



Smithsonian
National Museum of Natural History



EntNews

The Newsletter of the Department of Entomology

Vol. 22 No. 11/12, November/December 2007



Gina Wimp



Sue Olcott



Jennifer Ryan & parents with Gary Hevel



Ted Schultz & Terry Erwin

Front Page Photo credits: Wimp, Schultz & Erwin: G. Hevel; Ryans and Olcott: J. Louton. Formatting of front page: K. Darrow)

ANNOUNCEMENTS:

The 1113th Regular Meeting of the **Entomological Society of Washington** convened on December 06 at 7:00 pm in the Cathy Kerby Seminar Room at the National Museum of Natural History. Jerry Cook from Sam Houston University/National Science Foundation presented the topic “Mysteries and new insights on the order Strepsiptera.” (photograph of speaker next issue of EntNews).

Congratulations to **Charyn Micheli** who has been chosen as the new Diptera Technician in the Systematic Entomology Lab, USDA. Her first day was November 26.

C. J. Geraci, a post-doc with the Coleoptera Unit, presented the topic “Defragmenting a genus: molecular data reveal how genitalic saturation and taxonomic splitting obscured the evolutionary history of a net-spinning caddisfly lineage (Trichoptera: Hydropsychidae: *Hydropsyche sensu lato*) in the Rose Room on November 27. This was the second of a series in the re-establishment of the Department of Entomology Seminar Series.

GENERAL NEWS:

As previously announced, **Terry Erwin** has become the new Chair for the Department of Entomology, effective October 01, after the Chairship of **Ted Schultz**, who held the position for more than the past three years. Congratulations to both gentlemen (photo on front page from recent ceremony).

Jennifer Ryan, co-anchor for WUSA 9 News Now weekend newscasts, and her parents were given a tour behind-the-scenes of the Department of Entomology in late November by Gary Hevel. Ms. Ryan has a strong interest in insects, developed during camping trips in her youth, and now has made the subject a family hobby. Her father, John Ryan, is

a passionate beetle collector, and is acquainted with many professional entomologists in the western United States. (Photo on cover).

Richard Anderson of St. Petersburg, Florida has donated a collection of Nicaraguan Lycaenidae (Hairstreak) Butterflies to the Smithsonian Institution. The collection contains about 1200 specimens of about 125 species, and represents about 95% of the Nicaraguan lycaenid butterfly fauna. It is the first major collection of Nicaraguan Lycaenidae donated to the Smithsonian in over a century.

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.

Burns, J.M., D.H. Janzen, M. Hajibabaei, M. Hallwachs, & P.D.N. Hebert. 2007. DNA barcodes of closely related (but morphologically and ecologically distinct) species of butterflies (Hesperiidae) can differ by only one to three nucleotides. *J. Lepidopterists' Soc.* 61(3): 138-153.

--abstract-- Unlike most species of Lepidoptera whose DNA barcodes have been examined, closely related taxa in each of three pairs of hesperiids (*Polyctor cleta* and *P. polyctor*, *Cobalus virbius* and *C. fidicula*, *Neoxeniades luda* and *N. Pluviasilva* Burns, new species) seem indistinguishable by their barcodes; but that is when some of the cytochrome *c* oxidase I (COI) sequences are short and sample sizes are small. These skipper butterflies are unquestionably distinct species, as evidenced by genitalic and facies differences and by ecologic segregation, i.e., one species of each pair in dry forest, the other in adjacent rain forest in Area de Conservacion Guanacaste in northwestern Costa Rica. This national park is the source of the specimens used in this study, all of which were reared. Larval foodplants are of no or problematic value in distinguishing these species. Large samples of individuals whose barcodes are acceptably long reveal slight interspecific differentiation (involving just one to three

nucleotides) in all three pairs of skippers. Clearly, the chronic practice of various taxonomists of setting arbitrary levels of differentiation for delimiting species is unrealistic.

Edmiston, J.F. & **W.N. Mathis**. 2007. New Zealand species of the shore-fly genus *Nostima* Coquillett. *Zootaxa* 1661: 1-16.

