Castniinae (Lepidoptera: Castniidae) from Venezuela. III: Genera represented by only one known species. Diagnosis and comments

Jorge M. González

Palmichal S.C., Complejo Petroguímico El Tablazo, Zulia, Venezuela

Recibido: 19-08-98 Aceptado: 07-01-99

Abstract

A list of six species belonging to genera of Castniinae (Lepidoptera: Castniidae) represented in Venezuela by only one species is presented herein. General comments on the importance and difficulties on studying the family are given. A diagnosis to help on identification and comments on each species are provided. Examined material from different Venezuelan collections are also presented.

Key words: Castniinae; Castniidae; Venezuela.

Castniinae (Lepidoptera: Castniidae) de Venezuela. III: Géneros representados por sólo una especie conocida. Diagnosis y comentarios

Resumen

Se presenta una lista de seis especies pertenecientes a géneros de Castniinae (Lepidoptera: Castniidae) representados en Venezuela por una especie solamente. Se incluyen comentarios generales sobre la importancia y las dificultades de estudio de esta Familia. Igualmente, se incluye una diagnosis y comentarios generales para ayudar en la identificación de cada especie. Se menciona datos completos del material examinado proveniente de diversas colecciones venezolanas.

Palabras clave: Castniinae; Castniidae; Venezuela.

Introduction

Castniinae (Lepidoptera: Castniidae) is a small neotropical subfamily of either diurnal or crepuscular moths which has a few species of certain economical importance (1-5). There is limited taxonomic knowledge of the family worldwide and, consequently, from this country (6, 7). This is mainly because these moths are normally difficult to collect which have made them to be rare in

collections (1, 2, 4, 8, 9, 10). Some species are also rare in nature and many of them are endemic to particular areas or have a reduced geographical distribution (3). Due to the above mentioned characteristics and also to the destruction of some habitats, some species might have even been extinguished (3, 11). The author has been gathering data on different aspects of the group in Venezuela for many years. Information came from different sources including pri-

vate and public collections and publications (see 2, 6, 7, 8, 12, 13, 14). Until recently, many publications on the family mentioned the different species under Castnia s.l. mainly because the most complete known review to the moment, written by Houlbert (15) was somehow confuse (2, 9, 10). Besides, attempts to split up the group were not very successful due to difficulties in understanding relationships among some species (16). Even though Oiticica (17) made an interesting review of generic names of Castniidae, it is only after Miller (4) that more appropriate generic names were available. They were later published by the same author (5) as a checklist of the family. That list was reviewed by Lamas (18) who rewrote and improved it due to Miller's "inaccuracies and omissions". The following paper enhances information on the group for Venezuela and follows Lamas (18) and González (6) on generic assignations.

Material and methods

This study is based on material collected over the years by many entomologists from Venezuela and deposited on different public and private collections. The material examined with no reference to a particular collection belongs to Colección Entomológica "Francisco Fernández Yépez" del Museo del Instituto de Zoología Agrícola, Universidad Central de Venezuela (MIZA-UCV). The other collections whose insect material have been examined are as follows: Facultad de Agronomía, Universidad Centrooccidental Lisandro Alvarado, Barquisimeto, Lara (FA-UCLA), Family Romero, Aragua State (CFR); Ms. M. Gadou, Aragua State (CMG); Family Mattei, Amazonas State (CFM); Mr. Francisco De La Villa, Amazonas State (MEPA).

Studied Species, Diagnosis and Comments

Eupalamides guyanensis (Houlbert, 1917) (Figure 1A)

WINGSPAN: 150 mm - 180 mm.

Dark brown with olive-green hues. Forewing with creamy band that goes from the costal margin to the inner angle. There are 5 - 6 creamy spots forming a semicircular band at the apical region. Two rows of 7 - 8 creamy spots are parallel to the posterior margin of the hindwing.

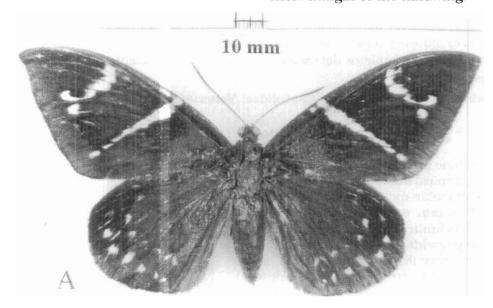


Figure 1A. Eupalamides guyanensis (Houlbert).

