberries, raspberries and currants. Blueberries have most of their antioxidants in their skins, so small blueberries have the highest antioxidant levels. In general, antioxidant levels correlate well with anthocyanins, the pigments that make our berries so colorful. Dr. Wrolstad pointed out the fantastic diversity of anthocyanins (over 6,000 types!); these may help the plant by blocking different wavelengths of light. They also differ in their antioxidant properties, their metabolites and their absorption rates. It may be that the best health benefits come from the combination of these compounds found in berries rather than from a single chemical.

Dr. Luke Howard (U of Arkansas) showed that blackberry anthocyanin levels generally vary among varieties, but that some varieties (Kiowa) also vary significantly from one growing season to another.

Northwesterners rejoice! Dr. Mary Ann Lila (University of Illinois) presented results showing that North-

Media Relations Program Update

- by Cat McKenzie, Berry Works, Inc. -

The 2005 Oregon Raspberry & Blackberry Commission (ORBC) Media Relations program targeted an array of publications with the message that Oregon berries are nutritious, healthful and taste great.

The newspaper food editor campaign included outreach to newspapers through recipe distribution by the Associated Press. This year, the Associated Press distributed two recipes. "Red Raspberry Champagne Granita", an elegant frozen dessert was published nationwide for the Valentine Day holiday. "Lavender Panna Cotta with Marionberry Compote" was distributed during the height of the summer berry harvest.

Nationwide, 1500 Newspaper Food Editors received the newly revised PDF format of the Photofax via email, which editors have indicated that they prefer. This updated electronic format allows a food editor to request the recipes, press releases, photos and background information and receive them back the same day. For the Valentine Day holiday, editors were offered two recipes, "Dark Chocolate Pave with Red Raspberry Sauce" and "Red Raspberry Mousse". The summer media offering also contained two recipes, "Blackberry Cobbler with Triple Ginger Biscuit Topping" and "A Trio of Berry Sorbets".

Oregon berries once again starred on prominent television shows. "Caprial and John's Kitchen", a nationally syndicated show on Public Broadcasting featured a look at "Savoring Summer Berries" in an episode filmed in Oregon's berry fields. This show was aired during the summer on public broadcasting stations across the country.

BYU TV, a public access station, available to 39 million homes nationwide and also broadcast worldwide, included a segment on Oregon berries in one of the summer shows on the "Living Essentials" program. "Good Day Lifestyles" on Fox and UPN channel 12 in Portland, showcased Oregon berries on their early morning news magazine.

Magazine coverage of Oregon berries reached international attention when "Wingspan" the in flight magazine of ANA, Japan's second largest airline, featured a cover story entitled "Oregon, USA - The Berry Paradise". This ten page article, with stunning shots of Oregon berries and berry farms,

ORBC Gives Seminar on US Juice and Smoothie Bar Market, Hispanic Market Research and Upcoming US & International Trade Shows in Salem on November 14th

- by Cat McKenzie, Berry Works, Inc. -

The Oregon Raspberry & Blackberry Commission (ORBC) will sponsor an afternoon seminar on three important topics of interest to Oregon berry packers and processors. The first topic will be an update on the still fast growing US Juice and Smoothie Bar Market; the second will look at the latest research into marketing to the US Hispanic population; and the third will cover upcoming trade shows of interest to berry processors and packers.

The seminar will be held at the Phoenix Grand Hotel and Salem Conference Center on November 14, 2005 beginning at 11:00 a.m., lunch will be served.

All three areas of interest are ones that will help in the successful promotion and sales of berries in a wide variety of ways. The US Juice and Smoothie Bar market has been expanding at a fast pace and this report will deal with the latest developments in that market tailored to use of berries in smoothies and juices. The US Hispanic population is now officially the largest minority group in the country and will continue to grow in future years; the report will focus on demographics, market strategies and how other commodities are dealing with this population. An update on US and International trade shows will give processors and packers a fast track to accessing these shows.

