The coming school year should be an exciting and important one for the division. The university is rolling out a set of Strategic Initiatives in which our division can play a key role. Initiatives our division could contribute to include: Food for the Future; One Health, One Medicine; Sustainable Energy; and Understanding and Managing Disruptive and Transformational Technologies. The idea is to focus attention on important areas in which MU already has strategic advantages in order to make progress on solving big problems. Our division will also complete a program assessment process during the 2009-2010 academic year. We are planning input sessions and gathering background data to support the assessment process. Classes are beginning and the division is welcoming a great group of new undergraduate and graduate students. Counting those beginning this fall, and those who started earlier this season, we have 20 new graduate students and 18 new undergraduate students.

Congratulations to the five division faculty who were promoted this year (page 2). Bruce Barrett, Rob Kallenbach and Peter Scharf were promoted to the rank of Professor; Gene Stevens was promoted to Extension Professor; Kevin Bradley was promoted to Associate Professor with tenure. This success is a clear reflection of the quality of the division’s programs and people.

Faculty recruitment has recommenced on four of our five open faculty positions (page 3). Weed Science Extension, Rice Production Research, Cereal Crops Extension and Turfgrass Extension Pathology are now actively seeking applicants and we hope to conduct interviews this fall. In addition, we were successful in justifying a research and teaching position on Cell Wall Physiology that should allow us to address research and educational needs in the bioenergy and forage crops areas.
Stacey Appointed Chair of DOE, Biology and Environmental Committee

Gary Stacey, director of the University of Missouri Center for Sustainable Energy and professor in the Division of Plant Sciences, was appointed chair of the Department of Energy's Biological and Environmental Research Advisory Committee (BERAC). The BERAC advises the Biological and Environmental Research (BER) office of the Department of Energy on complex biological and environmental research technical issues. These issues can include developing biofuels, determining the impact of climate change, assessing options for carbon sequestration, predicting the fate and transport of subsurface contaminants, and developing new tools to explore the interface of biological and physical sciences.

Graduate Students Win Awards

Four DPS graduate students received awards at the North Central Branch Meeting of the Entomological Society of America held in St. Louis on March 15-18. The awards were won in the doctoral student poster competition. Co-winners, Megan Zeller and Paul Botch, both advised by R. Houseman, won first place with “Aquatic Insect, Amphipod, and Isopod Communities and Habitat Gradients in Missouri Spring Systems” and “The effects of soil micronutrients on the foraging behavior of the termite Reticulitermes flavipes.” Lisa Meihls, advised by B. Hibbard, took second place with “Fitness Comparisons of Bt-resistant and Bt-susceptible Western Corn Rootworm Colonies.” Co-winner Kristen Leach, advised by G. Davis, took third with “A brown midrib mutant, bm2, decreases Western Corn Rootworm feeding on maize roots.”

Faculty Members Get Promotions

Five faculty members have received promotions starting September 1. Bruce Barrett, Horticultural & Agroforestry Entomology, has been promoted to Professor; Kevin Bradley, Weed Science, has been promoted to Associate Professor; Rob Kallenbach, Forage Production & Management, has been promoted to Professor; Peter Scharf, Nutrient Management, has been promoted to Professor; and Gene Stevens, Crop Production, at the Delta Research Center in Portageville has been promoted to Extension Professor. Congratulations to all.

Oliver receives the Fellow of the ASPB award

Melvin Oliver, a research geneticist with the U.S. Department of Agriculture’s Agricultural Research Service and an adjunct professor in the Division of Plant Sciences, received the Fellow of the ASPB award. This award recognizes long-term contributions to both research in plant biology and service to the Society. Oliver was recognized for his research on the mechanism of desiccation tolerance and its importance in the evolution of the land plants and for his roles in recruitment of students and minorities by the ASPB.

Awards & Honors
Faculty Positions Available

- **Extension Assistant Professor - Weed Science (080055)**
  This is a Professional-track (non-tenure) Commercial Agriculture Extension position in the Division of Plant Sciences, College of Agriculture, Food and Natural Resources, University of Missouri. This position is located at the Delta Research Center (DRC) near Portageville in Southeast Missouri. Will begin reviewing applications on September 1, 2009 and applications will be accepted until a qualified candidate is identified. If interested go to [http://hrs.missouri.edu/find-a-job/academic/position/080055/](http://hrs.missouri.edu/find-a-job/academic/position/080055/)

- **Research Assistant or Associate Professor - Rice Production Systems Research (080184)**
  The Division of Plant Sciences, College of Agriculture, Food and Natural Resources at the University of Missouri-Columbia invites applications for a non-tenure-track position, at the rank of Research Assistant Professor or Research Associate Professor, in rice Production Systems Research. The position will be located at the University of Missouri’s Delta Research Center in Portageville, which currently houses six faculty members. Active review of applications will continue to be accepted until a suitable candidate has been identified. If interested go to [http://hrs.missouri.edu/find-a-job/academic/position/080184/](http://hrs.missouri.edu/find-a-job/academic/position/080184/)

