

Plant Science Says



Happy
Halloween!

October, 2003

Horticulture Faculty Attend Teaching Symposium By Tracy Dougher



Tracy Dougher, Jeanne Briggs and Yousef Zadegan attended the 2003 Western Region Teaching Symposium hosted by MSU. The conference was kicked off on the evening of Friday, Sept 19 with a reception and presentation by Stu

pp and Jack Taylor on the MSU course, Great Expeditions. Saturday morning, Dr. Kirby Barrick, the keynote speaker from the University of Illinois, addressed the different styles of learning, the connection between teacher behavior and student achievement, and learning and teaching preferences in a lecture on "The Science of Teaching and Learning".

The morning session was themed "Engaging Students" and Dr. Jack Elliot, University of Arizona, demonstrated how to "Teach Backwards". Teaching backwards begins with preparing students assessments and grading rubrics are detailed and shared with the students. Course content follows from the grading rubrics. Dr. Dan Edge, Oregon State University, brought the audience up to date on the challenges and opportunities facing distance education.

The afternoon session on "Engaging Students" included a demonstration from Dr. Jeff Adams and Dr. Greg Francis, MSU physics department, on "Putting more punch into your lectures". Their demonstration included physics lessons on sound waves using an aluminum rod and deceleration using a bed of nails. While they use many alternative techniques, they emphasized that entertaining students is not a bad technique. Dr. Adams and Dr. Francis three years data showing that their techniques help students retain information better. Dr. Ralph Johnson, MSU Architecture department, also spoke in the afternoon

session about his alternative style of small group discussions, even in large classes. Students are given a reading assignment prior to class and small group discussion questions during class. Each group is graded on their response to the questions.

The keynote speaker, Dr. Barrick, wrapped up the program with a discussion on effective lecturing, active learning, and problem solving in "The Art of Teaching". Dr. Barrick gave a sample lecture in which conference participants were able to take notes exactly as the instructor envisioned them. Dr. Barrick also proposed many ideas for active learning including writing, brainstorming, case studies, group problem solving, demonstrations, experiments, panel discussion, simulation games, and instructional technology. All suggestions were methods that had been used at the conference by the other presenters.

The conference was concluded with a banquet and a performance by the MSU Cello Ensemble (part of the Great Expeditions class from this year) and Dr. Gregory Young, VP for Undergraduate Education, on clarinet.

If you would like more in-depth information on any of the techniques, Tracy Dougher has extensive handouts from the sessions. This successful conference demonstrated that we have many effective teachers right here on campus!

Tropical Savannas Symposium By Matt Lavin



For two weeks during September, Matt Lavin traveled to Edinburgh, Scotland to attend a symposium on Tropical Savannas and Seasonally Dry Forests: Ecology, Environment, and Development. He presented an invited paper entitled, "Historical links of

seasonally dry ecosystems of Africa and the Neotropics: insights from plant molecular phylogenies." After the symposium, Matt held an all-day workshop on using DNA sequence data to estimate ages of historical events, like dating the ages of how long particular species have inhabited a particular geographical area. The symposium was attended mostly by students affiliated with the University of Edinburgh and the Royal Botanical Gardens Edinburgh. Afterwards, he traveled to Oxford, England where he presented an invited paper to the Department of Plant Sciences, which was entitled, "Estimating the ages of major legume diversifications." One of the main purposes of the Oxford trip was to pow-wow with other scientists studying the legume family and gear up for an NSF proposal submission next year to the Tree of Life panel. This proposal will argue that the legume family is a model for the study of global phylogenetics, an approach that takes a population genetic and community ecology methods to a global level to explain world-wide patterns of species diversity. Importantly, continental history has had little to no effect on the modern distribution of species and the biomes that they form. Most of the scientific discussions during Matt's trip were held at pubs, so a wee bit of recreation was had.

