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EntNews

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Jessica Ware



Curaliidae, new family



Melissa Sanchez



Paul Hanson

Front Page: Photo credits, Ware and Hanson/G. Hevel; Sanchez/ J.Louton; Curaliidae/Steve Thurston (AMNH). Formatting of front page/K. Darrow.)

ANNOUNCEMENTS:

The 1116th Regular Meeting of the **Entomological Society of Washington** convened on February 07 at 7:00 pm in the Cathy Kerby Seminar Room at the National Museum of Natural History. Paul Hanson, Escuela de Biología, Universidad de Costa Rica, presented the topic "Hymenopteran Biodiversity: Tropical versus Temperate Comparisons."

The 1117th Regular Meeting of the **Entomological Society of Washington** will convene on March 06 at 7:00 pm in the Cathy Kerby Seminar room at the National Museum of Natural History. James Carpenter, American Museum of Natural History, will present the topic "Simultaneous Analysis and the Origin of Eusociality in the Vespidae (Hymenoptera)."

GENERAL NEWS:

Jessica Ware from Rutgers University was the latest presenter in the Entomology Seminar Series. Her talk on January 23 was titled "Systematics of the most speciose group of dragonflies: are we beginning to understand the relationships within the superfamily Libelluloidea (Odonata: Anisoptera)?"

Applications are invited for the **Rice Professorship** in Systematic Entomology at Oregon State University. This is a full-time, 9-month tenured position at the Full Professor level in the Department of Zoology. The holder of the chair is expected to be a mid-career to senior scholar with an international reputation for scholarship and a distinguished record of funding, publication, and teaching in systematic entomology. The Rice Professor will participate in teaching, graduate education, and serve as Director of the Oregon State Arthropod Collection (OSAC), a major research collection with 3 million specimens. The appointment also includes annual discretionary funds of approximately \$100,000 to support

the research and teaching program of the Rice Professor, with approximately one-third to be spent in support of the functions of the OSAC. For additional requirements and to apply see [http:// oregonstate.edu/jobs](http://oregonstate.edu/jobs) Posting #00023193. For full consideration apply by 15 July 2008. Direct inquiries to Tara Bevandich at bevandit@science.oregonstate.edu or Rice Search Committee Chair, Steven J. Arnold at arnolds@science.oregonstate.edu.

PUBLICATIONS:

Research papers by colleagues no longer members of the combined entomological staff, mostly retired members, will be listed, and those will be preceded by a double asterisk.

Forrester, J. A. & **Vandenberg, N. J.** 2008. First Florida records for *Anovia circumclusa* (Gorham) (Coleoptera: Coccinellidae: Noviini): A natural enemy of *Icerya genistae* Hempel (Hemiptera: Margarodidae). *Zootaxa*: 1720: 66-68.

Henry, T. J. 2007. Synopsis of the eastern North American species of the plant bug genus *Parthenicus*, with descriptions of three new species and a revised key (Heteroptera: Miridae: Orthotylinae). *Amer. Mus. Novitates* No. 3593, 31 pp.

--**abstract**--Three new species of the orthotyline genus *Parthenicus* Reuter are described and the seven previously known species of eastern North America are diagnosed. *Parthenicus cruentus*, n. sp. is described from Nebraska, *P. sedumicola*, n. sp. from Arkansas, and *P. wheeleri*, n. sp. from Oklahoma and Texas. A lectotype from Texas is designated and male genitalia are illustrated for *P. psalliodes* Reuter, the type species of the genus. Also provided are selected scanning electron photomicrographs and illustrations of the male genitalia for new species, a color habitus illustration for *P. sedumicola*, and for all species a color dorsal habitus photograph, hosts, and distribution information. A revised identification key to the 10 eastern species is given to help distinguish species.

Lozier, J. D., Foottit, R. G., **Miller, G. L.**, Mills, N. J., and Roderick, G. K. 2008. Molecular and morphological evaluation of the aphid genus *Hyalopterus* Koch (Insecta:

Hemiptera: Aphididae), with a description of a new species. *Zootaxa* 1688: 1-19.

