

EntNews

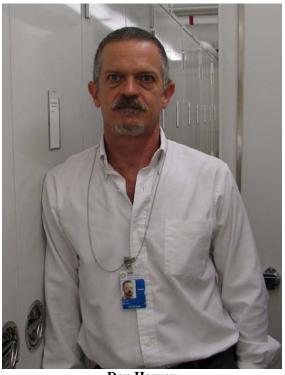
The Newsletter of the Department of Entomology Vol. 21 No. 7 July, 2006



Deborah Chavez-Wyatt



Natalie Allen



Don Harvey



Lucrecia Rodriguez

FRONT PAGE:

Deborah Chavez-Wyatt has been hired by the Systematic Entomology Lab as the Secretary for the group, in the position vacated earlier this year by Ed Synan.

Congratulations to **Don Harvey**, who recently joined his lifetime partner, Fred Pardo, in a commitment ceremony held at an 18th century mill in Adelphi, Maryland. The ceremony of May 06 was reported in a full page article in the July 16th issue of *The Washington Post Magazine*, which included several color photographs. During the ceremony, rings and vows were exchanged between the grooms in front of 75 friends and relatives.

Natalie Allen is an intern this summer for the Systematic Entomology Lab, and has mostly been assisting researchers Alex Konstantinov, Steve Lingafelter and Natalia Vandenberg in the Coleoptera area of the 7th floor of the East Court.

Lucrecia Rodriguez was the main organizer of the SEL Fun Day held July 15 at the U.S. Botanic Garden. The exhibit was co-sponsored by the Beltsville Agricultural Research Center and supported by FAR-B, and highlighted research by BARC systematists.

(Rodriquez photo/"Rodriquez"; others/G. Hevel, front page formatting/J. Louton).

ANNOUNCEMENTS:

Vichai & Nit Malikul will be on vacation in Thailand from September 01 through 29. While there, Vichai will conduct a Scientific Illustration Workshop at Kasetsart University in Bangkok, September 11-15.

GENERAL NEWS:

David Furth presented a talk entitled "Beetlemania" at the National Zoo on July 25. The program was originally scheduled for June 27, but was postponed due to the flooding problems that occurred in the

Washington area.

Vichai Malikul and Gary Hevel were participants on August 04 of the Invention on the Mall Program, conducted by the Office of Education. At tables in the Rotunda entrance, Vichai and Gary greeted visitors, especially family groups. Vichai concentrated on the needs for illustrating insects in scientific research, showing techniques of camera lucida use and necessary art supplies for scientific illustration. Gary stressed the topic of insects as "inventors" through adaptation, emphasizing exoskeletons, flight, the use of chemicals, and pollination techniques among insects.

In the July 29 edition of *Science News* is an article by Susan Milius, entitled "30 hours with Team Slime Mold," and is a report of some of the activities of the recent Potomac Gorge Bioblitz, attended by many local scientists. Concentration of the article is about slime molds, but entomology is represented by **Warren Steiner** and his wife **Jil Swearingen**. Warren and Jil are credited with lugging blacklights to the area to collect beetles that would otherwise not be found in the rocky outcroppings. **John Brown's** delight in finding another specimen of a new species of moth is captured in the article. The fresh specimen will be valuable for a species description in an upcoming research paper by one of his colleagues.

The July 31 edition of the *Washington Post*, in a half-page article by Elizabeth Williamson, featured the **Washington Biologists' Field Club** and their biological studies on Plummers Island during the past 100 years. Quoted in the article are John Brown, Michael Pogue, and botanist Stan Shetler. A color photograph shows John Brown and Smithsonian intern Kimberly Vann as they walk along a path during a Lepidoptera survey.

PUBLICATIONS BY STAFF:

Research papers by retired members of the combined entomological staff will be listed, and those will be preceded by a double asterisk.

Apple, J. and **D. Adamski**. 2006. The biology of *Chionodes hibiscella* (Busck) (Lepidoptera: Gelechiidae), with descriptions of the immature stages. Proc. Entomol. Soc. Wash. 108(3): 575-582.

