



A bi-monthly newsletter to faculty/staff/retirees of WSU Long Beach, Mt. Vernon, Puyallup & Vancouver

Message from the Director

At any institution of higher learning, adequate facilities must be available for research, teaching and extension programs to take place. Adequate funds must be available to properly operate and maintain facilities. Research labs must have proper ventilation for the elimination of fumes. Buildings must have adequate air exchange to maintain air quality. All buildings should meet ADA standards to provide access to all individuals.

How do WSU Puyallup and other research and extension facilities in Washington compare to these expectations? New fume hoods were recently installed in Kalkus Hall but the ventilation system does not completely work. The administration building does not provide any active air exchange. Kalkus Hall finally had an elevator installed 35 years after the building opened. However, the restrooms are not ADA accessible. The second floor of the 4H building, home to the state 4H office, is also not ADA accessible.

In a recent Tacoma News Tribune story, President Lane Rawlins was quoted, "I am embarrassed by the facilities at Puyallup, Wenatchee, Prosser and Mount Vernon and our other research stations". In a December 7 article in *The Chronicle of Higher Education* on Gary Chastagner's Christmas tree research, the reporter referred to the WSU Puyallup research building as a "hut". These descriptions in the press obviously send a bad message to the public and our colleagues.

In addition to these challenges, we are trying to cope with a second consecutive year of a facilities operations budget that was reduced by 50 percent from FY02.

To facilitate a positive change, we are in the process of updating the Westside strategic vision that was written in 2001. This plan will take a comprehensive look at current and potential programs; current facilities and future needs; and any improvements in our campus infrastructure. This plan must have input from the faculty, staff, and the community. Funding for improvements could come from a legislative initiative, from resources generated locally from land sales, or from elsewhere in the WSU system.

WSU Puyallup has a bright future in research, extension and teaching. We hold the key to our success by proactively planning our own vision.

--Jim Kropf

WEST PROFILE

In June of 1984, **Dr. Craig Cogger** joined WSU's Agronomy and Soil Sciences department in Puyallup. Craig, along with his scientific assistant **Andy Bary** and technologist **Liz Myhre**, has conducted research on soil management and composting for nearly 20 years. For the last dozen years, Craig's "Organic Nutrient Management Program" has been focused on recycling organic wastes in agricultural and urban soils. Recently the program has expanded its focus to small farms agriculture and organic agricultural systems.

The goal of the program is to close the recycling loop for organic materials produced in urban areas (biosolids, yard debris, compost, and animal manure from surrounding agricultural areas), using them as a source of nutrients and organic matter for crop production, soil renovation, and environmental protection. Craig initiated this program in 1990, hiring Dan Sullivan as a post-doc. Craig and Dan began a collaboration that continues today through Dan's position on the faculty at Oregon State University. Craig has worked on this program with many collaborators from WSU, including **Andy Bary, Steve Fransen, Jim Kropf, Rita Hummel, Bob Stevens, Craig MacConnell, Eric Miltner, Marcy Ostrom, Dave Muehleisen, David Granatstein, and Ann Kennedy.**

The Organic Nutrient Management team's largest effort has focused on biosolids management in agriculture. Biosolids are derived from wastewater sludge and are treated to be suitable for agricultural use. Cogger and those working with him developed 10 on-farm dryland grain research and demonstration sites in eastern Washington, and a series of experiments on irrigated forage grasses in western Washington. Through these projects they have developed educational programs and guidelines for biosolids applications use in Washington State. They collaborated with scientists from five states on a national study on biosolids nitrogen availability. The results of that study are now the standard for estimating the nitrogen value of biosolids.

Dr. Cogger was co-author on the Biosolids Management Guidelines for Washington State, which is the primary guidance document used by biosolids producers, users, and regulators in the state. He was also co-author of an on-line spreadsheet that is used by regulators, biosolids managers, and consultants for calculating biosolids application rates. Through the team's research and education programs, they have helped turn biosolids from a crisis disposal problem in the state in the late 1980s to a resource in demand today.

