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EntNews

The Newsletter of the Department of Entomology

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Marie Metz



Desmond Foley



F. Chris Thompson & Wayne Mathis



Sonja J. Scheffer

ON THE COVER:

Marie Metz, Sonja J. Scheffer, Desmond Foley and Chris Thompson with Wayne Mathis: all photos/GFHevel.

ANNOUNCEMENTS:

The 1127th Regular Meeting of the **Entomological Society of Washington** convened at 7:00pm on April 02 in the Carolyn Rose Room of the National Museum of Natural History. Co-presenters Wayne Mathis and Chris Thompson discussed the topic “Diptera of Delmarva.”

Sonja J. Scheffer presented the ESW topic in March, with details included in the Jan/Feb. issue of the EntNews.

GENERAL NEWS:

Marie Metz will leave her employment as a scientific illustrator and graphic designer with the Systematic Entomology Lab of the USDA on April 10. She has been with that unit for several years, and her service will be strongly missed. Marie has secured an important position with the Bureau of Engraving. Her friends and colleagues at the National Museum of Natural History are sorry to see this transition, but wish her strong success in the new, money-making area of employment.

Desmond Foley presented the topic of “Mapping Mosquitoes” at a recent (April 01) Entomology Seminar, discussing a new global geodatabase of mosquito species collection records and species distribution models.

Michael Pogue, John Brown, and M. Alma Solis, Systematic Entomology Laboratory (SEL) participated in Adult Lepidoptera Workshops: March 17-19, 2009 at the University of Maryland at College Park and March 24-26, University of California, Davis, attended by members of the National Plant Diagnostic Network and U.S. state departments of agriculture entomologists. They presented current taxonomic concepts about economically important moth groups and discussed the impact of potential invasive exotic species.

PUBLICATIONS:

(** retired, emeritus, or former dept. member)

Erwin, T.L. and **Geraci, C.J.** 2009. Amazonian rainforests and their richness of Coleoptera, a dominant life form in the *critical zone* of the neotropics. Chapter 4, pp. 463-473. **in** “Insect Biodiversity, Science and Society,” 632 pp., 1st edition. Edited by R. Foottit and P. Adler, Blackwell Publishing.

****Gordon, R.D.** and Barbero, E. 2008. Dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae) of the Mpala Research Centre and environs, Laikipia District, Kenya. *J. East African Natural History* 97(2): 135-164.

--**abstract**—The dung beetle fauna of the subfamily Scarabaeinae (Coleoptera: Scarabaeidae) occurring in the Laikipia District of Kenya was surveyed. A total of 79 species were found which are diagnosed, keyed, and known dung preferred discussed. Seven species are new records for Kenya, namely *Allogymnopleurus indigaceous*, *Copris denticulatus*, *Euoniticellus parvus*, *Gymnopleurus reichei*, *Oniticellus egregious*, *Oniticellus pseudoplanatus* and *Sisyphus tibialis*.

Henry, T.J. 2009. Biodiversity of Heteroptera. Chapter 10, pp. 223-263. **in** “Insect Biodiversity, Science and Society,” 632 pp., 1st edition. Edited by R. Foottit and P. Adler, Blackwell Publishing.

Holguin, C.M., Pena, J.E., **Henry, T.J.**, and Acevedo, F. 2009. Biology of *Stethoconus praefectus* (Distant)(Heteroptera: Miridae), a newly established predator of the avocado lace bug, *Pseudacysta perseae* (Heteroptera: Tingidae) in Florida. *Fla. Entomol.* 92(1): 54-57.

--**abstract**—The Asian plant bug *Stethoconus praefectus* (Distant)(Heteroptera: Miridae) was recently discovered in Florida preying on the avocado lace bug, *Pseudacysta perseae* (Heidemann) (Heteroptera: Tingidae). Its life cycle and effectiveness as a predator of *P. perseae* were investigated at 26 +/- 1°C, 0 +/- 5RH, and 12:12(L:D) under laboratory conditions. *Stethoconus praefectus* developed from egg to adult in 16.5 +/- 0.2 d. On average, the first 4 instars consumed 2 to 4 prey per day, whereas the

last 2 instars consumed 2 to 7 lace bugs per day. *Stethocomus preaefectus* was observed in the field from Aug. through Dec. 2007.

Kazantsev, S.V. and **Perez-Gelabert, D.E.** 2009. Fireflies of Hispaniola (Coleoptera: Lampyridae). Russian Entomol. J. 17(4): 367-402.

