

Plant Science Says

Happy
Valentine's Day

February, 2003

Montana Nursery and Landscape Association Convention

By Jeanne Briggs

The Montana Nursery and Landscape Association held its annual convention and trade show in Billings Jan. 8 – 10, and MSU Plant Sciences/Horticulture was well represented at the event. Tracy Dougher, Cheryl Moore, Toby Day, David Baumbauer, Yousef Zadegan, John Cox (Horticulture Club President) and I made the trip east. I presented a workshop on Nursery and Landscape Weed Management to over 70 attendees and gained much insight into what weed problems horticulture professionals are encountering and how the problems are currently being addressed. Apparent was that the industry in Montana is eager and hungry for new information and research in this area.



Clockwise: Tracy Dougher, Jeanne Briggs, Toby Day, John Cox, Yousef Zadegan and David Baumbauer

John and I set up a booth featuring the Hort. Club at the trade show and all MSU attendees helped “man” it throughout the show. Tracy provided information on the Department’s internship program, which generated much interest, as did the projects of Horticulture Club. One of the most frequent questions asked was how best to publicize job openings. The industry appears to be experiencing quite a growth surge in Montana and qualified employees are needed throughout the state.

David B. was “delighted to visit with former students who are active in the horticulture industry”. A number of MSU

graduates were in attendance, as were many recent graduates looking for positions. John Cox did an excellent job of matching employers with potential employees, and several students had interviews scheduled for the near future.

As we were so well received, plans for participation for next year are already in the works. We will pursue the creation of a job placement booth, which would facilitate communication between students and potential employers, and a horticulture research booth to showcase faculty and student projects. Also, in the thought process, is the offering of an intensive training course for students wishing to take the Certified Plant Professional exam as this certification is very highly respected in the industry.

Genome Conference XI 2003

By Jason Walling and Jason Cook

Several members of the Department of Plant Sciences and Plant Pathology had the opportunity to attend the Plant and Animal Genome Conference in San Diego from January 11-15. The size and diversity of this conference attracts top scientists from around the world that consider genomics an integral part of their research. As for graduate students, this conference provided a means of gathering feedback on their work in the form of poster presentations and interactions with other scientists that share similar interests.

The conference started with a variety of workshops that consisted of subject-focused seminars pertaining to disciplines within plant and animal genomics including: species-specific workshops, molecular markers, cytogenetics, disease resistance, and bioinformatics. The workshops provided a medium for presenting novel approaches within these disciplines as well as illustrating the current focus of plant and animal genomics research.

The conference progressed through a series of plenary speakers who addressed the current state of and future directions genomics should proceed. Nobel laureate, Dr. Sydney Brenner, proposed that the trouble with science nowadays is that it is focused on making people. He emphasized that clones of a person would be like a much younger identical twin with a different personality, different immune system and different perspective on life.

Indeed, instead of being used for spare parts, (s)he might want to use the 'original' individual for spare parts! He also felt that genomic work on model systems like *Arabidopsis thaliana* was okay for young people (e.g. graduate students), but "more serious scientists work on the important organisms." Dr. Brenner's comments led to many interesting discussions during the rest of the conference.

Although the draw of reading 1000+ posters kept us busy, we did get the opportunity to explore some of the finer aspects of San Diego. This included a visit to the world famous San Diego Zoo, bath tub size margaritas and authentic Mexican Cuisine in "Old Town" San Diego, and of course the beach. Additionally we found that rubbing elbows with some of the industries "Big Wigs" at poolside was one of the more unusual, but pleasant, ways to make new contacts and gain feedback in our field.

2003 MT / WY Sugarbeet Symposium

The 4th biennial Sugarbeet Symposium was held January 13 and 14 in Billings, MT. Attendance for the Monday sessions was 247. The focus was on crops grown in rotation with sugarbeets, such as malt barley, dry beans, soybeans, hay barley, corn and safflower. Faculty from MSU making presentations included: Jack Reisselman, Pat Hensleigh and Barry Jacobsen from the Plant Sciences and Plant Pathology Department; Gary Brester from the Department of Economics and Agricultural Economics; Paterson from Animal and Range Sciences; and Ken Kephart, Jim Mickelson, Duane Johnson and Chuck Flynn from the Research Centers. Topics covered pest control, agronomy, irrigation, value-added products, cattle feeding and crop insurance.

Tuesday sessions were attended by 326 sugarbeet growers and allied industry. Faculty from MSU that made presentations included Jim Mickelson, Gary Brester and Barry Jacobsen. Topics included: Consumer attitudes about biotechnology; insect, weed and disease control, effects of the sugarbeet industry on land values (this talk was very interesting in that Dr. Brester showed that sugarbeets add more than \$247 value to each acre of irrigated land in MT), the Farm Bill, irrigation, the best management practices for cooperatives, Montana water law and the future of the North American sugar business. Key speakers included Luther Markwart of the American Sugarbeet Growers Association, officers from sugar plants in Montana and Wyoming and experts from the Departments of th Interior and Fish, Wildlife and Parks, the MT Water Court, The MT Department of Agriculture, Washington State University, Kansas State University, University of Nebraska and the University of Wyoming.

Barry Jacobsen co-chaired the program committee with Ken Kephart. A published Proceedings was produced. There were 44 commercial booths at the trade show.

