

## Brazilian Sesiidae in the collection of the Universität des Saarlandes, Saarbrücken, Germany (Lepidoptera)

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### Abstract

Specimens of Brazilian Sesiidae on loan from the University of Saarlandes, Saarbrücken, Germany (IGUS) were examined, including seven of B. Zukowsky's types in the Marten Collection in the IGUS. The types are redescribed and illustrated. Three new species (*Carmenta leptosoma* **sp. nov.**, *C. plaumanni* **sp. nov.** and *C. splendens* **sp. nov.**) are described, with adults and genitalic structures illustrated; *C. semitrista* (Zuk.) is designated a **new synonym** of *angarodes* Meyrick; and *Carmenta asema* is a **comb. nov.** for *Synanthedon asema* Zuk.

**Key words:** Lepidoptera, Sesiidae, types, genitalia, distribution, Brazil, new species, synonymy

### Introduction

After examining the neotropical clearwing moths (Sesiidae) of the Marten Collection located in the Universität des Saarlandes, Saarbrücken, Germany (IGUS), we herein document the IGUS holdings of Zukowsky's type specimens (Zukowsky 1936). The senior author describes three new Brazilian species. The IGUS collection contains seven of Zukowsky's type species. Overall, Zukowsky described 26 neotropical species (one from Mexico, *Alcathoe altera*, and the rest from South America); 19 of the South American taxa are from Brazil. The collection also has several individual morphotypes which were not described here because of their poor quality and/or lack of additional representatives. Please note the quotation marks used in the Type sections denote information on specimen labels.

**Repositories**

- BMNH British Museum of Natural History, London  
CSCA California State Collection of Arthropods, Sacramento  
IGUS Universität des Saarlandes, Saarbrücken  
UCR University of California, Riverside  
USNM U. S. National Museum of Natural History, Washington, D.C.

**[Zukowsky Types in the IGUS]*****Synanthedon flavostigma* Zukowsky**

*Synanthedon flavostigma* Zukowsky, 1936:1233.

**Diagnosis.** Wing length 11 mm (Fig. 9). This species is easily recognized by the large yellow-orange spot in the approximate area of the discal spot on the otherwise darkly opaque forewings. There are rust red subdorsal stripes on the thorax and much rust red on the legs.

**Redescription.** Head with vertex, occipital fringe and front brown black; labial palpus smooth, brown black with some orange inside basally; antenna (missing). Thorax brown black, with rust red subdorsal stripe; some orange beneath wing base. Abdomen brown black. Foreleg pale yellow; other legs brown black, mostly rust red on tibiae and first tarsal segments. Forewing opaque, brown black but with large yellow-orange spot in region of discal spot. Hindwing mostly hyaline but with brown black, broad apical and anal margins, yellow powdering on costal margin and discal spot.

**Distribution.** Known only from the holotype: BRAZIL: Rio de Janeiro.

**Type.** *flavostigma*: Holotype female - BRAZIL: "Rio de Janeiro. 1 female. Type: Coll. Hamburg Zool. Museum. Figure is a female taken by Mr. W. MARTEN in Brazil."

**Remarks.** Since the holotype is the only known specimen, it was not dissected.

***Synanthedon hemigymna* Zukowsky**

*Synanthedon hemigymna* Zukowsky, 1936:1226.

**Diagnosis.** Wing length 14 mm (Fig. 8). Most notably, the abdomen is slender, multi-hued, with a yellow spot on both sides, and the anal tuft is extended, mostly rust red. The wings are brownish yellow hyaline, more so on the forewing. The tibiae of mid- and hind-legs are mostly bright yellow.

**Redescription.** Head with vertex brown black; front gray, white laterally; occipital fringe brown black with few white scales laterally; labial palpus brown black with some yellow inside; antenna brown black. Thorax brown black, dorso-anterior region yellow. Abdomen narrow, segment 1-4 brown black, large yellow patch laterally on 4; 5 and 6 light brown; ventrally segment 2 mostly white; 3 brown black; 4 and 5 tan, white posteriorly; 6 mostly orange red, some white; orange red laterally on 5 also; anal tuft thickened ventrally, extending posteriorly well beyond tip of abdomen, rust red, some brown mixed. Legs with forecoxa brown black; mesotibia and first tarsal segment yellow; metatibia about two-thirds yellow. Forewing brownish yellow hyaline, narrow discal spot with some yellow. Hindwing hyaline, slightly brownish yellow in discal cell.

**Distribution.** Known only from the holotype: BRAZIL: Itatiaya.

**Type.** *hemigymna*: Holotype female: "BRAZIL: "Itatiaya. 1 male (actually female), flying in the sunshine on a forest glade. Type: Coll. MARTEN."

