

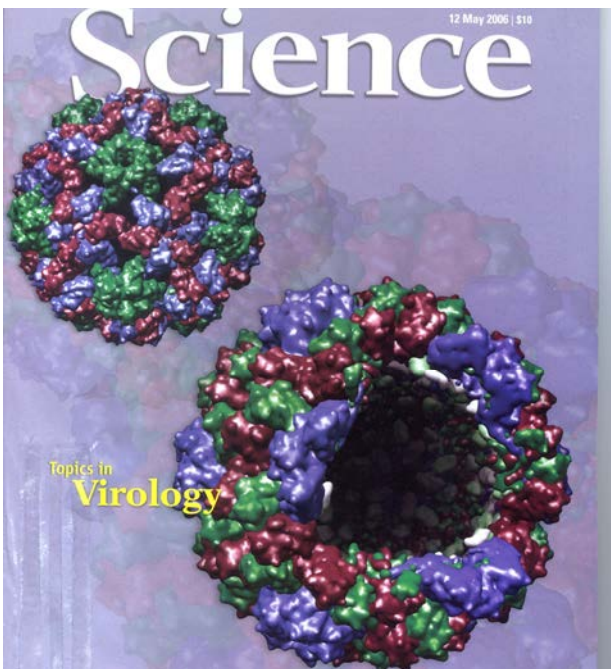
# Plant Science Says



June, 2006

## Mark Young and Trevor Douglas Make Cover of Science Magazine

What's better than seeing your picture on the post office wall? Well, I must admit that having your research selected as the cover of *Science* comes close! Trevor Douglas (MSU Chemistry & Biochemistry) and I were delighted to be asked to submit a possible cover art for an article that was published in the May 12 issue of *Science*. We were more surprised when they choose our submission to be the cover. As a scientist, it is a real honor. But honestly, it is good science mixed with a lot of luck that get you both a paper and the cover of *Science*. What's our next goal... how about the cover of *Ski* magazine... then we are having fun both in the lab and on the slopes!



An article written by Mark Young and Trevor Douglas entitled "Making Friends with Old Foes" was published in the May, 2006 issue of *Science* magazine.

## New Faculty Hires

Dr. Bill Hoch has been hired as our new Assistant Professor of Horticulture. He comes to us from the University of Wisconsin where he is a post doc. He will be arriving sometime in August. Previously this position was filled by Jeanne Briggs.

Dr. Mary Burrows will also be starting her new position in August as our new Extension Specialist. This position is currently being filled by Jack Riesselman who will be retiring at the end of June. Mary is a post doc at the Cornell University. Jack will be introducing her to the area June 2-7.

Welcome to these new faculty members!

## Farewell to Pat and Uvi

Pat Hensleigh will be starting a new position with the USDA-NRCS in Glasgow, Montana on June 1. Pat has been with the university for 22 years and in that time he was instrumental in the production and release of new barley varieties. He had a special interest in the development and production of hay barleys.





Uvi Castillo has been with our Department for the last six years as a research assistant /associate for Gary Strobel. He has been working on all aspects of endophyte biology and biochemistry and has contributed

numerous papers, reviews and patents to the literature. He will leave in very early June for a position with Jeneil Biotech in Saukville, Wisconsin.

Best wishes to both of them in their new positions.

**Tours for the Children**

Several students from Longfellow School were given tours of the Cereal Quality Lab, the Potato Lab, The Disease/Insect Clinic, the Plant Growth Center and the MSU grounds. In the following pictures we have future entomologists enjoying talks by Will Lanier, Jessica Fultz and Ian Foley.



**New Accounting technician**

Lisa White has been hired as our new account tech (Melody previously held this position). She is from Iowa and just graduated from Northern Iowa University in accounting. Her first day will be Monday, June 12. Thank you to Alfie Shird for his help in keeping our boat afloat financially for the past month. Also thank you to Jamie Jacobsen, our student employee, who has been especially helpful during the interim.

**New Student Secretary**

Joanna Dumas has been hired as our new student affairs secretary. She will begin on Monday, June 5. In addition to having administrative experience, she is also a floral designer. Thank you to Carren Stewart for filling in so capably for the past month!

**New Graduate Student  
Katie Hopp (Mike Ivie)**



Katie Hopp graduated from Luther College in Decorah, Iowa this past spring and will be researching beetle systematics with Mike Ivie at Montana State University as a master's student. Katie spent five weeks in Mongolia last summer as an

REU student collecting aquatic insects and researching the effects of livestock grazing on stream insect biodiversity. Katie is looking forward



to her research on beetles at MSU and is excited about exploring Bozeman and the surrounding areas.

### **New Grants**

Alan Dyer, USDA, “Responding to Montana’s Head Scab Epidemic”

Cathy Cripps, U.S. Forest Service Rocky Mountain Research Station, “Assessment of Post-fire treatments to restore whitebark pine forests: Mycorrhizal infection of planted rust resistant seedlings (Fridley Burn, Gallatin County, MT)”

### **Publications**

Morris C.E., Kinkel L.L., Xiao K., Prior P., Sands D.C. 2006. “Surprising niche for the plant pathogen *Pseudomonas syringae*. Infection, Genetics and Evolution” (in press).