--abstract—Thirty three new fireflies, *Lychnacris atrocrocea*, *L. bahorucoensis*, *L. cienagaensis*, *L. hierroi*, *L. montensis*, *L. orbis*, *L. piceonotata*, *L. rufocaerulea*, *L. scintilla*, *Callopisma altimontana*, *C. dominicana*, *C. engombe*, *C. lamellicornis*, *C. larimarena*, *C. rubicunda*, *Erythrolychnia azuensis*, *E. caborojensis*, *E. cristobalensis*, *E. marcanoi*, *E. medranoii*, *E. pedernalensis*, *E. roseimargo*, *Robopus acutangulus*, *R. bastardoii*, *R. dissimilis*, *R. hondovallensis*, *R. nigrifrons*, *R. peregrinus*, *R. vallinovae*, *Heterophotinus monticola*, *H. nubilus*, *H. striatus* and *Presbyolampis mirabilis*

Kazantsev et Perez-Gelabert, 2009, spp. n., are described from the Dominican Republic, mostly from the collections of Instituto de Investigaciones Botánicas y Zoológicas at the University of Santo Domingo and the Museo Nacional de Historia Natural, Santo Domingo. The genera *Callopisma* Motschulsky, 1853 and *Erythrolychnia* Motschulsky, 1853 are transferred from the tribe Photini to Cratomorphini. *Erythrolychnia olivieri* Leng et Mutchler, 1922 syn. n. is synonymized with *E. bipartita* (E. Olivier, 1912). Distribution maps of Lampyridae of Hispaniola, as well as a checklist and determination keys to tribes, genera and species are presented. The number of lampyrid species registered for Hispaniola is raised from 34 to 66.

Konstantinov, A.S., Korotyayev, B.A., and Volkovitsh. M.G. 2009. Insect biodiversity in the Palearctic Region. Chapter 7, pp. 107-163. in "Insect Biodiversity, Science and Society," 632 pp., 1st edition. Edited by R. Foottit and P. Adler, Blackwell Publishing.

Kula, R.R. 2009 A new species of *Chaenusa* (Hymenoptera: Braconidae) reared from *Hydrellia pakistanae* and *Hydrellia sarahae laticapsula* (Diptera: Ephydriidae) infesting *Hydrilla*

verticillata (Alismatales: Hydrocharitaceae) in India and Pakistan. Fla. Entomol. 92(1): 139-

---abstract--- *Chaenusa glabra* Kula, new species from India and Pakistan is described, and sexual dimorphism is reported and discussed. A diagnosis is provided to differentiate it from all other species of *Chaenusa* Haliday *sensu lato*. It was reared from *Hydrellia pakistanae* Deonier and *Hydrellia sarahae laticapsula* Deonier infesting *Hydrilla verticillata* (L.f.) Royale during foreign exploration for natural enemies of *H. verticillata*, and is in quarantine at the Florida Biological Control Laboratory in Gainesville. It is the first species of *Chaenusa* described from the Oriental Region and the only species of *Chaenusa* known to attack species of *Hydrellia* Robineau-Desvoidy infesting plants from a genus other than *Potamogeton* L.

LaPolla, J.S. 2009. Taxonomic revision of the Southeast Asian ant genus *Euprenolepis*. Zootaxa 2046: 1-25.

--abstract—The taxonomy of *Euprenolepis* has been in a muddled state since it was recognized as a separate formicine ant genus. This study represents the first species-level taxonomic revision of the genus. Eight species are recognized of which six are described as new. The new species are *E. echinata*, *E. maschwitzii*, *E. thrix*, *E. variegata*, *E. wittei*, and *E. zeta*. *Euprenolepis antespectans* is synonymized with *E. procera*. Three species are excluded from the genus and transferred to *Paratrechina* as new combinations: *P. helleri*, *P. steeli*, and *P. stigmatica*. A morphologically based definition and diagnosis for the genus and an identification key to the worker caste are provided.

Miller, G.L. and Foottit, R.G. 2009. The taxonomy of crop pests: the aphids. Chapter 20, pp. 463-473. **in** "Insect Biodiversity, Science and Society," 632 pp., 1st edition. Edited by R. Foottit and P. Adler, Blackwell Publishing.

Pogue, M.G. 2009. Biodiversity of Lepidoptera. Chapter 13, pp. 325-355. **in** "Insect Biodiversity, Science and Society," 632 pp., 1st edition. Edited by R. Foottit and P. Adler, Blackwell Publishing.

Smith, D.R. and Schmidt, S. 2009. A new subfamily, genus, and species of Cephidae

(Hymenoptera) from Australia. *Zootaxa* 2034: 56-60.

--**abstract**—Australcephinae, n. subf., is described from Queensland, Australia, based on *Australcephus storeyi*, n. gen., n. sp. This is the only cephid known from Australia and one of the few from the Southern Hemisphere. A key is given for the three recognized subfamilies of Cephidae.

Staines, C.L. 2009. A review of the genus *Chelobasis* Gray, 1832 (Coleoptera: Chrysomelidae: Cassidinae). *Zootaxa* 2033: 58-68.