**Remarks.** Genitalia were not removed for study since the type is the only known specimen.

### *Synanthedon martenii* (Zukowsky)

*Synanthedon martenii* Zukowsky, 1936:1224.

**Diagnosis.** Female (Fig. 3) (male unknown). Wing length 10.5 mm. Most noticeable about *Synanthedon martenii* is the bright yellow orange on the broad outer margin and contrasting dark discal spot of the otherwise hyaline forewing. The abdomen has very narrow yellow bands on all but the first segment.

**Redescription.** Head with brown black; front brown black, white laterally; occipital fringe yellow orange; labial palpus smooth, yellow orange, brown black apically; antenna brown black. Thorax brown black; yellow orange subdorsal stripe; yellow orange beneath wing and dorsoposteriorly on metathorax. Abdomen dorsally brown black with very narrow yellow bands on posterior edge of all segments except segment 1; ventrally with segment 2 solid yellow, 3-6 with broad yellow bands posteriorly; anal tuft brown black tipped with yellow. Legs brown black, yellow ventrally. Forewing mostly hyaline with broad apical margin, bright orange; broad discal spot, brown black with orange distally; ventrally with apical area orange, costal margin yellow. Hindwing hyaline, some orange on apical margin.

**Distribution.** Known only from the holotype: presumably Brazil (possible Rio de Janeiro) (Zukowsky 1936).

**Type.** *martenii*: Holotype female - BRAZIL: "Type; martenii, Marten; Type: S. martenii Zuk.; 62 (red circle), 26.10.20; Saarbrücken."

**Remarks.** This female is the only known specimen of *martenii*; therefore, it was not dissected. Existing label data do not provide location information; consequently, the type locality is unknown to us.

*Carmenta aerosa* (Zukowsky)

*Synanthedon aerosa* Zukowsky, 1936: 1236.

**Diagnosis.** Wing length 8.5 mm (Fig. 1). Most noticeable on the abdomen are the bright, narrow orange bands and bright orange laterally and ventrally. The wings are mostly clear.

**Redescription.** Head with vertex brown black; front gray, white laterally; (occipital fringe not visible due to presence of fungus); labial palpus orange, brown black apically; antenna with pale orange on apical fourth. Thorax with much bright orange laterally above and beneath wing bases. Abdomen dorsally brown black with narrow bands on posterior edge of segments 2-4 and 7, bands bright orange; bright orange laterally and ventrally. Legs with forecoxa pale orange; femora brown black; tibiae bright orange, except brown black between spur pairs on hindtibia; tarsi brown black. Forewing mostly hyaline, apical margin somewhat broad, margins and discal spot brown black, bright orange at wing base; ventrally with orange powdering on costal margin, pale yellow sparsely on apical margin. Hindwing hyaline, bright orange basally. Genitalia (Fig. 17) with valvae elongate, narrow, bare area greatly reduced; saccus about one-third length of valvae; scopula androconialis long, about one-half length of valvae.

**Distribution.** Known only from the type locality: BRAZIL: Itatiaya.

**Type.** *aerosa*: Lectotype male - BRAZIL: "16-17 mm. Brazil, Itatiaya, December. Types: Coll. MARTEN."

One additional paralectotype (male - head missing) has the following labels: "3; Marten, *aerosa*; Type, *S. aerosa* Zuk.; 56 (red circle), Itatiaya, 28.12.25; 28.XII.25, Mar., Bl..... (handwritten, unreadable); Saarbrücken; Genitalia Slide by M.R. Papp, CDA #325."

**Remarks.** A male from the Senckenberg Museum, Frankfurt labeled "Syn. Type" does not fit the original description by Zukowsky nor match the Lectotype and is not considered to be a paralectotype of *aerosa*.

*Carmenta angarodes* (Meyrick)

*Sesia angarodes* Meyrick, 1921:443.

*Synanthedon semitrista* Zukowsky, 1936:1236, **n. syn.**

**Diagnosis.** Wing length: males = 9-12 mm; females = 12-14 mm. According to Marten (Zukowsky 1936), the male and female syntypes were found in copula, and he remarked that their association should not be in doubt. The sexes are considerably dimorphic, with the male having hyaline wings and the female having totally opaque forewings, dark brown with pale yellow to white toward the wing tips. The male has a slender body, dark with blue-green sheen and with a somewhat elongate, divided anal tuft. The female body is robust and dull dark brown. The male thorax has much orange to orange red laterally, and the head has white on the labial palps, both characters lacking on the female.

