



## Personnel News

**Vladimir Blagoderov** joined the Courtney lab as a postdoctoral research associate to work on an NSF-funded project Assembling the Tree of Life (ATOL) - Diptera. Vladimir is conducting morphological studies of nematoceros Diptera, and evaluating and incorporating paleontological data into phylogenetic analyses.

**Huarong Li** joined the Bonning lab as a postdoctoral research associate to work on the mechanism of insecticidal action of a protease.

**Sijun Liu** joined the Bonning lab as an Assistant Scientist to work on development of aphid resistant transgenic plants.

**Beth Minner** has been hired to join the Extension Pest Management and Environment team as Program Assistant II.

**Amanda Jacobson** is a new Masters student in the Courtney lab. She is working on Diptera phylogenetics and on museum curation.

**Kelsey Prihoda** is working in the Coats lab as a new student in Toxicology.

**Hailin Tang** joined the Bonning lab to pursue a PhD in Toxicology. Hailin will work on physiological effects of a basement membrane-degrading protease.

There are six new undergraduate students majoring in Entomology this fall. They are **Carolyn Dorland**, **Ross Isley**, **Airene Millsap**, **Lisa Procyk**, **David Reimers**, and **Jamie Taylor**.

**Keri Henderson** graduated with a M.S. in Toxicology in August. Keri is continuing for a Ph.D. in Toxicology in the Coats lab.

**Nanette Heginger**, Insect Zoo coordinator, left in July to become Director of Discipleship at Collegiate United Methodist Church.

## Awards and Honors

**Patti Anderson** has been selected to receive the National ESA-Student Activity Award which is sponsored by Monsanto Company. Patti will receive a plaque and \$300 at the National ESA meeting in Salt Lake City in November. This award honors students who have made outstanding contributions to the ESA, their academic department, and the community while still achieving academic excellence.

**Rebecca Laborde**, Ph.D. student in the Beetham lab, received the Eli Lilly and Co. Chester A. Herrick Award for the best poster/demonstration of parasitological research at the 56<sup>th</sup> Annual Midwestern Conference of Parasitologists held June 10-12 at Minnesota State University at Mankato. The award consisted of a certificate and \$300.

## Publishing Activity Published/In Press

Aldrich, B.T., E.S. Krafur, and S. Kambhampati. 2004. Species-specific allozyme markers for Appalachian wood-feeding cockroaches (Diptera: Cryptocercidae) *Biochemical Genetics* 42: 149-164.

Anderson, P.L., R.L. Hellmich, M.K. Sears, D.V. Sumerford, and L.C. Lewis. 2004. Effects of Cry1Ab-Expressing Corn Anthers on Monarch Butterfly Larvae. *Environ. Entomol.* 33(4): 1109-1115.

Arthurs, S.P., K.M. Heinz, and J.R. Prasifka. 2004. An analysis of using entomopathogenic nematodes against above-ground pests. *Bulletin of Entomological Research* 94: 297306.

Coates, B.S., D.V. Sumerford, R.L. Hellmich, and L.C. Lewis. Geographic and voltinism differentiation among North American *Ostrinia nubilalis* (Lepidoptera: Crambidae) mitochondrial cytochrome c oxidase haplotypes. *J. Insect Sci.* (in press).



