

# Plant Science Says



HAPPY  
THANKSGIVING!

November, 2002

## And What About That Review We Just Had?

by Dr. Weeden

There is a copy of the recent departmental review in both offices for you to look at if you would like. The Dean and I have discussed the major recommendations, as well as some of the minor ones, and I would like to take this opportunity to brief all of you all on what may take place. I will be scheduling a faculty meeting to which Dr. Quisenberry will be invited so a full discussion of the report can take place, and we can hear the Dean's perspective as well as she hear ours.

The major findings of the report are that the department has strong programs that compare well with other major institutions in the United States. No major weaknesses or deficiencies were identified. There may be minor issues that concerned the review team, but these must be examined in the final report.

The major recommendations include setting up a center for biocontrol and biotechnology within the department, filling the vice-Mathre position, filling an Extension agronomist position, filling a mycology position, delaying implementation of a Horticulture graduate program, and providing more support for departmental seminars, graduate students and faculty training. We have already taken action on some of these recommendations, some will be implemented soon, others require decisions at higher administrative levels, and some will have to be put on hold until economic conditions improve. For instance, the Horticulture faculty and I have agreed to continue to use the M.A. degree in Plant Science for graduate students interested in horticultural topics and not attempt to institute a graduate program in Horticulture at present. I will soon be working with faculty interested in developing a center for biocontrol and biotechnology (or some similar focus) to better highlight our expertise and contributions in these areas. This recommendation represents the most significant short-term goal of the department and will occupy much of my time this fall. Filling the vice-Mathre position may have to wait until the intentions of the Legislature are better known, and filling an Extension Agronomist position within the department does not appear to be feasible in the current fiscal

situation. However, having the review team indicate that an Extension Agronomist is a high priority for the department, and the state, certainly strengthens our position when lobbying for the position in the future. The Dean has indicated that she will contribute \$500 towards seminar speakers on an annual (and matching) basis and encourages faculty to look for opportunities for mini sabbatical leaves (1 to 6 months), which she will help support.

A minor suggestion by the review team that an Awards Committee be initiated to insure that all opportunities to recognize the excellent work of the faculty, staff and graduate students has also been implemented. The Awards Committee will be chaired by Robert Gough and includes Yousef Zadegan, Phil Bruckner, Jack Martin, Bob Sharrock, Cathy Cripps, David Sands, Barry Jacobsen, Irene Decker and Rebecca Bargabus. Their main function will be to identify nominees for the many awards and other honors or methods of recognition that are offered by organizations, institutions and the university system. If you happen to know of an award that may not be known to the members of the committee, or if you want to nominate someone for an award, please contact one of the committee.

## Annual Review of Phytopathology Article

Dr. Mathre recently wrote an article chronicling his start in the field of Plant Pathology which was published in *Annu. Rev. Phytopathol*, 2002, 40:1-11. It is titled: "One Foot in the Furrow: Implications to One's Career in Plant Pathology." Dr. Mathre has additional copies of the article if you are interested. Following are a few excerpts.

### Abstract:

Most of us want to be successful in what we do – either financially or programmatically. For me, being a good, well-respected plant pathologist is what motivated me throughout my professional career. After being trained as a plant pathologist at the University of California-Davis, an institution that prides itself in solving problems, I spent the majority of my career in population-sparse Montana – "the last best place." And best place it has

been for me as I became involved in researching a number of plant disease problems and solving a few. J.C. Walker's philosophy of keeping "one foot in the furrow" has stood by me, and I encourage young plant pathologists to adopt it as well to ensure a productive and satisfying life in agricultural science.

#### How It All Started For Me

Several years ago I happened to read the book *With One Foot in the Furrow, a history of the First Seventy-Five Years of the Department of Plant Pathology at the University of Wisconsin-Madison*, edited by Paul Williams and Melissa Marosy (12). I found it very interesting and provocative, particularly the title. While I have never attended nor worked at the University of Wisconsin, I do have many colleagues who are currently on the faculty there, or who were students there at one time in their career, including Douglas Maxwell, Paul Williams, Don Hagedorn, Ray Grogran, and Dennis Hall, all giants in their field. As such, I have come to know that this philosophy espoused by Dr. J.C. Walker, as indicated by this title, has real implications for our profession and the careers of us who have spent the better part of our lives being plant pathologists. This chapter is an attempt to show how this philosophy has affected my life and career, hopefully for the better, and how it can serve the profession well as we proceed into the twenty-first century.

#### Employees

##### **Gerard Sellek – Young Lab – 333 ABS**

I've just started my third week in Mark Young's lab, working as a postdoc on the thermophilic viruses of Yellowstone. I'm 28, a citizen of the United Kingdom, and was born and raised in Cardiff, the capital of Wales. My parents, two brothers, and sister have all settled in the south Wales area.