### **Hort Club Plant Sale**



The MSU Horticulture Club is having a plant sale on Saturday, June 3rd from 10 am-2pm at the Horticulture Farm, which is off College Ave. between the Technology Park and the Bozeman Daily

Chronicle. We will be selling a variety of perennials, annuals, herbs, and mixed baskets. Prices will vary from \$2.50 to \$25.

### **Using the Character Map**

**By Bob Johnston (Irene Decker filling in)**

Keep forgetting how to type é and ©? There's an easy way to remember. Just use the Character Map to find the right combination of Alt + number keys.



To call up the Character Map: Go to Start/ Programs/ Accessories/ Character Map. In

Windows ME & XP, go to Start/ Programs/ Accessories/ System Tools/ Character Map. A window like the one below will pop up.

The best way to use the Character Map is as a reference tool. Click on the character you want to use. The keystroke information is located in the lower left hand corner and will tell you what keys to use. For example: to type the copyright symbol, you have to press ALT+0169. You must use the number keys in the **numeric keypad** of your keyboard.

### **Phone Tip**

If you are listening to a message from someone and want to call them – press 9 and your phone will dial their number.

### **Fertilizing Fruit Trees for a Better Crop By Bob Gough**

Bearing fruit trees often exhibit nutrient stress brought on in part by potential low nutrient availability in the soil and in part by the additional stress of having to mature a crop. Unlike in lawns, where clippings are left to return some nutrients to the soil, the fruit are removed thus taking nutrients with them. For best fruit production be sure your plants have sufficient nutrients, but don't overdo it! Too high a nutrient level can be just as disadvantageous to bearing as too low a level. So, how much fertilizer should you apply? Let the condition of the plant be your guide.



Deficiencies of different nutrients produce characteristic visual symptoms. If a given element is deficient to the point that visual symptoms occur, then reductions in yield, vegetative growth, and fruit quality and quantity have already taken place.

Diagnosing specific deficiencies accurately on the sole basis of visual symptoms can be difficult. Deficiency symptoms of the plant combined with the results of foliar analyses increase accuracy of diagnosis. Multiple deficiencies or excesses frequently prevent typical deficiency symptoms from developing.

Nitrogen is by far the most commonly deficient nutrient in fruit trees and the one most easily

supplied in excessive concentrations. Both deficiency and excess can interfere with yields and fruit quality.

## Recipes

### Scones

- 1 cup sour cream
- 1 teaspoon baking soda
- 4 cups all-purpose flour
- 1 cup white sugar
- 2 teaspoons baking powder
- 1/4 teaspoon cream of tartar
- 1 teaspoon salt
- 1 cup butter
- 1 egg
- 1 cup raisins (optional)



In a small bowl, blend the sour cream and baking soda, and set aside.

Preheat oven to 350 degrees F (175 degrees C).

Lightly grease a large baking sheet.

In a large bowl, mix the flour, sugar, baking powder, cream of tartar, and salt. Cut in the butter. Stir the sour cream mixture and egg into the flour mixture until just moistened. Mix in the raisins.

Turn dough out onto a lightly floured surface, and knead briefly. Roll or pat dough into a 3/4 inch thick round. Cut into 12 wedges, and place them 2 inches apart on the prepared baking sheet.

Bake 12 to 15 minutes in the preheated oven, until golden brown on the bottom.

## June Birthdays

Uvi Castillo	10
Ron Larson	12
Ron Ramsfield	15
Jackie Kennedy	15
Darlene Cromwell	17
Luther Talbert	18
Alice Ortmann	19
Eileen Carpenter	22



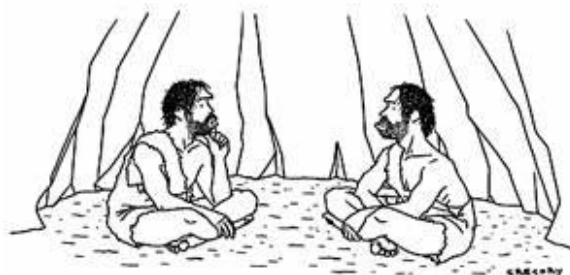
## Owls!

Many have been watching the Great Horned Owls outside of Leon Johnson Hall. Great horned owls are resident throughout all of North America in

forests, woodlands, thickets, chapparal, streamsides, open country, deserts, canyons, cliffs and even city parks. These owls prey on rabbits, rodents and birds and occasionally skunks. They lay their 2-3 white eggs on a bare surface of a cliff, cave or on the ground; in the East they will use the uninhabited nests of the heron, hawk or crow. This is the largest and best known of the common owls.



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*"Something's just not right—our air is clean, our water is pure, we all get plenty of exercise, everything we eat is organic and free-range, and yet nobody lives past thirty."*

*Contributed by David Sands*