

Notes on some Ctenuchinae dry season (Lepidoptera: Arctiidae) from a cloud forest and pine-oak forest in Guatemala, Middle America

The Ctenuchinae (= Syntomidae, Euchromidae, Amatidae, Ctenuchidae) moths of Guatemala, as in most tropical American countries, have been poorly studied. Species in some genera are difficult to identify and many synonymies exist. Few entomological collections with adequate data exist in Central America. Classic studies of Ctenuchinae of America include Walker (1854), Druce (1886), Hampson (1898, 1914), (Zerny (1912), Draudt (1917), finally to update the nomenclature we take in consideration the investigations of Travassos (1952) and Donahue (1993). Guatemalan works include Boisduval (1870) and the synthesis by Hernández-Baz and Bailey (2006) that lists for Guatemala a total of 215 species, estimating the total wealth at approximately 400.

With the purpose of contributing to the inventory of this fauna we have begun a systematic survey of the entire country. In this note we present the results of our first trip to study the Ctenuchinae of Guatemala of particular interest are gaps where a photo is needed for a particular taxa.

We collected specimens between February 20 to 22, 2005 (dry season) at a cloud forest site, the Biotopo del Quetzal, Department of Baja Verapaz, and an oak-pine forest site, El Pilar, Antigua Guatemala, Department of Sacatepequez. An aerial hand net was used to capture day-flying species starting at noon. From 20:00 to 06:00 hours the following night, we used a 400 watt metallic arc light trap with white screen. All specimens were stored according to the conventional techniques for Lepidoptera (Steyskal *et al.*, 1986). Identifications were made mostly by comparison with determined specimens from the collection of the first author and that of the Arthropod Collection of the Universidad del Valle de Guatemala.

Sampling three days (35 effective working hours), a total of 23 individuals were collected of which 15 were male and 8 female, representing seven species in two tribes. (Table 1). Two are diurnal species: *Syntomeida epilais epilais* (Walker) and *Cyanopepla bella* Guérin.

This study is part of the project "The Ctenuchinae (Insecta: Lepidoptera: Arctiidae) of the American Continent," under the auspices of the Universidad Veracruzana in Mexico. code: 22314200592. All the material collected has been deposited in the world collection of Ctenuchinae with the scientific collection registration Code: SEMARNAT/CITES/CP-0026-VER/05.

List of Ctenuchinae from a cloud forest site (Biotopo "El Quetzal," elevation 1800 m; BEQ) and a pine-oak forest site (Finca "El Pilar," elevation 1900 m; FEP) in Guatemala.

Family Arctiidae Subfamily Ctenuchinae Tribe Ctenuchini

1. *Correbidia fana* (Druce). BEQ, 20-II-2005. This nocturnal species flies 19:00-20:00 hrs. 1 ♀ (figure 1). 2. *Cosmosoma stilbosticta* (Butler). BEQ, 20-II-2005, This nocturnal species flies 19:00 a 21:00 hrs. 1 ♂ and 21-II-2005, 02:00-03:00 hrs, 3 ♂ (figure 2). 3. *Cyanopepla bella* (Guérin). BEQ, 20-II-2005. This diurnal species was collected at 16:00 hrs. 1 ♂ (figure 3). 4. *Nelphe relegatum* (Schaus). FEP, 21-II-2005. This nocturnal species flies between 20:00 and 24:00 hrs. 8 ♂ and 22-II-2005, 01:00 to 06:00 hrs, 4 ♀ (figure 4).

Tribe Euchromiini

5. *Apeplopora mecrida* (Druce). FEP, 21-II-2005. This nocturnal species flies 22:00-24:00 hrs. 2 ♂ (figure 5). 6. *Scena potentia* (Druce) BEQ, 20-II-2005. This nocturnal species flies between 19:00 and 21:00 hrs. 1 ♂ and 1 ♀ (figure 6). 7. *Syntomeida epilais epilais* (Walker) FEP, 21-II-2005. This diurnal species was collected at 14:00 hrs, 1 ♂ (figure 7).