--abstract— The shore-fly genus *Nostima* Coquillett is first reported from New Zealand in a revision of the three species now known to occur there. Species included are: *Nostima kivistriata* sp. n., *N. negramaculata* sp. n. and *N. duoseta* Cresson. The latter species was first described from Australian specimens and is here reported to occur widely in New Zealand. Detailed locality data from New Zealand are provided for each species. The phylogenetic relationships between the New Zealand species and species from other geographical regions are presented. A key to the species of *Nostima* occurring in New Zealand is presented.

Erwin, T.L. & D.H. Kavanaugh. 2007. Studies of the subtribe Tachyina (Coleoptera: Carabidae: Bembidiini). Supplement E: a revision of the genus *Costitachys* Erwin 1974. *Proc. Cal. Acad. Sciences*, 4th series 58(14): 331-338.

--abstract— The Neotropical genus *Costitachys* Erwin 1974 is revised. Newly discovered specimens of a new species of *Costitachys* from Ecuador provide comparative genitalic characters of males for the genus and extend its range 2900 in west of its previously known distribution into an additional center of species radiation in South America, the “North Andean Slope.” A new species, *Costitachys tena* Erwin and Kavanaugh sp. nov. (type locality: Ecuador, Napo Province, Tena, 598 m, 0 is described. One additional locality for *Costitachys inusitatus* Erwin is recorded from Brazil and another noted from French Guyana. A key to facilitate identification of adults of the two species is included.

Hall, J.P.W. 2007. Phylogenetic revision of the new neotropical genus *Minstrellus* (Lepidoptera: Riodinidae). *Ann. Entomol. Soc. Am.* 100(6): 773-786.

--abstract— The small Neotropical riodinid genus *Minstrellus* (Lepidoptera: Riodinidae) is described and revised. It seems to be most closely related to *Pseudonymphidia* Callaghan, in the *incertae sedis* section of the Riodininae. A phylogenetic analysis of its four species, using 11 characters of adult morphology, generated a single most parsimonious cladogram with the following structure: *grandis* + (*nivosa* + (*Leucotopus* + *emphatica*)). The species *watkinsi* d’Abrera, like all the taxa of *Minstrellus*, was described in *Ematurgina* Rober (a synonym of *Synargis* Hubner) and briefly subsequently treated in *Zelotaea* Bates, but it is here transferred to *Machaya* Hall & Willmott (n. comb.). The taxon *emphatica* Stichel is raised from a subspecies of *leucotopus* Stichel to the rank of species (n. stat.), and the name *candida* Le Cerf is synonymized with *emphatica* (n. syn.).

Lingafelter, S.W. 2007. Two new *Distenia* Lepeltier & Serville from Fiji with a key to the known Melanesian species (Coleoptera: Cerambycidae: Disteniinae). *Bishop Mus. Occas. Papers* 93: 3-11.

--abstract— Two new species of *Distenia* are described and a key to all known species of the genus *Distenia* in Melanesia is presented. *Distenia dillonorum* sp. nov. is from Taveuni (Fiji) and *D. gressitti* sp. nov. is from Tavenui, Kadavu, and Vanua Levu (Fiji).

Lofego, A.C., G.J. de Moraes, & **R. Ochoa**. 2007. Four new species of *Xenotarsonemus* (Acari: Tarsonemidae) from Brazil. *Zootaxa* 1646: 1-15.

--abstract— Four new species of *Xenotarsonemus* Beer (Acari, Tarsonemidae), *X. barchytegula*, *X. pirassunungensis*, *X. cerrado* and *X. spiniphorus*, are described based on specimens collected from plants of the “Cerrado” vegetation in the State of Sao Paulo, Brazil.

Pogue, M.G. 2007. Revision of the genus *Psectrotarsia* Dognin, 1907 (Lepidoptera: Noctuidae: Heliothinae). *Zootaxa* 1637: 1-19.