In the summer of 1997, I graduated with a B.Eng. (Hons.) degree in Biochemical Engineering from the University of Wales, Swansea, located in south-west Wales near the beautiful Gower peninsula. Then, in the fall of '97, I went to the Roman city of Bath to spend 3 years doing a PhD in Chemical Engineering under the supervision of Dr. Julian Chaudhuri. Working in collaboration with the Centre for Extremophile Research (also at the University of Bath), directed by Prof. Michael Danson, I explored the application of enzymes from extremophiles

("extremozymes") as catalysts in media containing organic solvents.

In January 2000, during the last year of my PhD, I had the opportunity to travel to Antarctica to participate in the annual NSF Antarctic Biology Course. I spent 4 weeks at the McMurdo Station, located on Ross Island at latitude 77° South. With the focus on marine organisms, I studied the adaptation to low temperatures, the effect of light - particularly UV - and the biodiversity of the region. There were many field trips onto the sea ice, the Ross Ice Shelf, and the particularly spectacular environment around Bratina Island. I also visited the historic huts of Robert Falcon Scott located at Hut Point (next to McMurdo) and Cape Evans, and went on cross-country ski trips to Castle Rock.

I completed my PhD research in the fall of 2000 and immediately took up a post as Postdoctoral Fellow with Prof. Roy Daniel of the Thermophile Research Unit at the University of Waikato, located in Hamilton in the North Island of New Zealand. I spent my first year studying the dynamics of thermophilic enzymes in cryosolvents at low temperatures, spending a week at the Institute Laue-Langevin in Grenoble, France to use the IN16 neutron beam spectrometer. I then spent almost a year working with Prof. Craig Cary (University of Delaware), on sabbatical in NZ at the time, working on DNA extraction from the geothermal siliceous mud commonly found around Rotorua.

Outside of science, my two passions are for exploring and photographing wild places. While in New Zealand, I spent much time exploring the country (both North and South Islands), hiking and backpacking, and made a great many visits to the volcanic Tongariro National Park. I especially enjoyed exploring and geologising the summits and craters of the active volcanoes Ruapehu and Ngauruhoe, and walking New Zealand's longest trail - the 150km North-West circuit of Stewart Island. My last memory of New Zealand is a night climb of the dormant volcano Mt. Taranaki to enjoy a beautiful sunrise from its summit at an elevation of 2518 metres. In the UK, I particularly enjoy visiting the Brecon Beacons National Park, the Gower peninsula, Snowdonia National Park, and the Lake District.

##### **Sue Johnston – MSGA – 317 LJH**

My name is Susan Johnston and I am very happy to be joining the Department of PS&PP as an Administrative Associate for Montana Seed Growers in Leon Johnson Hall. I am originally from Texas



and arrived in Montana in 1968 to enter a graduate program at Montana State University. I completed an M.S. in Genetics in 1973 and another M.S. in Child Development/Early Childhood Education in 1991. I have 1 positions at MSU in biochemistry and analytical chemistry, and I taught preschool for about four years. I have worked most recently with plant sciences (cereal quality), MPIA, and the Montana Department of Agriculture Analytical Laboratory. Most of you know my husband, Bob, who is chief exorcist for departmental computers. Our son, Jeff, is an MSU sophomore who works part-time for Bill Grey. I love playing the guitar and am part of a music team providing contemporary Christian music at St. James' Episcopal Church. I am not sure what I am going to be when I grow up, but I have worked for the last ten years in agriculture and it is **GREAT** to be back in plant sciences. I am excited to be working with Ron Larson and Katie Cash and I love seeing many familiar faces. I also look forward to making new acquaintances in the Department. Come by 317 Johnson Hall anytime. Bob Gough will buy coffee. Just kidding, Bob!

### New Graduate Students

**Yuping Wu – Giroux and Sharrock Lab–124, 331 ABS**

Hi, I am Yuping Wu and I am from China. It is a country with over 5000 years of history. Recently, we have adopted many U.S. cultures and customs. I would like to invite you to visit China whenever it is convenient for you.



I have just recently arrived in Bozeman so everything is very new and exciting. When I arrived, I was struck by the big blue sky during the day and the star-filled sky at night, the huge lawns and parking places, fresh air, the snow covered mountain peaks, the beautiful sunsets and the colorful leaves on the trees. As time goes by, I am sure I will grow to like Bozeman very much as I adjust to the culture and way of life.

I am working on transgenic wheat with Mike Giroux and Bob Sharrock. Through this project, I will be trained extensively in the areas of plant molecular biology, plant genetics and crop breeding.

**Annual Christmas Party**  
The Christmas Party will be on December 14 at Country



Lanes. More details will follow in next month's newsletter.

### Bob's Byte

by **Bob Johnston**

Several people have asked recently how to connect to the P Drive. Here are the directions:



#### Windows 95/98

Note: The P drive is protected by a recognized user name and password. Before you can access the drive, the name you use to logon to your machine must be registered with a database maintained on the drive and updated by me. Your logon name is the one entered in the user name box. If your logon screen has three lines for data and the bottom one says Domain --> MSU then you must send me your user name before you can access the drive. If you only have two boxes to fill in then you can either send me your user name or you can use the word "USER" for a generic logon.