Grants

Bill Grey, "Management of Canola Diseases",
Entomology Department

Norm Weeden, "Gene Discovery in *Pisum Sativum* Ssp. *Abyssinicum*", USDA

Barry Jacobsen, "Bio-Based Product Research", MSU-NWARC

Gary Strobel, "Jewels of the Jungle", NSF

New Graduate students

Amanda Henry – Norman Weeden – 233 ABS



I just entered MSU Plant Sciences Master's Program this fall semester. I graduated from Rocky Mountain College in Billings, Montana with a Bachelor's Degree of Science in both Chemistry and Biology. I was married this summer to my fiancé of five years. We enjoy hiking and

or outdoor activities.

However, we are both also avid science-fiction book readers. I am originally from Glendive, Montana, but have

relatives in Bozeman and am familiar with the surrounding area.

Smita Sutrave – Talbert - 419 LJH



I am an international student from India. I am doing my PhD in Plant Genetics with Luther Talbert and Mike Giroux. This is my first semester as a grad student although I have been at MSU for a year now. I transferred to MSU and graduated last semester with a BS. in Plant Sciences.

Kathy Trujillo – John Sherwood – 337 ABS



Hello, my name is Kathi Trujillo and I will be working in the Sherwood lab on the puroindolin proteins and their anti-fungal properties. I received my bachelor's degree from MSU-Northern, in biology and science education. My interests have always leaned toward the plant and microbe

areas of biology, so I am very happy to be here and working in this area.

My hobbies are needlework, such as knitting and quilting, and outdoor recreation. I especially like hiking and camping and hope to do a lot of both while I am here in Bozeman.

Toby Day – Tracy Dougher



Toby has joined the department as a graduate student in August, 2003. He will be working with commercialization of native plants for landscaping purposes under Tracy Dougher.

“There is a need for growers to get native plant materials out to the contractors, especially with our current Drought and energy problems” says Toby. “It is an honor to be working with Tracy Dougher. I would also like to thank Sherwood and the rest of the Department for this opportunity.”

Bob's Byte (Irene Decker filling in) Phishing for Trouble

Add a new term to your list of online annoyances: phishing. In this scam, criminals send out millions of fake e-mails to trick online consumers into disclosing personal and financial information. The bogus e-mails may appear to come from reputable sources such as big online retailers or banks. The phishers flood your inbox with requests for a wide range of personal information, ranging from bank account information to credit-card numbers to personal identification numbers for automated teller machines.



How do they fool you? They direct recipients to phony Web sites that resemble legitimate corporate sites. Or, they claim that billing information needs to be updated or has been lost. In the most brazen versions, the criminals may actually suggest that you are a victim of fraud and that you need to share your information to avoid a fraudulent credit charge. Or, the e-mail may offer a bogus prize in return for your personal information. Here are some steps that the Federal Trade Commission recommends to protect yourself from e-mail scams:

- Don't click a link in an e-mail that warns your account will be shut down unless you reconfirm your billing information.
- Contact the legitimate company using a phone number or Web site address you know to be genuine.
- Avoid e-mailing personal and financial information.
- Before submitting such data through a Web site, look for the "lock" icon that signals the information is secure.
- Immediately review credit card and bank account statements for unauthorized charges.
- Go to the [FTC Web site](#) for more information or to file a complaint.

Dieffenbachia (Dumbcane) Basics

by Bob Gough

This is one of the most spectacular of the common house plants, but it is toxic. Do not ingest any part of the plant and do not allow the sap to enter any cut on your finger or hands when handling the plant.

Grow this plant in standard potting soil that is allowed to dry out moderately between waterings. Overwatering will encourage the roots and the base of the stems to rot. Although it does well in bright sunlight, it will tolerate somewhat less light. Set the plant in indirect sunlight in a warm room with fairly low relative humidity. As the plant grows the lower leaves will turn yellow. Remove them. If the stem becomes lanky and defoliated, cut off its top and root it in sand or a glass of water.