- **Assistant Professor and State Cereal Crops Extension Specialist (080213)**
  The Division of Plant Sciences seeks applications for a 12-month, tenure-track assistant professor position as State Extension Specialist for Cereal Crops. The position is 75% extension and 25% research. Review of applications will begin September 1, 2009 and will continue until a qualified candidate is identified. If interested go to [http://hrs.missouri.edu/find-a-job/academic/position/080213/](http://hrs.missouri.edu/find-a-job/academic/position/080213/)

- **Assistant Professor and State Extension Specialist - Turfgrass Disease Management (080220)**
  The position is a 12-month, tenure-track faculty appointment with 70% Extension and 30% research located at the University of Missouri in Columbia. Review of applications will begin September 1, 2009 and will continue until a qualified candidate is identified. If interested go to [http://hrs.missouri.edu/find-a-job/academic/position/080220/](http://hrs.missouri.edu/find-a-job/academic/position/080220/)

**Other Available Positions:**

- **Research Associate - Cotton Management (090150)**
  The Division of Plant Sciences seeks applications for a full time position as a Research Associate to conduct cotton management research. The position is located at the Delta Research Center in Portageville, MO. Applications will be accepted until the position is filled. If interested go to [http://hrs.missouri.edu/find-a-job/academic/position/090150/](http://hrs.missouri.edu/find-a-job/academic/position/090150/)

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**Fiscal Office Staff Updates**

The current hiring freeze has forced some changes in the fiscal office. We were finally given permission to fill the open Administrative Associate I position that had been vacant since Marissa Neff left for another job on campus. Mike Bent has moved into that position and taken over the grants post-award duties effective August 10th.

At the present time we have decided not to fill Mike’s Office Support position with a full-time staff member. We are employing part-time people to cover his duties and to pick up some of the areas we have not been able to cover due to sheer workload volume.

Michelle Li transferred to us from SOS temp services. She is located where Mike used to sit when you first enter the fiscal office in the Ag Building, and she is handling most of the duties Mike previously handled. She is processing vouchers and handling the purchasing card transactions for those individuals located in the Ag Building. We are thrilled to have Michelle join our office on a more permanent basis.

Kristi Erisman and Raine McCray are recent Mizzou graduates and they are also working in the fiscal office part-time. Kristi works Monday through Wednesday, and Raine works Thursday and Friday. Kristi and Raine are cross-training on Jean Miller and Michelle Li’s duties, so hopefully we will always have someone around who can fill out new hire paperwork and process vouchers. These ladies will also be taking care of a few things we’ve been needing to do here in the fiscal office, but had put off due to a lack of manpower. The first project they are working on is building a solid data base of all our WATS code users and then printing out monthly long distance usage details for your review and approval.

**IPG Symposium held May 27-29**

The 26th Annual Interdisciplinary Plant Group Symposium took place on May 27-29, 2009, in the Christopher S. Bond Life Sciences Center.

The focus of the 2009 symposium was on root biology. Root development and function are vitally important for plant adaptation to the environment. Understanding of root biology remains limited, however, and increased attention to this critical area is needed to facilitate improvement of crop performance, especially in the face of environmental constraints. This symposium brought together nineteen of the world’s leading scientists to address recent advances in studies of root development and root interactions with the abiotic and biotic environment.

**Some websites received a facelift; others got developed.**

You may have noticed changes to some websites of your colleagues over the last few months. Some websites that received a facelift are:

- Delta Crop Production; [http://plantsci.missouri.edu/deltacrops](http://plantsci.missouri.edu/deltacrops)
- Forage Research and Extension; [http://forage.missouri.edu](http://forage.missouri.edu)
- Woody Ornamentals Plants; [http://plantsci.missouri.edu/ps2210](http://plantsci.missouri.edu/ps2210)

Developed:

- Robert E. Sharp Lab; [http://plantsci.missouri.edu/robertesharplab](http://plantsci.missouri.edu/robertesharplab)

Kate’s projects that are in the works are:

- Enns Entomology Museum
- Graduate and Undergraduate sections

Please contact Tonya Mueller if you are interested in getting on Kate’s project schedule for your website redesign or development.

**CAFNR Staff Enrichment Award available**

Funding is available (up to $5,000 per year) not only for conferences and professional meetings, but also personal enhancement activities such as art/craft classes, workshops, coursework, etc.

- Deadline is September 16, 2009

Go to [http://mycafnr.missouri.edu/staff/](http://mycafnr.missouri.edu/staff/) for more details.