To access the drive:

1. Right click on Network Neighborhood
2. Left click on map network drive
3. Select a drive letter (I suggest the letter "P" -- for Plants)
4. Under path, type this: [\\ABS1\pccommon](#)
5. If you want to automatically reconnect at logon, Make sure the box is checked.
6. When you are asked for a password, type in "SNAP1000" (no quotes)
7. Go to the new P drive by calling up Windows Explorer or clicking on My Computer
8. Create a folder for yourself -- Please use your last name

#### Windows 2000 and XP

Note: The P drive is protected by a recognized user name and password. Before you can access the drive, the name you use to logon to your machine must be registered with a database maintained on the drive and updated by me. If you have sent me your logon name then just follow the instructions for windows 95/98 above.

If you have not sent me your user name, you can still access the P drive by doing the following:

1. Right click on Network Places
2. Left click on map network drive
3. Select a drive letter (I suggest the letter "P" -- for Plants)
4. Under path, type this: [\\ABS1\pccommon](#)
5. If you want to automatically reconnect at logon, Make sure the box is checked.
6. Click on the "connect as a different user" line
7. For the user name type "user" (no quotes)

7. Click on ok and then on finish
8. Go to the new P drive by calling up Windows Explorer or clicking on My Computer
9. Create a folder for yourself -- Please use your last name
10. Windows 2000 and XP will usually not store the p drive password and you will be prompted to enter it each time you startup your machine.

Please be aware that all files on the drive can be accessed by anyone who has logon access. Any files that need to be kept confidential should be handled differently or encrypted. Also be aware that the drive is just for temporary storage and files older than one month are erased on a regular basis. I will send out a department wide email before the drive is cleaned up.

### To Water or Not to Water in the Fall by Bob Gough

There's a lot of confusion out there as to when to water and when not to water trees and shrubs. Watering at the wrong time could increase winter damage and weaken your plants. So timing is a little tricky, but it's not complicated

Slack off watering your trees and shrubs in August. Excess water at that time of year can keep the plants lush. The plants are not dormant in August and can use more water than they get. Keep them fat, dumb, and happy now and they're too soft for winter.

But now, when the leaves have fallen, the tops of the plants are dormant. They cannot make soft growth, but they can store water to see them through the winter. Now is the time to water your woody plants deeply. Give them an inch of water each week until the ground freezes. The roots, still active in autumn, absorb the water and transport it to the crown and trunk, where it is stored and used to replace water lost from the plant during the winter. In other words, you are making sure the plant goes into the cold dry winter with all its water reservoirs brimming full.

If you made a basin around the base of the plant to hold water during summer months, punch a hole in it now. Water held in it during the winter will freeze, decreasing insulation to the roots and possibly damaging the crown.

If you want to know more about care of your ornamental, contact your local county extension office or get a copy of MontGuide 9518, "What's Wrong with this Tree?".

### Seasons

#### By Dave Sands

Not hot or too cold,  
I would not be so bold  
As to want it perfect  
Give me oscillations  
Seasons to measure

Some telomeric devices  
Built in timebombs  
Cascading through me  
Like Attila the Hun  
For I will not go gently  
Into a perfect climate  
Or a perfect anything

### On the Personal Side

Congratulations to Steve and Martha Mikkelson who will be bringing their son, Khean, home from Cambodia tonight! We will be having a shower sometime in November. I will keep you posted.

Xueyan Shan will be joining her husband in Arkansas the middle of November. We wish her and her family all the best.

### November Birthdays

Angie Solvie	3
Jim Berg	4
Jack Martin	8
Harvey TeSlaa	15
Adam Richman	22



### Recipe of the Month Pumpkin Pancakes

These barely-sweetened fluffy pancakes feature ginger, cinnamon and nutmeg to emphasize the pumpkin flavor. Serve them hot with maple syrup for the best autumn or winter breakfast dish ever.

- 2 cups all-purpose flour
- 3 tablespoons brown sugar
- 2 teaspoons baking powder
- 1 teaspoon baking soda
- 1 teaspoon ground allspice
- 1 teaspoon ground cinnamon
- 1/2 teaspoon ground ginger
- 1/2 teaspoon salt
- 1 1/2 cups milk
- 1 cup pumpkin puree
- 1 egg
- 2 tablespoons vegetable oil
- 2 tablespoons vinegar



1. In a separate bowl, mix together the milk, pumpkin, egg, oil and vinegar. Combine the flour, brown sugar, baking powder, baking soda, allspice, cinnamon, ginger and salt, stir into the pumpkin mixture just enough to combine.
2. Heat a lightly oiled griddle or frying pan over medium high heat. Pour or scoop the batter onto the griddle, using approximately 1/4 cup for each pancake. Brown on both sides and serve hot.