--abstract—Aphids in the genus *Hyalopterus* Koch (Hemiptera: Aphididae) are pests of stone fruit trees in the genus *Prunus* globally, causing damage directly through feeding as well as transmission of fruit viruses. Despite their status as cosmopolitan pests, the genus is poorly understood, with current taxonomy recognizing two, likely paraphyletic, species: *Hyalopterus pruni* (Koch) and *Hyalopterus amygdale* (Blanchard). Here we present a systematic study of *Hyalopterus* using a molecular phylogeny derived from mitochondrial, endosymbiont, and nuclear DNA sequences (1,320 bp) and analysis of 16 morphometric characters. The data provides strong evidence for three species within *Hyalopterus*, which confirms previous analyses of host plant usage patterns and suggests the need for revision of this genus. We describe a new species *H. persikonus* Miller, Lozier & Footitt n. sp., and present diagnostic identification keys for the genus.

Rightmyer, M. G. 2008. A review of the cleptoparasitic bee genus *Triepeolus* (Hymenoptera: Apidae). – Part 1. *Zootaxa* 1710: 170 pp.

--abstract— The cleptoparasitic bee genus *Triepeolus* is a widespread, species-rich group that has never been revised throughout its geographic range. Herein I review 103 species of *Triepeolus*, including all but those that belong to the newly defined *Triepeolus verbosinae* and *Triepeolus simplex* species groups (these will be the topic of a subsequent paper). I present three keys to the species, which together cover the genus throughout its range in the New World; the keys are to the females of North and Central America, the males and females from Eastern North America, and the males and females from South America and the Caribbean. I propose the following 37 new species: *Triepeolus antiochensis*, *T. argentimus*, *T. argus*, *T. bimorulus*, *T. charlesi*, *T. circumculus*, *T. claytoni*, *T. cruciformis*, *T. diffusus*, *T. dilutus*, *T. edwardi*, *T. engeli*, *T. exilicurvus*, *T. flavigradus*, *T. fulgidus*, *T. griswoldi*, *T. interruptus*, *T. isohedrus*, *T. jennieae*, *T. joliae*, *T. lateralis*, *T. margaretae*, *T. mauropygus*, *T. melanarius*, *T. micheneri*, *T. nayaritensis*, *T. parkeri*, *T. partitus*, *T. parvidiversipes*, *T. parvus*, *T. perpictus*, *T. phaeopygus*, *T. punctoclypeus*, *T. quadratus*, *T. simultatus*, *T. vernus*, and *T. warriti*, and propose the new combinations *Triepeolus laticeps* (Friese), *Triepeolus tepanecus* (Cresson) and *Triepeolus zacatecus*

(Cresson). I newly synonymize 45 of the 169 previously proposed *Triepeolus* names, for a total of 51 synonymies: *T. alachuensis* Mitchell under *T. rufithorax* Graenicher; *Epeolus albopictus* Cockerell, *E. costaricensis* Friese, and *E. flavocinctus* Friese under *T. aztecus* (Cresson); *T. alpestris* Cockerell, *T. amandus* Cockerell, and *T. vandykei* Cockerell and Sandhouse under *T. paenepectoralis* Viereck; *E. bardus* Cresson, *T. mesillae* Cockerell, and *T. pimarum* Cockerell under *T. distinctus* (Cresson); *T. brunneus* Cockerell under *T. balteatus* Cockerell; *T. charlottensis* Mitchell under *T. brittaini* Cockerell; *T. cirsiianus* Mitchell under *T. donatus* (Smith); *T. concinnus* Cockerell under *T. townsendi* Cockerell; *T. coquilletti* Cockerell, *T. helianthi arizonensis* Cockerell, *T. helianthi pacificus* Cockerell, *T. lineatulus* Cockerell and Sandhouse, and *T. maculiventris* Cockerell under *T. helianthi* (Robertson); *T. dichropus* Cockerell, *T. eldredi* Cockerell, *T. helianthi grandior* Cockerell, *T. pallidiventris* Cockerell and Sandhouse, *T. rectangularis* Cockerell, and *T. wyomingensis* Cockerell under *T. texanus* (Cresson); *T. digueti* Cockerell and *E. nobilis* Friese under *T. intrepidus* (Smith); *T. floridanus* Mitchell under *T. georgicus* Mitchell; *T. fortis* Cockerell, *T. insolitus* Cockerell, and *T. trilobatus* Cockerell under *T. martini* (Cockerell); *T. foxii* Cockerell under *T. rufoclypeus* (Fox); *T. lestes* Cockerell under *T. subalpinus* Cockerell; *T. loganensis* Cockerell and *T. sandhousae* Cockerell under *T. fraseriae* Cockerell; *T. nautlanus* Cockerell under *T. lunatus* (Say); *E. nigriceps* Smith under *T. robustus* (Cresson); *E. oswegoensis* Mitchell under *T. pectoralis* (Robertson); *T. perelegans* Cockerell and *T. trichopygus* Cockerell and Timberlake under *T. subalpinus* Cockerell; *E. superbus* Provancher and *E. texanus nigripes* Cockerell under *T. remigatus* (Fabricius); and *E. utahensis* Cockerell under *T. haeterurus* (Cockerell and Sandhouse).