--abstract—Observations are presented on the life history of *Chionodes hibiscella* (Busck) (Lepidoptera: Gelechiidae) on *Hibiscus moscheutos* L. (Malvacae) in nontidal freshwater wetlands and intertidal habitats along the Chesapeake Bay in Maryland. In the summer, early instar larvae of this bivoltine species are leaf-tiers in young terminal leaves; later instars construct leaf rolls from mature leaves. In the fall, larvae from the second brood feed on the seeds of mature fruits and overwinter in the dried fruit capsule. The morphology of the larva and pupa is illustrated with images from digital day-light photography, scanning electron microscopy, and line drawings. Chaetotaxy of the larva, mouthparts and associated sensilla, claws of the thoracic legs, prolegs of the abdomen, and the anal fork are described.

Chamorro-Lacayo, M. L., **A. S. Konstantinov,** and A. G. Moseyko. 2006. Comparative morphology of the female genitalia and some abdominal structures of neotropical Cryptocephalini (Coleoptera: Chrysomelidae: Cryptocephalinae). Coleopts. Bull. 60(2): 113-134.

--abstract— The female genitalia of New World Cryptocephalini was studied and illustrated based on representatives of 11 of the 13 genera of the tribe. It was found that female genitalia contain pleurites IX, a rare and apparently primitive feature among leaf beetles. In other features cryptocephaline female genitalia are simpler than genitalia of other leaf beetles in having a poorly sclerotized sternite VIII and lacking the tignum. It is also hypothesized that the vagina is formed by sternites IX (dorsally) and VIII (ventrally), and that scelerotized plate of sternite IX can be homologized with vaginal palpi of flea beetles. A set of characters of diagnostic and of possible phylogenetic value was found. In general, Cryptocephalina and Monachulina bear the greatest affinity in overall morphology of the female genitalia, with Pachbrachina possessing a different set of unique morphological states. Of particular diagnostic and phylogenetic value at the subtribal level, as revealed by this study, are the shape and degree of sclerotization of tergite VIII, tergite IX, and sternite VIII.

**Flint, O. S., Jr. 2006. New species and records of Neotropical Sisyridae with special reference to *Sisyra* (Insecta: Neuroptera). Proc. Biol. Soc. Wash. 119(2): 279-286.

--abstract—New figures of the male genitalia and wings of Sisyra elongate Penny & Rafael are shown and the species is newly reported from Peru. Additional distributional data are given for S. amazonica (Brazil, Guyana, Paraguay), S. apicalis (Peru, Panama), S. minuta (Brazil), and S. panama (Brazil, Bolivia). A new Brazilian species of spongilla fly, Climacia punctulata is described and figured. New records of C. amalla (Peru), C. carpenteri (Brazil), C. insolita (Brazil), and C. townesi (Brazil) are presented. Climacia basalis Navas, 1933, is synonymized with C. basalis Banks, 1913.

Footit, R. G., S. E. Halbert, **G. L. Miller,** E. Maw, and **L. M. Russell.** 2006. Adventive aphids (Hemiptera: Aphididae) of America north of Mexico. Proc. Entomol. Soc. Wash. 108(3): 583-610.

--abstract—We provide a compilation of 262 species of aphids that are considered as adventive to North America north of Mexico. Included for each species, where applicable, is reference to: the location and date of introduction of the first North American record: pest status in North America; principal economic hosts; and biogeographical origin. Information is also provided for species whose presence in North America is considered erroneous or questionable and for those species that are considered Holarctic or Beringian.

Hevel, G. F. 2006. <u>book review</u> of "Arthropod Collection and Identification, Laboratory and Field Techniques," by T. J. Gibbs and C. Y. Oseto. Proc. Entomol. Soc. Wash. 108(3): 740-742.

McKamey, S. H. 2006. Further new genus-group names in the Cicadellidae (Hemiptera). Proc. Entomol. Soc. Wash. 108(3): 502-510.