- Coates, B.S., D.V. Sumerford, R.L. Hellmich, and L.C. Lewis. Polymorphic CA/GT and GA/CT microsatellite loci for *Ostrinia nubilalis* (Lepidoptera: Crambidae). *Molecular Ecology Notes* (in press).
- Choi, M.-Y., J.M. Lee, K.S. Han, K.S. Boo. 2004. Identification of a new member of PBAN family and immunoreactivity in the central nervous system from *Adoxophyes* sp. (Lepidoptera: Tortricidae). *Insect Biochem. Molec. Biol.* 34 (in press).
- Dively, G.P., R. Rose, M.K. Sears, R.L. Hellmich, D.E. Stanley-Horn, D.D. Calvin, J.M. Russo, and P.L. Anderson. 2004. Effects on monarch butterfly larvae (Lepidoptera: Danaidae) after continuous exposure to Cry1Ab-expressing corn during anthesis. *Environ. Entomol.* 33(4): 1116-1125.
- Gill, J.S., W.A. Rowley, P.J. Bush, J.P. Viner, and M.J.R. Gilchrist. 2004. Detection of human blood in the bat tick *Carios (Ornithodoros) kelleyi* (Acari: Argasidae) in Iowa. *J. Med. Entomol.* (in press).
- Gooding, R.H. and E.S. Krafsur. 2004. Tsetse genetics: applications to biology and systematics. In I. Maudlin, P.H. Homes & M.A. Miles [Eds]. CAB International pp 95-111.
- Gooding, R.H. and E.S. Krafsur. 2004. Tsetse genetics. *Annu. Rev. Entomol.* (in press).
- Kim, K.S. and T.W. Sappington. 2004. Isolation and characterization of polymorphic microsatellite loci in the boll weevil, *Anthonomus grandis* Boheman (Coleoptera: Curculionidae). *Mol. Ecol. Notes* (In Press).
- Krafsur, E.S. 2004. The role of population genetics in the sterile insect technique. In A.V. Dyck, J. Hendrichs, A.S. Robinson [eds], *The sterile insect technique. Principles and practice in area wide integrated pest management.* (in press).
- Matten, S.M., R.L. Hellmich, and A. Reynolds. 2004. Current resistance management strategies for Bt corn in the United States. 2004. In *Transgenic Crop Production: Concepts and Strategies*, edited by Opende Koul and G. S. Dhaliwal, Science Publishers, Inc, Plymouth, UK. pp. 261-288.
- Marquez, J.G., M.J.B. Vreysen, A.S. Robinson, S. Bado, and E.S. Krafsur. 2004. Mitochondrial diversity analysis of *Glossina palpalis gambiensis* from Mali and Senegal. *Med Vet Entomol.* 18: 1-8.
- Prasifka, J.R. and K.M. Heinz. 2004. The use of C<sub>3</sub> and C<sub>4</sub> plants to study natural enemy ecology and movement. *International Journal of Pest Management* 50: 177181.
- Prasifka, J.R., K.M. Heinz, and C.G. Sansone. 2004. Timing, magnitude, rates and putative causes of predator movement between cotton and grain sorghum fields. *Environmental Entomology* 33: 282290.
- Prasifka, J.R., K.M. Heinz, and K.O. Winemiller. 2004. Crop colonisation, feeding and reproduction by the predatory beetle, *Hippodamia convergens*, as indicated by stable carbon isotope analysis. *Ecological Entomology* 29, 226233.
- Sappington, T.W., A.D. Brashears, M.N. Parajulee, S.C. Carroll, M.D. Arnold, and R.V. Baker. 2004. Boll weevil (Coleoptera: Curculionidae) survival through cotton gin trash fans. *J. Econ. Entomol.* (In Press).
- Sappington, T.W., A.D. Brashears, M.N. Parajulee, S.C. Carroll, M.D. Arnold, and R.V. Baker. 2004. Potential for escape of live boll weevils (Coleoptera: Curculionidae) into cottonseed, motes, and cleaned lint at the cotton gin. (Forum) *J. Econ. Entomol.* (In Press).
- Tiawsirisup, S., K.B. Platt, R.B. Evans and W.A. Rowley. 2004. A comparison of the susceptibility of *Ochlerotatus trivittatus* (Coq.), *Aedes albopictus* (Skuse), and *Culex pipiens* (L.) to West Nile virus. *J. Vector-borne and Zoonotic Diseases.* (in press).
- VanDyk, J.K. 2004. Embiopteran Tools. *Antenna* 28(3):172-175.
- Zhu, J. and K.F. Haynes 2004. Sex pheromone components of the bronzed cutworm, *Nephelodes minians*, A prey species of a bolas spider, *Mastophora hutchinsoni*. *Journal of Chemical Ecology*, 30:2047-2056.
- Zhu, J., S. Polavarapu, K. Park, C. Garvey, D. Mahr, S. Nojima, W. Roelofs and T. Baker. Sex pheromone identification of *Sparganothis sulfureana*: Evidence of different pheromonal populations in Wisconsin and New Jersey. *Journal of Chemical Ecology* (In press).