**Redescription.** Male (Fig. 10). Head with vertex brown black with blue-green sheen; occipital fringe dorsally brown black with pale yellow mixed, laterally white; front white laterally; labial palpus relatively smoothly scaled, brown black, white ventrally; antenna brown black. Thorax with narrow subdorsal orange or orange-red stripe; mostly orange laterally beneath wings. Abdomen brown black with blue-green sheen; ventrally powdering white; anal tuft divided into two lateral, elongate tufts. Legs with white on most of forecoxa, laterally on basal half of fore- and mid-tibiae, slight mixed dorsally on medial tuft of hind tibia and dorsally at joints of tarsal segments. Forewing mostly hyaline, with narrow discal spot, broad to narrow apical margin; apical and anal margins often variously, lightly powdering pale yellow. Hindwing hyaline, no discal spot. Genitalia (Fig. 14) with bare area of valvae reduced; saccus thin, less than one-third length of valvae; scopula androconialis one-half length of valvae.

Female (Fig. 11): Very different from male. Thorax lacking orange of male. Abdomen brown black. Legs lacking white of male. Forewing opaque, brown black, with apical area pale yellow to white (more extensively ventrally). Hindwing mostly hyaline, with some brown black anteriorly in discal cell and on anal fold. Genitalia (Fig. 23) with antrum initially membranous, slightly curving, gradually becoming pigmented distally; ductus bursae short, some pigmentation; corpus bursae ovoid, without signum.

**Distribution.** BRAZIL: Rio de Janeiro; Manaus; Rondonia. ECUADOR: Bucay; Napo. GUYANA: R. S. Parish, Mallali. COSTA RICA: Turrialba.

**Types.** *angarodes*: Holotype male - BRAZIL: "Holo-type; Manaus, Brazil, Parish, 11.19; *Aegeria angarodes* Meyr., 1/1, E. Meyrick det. In Meyrick Coll.; Meyrick Coll., B.M. 1938-290; *angarodes* Meyr." (BMNH)

*semitrista*: Lectotype male - BRAZIL: "8 ; *semitrista*, Marten; 60 (red circle), Rio, 14.4.27; Saarbrücken; LECTOTYPE male, *Synanthedon semitrista* Zukowsky, By T.D. Eichlin '77."

**Remarks.** Based on label data, adults were captured in April, August, October and November. One additional female from Ecuador was found in material from the Bishop Museum, Hawaii, and very recently, a female was captured in a flight trap in Ecuador by Fred Andrews (CSCA). The seven males from Rondonia were net collected when responding to artificial sex attractant (Z,Z 3,13-octadecadien-1-ol acetate) (Eric Fisher, CSCA, pers. comm.). In the Neotropics the color pattern described above for female *angarodes* (dark opaque forewings with whitish scaling apically) is a repeating pattern seen in other species of Sesiidae in all three subfamilies and in different genera within a subfamily (see Discussion of *Sophona leucoteles* (Clarke) in Eichlin 1986:345).

***Carmenta asema* (Zukowsky), comb. nov.**

*Synanthedon asema* Zukowsky, 1936: 1219.

**Diagnosis.** Wing length 5-8.5 mm. Most notably, the anal tuft has much orange red. The

wings are clear, although the forewing apical margin is broad. The abdomen dorsally has narrow pale yellow bands on most segments, but the last two segments have narrow orange bands. The antennae have white spots near the tips.

**Description.** (first description of male): Head with vertex brown black with slight blue-green sheen; front brown black, white laterally; occipital fringe yellow dorsally, white laterally; labial palpus smooth, pale yellow, some brown black apically; antenna with preapical white spot. Thorax brown black, narrow subdorsal yellow stripe, pale yellow below wing. Abdomen brown black, dorsally with segments 2 and 4 with narrow yellow bands (orange bands of 5 and 6 present on female not evident on only male specimen); ventrally, mostly pale yellow; anal tuft with orange red subdorsally and ventrally. Legs brown black; forecoxa white and pale yellow; pale yellow on tibiae medially, distally and at joints of tarsal segments. Forewing mostly hyaline but with broad apical margin and discal spot; ventrally with yellow on costal margin, white powdering on apical margin. Hindwing hyaline. Genitalia (Fig. 15) with little or no bare area on valvae; saccus narrow, more than one-third length of valvae; scopula androconialis nearly two-thirds length of valvae.

Female (Fig. 2): Similar to male; forewing of type specimen with pale yellow or white scales on costal margin; abdomen dorsally with narrow orange-red bands on segments 5 and 6, anal tuft brush-like, orange red. Genitalia (Fig. 21) with antrum slender, elongate, slightly curving, sclerotized; ductus bursae broad, slightly pigmented, narrowing distally; corpus bursae ovate, without signum.

