



NEWSLETTER

October/November 2000 Entomology and Nematology News
Entomology and Nematology Student Organization
A University of Florida Publication

CONGRATULATIONS!

Shuntele N. Burns received her Ph.D. in entomology during summer commencement. Her dissertation is entitled "An Investigation of the Role of Juvenile Hormone in Dealation and Flight in *Solenopsis invicta* Female Alates." Burns is currently a postdoctoral research scientist under Dr. Peter Teal at the United States Department of Agriculture, Center for Medical, Agricultural, and Veterinary Entomology.

AWARDS

Fahiem Elborai Kora won first place in his session of the student paper competition at the Soil and Crop Science Society of Florida annual meeting in Tallahassee in September. The paper, by **F.E. Kora, L.W. Duncan, J.H. Graham, and E. Dickstein**, was titled "Interactions of citrus nematodes and rhizosphere bacteria may reduce infection of citrus roots by *Phytophthora nicotianae*".

GRANTS

Drs James Cuda and Norm Leppla were awarded an \$8000 grant from the National Biological Control Institute to edit and publish the proceedings of the assessment and planning workshop on *Cactoblastis cactorum* in North America.

SEB-ESA Meeting

It is not too late to enter the Student's Insect Behavior Symposium. The deadline for submissions is 15 Oct. 2000 for the ESA/SEB meetings to be held March 4-7, 2001, in Augusta.

LINNAEAN GAMES

Practice is held in room 1016 at 4:00PM every Monday and Wednesday. Anyone who wants to show support should stop by. They are practicing to compete at the ESA meeting in Montreal (two months away!). Members are needed for the team competing in February at the southeastern branch meeting of the ESA. Anyone wishing to be on this team should start practicing on Mondays or Wednesdays with the other team.

DEPARTMENT VISITORS

The University of Florida Nematode Evolution Laboratory recently hosted two visitors from Cairo University, Egypt. **Dr. Muhammad Mostafa Shamseldean**, and his graduate student, Atwa Ahmed Atwa spent two weeks with us in August studying the morphology and identification of entomopathogenic nematodes (EPNs) under the tutelage of Dr. Khuong Nguyen (who is building on his reputation as the world's leading expert in the field!). Dr. Shamseldean conducts internationally recognized research on the genetic modification of EPNs for use as biological control agents. Mr. Atwa's graduate research involves genetically engineering EPNs for improved tolerance to environmental factors, such as heat, UV radiation, and desiccation.

We are currently hosting **Susana Carrasco Ballesteros**, a student from Cordoba, Spain. Susana studied Biology at the University of Cordoba and completed a minor thesis in the department of Plant Physiology. For her thesis, she characterized the genes that encode the enzyme asparagine synthetase in sunflower. Susana has a four-year scholarship from the Ministry of Education and Culture towards the completion of her PhD. Every year she has the opportunity to work in another laboratory for a maximum of 6 months. For her PhD research, Susana is looking for molecular markers of *Pratylenchus* using RAPD-PCR. Her work here will involve the phylogenetic analysis of these populations, as a complement to her doctoral research. Susana will be spending 3 months with us.

MOLE CRICKET BIOPESTICIDE

Dr. Norm Leppla attended a "Mole Cricket Biopesticide Application Workshop" that was held at the Polk County Cooperative Extension office in Bartow, Florida on September 27, 2000. It was immediately followed by a field tour and demonstration of nematode application at the A. D. Combee Ranch near Polk City. At the workshop, **Dr. Billy Crow** presented information on the use of beneficial nematodes, Dr. Grover Smart discussed the history and mass production of *Steinernema scapterisci*, **Dr. Howard Frank** explained field applications and sampling of this mole cricket nematode, and Dr. Norm Leppla updated the status of the mole cricket project in Florida. The nematodes were purchased and imported from a production facility in Australia for release on experimental plots at the Combee Ranch. This IFAS Florida First Initiative research project is designed to determine the rate of nematode dispersal and minimum number needed per acre. Digital photographs of the "field day" are available from **Dr. Leppla**. The following Friday, a company in the U.K. signed an agreement with UF Office of Technology Licensing commercial production of the nematode. The UF holds a patent for the use of this South American nematode to control *Scapteriscus* spp. of [mole crickets](#) in the U.S. This agreement culminated about a year of negotiations and is expected to provide *S. scapterisci* for use throughout Florida in 2002.

PUBLICATIONS

W. T. Crow, D. W. Dickson, D. P. Weingartner, R. McSorley, and G. L. Miller. 2000. Yield reduction and root damage to cotton induced by *Belonolaimus longicaudatus*. *Journal of Nematology* 32:205-209.