## Extension, Educational, Technical Publications

Rice, M. E., M. O'Neal, and P. Pedersen. 2004. Soybean aphids in Iowa 2004. Iowa State University Extension. SP-247.

Zhu, J. 2004. Beneficial insects may be helpful in bean aphid battle. A report in AgriNews on research on enhanced biological control of soybean aphids.

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## Patents/intellectual property

J. Zhu and T.C. Baker. Soybean aphid and soybean plant associated semiochemicals used in soybean aphid control, USSN 60/568,640.

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## Out-of-state Travel

Keven Arrowsmith, Jerry DeWitt, Elaine Edwards, Joyce Hornstein, Beth Minner, Linda Naeve, Carol Pilcher, Rich Pope, Kristine Schaefer, and Mark Shour traveled to Washington, DC, to attend meetings with Pest Management and Environmental Program group, July 25-27.

Jeffrey Beetham presented a poster in June in Rhode Island at the Gordon Research Conference on Biology of Host-Parasite Interactions.

Rebecca Brown and Matt Petersen conducted research in Silver City, MI, July 23-27.

Joel Coats, Bryan Clark, and Keri Henderson presented a research poster and platform at the 228<sup>th</sup> National Meeting of the American Chemical Society, in Philadelphia, PA, August 22-25. Bryan and Keri received Student Travel Awards from the Agrochemicals Division for their posters. Joel Coats presented in the International Award for Research in Agrochemicals: The Yin and Yang of Pesticide Toxicology—A Symposium in Honor of John M. Clark. Keri and Bryan also presented platform presentations, in the Agrochemical Residues and Metabolism symposium.

Greg Courtney traveled to Pellston, MI to collect specimens at Douglas Lake Biological Station, May 1-2.

Jerry DeWitt reviewed proposals for the regional

SARE program, June 21-22 in Washington, DC. He traveled to Washington, DC, to work on the National Sustainable Ag Program, June 30-July 16.

Jerry DeWitt traveled to Orlando, FL, to give a presentation at the National County Ag Agents meeting, July 13 and gave a presentation to the NY Food Systems Conference on Sustainable Agriculture in Ithaca, NY, July 15. He traveled to Reno, NV, to meet with Western State Departments of Agriculture, July 28-30.

Jerry DeWitt and Rich Pope attended a region 7 EPA meeting in Kansas City, MO, August 9-10.

Richard Hellmich attended the Insect Resistance Management Modeling Workshop, which was held in Cincinnati, OH, in May.

Richard Hellmich was invited to participate in an EPA-sponsored conference on the Development of Strategic Monitoring Programs for Ecological Impact From Plant-Incorporated Protectants and to present a talk. The meeting was held in Washington, DC, in August.

Joyce Hornstein, Carol Pilcher, Kristine Schaefer, Rich Pope, and Mark Shour attended the North Central Pesticide Application Training Workshop in St. Louis, MO, June 6-10.

Kyung Seok Kim presented a poster, "Genetic Structuring of Boll Weevil Populations in the U.S. Based on Microsatellite loci analysis" at the 2004 Evolution Conference, held in Colorado State University, Fort Collins, CO, on June 26-30.

Rebecca Laborde and Masayo Ozaki presented posters describing their research at the 56<sup>th</sup> Annual Midwestern Conference of Parasitologists held June 10-12 at Minnesota State University in Mankato.

Donald Lewis and Laura Jesse attended the National Conference on Urban Entomology in Phoenix, AZ, May 18-22.