New Employees

Elena Kalinina-Turner – Dyer Lab – 725 LJH



Originally I am from Alma-Ata, Kazakhstan. It is a beautiful city surrounded by mountains and is famous for delicious apples and great cultural diversity.

After graduation from the Timityazev State

Agricultural Academy in Moscow, Russia with an M.S. degree in agricultural chemistry and soil science, I became interested in plant science, especially plant biotechnology and physiological mechanisms of plant responses to different stresses. It remains my primary area of interest. Due to family circumstances, I haven't been able to work for a number of years. Now I am very happy to have the opportunity to get back to research.

I am the proud mother of 2 children, Aleksey (15 yrs. old) and Veronika (5 yrs. old). I like Bozeman and MSU because of the friendly people, variety of outdoor activities, and of course, the scenic view of the mountains.

Bob's Byte

By Bob Johnston

Do you feel overwhelmed with the amount of Spam you receive? Here are some tips to help reduce the size of your inbox.

- 1) Only give your email to people you correspond with.
- 2) Open up a free web mail account at Yahoo or Hot Mail. Use this account to correspond with vendors, merchants, etc. If it gets spammed, you can always abandon the account. Plus both these sites offer some degree of Spam filtering.
- 3) Use a disposable email account when you don't need a confirmation or a response from tech support. Use can use Null@Montana.edu for this. This account will automatically delete all incoming email from the server.
- 4) Don't post your university email address on guest books, contact lists, news groups or chat rooms. Use your web mail account instead.
- 5) DO NOT EVER ANSWER SPAM. All this will do is confirm that they have reached a legitimate address and you will receive even more Spam.
- 6) If you are really getting a lot of Spam, there are some software programs available to help. If you need information, let me know.



by Bob Gough

How can I prepare to grow my own transplants?

It's too early to start vegetable plants indoors, but it's time to get those lights ready. Seedlings do poorly on window sills because there's too little light in early spring. An overcast winter's day provides only about 600 foot candles of light, and that's outdoors. Inside, that's reduced to only 50 to 300 foot candles. Plants need several thousand foot



candles of light to keep from getting spindly and weak. The solution...use a special plant growing light or a combination of cool white fluorescent and incandescent lights in the proportion of 5 to 2 to mimic the quality and quantity of sunlight your plants need. Since light intensity decreases as the square of the distance from the source, keep the lights just slightly above the plant tops.

Tuesday Seminar Schedule

1-21	John Noreika	"Thermal Tolerance and Plant Fungal Symbiosis"
1-28	Robyn Klein	"Phylogeny of Terpenes with Stress Adaptation Bioactivity"
2-4	Cheryl Mackowiak	"USDA Forest Service - Logan, UT"
2-11	Thais Hulting	"A Phylogenetic & Biogeographical Study of the Genus <i>Strophostyles</i> "
2-18	Christopher Mahoney	"Mycorrhizae, Aspen and Reclamation"
2-25	Kelly Hansen	"Performance of Improved and Historical Wheat Varieties in Competitive Verses Non-competitive Environments"
3-4	Yusuke Odake	
3-11	Spring Break	
3-18	Rebecca Bargabus	
	Aravind Jukanti	
4-1	Oliver Zietlow	
4-8	Eva Grimme	"Mycofumigation for the control of soilborne diseases in

4-15	TBA
4-22	Cheryl Moore
4-29	John Ansley
5-6	Abdel-Haleem Hussein

Recipe of the Month

Sweet and Sour Chicken (crock pot and oven directions)

Serves: 4 to 5

- 1 carrot; in chunks
- 1 green pepper; cubed
- 1 med onion; quartered
- 2 tbs tapioca; quick-cooking
- 4 chicken breasts- boned; cut
- 8 oz pineapple chunks; canned
- 1/3 c dark brown sugar; packed
- 1/3 c red wine vinegar
- 1 tbs soy sauce
- 1 tsp chicken bouillon; instant
- 1/2 tsp garlic powder
- 2 tbs ginger-root; fresh; minced
- 1 tsp dried cilantro or 10 leaves rice; hot cooked

Directions:

Put vegetables in bottom of crockpot. Sprinkle tapioca over vegetables. Place chicken atop Vegetables. Combine all other ingredients except rice in a small bowl. Pour over chicken. Cover crockpot and turn to low and cook for 8-10 hours. Before serving ,make rice. Serve over rice. Leftovers can be reheated in microwave.

To cook in oven, put vegetables in bottom of a greased pan. Sprinkle vegetables with tapioca. Add chicken to pan. Combine all other ingredients except rice in a small bowl. Pour over chicken. Cover pan tightly with foil. Bake in 300° F oven for 2 hours. Serve over rice. Leftovers can be reheated in microwave.

February Birthdays

Mike Sun	2
Litao Yang	9
Norm Weeden	12
Phil Bruckner	17
Pam Border	23
Shirley Gerhardt	26





Deven and Tong were married December 28, 2002. They plan to live in Thailand. Tong was Gary Strobel's graduate student and Deven See was Tom Blake's graduate student.



Congratulations to Jesse and Joice Franzen on their recent wedding. Jesse is a junior majoring in English Education and Joice, Dr. Weeden's secretary, is a senior majoring in finance. Congratulations to both of you!