W. T. Crow, D. P. Weingartner, R. McSorley, and D. W. Dickson. 2000. Population dynamics of *Belonolaimus longicaudatus* in a cotton production system. *Journal of Nematology* 32:210-214.

Cuda, J.P., M.B. Adjei, G.H. Brinen, T.R. Fasulo, K.A. Langeland, S.G. Brown, P.D. Pratt, P.A. Stansly, and S.E. Webb. 2000. Creating a framework for delivering biological control technology and information. Proceedings Fourteenth Annual Meeting of the Florida Associations of Extension Professionals, 11-15 September, Hutchinson Island, FL, p. 24.

Smith, H. A., R. McSorley, and G. B. Edwards. 2000. A comparison of some arthropod groups on monocropped and intercropped tomato in Baja Verapaz, Guatemala. *Florida Entomologist* 83: 358 - 362.

Smith, H. A., and R. McSorley. 2000. Intercropping and pest management: A review of major concepts. *American Entomologist* 46: 154 - 161.

Branscome, D.D., and T.R. Fasulo. October 2000. [Talstar F - computer tutorial](#). UF/IFAS SW-144.

PRESENTATIONS

Dr. Khuong B. Nguyen presented a seminar entitled "Morphological and molecular characters in entomopathogenic nematode taxonomy" at the 2nd US/Hungarian EPN/EPB Annual Meeting held in Visegrad, Hungary.

Marco A. Toapanta presented a talk at the 2000 National Pepper Conference held in Lafayette, LA., 1-3 October. The title of his talk was "Management strategies to control the [pepper weevil](#), *Anthonomus eugenii* Cano, in Florida." This paper was co-authored by Drs. D. Schuster, P. Stansly, R. Nguyen, and J. Eger. The conference was organized by Louisiana State University and McIlhenny Co. (the producers of Tabasco sauce) and celebrated in "cajun country," where the food and music were excellent.

Dr. James Cuda was an invited speaker at the 14th Annual Meeting of the Florida Associations of Extension Professionals held at Hutchinson Island, FL, 11-15 September. He also received a cash award of \$50 for his presentation entitled "Creating a Framework for Delivering Biological Control Technology and Information."

Drs. James Cuda, Norm Leppla and Marjorie Hoy participated in a planning workshop held in St. Pete Beach, 19-21 September. The purpose of the workshop, sponsored by the USDA APHIS National Biological Control Institute, was to address concerns raised about the environmental consequences of [Cactobastis cactorum](#) in North America. Although this pyralid moth is responsible for successful classical

biological control of prickly pear cacti in Australia and South Africa, it is an adventive species in Florida/ Georgia that threatens the biodiversity and commercial uses of prickly pear cacti in the western US and Mexico.

Dr. James Cuda participated in the Natural Resources Forum Steering Committee Meeting held 27 September in the department. The purpose of the meeting was to develop the program agenda for the 2001 Natural Resources Forum to be held 19-21 June, Embassy Suites, Tampa, FL. The theme of the 2001 forum is "Watershed Science, Management and Restoration."

Dr. James Cuda was invited to give a presentation to the Citizen's Advisory Committee of Hillsborough County, FL, on the proposed release of natural enemies of Brazilian peppertree. Cuda submitted a grant proposal to the County's Environmental Protection Commission requesting financial support from their Pollution Recovery Fund.

Dr. James Cuda attended the 24th Annual Meeting of the Florida Aquatic Plant Management Society, 3-5 October, Cocoa Beach, FL. Cuda presented the paper entitled, "Update: The [Hydrilla Tip-Mining Midge](#), *Cricotopus lebetis* (Diptera: Chironomidae)." The paper was co-authored by Pete Coon and Yen Dao.

NEWSLETTER LISTSERVER

As of September 29th there are 206 subscribers to our newsletter list server. While many subscribers are from Florida, others from across the USA and around the world read the latest and greatest news from our department!

BEST OF THE BUGS

The latest site to receive our Best of the Bugs Award is Alien Empire - the multimedia Web companion to the fascinating three-week PBS mini-series on insects. Another site receiving our Best of the Bugs Award is Insecta Inspecta - a Web site developed by seventh-graders at the Thornton Jr. High School in Fremont, California. The Best of the Bugs site is available at: <http://pests.ifas.ufl.edu/bestbugs/> .