--abstract— Based on characters of the male and female genitalia, the genus *Erythroecia* Hampson, 1910 is considered a new synonym of *Psectrotarsia* Dognin, 1907. *Psectrotarsia* contains five species: *P. flava*

Dognin (type species); *P. suavis* (H. Edwards), new combination; *P. hebaridi* (Skinner), new combination; *P. euposis* (Dyar), new combination and revised status; and *P. rhodopora* (Hampson), new combination. Each species is redescribed and illustrated. *Copitarsia fuscirena* (Hampson), new combination, and *C. tamsi* (Giacomelli), new combination, are transferred from *Psectrotarsia* to *Copitarsia* Hampson, 1906. *Psectrotarsia* ranges from the northeastern, midwestern, and southwestern United States to Guatemala.

Sziraki, G. & **O.S. Flint, Jr.** 2005 [2007]. Larva of *Brucheiser penai* Riek, 1975 (Neuroptera: Coniopterygidae). Ann. Mus. Civ. St. nat. Ferrara 8: 45-48.

--**abstract**-- Description of the larva of a *Brucheiser* species is given on the first time. Morphological investigation of three larval specimens of *B. penai* Riek, 1975 confirmed the systematic position of Brucheiserinae within the family Coniopterygidae.

Woodley, N.E. & E.H. Nearn. 2007. The type material of Buprestidae (Coleoptera) in the Fernando de Zayas Collection, Havana, Cuba. Coleop. Bull. 61(3): 334-338.

--**abstract**-- Habitus photographs of holotypes and syntypes of Buprestidae (Coleoptera) in the Fernando de Zayas Collection, Havana, Cuba, are presented. Notes on the identities of the species are given. *Peronaemis viridithorax* Zayas 1988 is synonymized with *Peronaemis monticola* Fisher 1936.

VISITORS:

Roxana Acosta from Universidad Nacional Autónoma de México, México City, was a visitor with David Furth and the Siphonaptera Collection, October 02 through November 30.

Jane Bownes from the University of Maryland visited Ted Schultz and the Ant Lab on November 02.

Robert Copeland from Department of Home, Nairobi, Kenya, will be a visitor with Allen Norrbom

and the Diptera Collection December 18 (2007) through January 18 (2008).

Maru Coscaron from La Plata Natural History Museum, La Plata, Argentina has begun a month-long visit with the Hemiptera Collection and Tom Henry, starting November 28.

Hinojosa-Diaz from the University of Kansas visited Ted Schultz and the Apoidea Collection November 15-16.

Laura Emerson from American University, D.C., visited Ted Schultz and the Ant Lab on November 02.

Daniel Gruner from the University of California at Davis (Bodega Marine Lab) visited Ted Schultz and the Ant Lab on December 04.

Dan Janzen from the University of Pennsylvania visited John Burns and the Skipper Collection on November 19.

J. E. Meleshko from Byelorussian State University, Minsk, Belarus, is visiting Alex Konstantinov and the Coleoptera Collection December 01-24.

Brian Nettey from the University of Maryland visited Ted Schultz and the Ant Lab on November 02.

Sue Olcott from West Virginia Department of Natural Resources visited Jerry Louton and the Odonata Collection November 05-09. She is adding the NMNH Odonata records to her West Virginia dataset. Her visit was very mutually beneficial, filling gaps in her distributional data and geo-referencing NMNH West Virginia data records.

Thomas Pape from the Zoological Museum of Natural History in Denmark visited Norman Woodley and the Diptera Collection November 12-16.

Claudia Ratti from Simon Fraser University,

Canada, visited Ted Schultz and the Apoidea Collection on November 30.

Larry Stevens from the Museum of Northern Arizona visited David Furth to discuss the Odonata Collection on November 19.

TRAVEL:

Jon Coddington traveled to Costa Rica to conduct research, November 4-7.

Scott Miller was in Beijing, China, December 02-06. He gave an invited talk on DNA barcoding at the science forum of the Consultative Group on International Agriculture Research annual meeting, and visited the Institute of Zoology and the Institute of Botany of the Chinese Academy of Sciences to discuss DNA barcoding and CTFS tree plots.

Many of the combined staff members from Entomology attended the annual Entomological Society of America meetings in San Diego, California, December 07-13.