**Distribution.** BRAZIL: Rio de Janeiro, Itatiaya; Nova Teutonia. PARAGUAY: Villarica.

**Type. asema:** Holotype female - BRAZIL: "Itatiaya Mts. In the State of Rio de Janeiro. Male in the Coll. MARTEN (Königstein I. T.)."

**Remarks.** The holotype is actually a female, not a male as stated in the original description (see discussion in Duckworth and Eichlin, 1978:4). The male described above is labeled: Guaraquecaba Pr., Brazil, 9.XII.1970, V.O. Becker leg; I.P.A.M. - Becker. The four known specimens of *asema* were collected from December to March.

### *Carmenta laticraspedontis* (Zukowsky)

*Synanthedon laticraspedontis* Zukowsky, 1936:1220.

**Diagnosis.** Wing length 9.5 mm (Figs. 6 & 7). This species is much like *Carmenta xanthomelanina* (Zukowsky:1214) as to the golden yellow outlining the cell and posterior to the cell to the wing margin. It differs in lacking the golden yellow in the center of the discal spot of *xanthomelanina*; however, *laticraspedontis* has yellow powdering between the veins in the broad apical margin dorsally, scales pale yellow or white ventrally (*xanthomelanina* may have some white powdering dorsally). Also, unlike *xanthomelanina* which has the occipital fringe yellow, *laticraspedontis* has the occipital fringe white laterally.

**Redescription.** Female (male unknown). Head with vertex brown black; front brown black, white laterally; occipital fringe yellow dorsally, white laterally; labial palpus smooth, golden yellow; antenna (broken off of type specimen) with pale yellow on basal third ventrally. Thorax brown black. Abdomen brown black with narrow yellow bands on posterior margin of segments 4-6 and yellow laterally on 1 and 2; ventrally with wider pale yellow bands on 4-6; anal tuft brush-like, scales tipped pale yellow. Legs brown black, yellow on mesal side of tibiae, dorsally on most of midtibia, encircling at tibial spur pairs and at tarsal joints. Forewing mostly hyaline, with broad, brown black, apical margin with pale yellow powdering between veins, yellow lining discal cell and distally on discal spot, yellow on anal margin; ventrally with apical margin powdering pale yellow to white. Hindwing hyaline. Genitalia (Fig. 22) with antrum long, strongly sclerotized, slightly curved medially, abruptly curved at entrance to ductus bursae; ductus bursae membranous, short; corpus bursae ovoid, without signum.

**Distribution.** BRAZIL: Itatiaya; Petropolis

**Type.** *laticraspedontis*: Holotype female - BRAZIL: "Itatiaya, January, 1 female. Type Coll. MARTEN."

**Remarks.** One additional female (abdomen missing) is simply labeled: "Petropolis, Brazil; Collection WM Schaus (USNM)."