When clopyralid contamination of compost emerged as a major issue in 2001, Craig helped form a WSU team involving research, extension, and media specialists. Together, they set up a clopyralid bioassay program for local composts, initiated research focused on reducing clopyralid risks, and developed a website providing the latest information on clopyralid issues. The information they found helped guide clopyralid decisions made by compost producers and the WSDA. Because of new rules adopted by the WSDA and management adopted by composters, the clopyralid issue has now passed without major losses occurring.

Craig's latest research is focused on organic agricultural systems, including the nutrient value of local animal manures, composts, and yard debris. The Organic Nutrient Management Program demonstrates various cover crop systems, and has developed a multidisciplinary organic systems experiment, which integrates research on nutrient management, soil quality, weed management, insect ecology, and economics of different organic systems.

In addition to his research, Craig gives approximately 35 presentations on soils, nutrient management, and water quality each year to master gardeners, extension water quality volunteers, biosolids producers and users, septic system professionals, farmers, soil scientists,

environmental health specialists, composters, and students ranging from junior high school through college.

Craig recently received the 16th annual Kenneth J. Morrison Award in Agronomy and Soil Sciences at the Spillman Field Day in Pullman on July 11. This award recognizes WSU Cooperative Extension faculty for outstanding contributions made to improve Washington State's agriculture in agronomic production, crop quality and soil management. Craig is nationally recognized for his expertise in recycling solid waste.

To learn more about the programs on recycling organic materials, soils, and sustainable agriculture, check out the website at: www.puyallup.wsu.edu/soilmgmt/

PRESENTATIONS/MEETINGS/TRAININGS/INVITATIONS

Carrie Foss, Gary Chastagner, Art Antonelli, Tim Miller and Jenny Glass conducted a Christmas Tree Workshop at WSU Puyallup, Sept. 24-25.

The Christmas Tree Team (**Gary Chastagner, John Stark, Art Antonelli, Kathy Riley, and Paul Kaufmann**) presented various posters and talks at the Sixth International Christmas Tree Research and Extension Conference in Hendersonville North Carolina in Sept.

Andy Bary and Craig Cogger were part of the planning and teaching team for a 5-day class, "Compost Facility Operator Training". **Gwen Stahnke and Rita Hummel** also taught parts of the course to the nearly 30 professional composters and regulators who attended the training, Sept. 29-Oct. 3.

Craig Cogger presented advanced training on compost and mulches to more than 125 Master Gardeners at the Master Gardener Annual Conference, Port Townsend, Oct. 18.

Art Antonelli began his 29th season of Teaching Master Gardeners in Shelton and Vancouver, Oct.

Art Antonelli gave the following presentations: "WDOs, (Wood Destroying Organisms)," for the Washington State Pest Consultants Associations, Yakima, Nov. 13.

"IPM for Insects 2004," for the Pesticide Education Program, Mill Creek, Nov. 19.

"Pesticide Pre-license Training," and "Tree and Shrub Pest Management," Bellevue, Dec. 2.

"Diagnosing Plant Problems," for Washington State Nursery and Landscape Association, Puyallup, Nov. 20, and Everett,

Dec. 4.

"Mite Pest Management," and "Caterpillar Pest Management," to the Interstate Pest Applicators Association in Puyallup, Jan. 10.

"Pesticide Training," Tacoma, Jan. 14.

Art Antonelli, Carrie Foss, Gwen Stahnke, Tim Miller, and Rita Hummel presented a multiple discipline oriented Integrated Plant Health Management Workshop in Puyallup, Jan. 27-29.

Debbie Inglis gave invited presentations including: "Agricultural research and extension programs at WSU Mount Vernon" at the WSU Statewide Entomology Faculty Meeting in Mount Vernon, WA; "Phosphorous acid for control of potato tuber rots" at the 29th Annual Farm Fair and Trade Show in Hermiston, OR; "Potatoes, Pests and Pathologists: WSU Mount Vernon Vegetable Pathology Program" at the President's Associate's Council, WSU Foundation, WSU West in Seattle, WA; and, "The search for potatoes that are resistant to late blight" at the Western Potato Council 2003 Conference and Trade Show in Richmond, British Columbia.

Debbie Inglis gave the following commodity group presentation: "Water mold diseases" and "Phostrol for control of potato tubers rots" at the Columbia Basin Potato IPM meeting in Moses Lake.