The Phoenix Grand Hotel is located at 201 SE Liberty St., Salem, OR. There is free underground parking at the hotel. Maps are available.

Registration for the seminar is free, but we ask all people interested to RSVP by November 9, 2005 to allow for an accurate count for handouts, lunch and seating.

To RSVP or for more information please call 1-800- 859-0355 or 541-456-2264. You may also RSVP by email to cat@oregon-berries.com

Chemical Use Survey to Begin

- by Joe DeFrancesco, OSU -

The National Agricultural Statistics Service (NASS) will soon begin their biennial chemical use survey for caneberries, blueberries and other fruit crops (the survey for strawberries will occur next year). As in years past, the NASS staff will send out survey forms and make follow-up phone calls to ascertain not only which pest management chemicals are being used but, also, the rate, number of applications, and other pertinent information associated with pesticide applications. With everyone's busy schedule, it may seem troublesome to take the time to provide the requested information, but I would encourage growers to cooperate with this survey if contacted. Having accurate information about chemical use in berry crops is critical when EPA makes decisions about pesticide registrations or re-registrations. It gives them "real-life" information so they don't have to rely on assumptions or worse-case scenarios. Having reliable chemical use statistics also helps me when I need to write the justification for a Section 18 emergency registration or when I get inquiries from EPA or USDA about pest management practices in Oregon berry crops. The information that growers provide in the NASS survey gets tallied up for a published summary, but individual sources remain confidential.

In addition, after being on hold due to lack of funding, the Oregon Department of Agriculture is planning to re-initiate its Pesticide Use Reporting System (PURS) for all agricultural crops some time in 2006. They advise growers and pesticide applicators to prepare for PURS by keeping records of their pesticide usage beginning January 1, 2006. Worksheets to help organize pesticide use information, and further information about PURS in general, can be found on the ODA website (http://egov.oregon.gov/ODA/PEST/purs_index.shtml); specific questions can be directed to ODA Pesticides Division at (503) 986-4635. The information that will be generated from PURS will provide a clear picture of pesticide usage and can only help to further serve well the berry industries in Oregon. A summary of the information from PURS would most likely not be available until all the reporting for 2006 is completed, whereas the information from the NASS survey should be published and available in the early part of 2006.





Notes from the 2005 Berry Health Benefits Symposium

- Continued from Page 6 -

west-grown blackberries were higher in antioxidants than the ones commercially grown in Mexico. She looks at ways in which stress elicits accumulation of bioactive chemicals in plants. Perhaps someday this work will lead to treatments in the field to make an even healthier crop of berries.

Adding blueberries to the diet of pigs reduced their total serum cholesterol (both LDL and HDL), according to the studies of Dr. Wilhelmina Kalt (Agriculture and Agri-Food Canada). She also showed that blueberry anthocyanins could cross the blood-brain barrier, and could be found in the cortex. She found that blueberries had the best effect when part of a diet high in phytochemicals. There's that combination theme again... Or, as Henry Bierlink of the WA red raspberry commission pointed out, it looks like Mom was right about eating all of your fruits and vegetables... Thanks, Mom!

Dr. Francisco A. Tomas Barberan (CEBAS Institute, Murcia, Spain) investigated the ways in which the beneficial ellagic acid and ellagitannins are metabolized. These compounds do not themselves move into the bloodstream, but he showed that they are metabolized in the colon into urolithin B, a known cancer-preventative compound which does move into the bloodstream.

Dr. Shioh Wang of the USDA's Beltsville Fruit Laboratory described an impressive effort to evaluate many factors affecting the anticancer and antioxidant properties of berry fruits. For example, high light, antioxidants can be increased by high light levels, high temperatures or tea tree oil (methyl jasmonate). She also showed many effects of berry extracts or bioactive compounds on cancer-related protein functions.