--**abstract**—The genus *Chelobasis* Gray, 1832 is reviewed. Four species are recognized. A key to the species is presented. The literature is summarized and each species is illustrated.

Ward, P.S. and **Brady, S.G.** 2009. Rediscovery of the ant genus *Amyrmex* Kusnezov (Hymenoptera: Formicidae) and its transfer from Dolichoderinae to Leptanilloidinae. *Zootaxa* 2063: 46-54.

--**abstract**—The ant genus *Amyrmex* Kusnezov (1953), previously known only from several males collected more than fifty years ago in Tucuman, Argentina, is redescribed on the basis of more recent material from Argentina and Brazil. Using DNA sequence data from seven nuclear genes we investigate the phylogenetic position of *Amyrmex* and demonstrate that it is a member of the subfamily Leptanilloidinae, rather than the Dolichoderinae to which it had been previously assigned. This placement is also supported by a reevaluation of morphological traits. *Amyrmex* is possibly a senior synonym of the worker-based genus *Asphinctanilloides* Brandao, Diniz, Agosti & Delabie (1999), but additional study is needed to establish generic limits within the Leptanilloidinae and to reliably associate male and worker castes.

Woodley, N.E. 2009. A review of the genus *Ditylometopa* Kertész (Diptera: Stratiomyidae). *Zootaxa* 2032: 39-47.

--**abstract**—The genus *Ditylometopa* Kertész (Diptera: Stratiomyidae, Clitelliinae), which occurs only in the Neotropical Region, is reviewed. *Euryneura rufifrons* Curran, 1934 is synonymized with *Ditylometopa elegans* Kertész, 1923. A neotype is designated for *E. elegans*. Two species are recognized, including *Ditylometopa*

centralensis sp.nov., which is described from Costa Rica (type locality) and Nicaragua and may occur in Brazil.

VISITORS:

Janet Baran from the US Department of State, Washington, D.C., visited **Scott Miller** for a presentation of Smithsonian research in Papua New Guinea.

Paul Berg from the US Department of State, Washington, DC visited **Scott Miller** on March 13 to present Smithsonian projects in Papua New Guinea.

Robert Busby from Andover, Massachusetts visited **Robert Robbins** and the Butterfly Collection for research on Ecuadorian Lycaenidae, 09-11 April.

Tabatha Carroll from Purdue University, Lafayette, Indiana visited **Ted Schultz** and the Formicidae Collection March 16-18.

Dave Cheung from University of Guelph Insect Collection, Guelph, Canada, visited **Wayne Mathis** and the Clusiidae Collection March 26-28.

Christophe Faynel from MNHN, Montaud, France, visited **Robert Robbins** and the Butterfly Collection April 06-10.

Matjaz Kuntner from Slovenian Academy of Sciences and Arts, Ljubljana, Slovenia, visited **Jonathan Coddington** and the Arachnida Collection for collaboration on deinopid spiders research.

Gerardo Lamas from Universidad Nacional Mayo de San Marcos, Lima, Peru, visited **Robert Robbins** and the Lepidoptera Collection March 24-29.

Dan Lindsley from the University of California at San Diego visited **Robert Robbins** and the Butterfly Collection on April 08.

Matthew Medeiros from the University of California will visit **Don Davis** and the Lepidoptera Unit to consult on a research project.

Ron Priest from Michigan State University will visit **Don Davis** and the Microlepidoptera Collection in connection with a research project.

Susanne Saunders from Sidwell Friends Middle School in Bethesda, Maryland, brought a group of eight students for a tour and demonstration of digital imaging and illustration techniques. Their visit was hosted by **Steve Lingafelter**.

Andrew Short from the University of Kansas, Lawrence, Kansas, visited **Warren Steiner** and the Hydrophilidae Collection March 16 through April 10, with the purpose of assistance with curation and loan returns of material borrowed by Paul Spangler.

Jay Sohn from the University of Maryland will visit **Don Davis** and the Lepidoptera Collection for collaboration on a research paper.

Sara Taliaferro from Kansas University visited **Gary Hevel** and the Zoraptera Collection to illustrate members of this group. March 26-30. She also illustrated a holotype from the Staphylinidae Collection while here.

Mike Thomas from The Connecticut Agricultural Experiment Station, New Haven, visited **Wayne Mathis** and the Asilidae Collection and conferred with specialists April 09-10.

Erika Tucker from the University of Maryland visited **Sean Brady** and the Apidae (bees) Collection on March 19. She is developing a key to North American bumblebee species.

Charlie Young from Wonkwang University, Conbuk, South Korea will visit **Wayne Mathis** and the Asilidae Collection to confer with specialists, April 09-10.

Andreas Zwick from the University of Maryland visited **Don Davis** and the Lepidoptera Unit for consultation on a research project.

TRAVEL:

Terry Erwin traveled to Florida to gather information on the habits of ground beetles, March 20-26.

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