Debbie Inglis gave a presentation to potato scientists and industry members on the "WSU Mount Vernon Dacom PlantPlus experimental field trial" at the Syngenta Potato COI meeting, in Vero Beach, FL.

Glawe, D. A. presented "An Overview of Taxonomic Diversity of Powdery Mildew Fungi in the Pacific Northwest," to the

Western Ornamental and Turf Disease Conference, Portland, Jan. 14.

The Washington Tilth Producers' Annual Meeting held in Bellingham on Nov. 7-9 included presentations by the following westside WSU staff/faculty: **Lindsey du Toit** and **Tim Miller** - "Evaluation of mustard cover/biofumigant crops for control of weeds and Fusarium wilt in spinach seed crops"; **John Stark** part of a panel discussion on "Salmon and the farm". **Brad Gaoloch** "Entomology: Learn how to identify insect orders" and "Organic controls for flea beetle on mustard greens"; **Lindsey du Toit** "Systematic diagnosis (Part I) & management (Part II) of plant diseases"; **Tim Miller** "Organic amendments for weed control" Do they work?"; **Marcy Ostrom**, **David Muehleisen**, **Andy Bary** and **Tim Miller** "Using cover crops to manage soils, weeds and pests"; **Debra Inglis** "New approaches for late blight control on potatoes and tomatoes"; **David Muehleisen** "Conservation Security Program (CSP) What is in it for you?"

The following presentations were made by westside WSU faculty/staff at the Annual Convention and Trade Show of the Pacific

Northwest Vegetable Association in Pasco on Nov. 19-20: Vegetable sessions **Debra Inglis**, "Seed and in-furrow treatments for control of root rot in peas"; **Tim Miller** "Weed management in green peas"; **Renee Prasad**, "Natural enemies for root maggot biocontrol". **Lindsey du Toit**, "Botrytis gray mold studies in onion seed" and "Aspergillus black mold: Can it be controlled?" **Mike Derie**, "Bacterial blight in seed carrots: Biology and management"

Lindsey du Toit was invited to speak to the Lower Columbia Basin Crops Consultants Association on "Fungicide use in vegetable crops" on Nov. 19 in Pasco.

Lindsey du Toit gave two presentations at the National Spinach Conference in Fayetteville, Arkansas on Nov. 20-21: "Verticillium wilt of spinach" and "Epidemiological aspects of Stemphylium leaf spot and Cladosporium leaf spot in spinach seed production".

Lindsey du Toit was invited to speak at the Great Lakes Expo in Grand Rapids, Michigan, on Dec. 9-11, "Gray mold, black mold and onion seed quality" and "Bacterial blight and carrot seed quality".

PUBLICATIONS

Chastagner, G., I.M. Thomsen, J. Hudak, and **K. L. Riley. E. Miltner, A.I. Bary,** and **C.G. Cogger.** 2003. Clopyralid and compost: Formulation and mowing effects on herbicide content of grass clippings. *Compost Sci. Util.* 11:289-299.

The following posters and talks were presented at the sixth International Christmas Tree Research and Extension Conference in Hendersonville North Carolina in Sept.: 1) **Chastagner, G., E. Hansen, K. Riley,** and **W. Sutton.** 2003. Susceptibility of conifer shoots to infection by *Phytophthora ramorum*. Pp 10-11. Program and Abstract Book; 2) **Stark, J. D., A. Antonelli,** and **G. Chastagner.** 2003. Arthropod pest management in Christmas trees in the Pacific Northwest. Pp 12. Program and Abstract Book; 3) **Chastagner, G., K. Riley,** and **J. Brown.** 2003. Identification of Canaan fir trees with superior needle

retention. Pp 25-26. Program and Abstract Book; 4) **Chastagner, G., K. Riley,** and **C. Landgren.** 2003. The keepability of Douglas-fir progeny from Texada Island, B.C. Pp 26-27. Program and Abstract Book; 5) **Chastagner, G.** 2003. Late season moisture levels of Christmas trees on retail and wholesale lots in Washington, Oregon and California. Pp 27-28. Program and Abstract Book; 6) **Chastagner, G., A. Antonelli, K. Riley, J. Stark,** and **P. Kaufmann.** 2003. Susceptibility of various true firs to insect pests in the Pacific Northwest. Pp 30. Program and Abstract Book; 7) **Chastagner, G.,** and **P. Kaufmann.** 2003. Effect of Annosus root rot on the keepability of noble fir Christmas trees. Pp34-35. Program and Abstract Book; 8) **Chastagner, G., E. Hansen, K. L. Riley, W. Sutton.** 2003. Identification of fungicides to control