Les Lewis traveled to Columbia, MO, to interview candidates for Research Leader of the USDA, ARS Biological Control of Insects Research Unit.

Matt Petersen worked in the insect collection at the Smithsonian in Washington, DC, July 4-11.



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**Marlin Rice** participated in the Governing Board Meeting of the Entomological Society of America, June 14-17, in Baltimore, MD.

**James Romer** spoke at the 2004 Tri-State Master Gardener Conference in St. Cloud, MN, June 23-27.

**Tom Sappington** participated in the ARS Farming Systems Workshop in Moline, IL, May 19-20.

**Tom Sappington** gave demonstrations and a special seminar to Egyptian government officials on a fact-finding mission regarding potential quarantine risks of boll weevils in baled cotton imported from US, Lubbock, TX, on July 21-24.

**Kristine Schaefer** traveled to Ashville, NC, June 13-16, to attend the Southern Region Pesticide Safety Education Program.

**Gretchen Schultz** presented research from the Pesticide/Toxicology Lab at the International Society of Arboriculture's Annual Conference in Pittsburgh, PA, August 7-11.

**Mark Shour** traveled to the North Central Region Pesticide Certification & Training Workshop in St. Louis, MO, June 6-10, 2004. Dr. Shour is finishing a two-year term as regional representative to the American Association of Pesticide Safety Educators, which also met during this time.

**Mark Shour** attended the National Pesticide Certification and Training Workshop preparatory committee meeting in Madison, WI, August 1-3.

**Jon Tollefson** traveled to Urbana, IL, August 9-10, to observe rootworm damage in fields of genetically engineered corn and discuss performance with University and Monsanto scientists.

**Jon Tollefson** took visiting Serbian scientists to Washington, DC, to visit the USDA, CREES, and APHIS, August 27-September 1.

**John VanDyk** and **Matt Westgate** attended the O'Reilly Open Source Convention to learn about the latest techniques of open source software, programming, and information technology in Portland, OR, July 27-31.

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## International Travel

**Bryony Bonning** visited the Entomology department at CSIRO, Canberra, Australia to give a seminar, August 22-24.

**Jeff Bradshaw, Bryony Bonning, Jerry DeWitt, Russ Jurenka, Marlin Rice, Tom Sappington, and Wayne Rowley** attended the XXII International Congress of Entomology in Brisbane, Australia, August 14-23.

**Joel Coats** traveled to Vancouver, BC, Canada to present research results and to participate on the EcoSmart Technologies, Inc. Scientific Advisory Panel, May 12-15.

**Greg Courtney** visited colleagues at the University of Alberta, Edmonton, and in Salmon Arm, BC, in August, to discuss aspects of the ATOL project. Since mid-August, he has been in Australia, conducting field work in Queensland and New South Wales and attending an ATOL-Diptera meeting at Tangalooma, Queensland.

From May 12-30, **Greg Courtney, Greg Curler, and Matt Petersen** traveled to Bangkok, Thailand, for research collaboration with Chiang Mai University.

**Megan O'Rourke** traveled to England to study radar Entomology at Rothamsted Research Station with Juliet Oleson's laboratory, June 21-July 8. This trip was funded by a departmental Richardson Research Incentive grant.

**Wayne Rowley** traveled to Australia to visit the Queensland Tropical Health Unit in Cairns in August.

**Jon Tollefson** traveled to Belgrade, Serbia, to conduct the Serbia-Montenegro Dialogue and then to Osijek, Croatia, to visit research collaborators and research plots, June 18-July 1.

**Junwei Zhu** gave two invited presentations at the 15<sup>th</sup> Plant Protection Congress in Beijing and at Shanghai Institute of Plant Physiology, Chinese Academy Sinica, May 4-31.

**Junwei Zhu** also traveled to Ottawa, Canada to present a talk at the Joint meeting of Annual Meeting of International Society of Chemical Ecology and Phytochemical society of North America. July 24-28.