This species has been erroneously named in Venezuelan literature on crop pests as *Castnia dedalus* (Cramer) [= *Eupalamides cyparissias cyparissias* (Fabricius)] from which it differs by having small scales on the ventral face of the wings, among other things. *E. c. cyparissias* (= *C. dedalus*) has long and threadlike scales that cover half the ventral face of the forewing (1, 2).

Eupalamides guyanensis is widely distributed in Northern South America and is a frequent coconut palm (Cocos nucifera L.) pest in Venezuela. Their long, thick, creamy larvae bore galleries at the apical zone of the trunk and at the leaves base. The cocoons are made of plant fibers and can be found in between petiole and trunk. A few larvae were collected feeding on leaves of an Attalea palm (see Material Examined below). A female of this species was observed laying eggs in a trunk of a palm that probably belongs in the genus Coccothrinacs (19).

Material examined:

lø, Venezuela?, 20-V-1950, ex-pupa, col.?; lø, lø, Las Trincheras, Carabobo, 22-II-1948, ex-pupa en cocotero, F.Fernán-

dez Y. & J. Salas; 10, Tocuvito, Carabobo, 23-XI-1976, ex-larva en cocotero. J.M.González; 19, Urb. El Viñedo, Valencia, Carabobo, 500 m, 12-I-1981, L.D.Otero; 19, idem., 3-V-1981; 1ø, 299, Reserva Forestal Ticoporo, Barinas, 230 m, Ex- Larva en Attalea, 3-16-IV-1966, F.Fernández Yépez & L.J. Joly: 10. Upata, Bolivar, 10-IX-1985, M. Gutiérrez; 10, Barinitas, Quebrada El Muertico, Barinas, V-66, M. Gadou (CMG); 19, Ocumare de la Costa, Aragua, En tallo de Coco, 12-III-1963, Col. ? (CFR); 19, Choroní, Aragua, 200 m, V-1994, Poniendo huevos en Palma, 6:30 p.m., F. Romero (CFR); 10, Monagas, date?, J.M. Osorio (FA-UCLA); 10, Maturin, Monagas, 20-V-1986, col. ? (FA-UCLA).

Amauta papilionaris amethystina (Houlbert, 1917) (Figure 1B)

WINGSPAN: 105 mm - 135 mm.

Dark brown. Forewing with a transverse yellowish band parallel to the exterior margin. Discal area with a small, colon shaped, yellow spot. A turquoise band that goes from the costal margin, near its center, to the anal margin, without touching it, is at the hindwing.

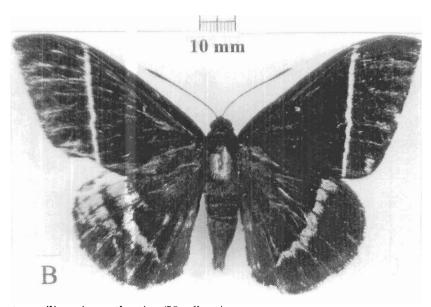


Figure 1B. Amauta papilionaris amethystina (Houlbert).

This moth has a very swift flight. Its activities are at the twilight and fly at about 3 meters above ground level. It has an Amazon distribution. It is a rare species in Venezuela.

Material examined:

lø, vía Chorro del Indio, Táchira, Venezuela, 1,200 m, V-1982, Crepuscular, F. Romero (CFR); lø, idem., capturada a las 7 pm., F. Romero (CFR); lø, Hda. Panaga, cr. San Cristóbal, Táchira, cr. 1,400 m, VII-1992, F. De La Villa (MEPA).

Corybantes mathani (Oberthur, 1881) (Figure 1C)

WINGSPAN: 110 mm - 115 mm

Light brown with greenish hues. Forewing is crossed by a sinuous grayish band at the discal area. The band goes from the costal margin to the inner angle, without touching it. There are two whitish spots closer to the costal margin. There is also a yellowish, smaller spot in between M2 and M3. Posterior wing light brown with greenish hues towards the base and anal margin.

There are two rows of yellowish spots with reddish borders that run parallel to the external margin.