- sudden oak death. Pp 36. Program and Abstract Book; 9) **Chastagner, G., K. Riley, P. Kaufmann.** 2003. Effect of harvest date on needle retention by various true firs. Pp 42-43. Program and Abstract Book.
- Sullivan, D.M., **A.I. Bary, T.J. Nartea, E.A. Myhre, C.G. Cogger, and S.C. Fransen.** 2003. Nitrogen availability seven years after a high-rate food waste compost application. *Compost Sci. Util.* 11(3): 265-275.
- Glawe, D.A.** 2003. First report of powdery mildew of *Platanus occidentalis* caused by *Microsphaera platani* (*Erysiphe platani*) in Washington State. Online. Plant Health Progress doi:10.1094/PHP-2003-0818-01-HN.
- Glawe, D.A.** 2003. Much more than phylogenies: a utilitarian view of the taxonomy of plant pathogenic fungi. *APSnet Feature*, Sept. 2003. <http://www.apsnet.org/online/feature/taxonomy/>.
- Upright fruiting habit of Puget Summer strawberry related to reduced fruit rot. **Pete R. Bristow and Patrick P. Moore.** *Phytopathology* 93:S127.
- Controlling *Botrytis cinerea* on fruit and canes of red raspberry with fungicides. **Pete R. Bristow and Gwen E. Windom.** *Phytopathology* 93:S127.
- Effect of controlling *Melampsora medusae* f. sp. *deltoidae* on the productivity of hybrid poplar stool beds. **Gary A. Chastagner.** *Phytopathology* 93:S128.
- du Toit, L.J., and Derie, M.L.** 2003. Inoculum sources of *Stemphylium botryosum* and *Cladosporium variabile* in spinach seed crops. *Phytopathology* 93:S22.
- du Toit, L.J., and Derie, M.L.** 2003. Verticillium wilt of spinach in Washington. *Phytopathology* 93:S22.
- Stark J.D., Banks J.E., Vargas R.I.** 2004. How risky is risk assessment? The Role that Life History Strategies Play in Susceptibility of Species to Stress. *Proceedings of the National Academy of Sciences* 101: 732-736.
- Stark, J.D. and Vargas, R.I.** 2003. Demographic changes in *Daphnia pulex* (leydig) after exposure to the insecticides spinosad and diazinon. *Ecotoxicology and Environmental Safety* 56: 334-338.
- Stark, J.D. and Walthall, W.K.** 2003. Agricultural adjuvants: acute mortality and effects on population growth rate of *Daphnia pulex* after chronic exposure. *Environ. Toxicol. Chem.* 22: 3056-3061.
- Kramarz, P. and **Stark, J.D.** 2003. Population Level Effects of Cadmium and the Insecticide, Imidacloprid to the Parasitoid, *Aphidius ervi* after Exposure Through its Host, the Pea Aphid, *Acyrtosiphon pisum*. *accepted Biological Control* 27: 310-314.
- Stark, J.D. and Banks, J.E.** 2003. Population-level effects of pesticides and other toxicants on arthropods. *Annu. Rev. Entomol.* 48: 505-19.
- Falacy, J. S., and Glawe, D. A.** 2003. First report of powdery mildew of *Ligustrum japonicum* (Japanese privet) caused by *Microsphaera syringae* (*Erysiphe syringae*) in North America. Online. Plant Health Progress doi:10.1094/PHP-2003-1210-01-HN.
- Glawe, D.A.** 2003. First report of powdery mildew of *Nandina domestica* caused by *Microsphaera berberidis* (*Erysiphe berberidis*) in the Pacific Northwest. Online. Plant Health Progress doi:10.1094/PHP-2003-1023-01-HN.
- Glawe, D.A., Windom, G.E., Grove, G.G., and Falacy, J.S.** 2003. First report of powdery mildew of *Convolvulus arvensis* (field bindweed) caused by *Erysiphe convolvuli* var. *convolvuli* in North America. Online. Plant Health Progress doi:10.1094/PHP-2003-1021-01-HN.
- Lindsey du Toit** presented two posters at the annual meeting of the American Phytopathological Society in Charlotte, NC, Aug. 9-13: 1. Inoculum sources of *Stemphylium botryosum* and *Cladosporium variabile* in spinach seed crops. **Lindsey J. du Toit and Mike L. Derie.** Abstract published in *Phytopathology* 93:S22. 2. Verticillium wilt of spinach in Washington. **Lindsey J. du Toit and Mike L. Derie.** Abstract published in *Phytopathology* 93:S22.
- Debbie Inglis** in the Vegetable Pathology program at WSU Mount Vernon attending the Potato Association of