Dr. Lyndon Larcom gave us an excellent perspective on mutation and cancer development. He explained that cancer development requires not one but multiple cell mutations; most cancers have 4-8 mutations. Mutations happen all the time, but fortunately, our bodies have very efficient mechanisms for repairing mutations. However, we also have a less efficient, error-prone repair which is itself a major source of mutation. Dr Larcom's work showed that blackberry extracts shut down error-prone repair, and should therefore be effective cancer preventatives. He particularly suggested that Chester or Navajo blackberries could be incorporated into an effective cancer-preventative skin cream.

If you chewed tobacco, you would probably quit after Dr. Bruce Casto's talk (Ohio State University). Then again, perhaps you should switch to chewing black raspberries! Dr. Casto reviewed the tragic statistics on oral cancer:

90% of the oral cancers are squamous cell carcinomas linked to exposure to alcohol and tobacco. The 5-year survival rate is only 50%, and has not improved in recent years. Dr. Casto showed that having 5% freeze-dried black raspberry in the diet significantly reduced the number of oral cancers in hamsters having the misfortune to be exposed to tobacco carcinogens. He is looking at the mechanism of this, and is designing clinical trials to prevent oral cancer. Similarly, Dr. Laura Kresty (also of Ohio State) is investigating the use of freeze-dried black raspberries in suppressing development of a type of esophageal cancer.

Dr. Rui Hai Liu (Cornell University) presented a wealth of evidence that regular consumption of fruits and vegetables reduces risk of cancer and cardiovascular disease. Mom would love him! He is interested in the synergistic effects of phytochemicals from different foods, and showed synergistic benefits of Lectin vitamin E, and Cranberry and apple juices.

Our source of Boysenberry information was Tony McGhie, all the way from New Zealand. In his studies, he found that the anthocyanins of boysenberry could be transported into the blood in the jejunum, and that a diet rich in boysenberries resulted in higher antioxidants in the bloodstream.

Over the years, plant biochemists have studied the metabolism of anthocyanins in plants, but Dr. Ronald Prior (USDA-ARS) is unearthing their metabolism in animals. In pigs, he found that some, but not all of the anthocyanins are modified. Anthocyanins with complex glycosylation patterns stay in the gut longer.

Have you ever heard about the benefits of blueberries to the aging brain? If so, chances are the research came from the group headed by Dr. James Joseph at Tufts University. He has shown that many fruits and vegetables alter cognitive function in aging rats, but only a few (like blueberries) altered cognitive function. High levels of anthocyanins in the diet enhanced searching activity in rats. Blueberry anthocyanins were good for memory of shape; strawberry anthocyanins were good for memory of place, which is managed in a different part of the brain. Blueberries helped old rat neurons talk to each other better, and Dr. Joseph is interested in combining blueberries with Alzheimer's suppressing drugs like Reminil to combat this progressive disease.

Dr. S. Porta (Institute of Applied Stress Research, Austria) found that consuming elderberry concentrate before a training run reduced lactate increase.

Many of us have already heard of the grand-daddy of berry health benefits: drinking cranberry juice prevents urinary tract infections. As Dr. Amy Howell (Rutgers) described, cranberries are unique in an anti-bacterial adhesion activity. They may have a benefit in the colon, as well. This effect may be due to the particular type of proanthocyanidins found in cranberries. The NIH just invested a lot of money in cranberry health benefit research, so expect to hear more good news about cranberries in the next 3 or 4 years.



Media Relations Program Update


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included information on the health benefits of Oregon berries as well as an in depth look at many aspects of berry growing. The magazine was seen by many thousands of passengers as they traveled on ANA in the month of July.

Bon Appetit magazine featured personal recipes from the ORBC Marketing Director Jan Schroeder, in their widely read Christmas issue, and also released these recipes to their massive online audience via their Epicurious web site and online newsgroup.

Other notable magazine articles on Oregon berries were featured in Weight Watchers Magazine, NW Palate (online edition), Food Product Design, Country Home, Woman's Day and EatingWell.