Of Amazonian distribution, this is a relatively rare species and just a few specimens are known to the author. One of those comes from an area in Miranda state, Venezuela, whose population has very probably disappeared since it is actually a residential area (11, 12). All the specimens from Amazonas state [named Territorio Federal Amazonas (T.F.A.) up to 1996) were collected flying during morning hours (20).

Material examined:

1σ, Cueva de Figueroa, cr. Encrucijada de Petare, Miranda, 1947, F.Fernández Yépez; 1σ, Puerto Ayacucho, 400 m, T.F.A., XI-1986, F. De La Villa (MEPA); 19, Pintado, Puerto Ayacucho, T.F.A., IV-1989, F. De La Villa (MEPA); 19, Puerto Ayacucho, T.F.A., V-1995, F. De La Villa (MEPA); 1σ, Puerto Ayacucho, Avda. Perimetral, T.F.A., III-1990, R. Mattei (CFM); 19, Puerto Ayacucho, T.F.A., R. Mattei (CFM).

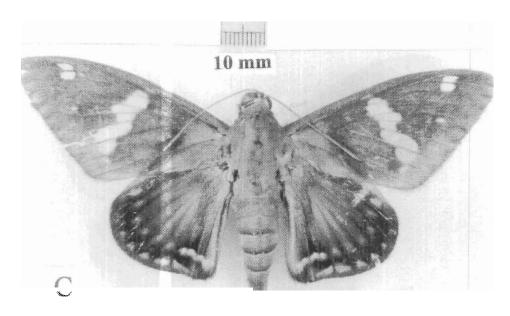


Figure 1C. Corybantes mathani (Oberthur).

Feschaeria amycus (Cramer, 1779) (Figure 1D)

WINGSPAN: 70 mm.

Grayish brown with an irregular sinuous whitish band from mid costal margin to the inner angle of the forewing. There is also a small sinuous white band at the apical region. A small lobe appears at the mid anal margin. Its apex is covered by long scales. The base of the hindwing is dark brown. Its anal margin

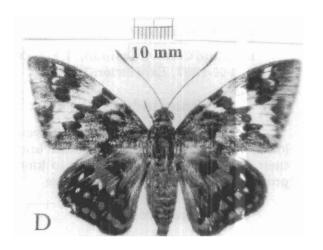


Figure 1D. Feschaeria amycus (Cramer).

is covered by long greenish brown scales. An irregular black band appears at the central area of the hind wing. Starting from it, there is a red band that becomes spots toward the costal margin. There is also a row of red spots parallel to the external margin.

This species should be considered very rare in Venezuela and only one specimen is known from this country (2). According to Miller (4) this genus is restricted to southeastern Brazil. However, the northernmost records for either the genus or the species, are of this specimen together with another in the collection of Madame Gaston Fournier, collected in Tobago according to Lathy (21).

Material examined:

1σ, Catica, Aragua, 5-V-1974, F. Mattei (CFM).

Erythrocastnia syphax (Fabricius, 1775) (Figure 1E)

WINGSPAN: 100 mm - 130 mm

Dark brown, almost black. Forewing with a slightly sinuous white band that

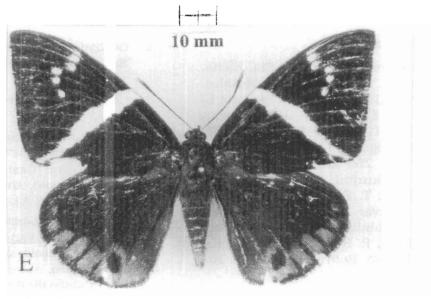


Figure 1E. Erythrocastnia syphax (Fabricius).



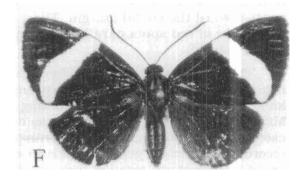


Figure 1F. Castnius pelasgus (Cramer).

cross the discal cell from the costal margin to the inner angle. Apical region of wing with a six spotted row divided into two groups of three spots each. The lower group is closer to the external margin. Hind wing with a row of red spots (7 or 8) parallel to the external margin. The second spot, close to the inner angle and between CuA2 and 1A + 2A, is greater than the others and has an oval, oblique, blackish spot.

It is common and widely distributed in the Amazon basin. This is a relatively common species south of the Orinoco in Bolivar state.