**MU Staff Development Award available**

The Staff Development Award Program is intended principally to assist in professional and personal development of individual(s) through funding for conferences, workshops, short courses, or other appropriate short-term experiences.

- Deadline is December 17, 2009

Go to [http://staffcouncil.missouri.edu/awards/sdaward.html](http://staffcouncil.missouri.edu/awards/sdaward.html) for more details.
Bill Wiebold, Ph.D., is the state extension specialist for soybean and corn. In that position, he is responsible for extension and applied research programs that develop cropping systems to enhance productivity, improve income stability, and protect the environment. Examples of recent applied-research thrusts include precision agriculture, remote sensing, optimum plant density, conservation tillage, and crop rotation. Current research includes intensive management of both corn and soybean, residue management for continuous no-till corn production, and use of cover crops to reduce impacts of corn residue removal for cellulosic ethanol. He also serves as the extension program director for the Division of Plant Sciences, director of the MU Variety Testing Program, and coordinator of the MU IPM Program. He also assists in the instruction of two undergraduate courses.

Dara Boardman, a senior Plant Sciences undergraduate has been selected to participate in the 2009 class of the Golden Opportunity Scholars Institute. The Golden Opportunity Scholars Institute is a program of the Crop Science Society of America that matches undergraduates with scientist-mentors. The program encourages talented students to enter the crop sciences, cultivate networks, and develop the necessary workforce to sustain the profession. Dara is one of 15 undergraduate students selected this year to be a Golden Opportunity Scholar. Applications to the program were submitted by students throughout the United States. Dara’s selection is a high honor and illustrates her academic talents and potential as a crop scientist.

Dara is from Eldon, MO, where she became interested in agronomy through her high school FFA experience. She then became interested in genetic research and plants. Upon entering college, she decided to pursue a degree in Plant Science - with an emphasis in Breeding, Genetics, and Biotechnology. After graduating in December, Dara plans on staying at MU to get her Masters in Crop, Soil and Pest Management.
Variety Testing Program

Howard Mason, Delbert Knerr, Richard Hasty, David Schwab, Bill Schelp, and Jeremy Angotti are responsible for all activities associated with the MU Variety Testing Program. The MU Variety Testing Program provides unbiased comparisons of 250 corn, 35 grain sorghum, and 450 soybean varieties. These varieties are tested at 33 locations throughout Missouri. Results are published in printed crop performance reports and on the Internet (varietytesting.missouri.edu). This fall the MU Variety Testing Program will take on the responsibility for comparing soft red winter wheat varieties. All of the MU Variety Testing Program team members assist Bill Wiebold with his research activities at the Bradford Research and Extension Center and at the Delta Research Center.

Integrated Pest Management (IPM)

Jessica Kohler is a multimedia specialist for the MU IPM Program. Her responsibilities include layout and publishing two newsletters – *Integrated Pest and Crop Management* and *Missouri Environment and Garden*. Jessica maintains three web sites: Plant Protection Programs, MU IPM Program, and Pesticide Applicators Program. The MU IPM Program has a portfolio of 25 manuals, and it is Jessica’s responsibility to help authors develop and publish new manuals. In this role, she integrates multiple-media into effective educational products.

Steven Kirk is an Extension Associate for the MU IPM Program. He develops educational activities dealing with IPM. His programs are delivered through multiple venues including print and web media. Steven manages the MU Pest Monitoring Network that monitors 11 insect pests through a network of more than 25 traps located throughout Missouri. He serves as acquisition editor for the MU IPM Program and helps authors develop newsletter articles, IPM series manuals, video, and other media. He also manages 6 to 8 IPM projects that demonstrate IPM principles in local communities.
Events & Activities

FIELD DAYS:

<<< The **Turf and Ornamental Field Day**, was held on July 14 at the University of Missouri South Farms. Approximately 180 were in attendance including participants and vendors. Highlights of the day included discussions on cold tolerant warm-season grasses, annual flower selections, exotic pests in the landscape, and demonstrations on the latest research on control of weeds and diseases in turfgrass.

2009 FALL MEETINGS:


The 9th IPMB Congress will be held Oct 25-30, 2009 in St. Louis, MO. Details can be seen on the IPMB web site at: [http://www.ipmb2009.org](http://www.ipmb2009.org)

**ESA, The Entomological Society of America**, meets November 16-19 in Reno, NV.

ASA-CSSA-SSSA, **The American Society of Agronomy**, meets November 1-5, 2009 in Pittsburgh, PA.

*** Missouri Dairy Grazing Conference, **was held at the Holiday Inn hotel in Joplin, Missouri on July 8-10. Approximately 300 people attended the conference from a total of 26 states across the U.S. and four countries. The target audience included dairymen who want to graze in the U.S. The theme of the conference was “Managing the System.”