Insufficient light will cause the plants to become spindly. Lower leaves will yellow at their margins and then eventually die and the plant will become very weak. To correct this, move the plant GRADUALLY into a brighter location. If most of the leaves have dropped, propagate a new plant by re-rooting the top. If you move the plant too quickly from indirect sunlight into bright sunlight the leaves may sunburn, wherein the areas between the veins near the margins of the older leaves turn yellow and then light brown. The tissue between the leaf veins of variegated cultivars turns brown. Accumulation of salts in the pot, from the use of salty water or from the fertilizers, can cause the leaves to turn brown. Be sure to flush the plant's soil when you water to remove salts.



Faculty changing offices

You may have noticed that a few faculty in our department have changed offices. Cathy Cripps is now in 309 ABS, Bob Sharrock is in 306 ABS and Leslie Gotlieb and Vera Ford are residing in 208 for the three months they are visiting here from Germany. Dr. Gotlieb was Dr. Weeden's professor when he earned his masters' and he and Dr. Ford will be working with Dr. Weeden during their time here.

Recipe of the Month (low carb)

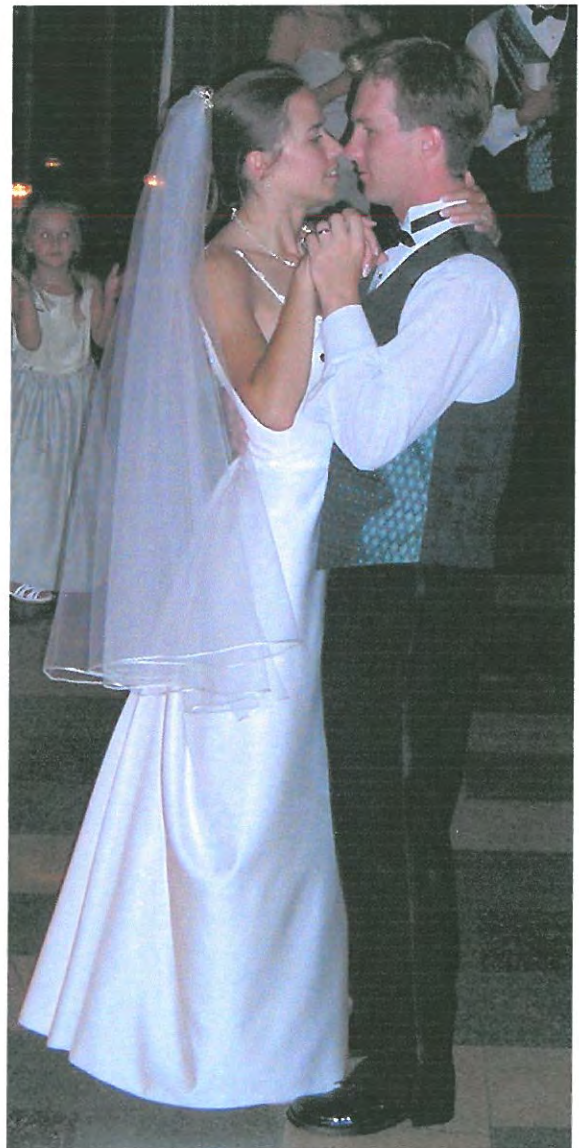
Eggs Florentine

- 1 lb. creamed cottage cheese
- 1 pkg. frozen chopped spinach
- 1/4 lb. butter
- 6 lg. eggs
- 1/2 lb. grated Swiss cheese
- 1/2 lb. feta cheese
- Nutmeg to taste
- Dash hot pepper sauce

Beat eggs. Add cheese, butter. Mix well. Cook and drain spinach well. Add to egg/cheese mixture. Add nutmeg and hot pepper sauce. Pour into greased 3 qt. baking dish. Bake at 350° for 40 minutes. Cut into squares and serve.



Rebecca Bargabus and Scott Larson on their wedding day, August 30, 2003.



Jason Walling and Sarah Zimmerly on their wedding day, August 16, 2002.