CEU/Training Tutorial

A new computer-verified training tutorial on Talstar lawn and tree flowable insecticide is now available. The tutorial is authorized for one CEU in the Core/General Studies category for the State of Florida. See http://pests.ifas.ufl.edu/software/det_labels.htm

PUBLIC HEALTH

David Dame and **Thomas Fasulo** have added three more chapters to the Public Health Pest Control Manual Web site. These are "Mosquitoes," "House Frequenting Insect Pests," and "Venomous Arthropods." PDF and HTML versions of all chapters are available at <http://vector.ifas.ufl.edu>

Two of our Ph.D. students will be listed as reviewers when this new national manual is made available to the states in print format: **Deanna Branscome** [for cockroaches, in "House Frequenting Insect Pests"] and **Clay Scherer** [for lice, in the same chapter]. **Nancy Hinkle**, a graduate of our department, also reviewed the fleas section of this chapter. All made significant additions to the text. Another in-house reviewer was **Dr. Tom Sanford**, who revised the text on bees.

FEATURED CREATURES

The UF Entomology and Nematology Department and the FDACS Division of Plant Industry have added files on the following organisms to the Featured Creatures WWW site at: <http://creatures.ifas.ufl.edu/>

Arnett, R.H. [False blister beetles](#), Coleoptera: Oedemeridae.

Barbara, K.A. [Velvetbean caterpillar](#), *Anticarsia gemmatalis* (Huebner).

Capinera, J.L. [European corn borer](#), *Ostrinia nubilalis* (Huebner).

Capinera, J.L. [Lesser cornstalk borer](#), *Elasmopalpus lignosellus* (Zeller).

Capinera, J.L. [Melonworm](#), *Diaphania hyalinata* Linnaeus.

Capinera, J.L. [Pickleworm](#), *Diaphania nitidalis* (Stoll).

Edwards, G.B. [Giant crab spider](#), *Heteropoda venatoria* (Linnaeus).

Edwards, G.B. [Pantropical jumping spiders in Florida](#).

Edwards, G.B. [Regal jumping spider](#), *Phidippus regius* C.L. Koch.

Edwards, G.B. [A spiny orb weaver spider](#), *Gasteracantha cancriformis* (Linnaeus).

Hall, D. W. and J.F. Butler. [Atala hairstreak](#), *Eumaeus atala* Rüber.

Hall, D. W. and J.F. Butler. [Spicebush swallowtail](#), *Papilio troilus* Linnaeus.

Hamon, A.B. [Cardin's whitefly](#), *Metaleurodicus cardini* (Back).

Larson, B., and J.H. Frank. [Mexican bromeliad weevil](#), *Metamasius callizona* (Chevrolat).

McCanless, K. [Oriental cockroach](#), *Blatta orientalis* Linnaeus.

Mead, F.W., and D.B. Richman. [Florida predatory stink bug](#), *Euthyrhynchus floridanus* (Linnaeus).

Richman, D.B., and F.W. Mead. [Predatory stink bug](#), *Alcaeorrhynchus grandis* (Dallas).

Selander, R.B. [The blister beetles of Florida](#), Meloidae.

Stange, L.A. [Cockroach egg parasitoid](#), *Evania appendigaster* (Linnaeus).

New text and/or photographs were added to the files on [velvetbean caterpillar](#) and [American cockroach](#).

To save space, these publications are not listed exactly as they should be cited. The complete citation is: Author(s). (date of publication). Full title. *UF/IFAS Featured Creatures*. EENY- ##. URL

For the last five weeks, the Featured Creatures site received an average of 133.8 hits per day. Here are two recent comments regarding Featured Creatures that demonstrates that it is not just professionals who access our site:

"Thank you very much for the caterpillar information and photos. My children and I found a very large caterpillar in our tomato garden. With the help of you web site we were able to identify it. It was great family fun. - Our best." The Trebbes 08/20/00

"I love this website. I am doing a bug collection for school and I need to know what the scientific name for a honey bee is."

E.N.S.O. NEWS

The new ENSO t-shirts sold out within a few days, giving the student-run organization it's most successful fund-raiser to date! More shirts will be ordered in the near future, but you might want to sign-up for your shirt in advance, to ensure your size is still available. These stylish but practical shirts are a "must-have" for any credible entomologist (or nematologist). You can buy a t-shirt in Nancy's office.

In addition to the recent fashion venture, ENSO also held a car wash. Members got wet and earned enough to build more insect boxes and purchase more T-shirts!

Finally, our insect drawers have been quite popular with students in the Principles of Entomology and Life Sciences courses. Boxes are \$40 and are available now.

If there is something you would like to see in future editions of the newsletter, please send all thoughts,

suggestions and supportive criticisms to Erin Britton, Editor.

A hard copy of this newsletter is given to department members in Building 970 only. All others can obtain an electronic subscription by sending a request to listserv@lists.ufl.edu and in the text of the message type:

subscribe UF-bugnews-L yourfirstname yourlastname

Turn off any signature file, if you have one. You will receive instructions for confirming your subscription and further information on the rules for the list server.

This version of the newsletter is prepared for the Web by Andy Koehler.

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