#### [New species described from the IGUS]

#### *Carmenta leptosoma* Eichlin, sp. nov.

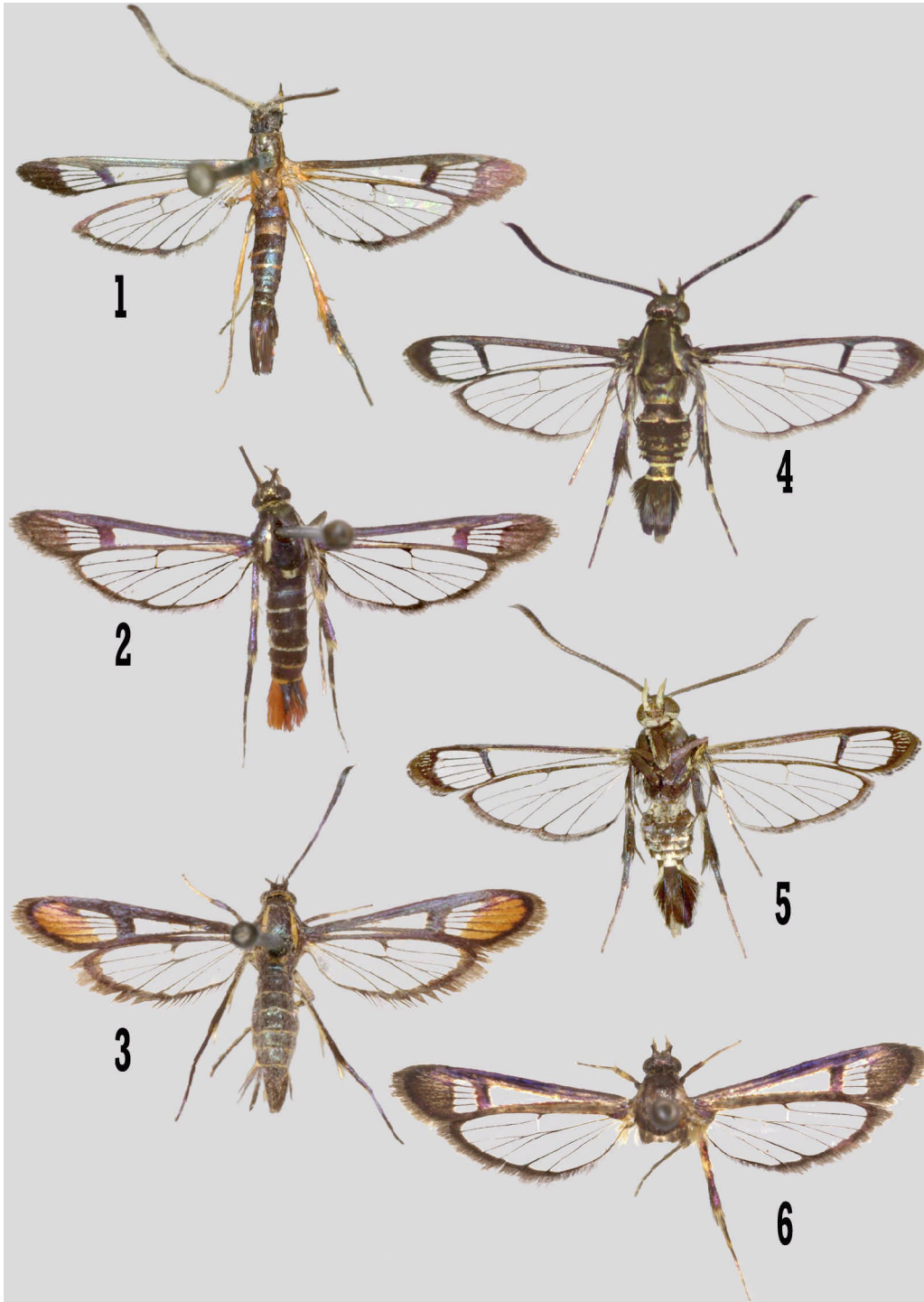
**Diagnosis.** Wing length: 9-10 mm. This is a clear winged, slender bodied moth with very narrow yellow bands on abdominal segments dorsally and mostly pale ventrally.

**Description.** Male (Fig. 13): Head with vertex brown black; front white with brown black medially; occipital fringe pale yellow, some brown black mixed dorsally; labial palpus relatively narrow, pale yellow and white, with much brown black laterally; antenna with yellow powdering on apical third. Thorax brown black with narrow mid-dorsal yellow stripe and subdorsal stripes. Abdomen overall appearing relatively elongate, narrow, brown black, with very narrow yellow bands on posterior edge of each segment (visible on well marked specimens); ventrally mostly pale yellow to white. Legs mostly brown black; forecoxa pale yellow. Forewing mostly hyaline with very narrow brown-black margins and discal spot; ventrally with lightly yellow powdering. Hindwing hyaline. Genitalia (Fig. 16) with bare area of valvae greatly reduced; saccus narrow, about one-third length of valvae; scopula androconialis more than one-half length of valvae.

Female: Unknown.