*** The annual **Pest Management Field Day** was held at the Bradford Research and Extension Center on July 15th. Approximately 120 producers, crop consultants, agricultural retailers, and agri-industry representatives throughout the Midwest were in attendance. Attendees noted that they make pest management decisions on more than 12 million crop acres throughout the Midwest and were very pleased with the information presented.

>>> The MU Bradford Research and Extension Center hosted its annual **Crop Injury & Diagnostic Clinic (CIDC)** from July 28-31st. The clinic consisted of two-double sessions where 50 participants in each session received hands-on training with the latest problems in plant protection and production. Participants also received instruction in basic plant genetics and biotechnology. They even got a chance to extract DNA!

>>> Over 300 attended the 32nd annual **Greenely Memorial Research Center Field Day** on August 13. The field day integrated faculty, staff, and graduate students from a wide range of specialties. They discussed research or production topics that will addressed production needs of farmers and agribusinesses in Northeast Missouri.
### Recent Grants

<table>
<thead>
<tr>
<th>Investigators</th>
<th>Title</th>
<th>Sponsor</th>
<th>Amount of Funding</th>
<th>Dates</th>
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<tr>
<td>Bailey, W.</td>
<td>Refuge Strategy Adult Emergence Tent Studies</td>
<td>Syngenta Seeds, Inc.</td>
<td>$37,375</td>
<td>4/1/09-12/31/2009</td>
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<td>Bradley, K.</td>
<td>Invinsa: Compare soybean phonological vs. DBSAT application timing for model variation</td>
<td>Syngenta</td>
<td>$19,000</td>
<td>5/1/2009-4/20/2010</td>
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<td>Bradley, K.</td>
<td>Invinsa (1-MCP) Formulation development, efficacy, and rate response in soybean</td>
<td>Syngenta</td>
<td>$12,000</td>
<td>5/1/2009-4/30/2010</td>
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<td>Bradley, K.</td>
<td>Invinsa (1-MCP) Application Timing (relative to growth stage and crop stress) effect on corn yield</td>
<td>Syngenta</td>
<td>$12,000</td>
<td>5/1/2009-5/30/2010</td>
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<td>English, J., Schoetz, J., Schmidt, F.</td>
<td>Soybean Germplasm designed with Soybean Rust Resistance</td>
<td>IMBA</td>
<td>$160,185</td>
<td>11/1/08-6/30/2011</td>
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<td>McMullen, M., Flint-Garcia, S.</td>
<td>Genetic Architecture of Maize and Teosinte</td>
<td>Cornell University</td>
<td>$1,674,850</td>
<td>1/1/09-12/31/2010</td>
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<tr>
<td>Nguyen, H.</td>
<td>with optimum saturates, oleic and linolenic acids</td>
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<td>Sleper, D.</td>
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<td>Smeda, R.</td>
<td>Vegetation Management</td>
<td>MoDot</td>
<td>$97,690</td>
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<td>Xiong, X.</td>
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<tr>
<td>Smeda, R.</td>
<td>Suppression of Seedhead Production from Tall Festive</td>
<td>MoDot</td>
<td>$19,804</td>
<td>5/18/2009-6/30/2010</td>
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<td>Stevens, G.</td>
<td>Developing Camelina Satvia as a non-food group</td>
<td>Donald Danforth Plant</td>
<td>$176,760</td>
<td>1/1/09-12/21/2010</td>
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<td>Sciences Center</td>
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<td>Stevens, G.</td>
<td>Effectiveness of Variable Rate Fertilizer Applications on Cotton</td>
<td>Cotton Inc.</td>
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<td>Scharf, P.</td>
<td>Fields</td>
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<td>Stacey, G.</td>
<td>Transposon tagging and fast neutron mutagenesis in soybean:</td>
<td>Univ. of Georgia</td>
<td>$796,996</td>
<td>10/1/08-9/30/2011</td>
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<td>Zhang, Z.</td>
<td>Necessary resources to aid in the translation of genomics information into applied technologies</td>
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<td>Tindall, K.</td>
<td>Evaluation of Cotton Yield Loss Caused by Twospotted Spider Mites</td>
<td>Cotton INC</td>
<td>$6,600</td>
<td>01/1/2009-12/31/2009</td>
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<td>Zhang, Z.</td>
<td>Functional Analysis of Soybean Genes through Mutagenesis</td>
<td>Univ. of Nebraska</td>
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<td>Stacey, G.</td>
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<td>Nguyen, H.</td>
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Recent Publications


Chege, P.G., T.L. Clark, and B.E. Hibbard. 2009. Initial larval feeding on an alternate host enhances western corn rootworm (Coleoptera: Chrysomelidae) beetle emergence on Cry3Bb1-expressing maize. J. Kans. Entomol. 82: 63-75.


Recent Publications