ACKNOWLEDGMENTS

We thank Julian Donahue, Natural History Museum of Los Angeles County for valuable comments and discussions on the manuscript.

Fernando Hernández-Baz*, **Anna Cristina Bailey**** and **José Monzón*****. *Facultad de Biología, Universidad Veracruzana, Circuito Gonzalo Aguirre Beltrán s/n. 91000. Zona Universitaria, Xalapa, Veracruz, México, e-mail: fhernandez@uv.mx; ferhbm@ yahoo.com.mx; **Facultad de Ciencias Ambientales y Agrícolas, Universidad Rafael Landívar, Guatemala, e-mail: acbailey@url.edu.gt; ***Laboratorio de Entomología Sistemática, Universidad del Valle de Guatemala, Guatemala, e-mail: jmonzon@uvg.edu.gt.

LITERATURE CITED

- Boisduval, J. A. 1870. *Considérations sur des Lépidoptères envoyés du Guatemala à M. d'l Orza*. Paris: Oberthur & Fils. *British Museum*. Part I, pages i-xiii+q-62, plates 1-20. London.
- Donahue, J. P. 1993. Six species of tiger moths (Arctiidae: Lithosiinae, Ctenuchinae) new to the United States fauna, with notes on their nomenclature and distribution in middle America. *Journal of the Lepidopterist's Society*, 47(3):199-210.
- Draudt, M. 1917. Syntomidae. In: A. Seitz (Ed). *Die Gross-Schmetterlinge der Erde*. II. Abteilung: Die Gross-Schmetterlinge des Amerikanischen Faunengebietes. 6. Band. Die Amerikanischen Spinner und Schwärmer. Stuttgart: Alfred Kernen.
- Druce, H. 1886. Zygaenidae. In: Godman F, and H. Salvin. (eds). *Biología Centrali-Americana*. Insecta, Lepidoptera-Heterocera. Volume II. Dulau & Co., London.
- Hampson, G. F. 1898. *Catalogue of the Lepidoptera Phalaenae in the British Museum*. Volume 1. Longwans & Co., London.
- Hampson, G. F. 1914. *Catalogue of the Lepidoptera Phalaenae in the British Museum*, Supplement. Volume 1. Longwans & Co., London.
- Hernández-Baz, F and A. C. Bailey. 2006. Los Ctenuchinae (Insecta: Lepidoptera: Arctiidae) de la República de Guatemala: Una síntesis preliminar. (Volumen I. p.403-413) In: E. Cano (Ed.). *La Biodiversidad de Guatemala*. Universidad del Valle de Guatemala, FONACON, MARN, CONCYT y SNCT.
- Steyskal, G. C., W. L. Murphy and E. M. Hoover. 1986. *Insects and Mites: Techniques for collection and preservation*. United States Department of Agriculture. Miscellaneous Publication No. 1443: 1-103.
- Travassos, L. 1952. Contribuição ao conhecimento dos "Arctiidae". XXX. Espécies do género "Nelphe" H.-Schaeffer, 1855 (sic). *Revista Brasileira de Biologia*, 12: 369-384.
- Walker, F. 1864. *List of the specimens of lepidopterous insects in the collection of the British Museum*. *Lepidoptera Heterocera*. Part xxxi. Supplement. Printed Edward Newman & Co., London.
- Zerny, H. 1912. Syntomidae. Part 7. (pp. 1-179) In: H. Wagner (Ed.) *Lepidopterorum Catalogus*. W. Junk. Kurfuestendamm, Berlin.

Recibido: 9 de mayo 2008

Aceptado: 15 de julio 2008



Figures 1-7. Dorsal habitus. 1. *Correbidia fana* (Druce), 2. *Cosmosoma stilbosticta* (Butler), 3. *Cyanopepla bella* (Guérin), 4. *Nelphe relegatum* (Schaus), 5. *Apeploda mecrida*, 6. *Scena potentia* (Druce), 7. *Syntomeida epilais epilais* (Walker).