--abstract—New replacement names are proposed for 11 genera or subgenera of leafhoppers in the subfamilies Coelidiinae, Ledrinae, Maccropsinae, Scarinae, Typhlocybinae, and Ulopinae: Davduospina for Duospina Davies, Dialodia for Lodia Nielson, Doowella for Woodella Evans, Hobemanella for Bohemanella DeLong & Freytag (subgenus of Polana), Latycephala for Platycephala, Lesinda for Selinda Theron, Lonnia for Nollia Hamilton, Negroneura for Genoneura Dlabola, Olidiana for Lodiana Nielson, Ruana for Urana Coelho & Nessimian (subgenus of Gypona), and Varpulana for Parvulana DeLong & Freytag (subgenus of Polana). The new generic names circumscribe 116 valid species, 93 of which are here proposed in new combinations. Twentytwo of the remainder are in preoccupied scarine subgenera. Lodiana pectinata Yang & Zhang (1995) is preoccupied by L. pectinata Nielson (1982) - the new replacement name Olidiana yangi McKamey is proposed to replace the junior primary homonym. One of the new combinations involves a known vector of phytopathogens, the sandal leafhopper (now Olidiana indica [Walker]). The spellings of Humpatagallia Linnavuori & Viraktamath (Agalliinae) and Limassolla Dlabola (Typhlocybinae) are fixed as correct.

McKamey, S. H. 2006. Two new species of the Neotropical leafhopper genus *Caldwelliola* Young (Hemiptera: Cicadellidae) with a key to males. Proc. Entomol. Soc. Wash. 108(3): 534-542.

--abstract—Two new species of *Caldwelliola* are described, *C. sinuata* from Honduras and *C. trilineata* from Ecuador, bringing the current total valid species in the genus to eleven. A key to males of all species is presented. The species *C. bipunctata* Nielson and Godoy, 1995, is placed in synonymy under *C. lutea* Signoret, 1855, n. syn. One species, *C. caucana* Young, has been implicated as a likely vector of the bacterium *Xylella fastidiosa* Wells, which causes the "*crespera*" disease, coffee leaf scorch, in Colombia and elsewhere in the Neotropical Region.

McKamey, S. H. 2006. Review of the Neotropical leafhopper genus *Chlorogonalia* (Hemiptera: Cicadellidae: Cicadellinae), with notes on the genus *Caldwelliola*. Proc. Entomol. Soc. Wash. 108(3): 611-618.

--abstract—Chlorogonalia Young, 1977, and Caldwelliola Young, 1977, are superficially very similar genera that may not be closely related genera within the tribe Cicadellini (Hemiptera: Cicadellidae: Cicadellinae). Two

species, *Chlorogonalia ultima* Young and *Caldwelliola reservata* (Fowler), are particularly similar phenotypically and are sympatric in Ecuador (new country record for *C. reservata*). New diagnostic features are given for both genera; two of these features can be assessed in undissected specimens. *Caldwelliola tharma* (Young) is proposed as a new combination (from *Chlorogonalia*). Species of both genera are possible vectors of the bacterium *Zylella fastidiosa* in coffee; *Caldwelliola caucana* has been directly implicated as a vector of the crespera disease in Colombia. An illustrated key is included to distinguish the four known species of *Chlorogonalia*.

McKamey, S. H. 2006. New combinations in sharpshooter leafhoppers (Hemiptera: Cicadellidae: Cicadellinae). Proc. Entomol. Soc. Wash. 108(3): 672-676.

--abstract—Nine species-gropup name changes in Cicadellinae are proposed so that all species in the subfamily can be listed in a single classification that is aligned with the International Code of Zoological Nomenclature. Bothrogonia tangmaiana Yang and Li and Mareba panamensis Young are fixed as the correct original spellings. Five new combinations are proposed: Hadria alayoi and H. zayasi (Dlabola and Novoa), Caribovia intense nigrineervis (Schroder), and Cicadella viridis suffusa (Salmon), and Cintermedia (Rao). The combination Cardioscarta flavifrons transversa Melichar is reinstated. Diedrocephala bimaculata (Gmelin) is reinstated as the valid name for the species of the genus most often cited in literature and collections as D. variegata (Fabricius).

Nickle, D. A. 2006. <u>book review</u> of "Field Guide to Grasshoppers, Katydids, and Crickets of the United States," by J. L. Capinera, R. D. Scott, and T. J. Walker. Proc. Entomol. Soc. Wash. 108(3): 743-746.

Perez-Gelabert, D. E. and **F. C. Thompson.** 2006. A new genus and species of Richardiidae (Diptera) from Hispaniola. Zootaxa 1259: 25-31.

--abstract—A new genus and species of richardiid flies are described from the Neotropical biotic region (*Johnrichardia* Perez-Gelabert & Thompson, type species, *vockerothi* Perez-Gelabert & Thompson (Dominican Republic)).