America meetings in Spokane, WA. In addition to moderating the session on breeding and genetics, she helped present these papers/posters: **Inglis, D.**, **Gundersen, B.**, **Johnson, D.**, **Newberry, G.**, and **Thornton, R.** Using improved host resistance to control late blight on potato; **Hamm, P. B.**, **Inglis, D.A.**, **Finn, R.**, and **Olaya, G.** Resistance to mefenoxam in isolates of *Pythium ultimum* from potato in Oregon; and, **Porter, L, D.**, **Johnson, D.A.**, and **Inglis, D.A.** Identification and characterization or resistance to *Phytophthora infestans* in

commercial potato cultivars and advanced breeding lines.

Eric Miltner presented the following two posters at the ASA/CSSA/SSSA Annual meetings in Denver, COP, Nov. 3: **Miltner, E.D.**, **G.J. Rinehart**, and **G.K. Stahnke**. Nitrogen source and mowing height effects on turfgrass quality and pest occurrence; **Rinehart, G.**, **E. Miltner**, and **G. Stahnke**. Effects of nitrogen rate and mowing height on colonial and velvet bentgrasses for home lawns.

FIELD DAYS & TOURS

At the WSU Onion Field Day held in Quincy on Aug 28, **Lindsey du Toit** and Gary Pelter, WSU Extension Agent for Grant/Adams Counties, presented an update on their research on gray mold/neck rot and Iris yellow spot virus of onion. The field day had about 100 attendees, including several people from Holland and New Zealand.

The WSU Mount Vernon Vegetable Pathology program hosted its annual potato field day on Aug 21. Speakers included USDA scientists, Chuck Brown and Lerry Lacy, and WSU scientists, Bob Thornton, George Newberry, **Tim Miller** and **Debbie Inglis**. The highlight of the event was a mashed potato taste test, featuring new red-fleshed potatoes developed at WSU Prosser.

PEOPLE

Ray Maleike and **Art Antonelli** received Certificates of Appreciation for their roles in establishing the WSU Master Gardener Program at the 2003 Master Gardener Conference Awards Banquet in Port Townsend in October. Additionally, Ray Maleike received a plaque for recognition of excellence in Master Gardener Instruction and Art Antonelli received a similar award for recognition as "The World's Most Experienced Faculty Instructor of Master Gardeners". Congratulations to both of you.

Becky Hines has joined the WSU Pesticide Education Program at WSU Puyallup. She will be helping to co-coordinate pesticide pre-license and recertification programs in western Washington. Becky has a Masters in Entomology from the University of Minnesota, has worked in Vegetable and Field Crop IPM both in the U.S. and Mexico, and comes to WSU from Michigan State University where she worked in Pesticide Education and Safety and Entomology.

Dr. Venche Talgo, a visiting scientist from the Norwegian Crop Research Institute

spent, 6 weeks during September and October working in **Gary Chastagner's** lab to learn about disease problems in conifer nurseries and Christmas tree plantations in the Pacific Northwest.

Anne Germino and **Linda Sanford** are the new Conference Coordinators working with Janet York for CAPPs, Conferences and Professional Programs, at WSU Puyallup. Anne came to WSU in November from the Tacoma Regional Convention and Visitor Bureau where she was a Convention Sales Manager, and from Emerald Downs where she worked as an Event Coordinator.