In April 2005, Jan Schroeder visited editors from a number of Time, Inc. owned magazines in Birmingham, Alabama. Desk-side visits were conducted with editorial staff from Health, Southern Living, Cottage Living, and Cooking Light magazines. As a result of this visit, the Food Editor of Cottage Living came to Oregon in July to work on a major berry article to be published in the summer of 2006.



The health benefits of berries was the focus of an international conference entitled "The Berry Health Benefits Symposium" which was held in June 2005 on the campus of Oregon State University in Corvallis. The ORBC spearheaded the idea for the conference that was conducted jointly by the ORBC, OSU Department of Food, Science and Technology, The Linus Pauling Institute, and The US Highbush Blueberry Council. The conference was a resounding success; with 17 international scientists reporting on research documenting the positive impact eating berries has on human health. One hundred and sixty attendees came from around the world including, CEOs of Nutraceutical manufacturing companies, as well as academic and industry representatives. The success of the symposium has led to future collaboration with representatives from the blueberry and strawberry industries and berry researchers to make this a biennial event. The next Berry Health Benefits Symposium will be held in Oregon in 2007. For a synopsis of the presentations delivered at the event be sure to read Tom Walters incisive article in this newsletter.

Support materials for berry marketing are an important part of getting the message about Oregon berries out to consumers and potential industry buyers. This year a new brochure was created for growers and processors to use in their marketing programs. The eye-catching brochure entitled "With Great Taste Comes Great Power" was an immediate hit and is now in its second printing. If you would like to

receive copies contact the ORBC office at 541-758-4043.

Two new Nutraceutical messages about berries and heart health were created this year and distributed to target audiences. Food editors and wellness professionals received a message that stressed a consumer approach to using berries as a part of a healthy diet. Manufacturers and R&D directors were sent a message outlining the high benefits to heart health that berries bring to product formulation and development. These messages were mailed to over 1500 recipients.

As part of its promotion program, the ORBC regularly sends berries to editors so that they can see for themselves how tasty and versatile our product is. This year a new container, made for shipping frozen product was purchased and a distinctive label was created especially for these boxes. Now editors receiving our berries will be impressed with the presentation as well as the product.

The ORBC marketing department continues to work hard to promote Oregon berries on all levels. If you have any questions or ideas that you would like to communicate, you can contact us toll free at 1-800-859-0355.



Wanted: Interesting Events and Picturesque Locations at Oregon Berry Farms

Every year the ORBC gets requests from Food Editors of magazines, newspapers and TV stations to help them find either an interesting locale or an exciting story about Oregon berries to feature. While we know about many of our growers and processors through their attendance at ORBC meetings or events, there are others who have an interesting story to tell that we haven't had the pleasure of meeting.

The ORBC marketing department would like you to help us broaden the scope of our knowledge about events in the berry community, or picturesque farms that would be the perfect spot for our

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2005-2006

Oregon Raspberry & Blackberry Commission Commissioner List

Chairman – Tony Wurdinger
Vice-chairman – Pieper Sweeney

Position			
P1	Pieper Sweeney 860 Ferry St. Dayton, OR 97114	503-864-2656 (work) SweeneyPreserves@aol.com	Partial Term Expires 6/30/06
P3	Jerry Stratton 37661 SE Bear Creek Road Boring, OR 97009	503-668-9674 (work)	First Term Expires 6/30/07
P4	Leonard Heidt 16563 Otter Lane NE Mt. Angel, OR 97362	503-951-0257 (work) ljeh@monitorcoop.com	First Term Expires 6/30/07
P5	Wayne Bochsler 13705 Monitor Mckee Rd NE Mt. Angel, OR 97362	503-634-2126 (work) wmboch@monitorcoop.com	First Term Expires 6/30/07
P6	Tony Wurdinger 1035 Tierra Lynn Dr. Woodburn, OR 97071	503-868-7154 (work) twurdinger@onlinemac.com	Second Term Expires 6/30/08
P7	Willard Kreder PO Box 732 Jefferson, OR 97352	541-327-0106 (work)	First Term Expires 6/30/08
H1	Dave Dunn 2994 82 nd Ave NE Salem, OR 97305	503-362-8678 (work) ddwvfc@aol.com	First Term Expires 6/30/08
H2	George Crispin PO Box 6109 Salem, OR 97304	503-363-4293 (work) GCrispin@rainsweet.com	Second Term Expires 6/30/07
PM	Phil Lavine – Public Member Chemeketa Community College 4000 Lancaster Drive NE Salem, OR 97309-7070	503-399-5089 (work) lavp@chemeketa.edu	Partial Term Expires 6/30/06