**Robbins, R. G., B. D. Phong, T. McCormack, J. L.

Behler, H. A. Zwartepoorte, D. B. Hendrie, and P. P. Calle. 2006. Four new host records for *Amblyomma geoemydae* (Cantor) (Acari: Ixodida: Ixodidae) from captive tortoises and freshwater turtles (Reptilia: Testudines) in the Turtle Conservation Center, Cuc Phuong National Park, Vietnam. Proc. Entomol. Soc. Wash. 108(3): 726-729.

Smith, D. R. 2006. Types and voucher specimens of New World Aulacidae (Hymenoptera) in the Naturhisoriska Riksmuseet, Stockholm, Sweden. Proc. Entomol. Soc. Wash. 108(3): 732-733.

Staines, C. L. 2006. The hispine beetles of America north of Mexico (Coleoptera: Chrysomelidae: Cassidinae). Virginia Mus Nat. Hist. Special Pub. Number 13, 178 pp.

--abstract—A key is presented to the 14 genera and 74 species and subspecies of hispines (Coleoptera: Chrysomelidae: Cassidinae) known to occur in America north of Mexico. Each genus and species is described and illustrated. The known larvae are described and the known biology is summarized. Baliosus ferrugineus from Arizona and Microrhopala inermis from British Columbia, Montana, and Oregon, are described as new. Sumitrosis arnetti Butte is synonymized with S. inaequalis (Weber); Microrhopala rubrolineata LeConte. signaticollis rubrolineata militaris Van Dyke, and M. rubrolineata vulnerata Horn are synonymized under M. rubrolineata (Mannerheim). The holotype of Platocthispa lateritia has been located making the neotype designation of Staines (1997) invalid. Pentispa morio (Fabricius) is reported from the United States for the first time.

VISITORS:

On July 25, four botanists from Thailand visited Vichai Malikul, who introduced them to Ted Schultz, Don Davis, and Bob Robbins. The visitors were interested in entomological curation and collection maintenance procedures at the Smithsonian Institution. Included in the group from Thailand were Dr. Weerachai Nanakorn from the Queensirikit Botanical Garden, the Director of the King Rama IX Botanical Garden, and two professors from Kasetsart University.

Gary Alpert from Harvard University visited Ted Schultz and the Formicidae Collection on August 02.

Alan Anderson from SCIRO Sustainable Ecosystems, Darwin, Australia, visited Ted Schultz and the Formicidae Collection on August 02.

Tatana Arefina Armitage from the Russian Academy of Sciences, Vladivostok, visited Oliver Flint and the Trichoptera Collection, July 31 and August 01.

Brian Armitage from Midwest Biodiversty Institute, Inc., Columbus, Ohio, visited Oliver Flint and the Trichoptera Collection July 31 and August 01.

Jennifer Berglund from Boston University visited Ted Schultz and the Formicidae Collection on August 02.

Samuel Beshers from the University of Illinois visited Ted Schultz and the Formicidae Collection on August 02.

Joe Bischoff from GenBank, Bethesda, Maryland, visited Ted Schultz and the Formicidae Collection on August 02.

Michael Braustetter from the University of California at Davis visited Ted Schultz and the Formicidae Collection.

Lloyd Davis, Jr. from Gainesville, Florida visited Ted Schultz and the Formicidae Collection on August 02.

Hermogenes Fernandes-Marin from the Smithsonian Tropical Research Institute, Panama visited Ted Schultz and the Formicidae Collection on August 02.

Kim Franklin from the University of Arizona visited Ted Schultz and the Formicidae Collection, with special interest in *Pogomyrmex*, on August 02.

Noah Franklin from Boston University visited Ted Schultz and the Formicidae Collection on August 02.

Alberto Galimdo-Cardona from Department of

Biologia Universidad, San Juan, Puerto Rico, visited Ted Schultz and the Formicidae Collection on August 02.

David General from Ateneo de Naga University, Naga City, Philippines visited Ted Schultz and the Formicidae Collection on August 02.

Michael Genoardi from Boston University visited Ted

Schultz and the Formicidae Collection on August 02.

Chris Georgiadis from the University of Athens and Zoological Museum visited Ted Schultz and the Formicidae Collection on August 02.