Linda came to WSU Puyallup in November after working on the main campus in Pullman. Linda has enjoyed the challenge of managing many conferences for WSU for more than 5 years and looks forward to continuing this in Puyallup. Welcome to both **Anne** and **Linda**!

Willy Stockman returned to WSU Puyallup in August and is once again working with **Jon Johnson**. Willy was hired on the USDA SARE project dealing with riparian buffers. He will be installing,

instrumenting and monitoring three experimental buffer types for nutrient movement through the buffer. Welcome back Willy!

Jessica Gigot has joined the Vegetable Pathology program at WSU Mount Vernon as a graduate student. She will be working with **Debbie Inglis** and Dennis Johnson towards an M.S. degree in plant pathology, and investigating tuber-to-tuber transmission of *Phytophthora infestans* on potato. Jessica received a B.A. degree in Biology and Anthropology from Middlebury College in Middlebury, VT in 2001. Most recently, she worked as an intern for the WSU Center for Sustaining Agriculture and Natural Resources at S&S Homestead Farm on Lopez Island. Her research assistantship is being funded by a grant from the National Potato Council.

Mount Vernon welcomes **Martin Chilvers** who came to WSU from Tasmania in December. Martin works as a postdoctoral research associate with Lindsey du Toit, investigating development of a molecular seed assay for *Botrytis* spp. pathogenic on onion. Martin completed his PhD in 2003 on the epidemiology of neck rot of onions in northern Tasmania, Australia.

Tim Miller received the Distinguished Service Award from the Western Washington Horticultural Association at their annual association banquet, January 7-9. This award recognizes individuals who have made outstanding contributions to the WWHA and to the horticultural industry of western Washington. Congratulations Tim!

The contributions of dozens of volunteers have been critical to the work of the Mycology Program at the Puyallup Center. During 2003, Master Gardeners and other volunteers contributed 951 specimens of powdery mildews and 818 hours of labor

valued at \$13,137. On November 22, two individuals were recognized as Mycology Program **Volunteers of the Year for 2003**, in recognition of outstanding contributions. Shirley Graves, Pierce County Master Gardener, was recognized for contributing 300 hours of work maintaining specimen records and doing proofreading for the new substrate-fungus database for the Pacific Northwest. Marilyn Tilbury, King County Master Gardener, was recognized for contributing nearly 400 powdery mildew specimens that included a number of new records for the Pacific Northwest and North America. As tokens of appreciation for their efforts, Shirley and Marilyn were presented with certificates of appreciation and limited edition prints of a rhododendron (without powdery mildew symptoms!).

Congratulations to the Master Gardener Foundation of King County regarding their recent write-up in the "WSU Foundation Honor Roll of Donors 2002-2003" brochure. The article features quotes from **Mary Robson** and **Elaine Anderson**. This is the first Master Gardener group in the history of WSU and the Master Gardner Program to become a recognized major donor (\$100,000 or more) to Washington State University. The Master Gardener Foundation of Mason County was also listed among the corporations, foundations and associations that support the teaching, research and public outreach of WSU. Thanks to the treasured volunteers who made these gifts possible and to those who support this great program in nearly every county of the state.

GRANTS

Gary Chastagner, John Stark and **Art Antonelli** received a grant from Pacific Northwest Christmas Tree Association for \$60,000.

Gary Chastagner received the following grants: \$10,000, from Fred C. Gloeckner Foundation, Inc.; \$1,400 from Silver Mountain Enterprises.

Craig Cogger and **D. Granatstein** received a grant from WSARE in the amount of \$107,696 (2003-2006) to assess soil quality in organic management systems.

Eric Miltner, Gwen Stahnke, and Geoffrey Rinehart received a grant from Golf Course Superintendents Association of America in the amount of \$20,000 (9/1/03-8/31/05) for Evaluation of wetting agents on golf course putting greens.

Eric Miltner and Gwen Stahnke received the following three grants from the National Turfgrass Federation: \$12,000 (9/1/03-9/30/09): for National Bentgrass (Putting Green) Test; \$12,000 (9/1/03-9/30/09) for National Bentgrass (Fairway/Tee) Test; \$12,000 (9/1/03-9/30/09) for National Fineleaf Fescue Test.