Schuh, R. T., Weirauch, C., Henry, T. J., & Halbert, S. E. 2008. Curaliidae, a new family of Heteroptera (Insecta: Hemiptera) from the Eastern United States. *Ann. Entomol. Soc. Wam.* 101(1): 20-29.

--abstract—*Curalium cronini*, new genus and new species is described on the basis of 16 male specimens from the southeastern United States. The relationships of *Curalium* are discussed within the context of a phylogenetic analysis for the Heteroptera: Cimicomorpha. *Curalium* is placed within the Cimicomorpha, primarily on the basis of pretarsal structure, with the ventral arolium being absent and the

dorsal arolium existing in the form of a peg-like dorsomedian sensillum. It is further placed in a clade with Joppeicidae and Velocipedidae as the sistergroup of the remaining members of the Cimiciformes, a lineage containing all predatory family=group taxa in the Cimicomorpha other than the Reduivoidea. *Curalium* uniquely possesses several autapomorphic features, including a collar-like pronotum, novel male genitalia, and enlarged proctiger; other characters which – in combination – contribute to its diagnosis include hemispherical eyes, reduced forewing venation, fusiform antennal segments III and IV, and two-segmented tarsi. Because its placement in any existing family would render the diagnosis of the family meaningless, this novel taxon is placed in the Curaliidae, new family. Color images of whole specimens and extensive line drawings and scanning electron micrographs of morphological details are provided.

Staines, C. L. 2008. A new species of *Cephaloleia* Chevrolat, 1837 (Coleoptera: Chrysomelidae: Cassidinae) from Dominica. *Insecta Mundi* 0030: 1-4.

--abstract— A new species of *Cephaloleia*, *C. simplex*, is described and illustrated from Dominica. The species of *Cephaloleia* known from the Caribbean are reviewed and a key to the Caribbean species is presented.

Webb, D. W. & Metz, M. A. 2008. A revision of the New World genus *Penniverpa* Irwin and Lyneborg (Diptera: Therevidae: Therevinae). *Zootaxa* 1720: 1-45.

--abstract—the genus *Penniverpa* Irwin and Lyneborg is revised and includes 13 species from the New World. Six of these: *Penniverpa bradleyi* Webb, n. sp., *P. chersonesa* Webb, n. sp., *P. epidema* Webb n. sp., *P. evani* Webb, n. sp., *P. insular* Webb, n. sp., *P. megaplax* Webb, n. sp., *P. multisetosa* Webb, n. sp., and *P. unispinosa* Webb, n. sp. are new to science. *Penniverpa longipes* (Loew) is placed in the genus *Insulatitan* (n. comb.) and becomes the senior synonym of *Insulatitan romaynae* Metz & Irwin, n. syn. and *Psilocephala gracilis* Krober is placed in the genus *Penniverpa* (n. comb.) and is the senior synonym of *Penniverpa brunnipennis* (Krober), n. syn. *Penniverpa alvadusta* Irwin & Webb is found to be a junior synonym of *P. alvatra* Irwin & Webb, n. syn. and *Penniverpa lyneborgi* Irwin & Webb and *P. stigmatalis* (Schiner) are found to be

junior synonyms of *Penniverpa dives* (Schiner), n. syn. Each species is described or redescribed with illustrations of their genitalia, a key to their identification, and a map of their distribution.

Woodley, N. E. 2008. Two new Stratiomyinae, including *Panamamyia* gen. nov., from the Neotropical Region (Diptera: Stratiomyidae). *Zootaxa* 1701: 29-39.