Mike Ivie from Montana State University is expected as a visitor with Warren Steiner and the Coleoptera Collection September 05 through October 05.

Gunther Jansen from the University of Helsinki, Finland visited Ted Schultz and the Formicidae Collection on August 02.

Dan Janzen and **Winnie Hallwachs** from the University of Pennsylvania visited John Burns and the Skipper Collection on July 28.

Herve Jourdan from CBGP-IRD, Noumea, New Caledonia visited Ted Schultz and the Formicidae Collection, with special interest for southwest Pacific ants on August 02.

Burke Kathleen from the University of Suriname, Suriname, visited Ted Schultz and the Formicidae Collection, with special interest in attine ants on August 02.

Rani Kottiath from Florida Atlantic University, Boca Raton, visited Ted Schultz and the Formicidae Collection on August 02.

Jean-Francois Landry from the Canadian National Collection, Ottawa, visited Don Davis and the Microlepidoptera Collection on July 31.

Jack Longino from Evergreen State College, Olympia, Washington visited Ted Schultz and the Formicidae Collection on August 02.

Amy Maitle from Boston University visited Ted Schultz and the Formicidae Collection, with special interest in *Pheidole*, on August 02.

Matthew Medeiros from the University of California at Berkeley will visit Don Davis and the Tineidae Collection August 08-12.

Natasha Mehdiabadi from Rice University, Houston

visited Ted Schultz and the Formicidae Collection on August 02.

Floria Mora-Kepfer from the University of Miami at Coral Gables visited Ted Schultz and the Formicidae Collection on August 02.

Corrie Moreau from Harvard University visited Ted Schultz and the Formicidae Collection on August 02.

Ulrich Mueller from the University of Texas at Austin visited Ted Schultz and the Formicidae Collection on August 02.

Mario Muscedere from Boston University visited Ted Schultz and the Formicidae Collection on August 02.

Kate Parr from CSIRO Sustainable Ecosystems, Darwin, Australia visited Ted Schultz and the Formicidae Collection on August 02.

Christian Peeters from the University of Paris-CNRS, Paris, France visited Ted Schultz and the Formicidae Collection on August 02.

Shauna Price from UCLA, EEB Department visited Ted Schultz and the Formicidae Collection on August 02.

Rabeling from the University of Texas at Austin visited Ted Schultz and the Formicidae Collection on August 02.

Joe Raczkowski from Ohio State University visited Ted Schultz and the Formicidae Collection, with special interest in *Larius*, on August 02.

Stephen Rehner from USDA, Beltsville, Maryland visited Ted Schultz and the Formicidae Collection on August 02.

Becky Rosengaus from Northeastern University,

Boston, visited Ted Schultz and the Isoptera Collection on August 02.

Kay Ryderwilkie from Boston University visited Ted Schultz and the Formicidae Collection on August 02.

Ritta Savolainen from the Department of Biological and Environmental Sciences, Helskini, Finland visited Ted Schultz and the Formicidae Collection on August 02.

Justin Schmidt from Southwestern Biological Institute, Tucson visited Ted Schultz and the Formicidae Collection, with special interest in chelcids and *Acromyrmex*, on August 02.

Jon Seal from Florida State University, Tallahassee, visited Ted Schultz and the Formicidae Collection on August 02.

Adam Smith from STRI, Panama, visited Ted Schultz and the Formicidae Collection on August 02.

Scott Solomon from the University of Texas at Austin visited Ted Schultz and the Formicidae Collection on August 02.

James Traniello from Boston University visited Ted Schultz and the Formicidae Collection on August 02.

Maufred Verhaagh from Staatl Museum fur Naturkuude, Karbruhe, Germany, visited Ted Schultz and the Formicidae Collection on August 02.

Jose Vieeute Hernandez from Universidad Simon Bolivar, Caracas, Venezuela visited Ted Schultz and the Formicidae Collection August 02.

Bill Warner from Chandler, Arizona visited David Furth and the Scarabaeidae Collection on July 19.

Milan Zanda from the Czech Academy of Sciences, Czech Republic visited Ted Schultz and the Formicidae Collection on August 02.

TRAVEL BY STAFF:

Terry Erwin will return from fieldwork in Ecuador on August 08.