Material examined:

lø, Carretera El Dorado - Sta. Elena,
Km. 84, Bolívar, 29-IX-1967, C.J. Rosales,
M. Gelvez & L. Rodríguez; 2σ, Carretera El
Dorado - Sta. Elena, Km. 125, Bolívar,
1100 m, 21-IX-1967, C.J. Rosales, M. Gélvez & L. Rodríguez; lø, Salto Pará, Río
Caura, Bolívar, 250 m, 8-10-XI-1980, J.
Clavijo; lø, Kukurital, Canaima, Bolívar,
20-30-VII-1987, T. Pyrcz; lø, lø, Jabillal,
Río Caura, Bolívar, 6-11-VIII-1987, J. De
Marmels; lø, Jabillal, Río Caura, Bolívar,
80 m, VII-1986, F. Romero (CFR); lø, Río
Surukum, 870 m, Bolívar, X-1989, F. Romero (CFR).

Castnius pelasgus (Cramer, 1779) (Figure 1F)

WINGSPAN: 60 mm.

Dark brown, almost black. Forewing with a transverse white-creamy band that goes from the mid costal margin to the inner angle. Hind wing dark brown. Dorsal part of abdomen with two parallel creamy bands alongside.

This can be considered a rare species and only one specimen is known from Venezuela (12).

Material examined:

lø, Talud Cerro Arakamuni, T.F.A. 600 m, 18-24-X-1987, Expedición Terramar.

Acknowledgments

To colleague and friends that have allowed me to study the specimens under their care. To those people that so kindly provided me with pertinent literature.

References

- 1. GONZALEZ J.M. Contribución al estudio de la familia Castniidae (Lepidoptera) en Venezuela (Trabajo Especial), Universidad Central de Venezuela, Maracay (Venezuela), pp. 55, 1981.
- GONZALEZ J.M., Fernández Yépez. F. Mem Soc Cienc Nat La Salle 53(139): 47-53, 1993.
- 3. LAMAS G. Rev Per Entomol 35: 13-23, 1993.
- 4. MILLER J.Y. The taxonomy, phylogeny, and zoogeography of the Neotropical Castniinae (Lepidoptera: Castniidae) (Ph.D. Thesis), University of Florida, Gainesville (U.S.A.), pp. 571, 1986.
- MILLER J.Y. Castniidae. In: Heppner, J.B. (Ed.) Checklist: Part 2. Hyblaeoidea Pyraloidea Tortricoidea. Atlas of Neotropical Lepidoptera, Assoc. Trop. Lepid./ Scient. Pub., Gainesville (USA), pp. 133-137, 176-177, 1995.

- 6. GONZALEZ J.M. **Bol Mus Entomol Univ Valle** 4(2): 1-10, 1996.
- 7. GONZALEZ J.M. Mem Cienc Nat La Salle 57(148): 83-91, 1997.
- GONZALEZ J.M., FERNÁNDEZ YÉPEZ F. Mem Soc Cien Nat La Salle 52(137): 5-10, 1992.
- 9. MILLERJ.Y. Bull Allyn Mus 6: 1-13, 1972.
- 10. MILLER J.Y. Bull Allyn Mus 34: 1-13, 1976
- RODRIGUEZ J.P., ROJAS-SUAREZ F. Libro rojo de la fauna venezolana, Provita -Fundación Polar, Caracas (Venezuela), 444 pp., 1995.
- 12. GONZALEZ J.M. **Bol Entomol Venez (N.S.)** 5(17): 139-140, 1990.
- 13. GONZALEZ J.M. Mem Soc Cien Nat La Salle 52(137): 11-16, 1992.

- GONZALEZ J.M., ROMERO F. Bol Entomol Venez (N.S.) 12(1): 119, 1997.
- 15. HOULBERT C. **Etudes de Lépidoptérologie comparée** 15: XVI + 730 pp., 1918.
- 16. STRAND E. *Die Gross-Schmetterlinge der Erde*. 6 (1). Edited by A. Seitz. Published by Stuttgart, A. Kernen, pp. 7-17, 1913.
- 17. OITICICA J. Rev Brasil Entomol 3: 137-167, 1995.
- LAMAS G. Rev Per Entomol 37: 73-87, 1995.
- 19. ROMERO F. Personal communication.
- MATTEI R., DE LA VILLA F. Personal communication.
- 21. LATHY P.I. Ann Mag Nat Hist (9)16: 242-243, 1925.