Positions

P = Producer
PM = Public Member
H = Handler

2005-2006 Oregon Raspberry & Blackberry Commission Committee List

BUDGET COMMITTEE

Tony Wurdinger, Chair
George Crispin
Leonard Heidt
Wayne Bochsler

LEGISLATIVE/LABOR/EDUCATION COMMITTEE

Tony Wurdinger, Chair
George Crispin
Pieper Sweeney
Phil LaVine

PROMOTION COMMITTEE

George Crispin, Chair
Pieper Sweeney
Phil LaVine
Dave Dunn

RESEARCH COMMITTEE

Wayne Bochsler, Chair
Jerry Stratton
Willard Kreder
Tom Peerbolt – Research Coord./ex officio

Wanted: Interesting Events and Picturesque Locations at Oregon Berry Farms

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next photo shoot. Do you know about a small but wonderful berry festival in your community? Do you have a lovely farmhouse that has been in your berry growing family for generations? Are you a new young farmer or farm family that has a growing business or uses a novel idea in your farming? Do you just feel that you have a story that would make interesting press coverage? If the answer to these questions is yes, then we would be happy to hear from you, so that we could include you in our promotions effort.

During summer of 2006, we will be once again hosting the "Oregon Berry Camp" for Food Editors from around the country. It would be delightful to find new and informative berry farms and businesses to take these editors to visit. We know that berry season is the busiest time of the year for farmers and processors and we always make every effort to have the least impact possible on your business when we bring visitors your way. We also know from experience that nothing equals a field visit and a first taste of a summer ripened berry straight from the vine to convince an editor that Oregon berries are a must do story!

If you can help us find some fresh and exciting ideas or locations we might just be able to get you a color photo in a major magazine or you might even find yourself on TV. Please call the ORBC marketing department at 1-800- 859-0355 or 541-456-2264.



The New Rust Disease Affecting Evergreen Blackberries

- by Diane Kaufman, NWREC -

This July a rust disease, previously unobserved in the United States, was positively identified on Evergreen, Everthornless, and wild Himalayan blackberry by scientists at ODA and the USDA. The disease is called 'blackberry rust' and it is caused by the fungus *Phragmidium violaceum*. *P. violaceum* had been fairly common on wild Himalayan blackberries in Europe, South America, and Australia for the last few years. Blackberry rust is a defoliating disease that reduces the vigor of wild Himalayan blackberry. Because it effectively controlled wild Himalayan blackberry, without damaging important cultivated blackberry varieties in Europe, South America, and Australia, it has been considered a promising biological control for weedy blackberries in those countries.

Blackberry rust has likely been in the Willamette Valley for at least 2 years. Late last summer, several Evergreen blackberry growers in the Salem area saw an unusual rust on their primocanes, especially in AY fields. It looked different from the cane and leaf rust we are accustomed to seeing on blackberries, seemed to attack the leaves only, and was much more aggressive. Most of the growers who had seen it on their primocanes last summer applied Rally and/or Cabrio, and felt that they had managed to achieve reasonable control going into the fall of 2004.