--abstract—A new species of *Hoplitimyia* James, *H. inbioensis* sp. nov., is described from Costa Rica. A new genus, *Panamamyia* gen. nov. (type species *P. silbergliedi* sp. nov.) is described from Panama. Both taxa are very rare in collections, not having been taken during extensive Malaise trap surveys in Costa Rica.

VISITORS:

Jay Abercrombie, retired from government service, visited Wayne Mathis and the Sciomyzidae Collection February 10-16.

Giorgi Babuadze from the National Center for Disease Control, Tbilisi, Russia visited Jim Pecor and the Collections of Formicidae (mosquitoes) and Ixodes (hard ticks), particularly examining specimens from the Republic of Georgia.

Edward Cohen from Maryland visited Gary Hevel and the Coleoptera Collection for identification of a specimen on February 19.

Diane Johnson from Rutgers University, New Brunswick, visited Norm Woodley and the Sarcophagidae Collection on February 20.

Lloyd Knutson from Gaeta, Italy visited Wayne Mathis and the Sciomyzidae Collection February 02-16.

Thomas Kollars, Director of the Biodefense and Infectious Disease Laboratory in Statesboro, MA visited Jim Pecor and the Culicidae Collection February 25-29.

Annette Lee from the Natural History Museum in London visited Ron Wilkerson and the Culicidae Collection

(particularly for molecular studies of the genus *Anopheles*)
February 27 through March 02.

Rory McDonnell from the University of California at Riverside visited Chris Thompson and the Diptera Collection February 01-16.

Jen Marangelo from the University of Montana visited Gary Hevel on February 29 to select specimens for an exhibit.

Luciane Marinoni from the University of Parana, Brazil will visit Wayne Mathis and the Diptera Collection March 24 through April 07.

Sean Menke from North Carolina State University, Raleigh visited Ted Schultz and the Formicidae Collection February 25-27.

Tom Miller from Florida State University visited Ted Schultz and the Formicidae Collection on February 15.

Kaiten Mooney from the University of California visited Ted Schultz and the Formicidae Collection on February 15.

Bill Murphy from Indianapolis visited Wayne Mathis and the Sciomyzidae Collection February 07-17.

Vojtech Novotny from the Czech Academy of Sciences, Czech Republic visited Scott Miller and the Entomology Department January 30-February 01.

Eugenie Phillips from Instituto Nacional de Biodiversidad, Santo Domingo, Costa Rica visited Alma Solis and the Collections of Oecophoridae and Acentropinae moths February 12-28.

Menno Reemer from the National Natuurhistorisch Museum, Leiden will visit Chris Thompson and the Syrphidae Collection March 10-21.

Melissa Sanchez Herrera from the Natural History Museum ANDES, Bogota, visited Jerry Louton and the Odonata

collection January 09-16 to study and image our holdings of the Family Polythoridae. Complete data for our holdings of Colombian odonates were provided as a starting point for a collaborative distributional checklist of the fauna. Melissa will return the collection data with updates and corrections to improve the specimen-level NMNH Odonata Catalog. The excellent images that she produced will be appended to the specimen records in the EMu Catalog. Melissa also met with David Furth regarding "best practices" in collection management and with other members of the Department on various matters.

Alexey Tishechkin from Louisiana State University visited Alex Konstantinov and Warren Steiner, working as a contractor with the Coleoptera Collection.

George Weiblen from the Bell Museum of Natural History University of Minnesota visited Scott Miller and the Departments of Entomology and Botany January 30-February 01.

Terry Wheeler from the Lyman Entomological Museum, McGill University, Ste-Anne-de-Bellvue, Canada will visit Norman Woodley and the Acalyptrate Diptera Collection March 07-14.

Xin Zhou from Ontario University (Canadian Center for DNA Barcoding Biodiversity Institute) visited Oliver Flint and Christy Jo Gerachi and the Trichoptera Collection January 03 through February 03.

TRAVEL:

Terry Erwin will travel to the University of Alberta (Canada) during the week of March 10-14, where he will present the following lectures: 1) the 2008 Strickland Memorial Lecture (after dinner presentation at the Faculty Club) titled "A third century of massive planetary conversion: humans testing the resilience of Earth's *Critical Zone*," and 2) "Racecars to Biodiversity: beetling along a personal odyssey," (Biology Department Seminar). Terry will receive the 2008 University of Alberta Distinguished Alumnus Award during the week.