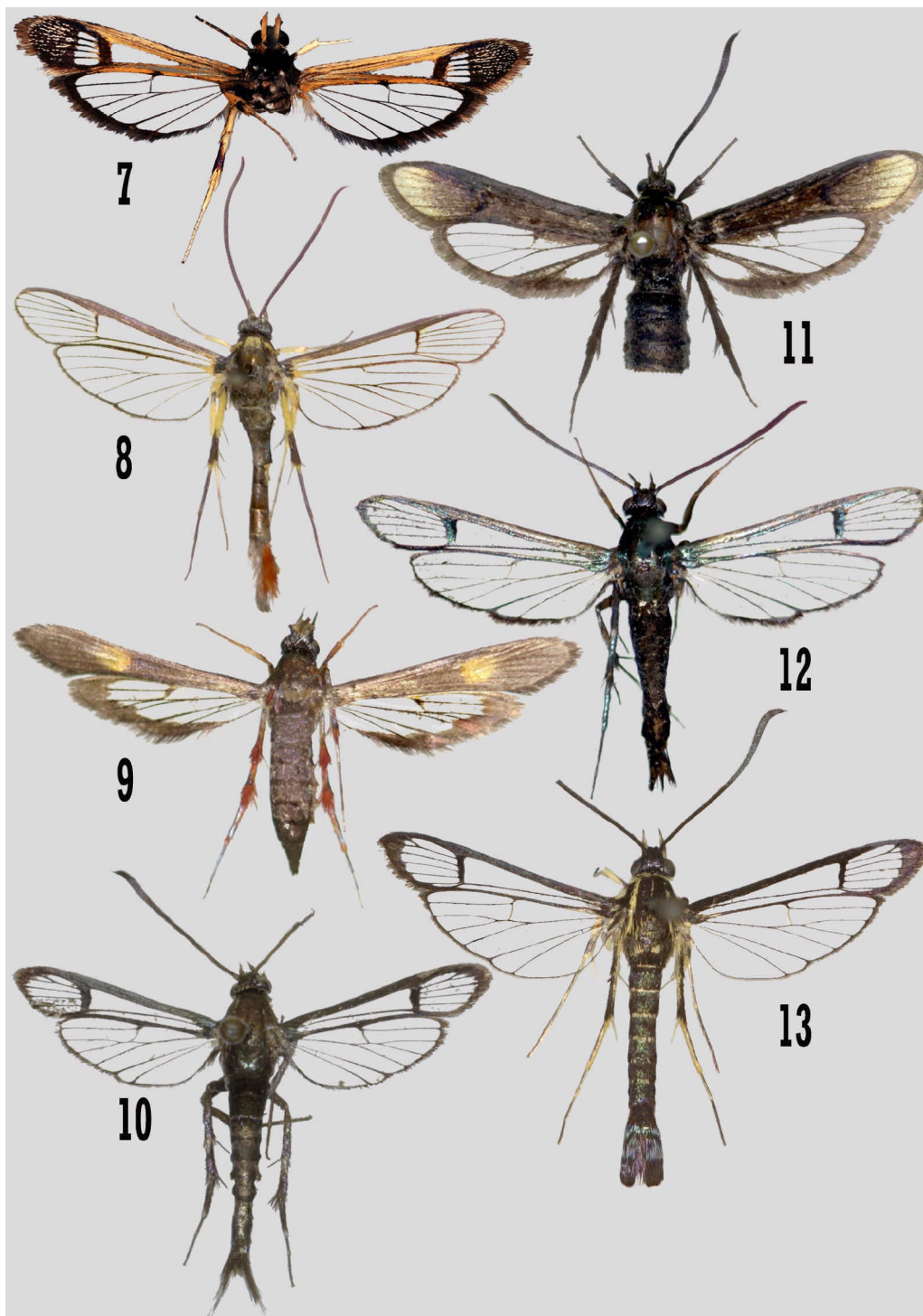
**Host plant.** Unknown.