In early June this unusual rust was present in several Evergreen blackberry plantings. It caused small, round, purple-colored lesions (similar to those caused by *Septoria*) on the upper surface of the leaves with yellow rust spores directly under these lesions on the underside of the leaves. It was also very aggressive, draping rust spores over unopened flower buds. I had heard that ODA had positively identified *P. violaceum* in some wild blackberries in Langlois (about 15 miles south of Bandon) and the symptoms they described sounded similar to what we were seeing on Evergreen blackberries in the North Willamette Valley and on Everthornless blackberries in Southwest Washington. In July, ODA confirmed *P. violaceum* on the samples we had submitted.

Between early June and late July (when the weather finally turned warm and dry, and the disease began to shut down naturally), many Evergreen blackberry growers made several applications of Rally, Cabrio, Pristine, and/or Abound in an attempt to control this new rust, with varying degrees of success. Unfortunately there are many more questions than answers at this time, but I'll try to address some of these questions below.

1. What should Evergreen blackberry growers do in the fall to help reduce disease pressure ?

I called Ken Johnson, the OSU Plant Pathologist who is leading the research effort on *P. violaceum* to





ORBC Research Coordinator Report

-by Tom Peerbolt, Peerbolt Crop Management -

Last July, the Oregon Raspberry & Blackberry Commission (ORBC) contracted with me to be their research coordinator. I've provided a similar service for the Washington Red Raspberry Commission for the last three years. My job is to be aware of research issues and opportunities and to assist the growers in continuing to support the research already available. Specific areas I will be focusing on include: representing the ORBC at research meetings, conventions, etc.; facilitating growers and industry members in formulating a research program; organizing and facilitating regular meetings of the ORBC research committee; providing communication between the commission, growers and researchers; and seeking grant opportunities for research and encouraging and assisting researchers in preparing grant requests that apply to the industry's research plan.

Oregon's raspberry and blackberry growers have accomplished much in the past in furthering the industry's success through research. The ORBC was a major influence in the formation of the Northwest Center for Small Fruit Research and offers ongoing support for the center's USDA scientists, as well as Oregon State University's small fruit researchers. These two institutions have top-notch scientists whose work has greatly contributed to the caneberry industry's growth in Oregon.

Here are some current issues:

* There's a trend going on toward integration of berry research on regional, national and even international lines. This offers benefits for us in terms of tapping into what other regions are

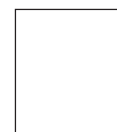
doing. It also offers some real challenges in that it tends to level the playing field. We don't want to give away competitive advantages, but we also can't afford to be isolated.

* Communication and information exchange is changing quickly with the advent of the Internet and email. These technologies can be both very helpful and very confusing and/or irritating. However, we need to find ways to use them to our advantage while ensuring that those segments of the industry that don't use the Internet aren't left out of the communication loop.

* Reduction and uncertainty in public research and extension support. There's certainly a trend in reduced government support for agriculture. This is happening at a time when, to stay competitive, we have more, rather than less, research needs. This means we need to make the most efficient use of those public resources that we do have, while we consider using researchers in other states or regions and finding private research resources.

* Getting the most out of assessment money and growers' time. There are a lot of opportunities for grant money beyond your assessment dollars. By using matching funds and the commission's endorsement, we can increase the return on your investment. There are also opportunities for cutting down on the time spent in meetings and at conferences discussing research—the better organized we are, the more useful the time investment will be.

If you have any concerns or questions regarding the ORBC research program, please contact me, Tom Peerbolt at 503-289-7287 or the research committee chair, Wayne Bochsler at 503-634-2126.



The New Rust Disease Affecting Evergreen Blackberries

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ask this question. He explained that rusts tend to like new growth (primocanes produce new growth in Sept/Oct) and temperatures ranging between the 50's and 70's F with heavy dews or fog. For this reason he was concerned that September might provide good conditions for additional cycles of infection and suggested an application of a fungicide (Rally, Cabrio, or Abound) to primocanes in early September. Since fungicides work better before the fungus has begun a new cycle of infection, the purpose of a fungicide application at this time would be to maintain vigor and healthy fruit buds in the developing primocanes. Once temperatures fall to the point that we are seeing highs at or below 60 degrees F, the disease will shut down naturally for the winter. Because there is a lag time of 14 – 20 days between fungicide application and effect on spore development, Ken would not recommend a fungicide application in October.