Patrick P. Moore received a grant from the Washington Red Raspberry Commission in the amount of \$49,000, for Red Raspberry Breeding, Genetics and Clone Evaluation.

The Washington Blueberry Commission awarded the following research grants for 2004: \$8,000 to **Patrick P. Moore** and **Gary Moulton** for evaluation of blueberries at WSU Mount Vernon; \$4,124 to **Peter Bristow** for evaluating the reaction of new blueberry cultivars to blueberry scorch carlavirus (BISV) and blueberry shock ilarvirus (BIShV); \$3,900 to **Lynell Tanigoshi** for evaluation of novel insecticides for the economic control of winter moth root in blueberry; \$4,700 to **Tim Miller** for weed control in blueberries.

The Center for Sustaining Agriculture and Natural Resources, CSANR, was awarded a \$3.75 million research grant from the Paul G. Allen Charitable Foundation to help farmers ease global climate change by reducing farm-produced greenhouse gas emissions.

The following grants were received from the Washington State Commission for Pesticide Registration (WSCPR): **Tim Miller** and **Lindsey du Toit**, \$7,500 to continue evaluating the efficacy of mustard cover crops for management of weeds and Fusarium wilt in spinach seed crops in western Washington; **Lindsey du Toit** and **Debra Inglis**, \$12,000 to investigate the host range of *Verticillium* on vegetable crops in western Washington and the influence of fumigation on development of *Verticillium* wilt; **Lindsey du Toit**, \$5,248 for continuing research on the significance and management of seedborne *Botrytis* causing neck rot of onion, \$7,500 to continue investigating fungicidal control of scape/umbel blight in onion seed crops in Washington, \$7,500 to assess the efficacy of bactericides for management of bacterial blight in carrot seed crops, \$20,000 for continuing research on the biology and management of leaf spot of spinach seed crops in western Washington.

GENERAL ANNOUNCEMENTS

The August 2003 edition of WSU's Vegetable Pathology Team newsletter can be found on the team's website at: http://mtvernon.wsu.edu/path_team/currentnewlet.htm.

WSU Puyallup REC fair booth was a great success. The 6-day booth at the Puyallup Fair attracted a great deal of interest again this year. Between the 35 faculty and staff who volunteered at the booth, 4,250 people were contacted, and the daily Cougar Gold Cheese drawing winners were from Iowa, Renton, Arlington, Tacoma and Auburn. Thanks to **Gwen Stahnke** for chairing this again this year and to all who helped to make it a success.

ARC Architects of Seattle has been selected to design new facilities at WSU Mount Vernon. ARC Architects was founded in 1976. It has broad experience, including a strong background in designing and planning laboratory, research and medical projects. The firm emphasizes harmonizing each building with its unique environment, and blending aesthetic and practical needs.

A Section 24(c) Special Local Needs registration was approved in the Spring by the WSDA and the Oregon Department of Agriculture for Cabrio EG for control of *Alternaria* leaf/pod spot and ring spot in Brassica seed crops grown in Washington and Oregon. The registration was approved based on field and greenhouse trials carried out by **Lindsey du Toit** and **Mike Derie** at WSU Mount Vernon.

The WSU 4-H Bonney Lake Challenge Course has filled the 2004 calendar with trainings and special programs for the year. To obtain more information, or to be involved with the Challenge Program or Demonstration Forest, please contact **Vicky McCarley** at 253-862-9569. You can also view the website at www.blchallenge.wsu.edu.

Permission to reprint the *West by Northwest Newsletter* is granted provided the intended meaning is not changed and explicit credit is given to the author(s) and publication source. If the original article is adapted, paraphrased, or changed in any way, please send a fax (253.445.4571) of the new version for verification of meaning and approval. To share *West by Northwest* with anyone who might be interested in our research and extension efforts, please direct them to the on-line edition at: <http://www.puyallup.wsu.edu/periodicals.htm>

Please send news items for the Spring edition of *West by Northwest* to Heather Schriver at WSU Puyallup, 7612 Pioneer Way E, Puyallup, WA 98371-4998 or e-mail: schrive@puyallup.wsu.edu. **Deadline for the Spring edition is April 30.** Editor:
Heather Schriver.