**Distribution.** BRAZIL: Minas Gerais; Rio de Janeiro.

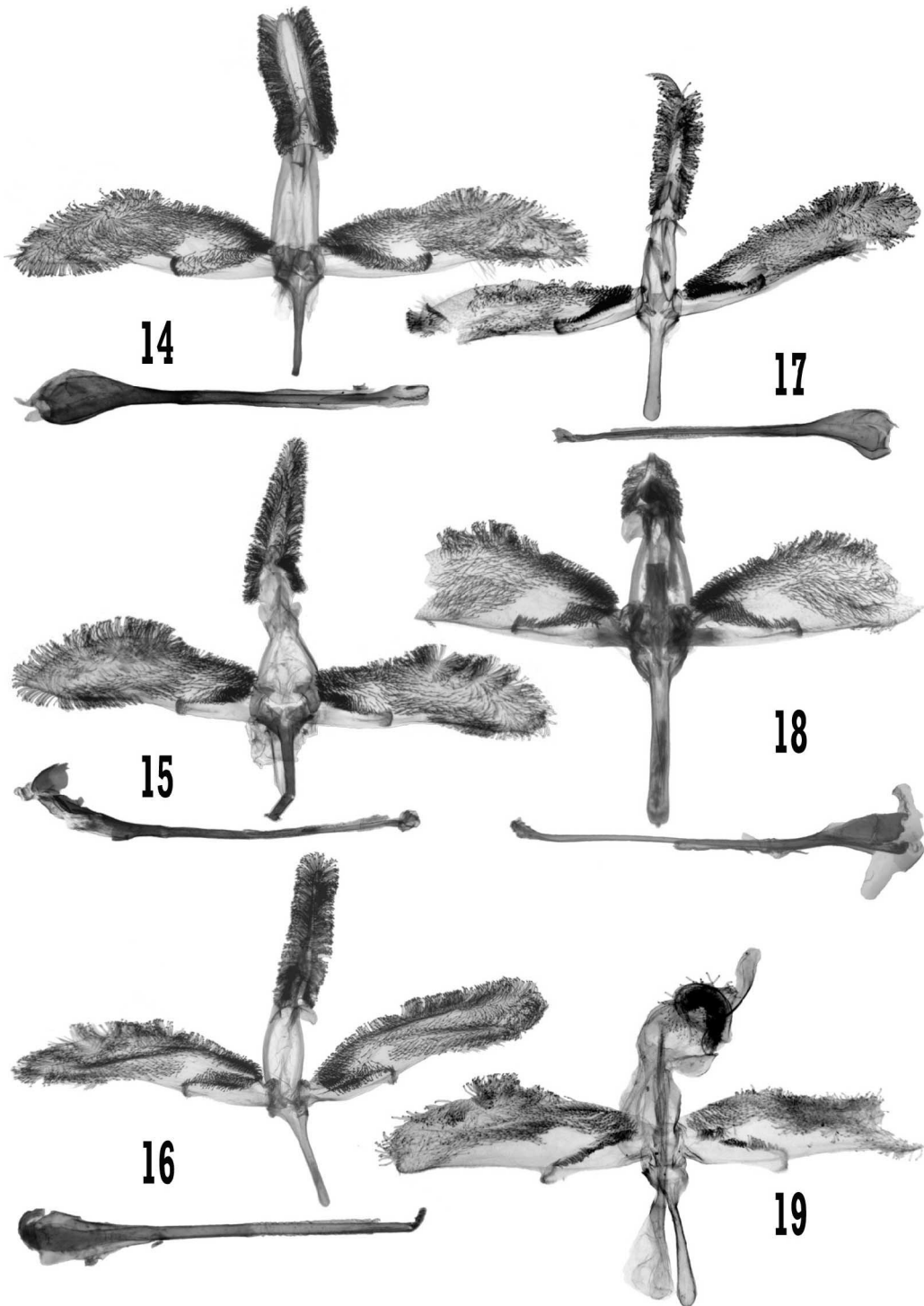


**FIGURES 1-6.** Adult clearwing moths. 1, *Carmenta aeresa*, male, Lectotype; 2, *C. asema*, female, Holotype; 3, *Synanthedon martenii*, female, Holotype; 4, *C. plaumanni*, male, Holotype (dorsal aspect); 5, *C. plaumanni*, male, Holotype (ventral aspect); 6, *C. laticraspedontis*, female, Holotype (dorsal aspect, abdomen removed);