2. What can be done during winter to slow rust development next spring?

Based on information from Europe and Australia, we know that this fungus overwinters on old leaves and the spores are spread by wind. The fungus overwinters mostly as

Teliospores are the black colored spores that appear a few weeks after the appearance of the yellow rust. The fungus overwinters on or in the leaves, it is not as effective if all of the leaves fall and if old leaves are removed. This kind of sanitation will slow the speed at which the disease gets started next spring. Nonetheless, old leaves will be a reservoir of disease in wild Himalayan blackberry, destruction of old leaves will not completely eliminate blackberry rust.

One other observation worth noting is that rust caused by *P. violaceum* appears to be worse in AY than in EY plantings. This may seem odd, since it is usually the opposite with other diseases. Although there is no definitive explanation for this, it may be that EY plantings are less full and bushy, resulting in better air flow. Since AY off-year canes are usually trained as they grow, more leaves infected with *P. violaceum* may remain in the bundles. Most leaves on EY primocanes may have fallen off by the time these canes are trained.

3. Have any other blackberry varieties been affected by *P. violaceum*?

At the present time there is no evidence of this disease attacking any other common blackberry varieties grown here. Dr. Walt Mahaffee, plant pathologist with the USDA, is monitoring all of Chad Finn's breeding stock for signs of the disease. Anyone seeing an unusual rust on a different black-

berry variety should contact me (503/678-1264 x23) or Dennis Isaacson with the ODA Noxious Weed Department (503/986-4550).

4. What efforts are being made at controlling *P. violaceum*?

On September 9 and 29, 2005, Ken Johnson applied various fungicide treatments to an infected planting of Evergreen blackberries at NWREC. He will be reporting his results at the North Willamette Horticulture Society Meeting on January 12, 2006. He is also planning to initiate trials in cooperating grower fields early next spring. Ken and Walt Mahaffee have both submitted grant proposals for research on *P. violaceum* to the Northwest Center for Small Fruits Research. There is also an effort underway to try to get a Section 18 (Emergency) label for use of a higher rate of Rally and/or for another fungicide effective against rusts.

5. How will *P. violaceum* affect the future of Evergreen blackberries in Oregon and Washington?

There is no doubt that blackberry rust is here to stay and Evergreen blackberries are highly susceptible. However, it is too early to say whether or not an economically feasible control program for this disease will be developed. Although some growers had limited success from their fungicide sprays this year, it is important to remember that the earliest fungicide applications targeting this rust were made

in early June, well after the pathogen was active. We now know more about the disease, and growers will be encouraged to begin protecting new growth in early April, when *P. violaceum* first becomes active. Timely applications of fungicides made before the disease gets out-of-hand may make a great deal of difference. It is also important to remember that this was an unusual year and that the weather was particularly conducive to the development of rust diseases. It may be many years before we see such favorable conditions for rust. How aggressive will *P. violaceum* be on Evergreen blackberries in a more "normal" year? Will it be possible to achieve good control with 2 or 3 well-timed fungicide applications? Unfortunately, most of these questions can only be answered with time.





Sweeter. Redder. Simply Better - Get This Brochure Today!



The Oregon Strawberry Commission (OSC) growers and processors looking for ways to let customers know about the outstanding benefits of Oregon berries have a great tool at their disposal. The OSC's promotional brochure entitled "Sweeter. Redder. Simply Better", is not only an elegant eye catcher, but contains references to the health benefits as well.

This marketing tool is available absolutely free. The brochure is a three fold, full color presentation that is designed to let people know why Oregon strawberries are best when taste matters. The brochure is written in clear and to the point language, which is easy for customers to understand. The brochure will help you, the grower, or the processor answer the questions that your customers have on berries and health and will allow you to offer them an information packed handout to take home.

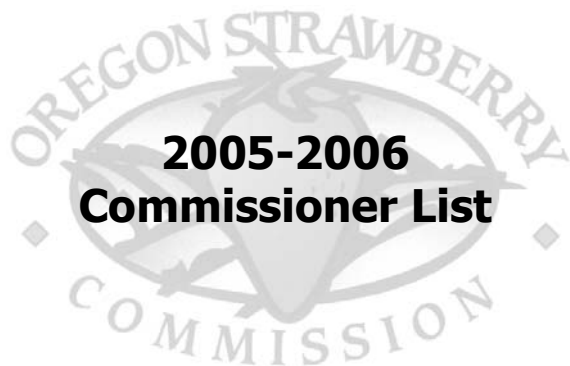
The OSC continues to make these brochures available to all Oregon strawberry growers and processors free year-round. This stunning brochure will definitely fly off the self at your fruit stand or be the keystone of your company's presentation portfolio.

As mentioned above, the brochures are offered free of charge and you may order as many as you will need by contacting the OSC offices at 541-758-4043.



The Oregon Strawberry Commission (OSC) has created a special "Oregon Strawberries - Sweeter. Redder. Simply Better." product seal for food manufacturers to use. Oregon Strawberries are ideal for quality ice creams. They're red through and through, and naturally sweet, allowing ice cream makers to save on dyes and processed sugars. When you see this special seal on a food product, it means one thing: it contains the best-tasting strawberry available.

Manufacturers who create products made with Oregon strawberries are eligible to use this seal on their packaging and promotional material. The OSC will also donate the first 100 copies of its newest promotional brochure to businesses using the OSC seal. For more information about using the seal and receiving a high-resolution image, please contact us at 541-758-4043 or visit www.oregon-strawberries.org and click on Oregon Strawberry Seal.



2005-2006 Commissioner List

Chairman – Michael Christensen
Vice-Chairman – Ken Kraemer
Secretary/Treasurer – Arne Goddik

Position

P2	Michael Christensen 36483 Hwy 226 SE Albany, OR 97322	541-928-8778 (work) mcccacmc@aol.com	First Term Expires 6/30/07
P3	Stan Herr 9631 Selah Springs Rd Silverton, OR 97383	503-873-8063 (work) stanh843@cs.com	Second Term Expires 6/30/07
P4	Ken Kraemer 12614 Dominic Road Mt. Angel, OR 97362	503-845-2489 (work) kraemerfarms@aol.com	Second Term Expires 6/30/07
P5	Arne Goddik 18265 SE Neck Road Dayton, OR 97114	(503) 864-3882 (work) goddik@viclink.com	First Term Expires 6/30/08
H1	Vacant		
H2	Dave Ralls 12415 Parrish Gap Turner, OR 97392	503-932-0008 (work) daver@norpac.com	Second Term Expires 6/30/07
PM	Elizabeth Howley Clackamas Community College Clairmont Hall 119 19600 S. Mollala Ave Oregon City, OR 97045	503-657-6958 ext. 2389 ehowley@clackamas.edu	Partial Term Expires 6/30/06

Positions

P = Producer
 PM = Public Member
 H = Handler

2005-2006 Oregon Strawberry Commission Committee List

BUDGET

Michael Christensen, Chair
 Ken Kraemer
 Arne Goddik
 Stan Herr

RESEARCH

Arne Goddik, Chair
 Dave Ralls
 Michael Christensen

LEGISLATIVE

Ken Kraemer, Chair
 Stan Herr
 Michael Christensen

EDUCATION/PROMOTION

Stan Herr, Chair
 Ken Kraemer
 Michael Christensen
 Dave Ralls
 Elizabeth Howley



FALL 2005

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Pacific Northwest Administration
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