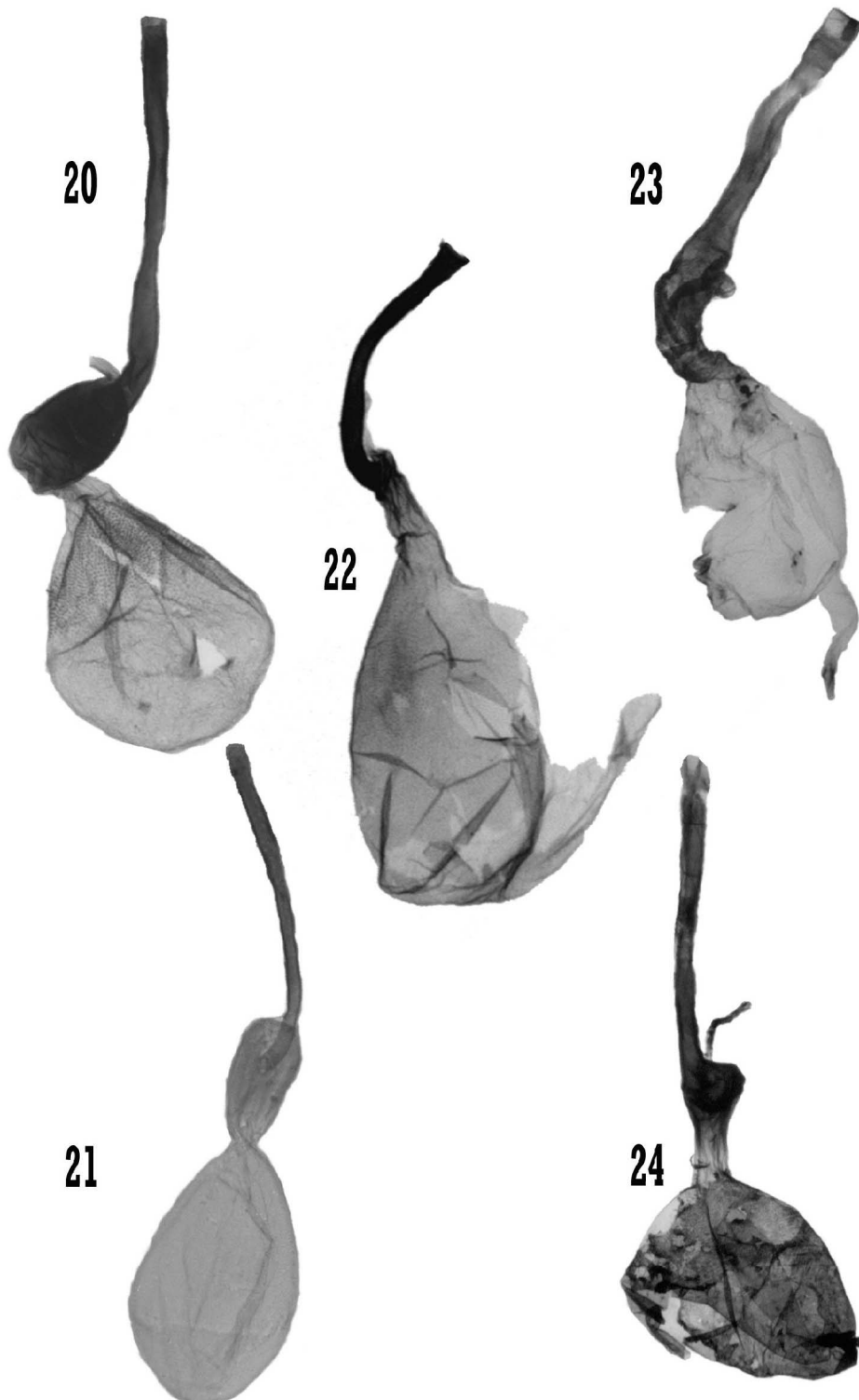




**FIGURES 7-13.** Adult clearwing moths. 7, *C. laticraspedontis*, female, Holotype (ventral aspect, abdomen removed); 8, *Synanthedon hemigymna*, female, Holotype; 9, *S. flavostigma*, female, Holotype. 10, *Carmenta angarodes*, male, (Lectotype of *semitrista* Zuk., n. syn); 11, *C. angarodes*, female (post. portion of abdomen removed); 12, *C. splendens*, female, Allotype; 13, *C. leptosoma*, male, Holotype.



**FIGURES 14-19.** Male genitalia of clearwing moths. 14, *Carmenta angarodes*; 15, *C. asema*; 16, *C. leptosoma*, Paratype; 17, *C. aeresa*; 18, *C. splendens*, Holotype; 19, *C. plaumanni*, Paratype.



**FIGURES 20-24.** Female genitalia of clearwing moths. 20, *Carmenta plaumanni*, Allotype; 21, *C. asema*; 22, *C. laticraspedontis*, Holotype; 23, *C. angarodes*; 24, *C. splendens*.

**Types.** *leptosoma*: Holotype male - BRAZIL: It. (Itatiaya, Rio de Janeiro), Saarbrücken (IGUS).

Paratypes (7 males): (4) same data as holotype (IGUS); (1) 39 (red circle), Itatiaya, I.27, Saarbrücken (IGUS); (1) 40 (red circle), Itatiaya, I.27, Saarbrücken (IGUS); (1) Passa Quatro, Marumba, 18.XII.25, Saarbrücken (IGUS).

**Etymology.** The name of this species, *leptosoma*, is derived from the Greek *leptos* (slender) and *soma* (body). This refers to its relatively slender abdomen.

**Remarks.** One additional specimen of *leptosoma* from the UCR collection was examined: "Coleção Julian, ARP" but included no locality information or date; therefore, it was not listed above as part of the type series. Unfortunately, several of the type series, including the holotype, have no label data except "It.," an abbreviation for Itatiaya.

***Carmenta plaumanni* Eichlin, sp. nov.**

**Diagnosis.** Wing length: 6-8.5 mm. The wings are clear. On most specimens the abdomen has narrow yellow bands on all segments except the third. Underneath, the abdomen is mostly pale yellow to white on all but segment three. The antennae have some yellow powdering toward the tip.

**Description.** Male (Figs. 4 & 5). Head with vertex brown black; occipital fringe dorsally yellow with some brown black mixed, becoming pale yellow to white laterally; front white laterally, labial palpus smoothly scaled, yellow with brown black variously laterally; antenna with yellow powdering variously distally. Thorax brown black, narrow subdorsal yellow stripe, yellow patch beneath wings. On most specimens examined, abdomen brown black with narrow yellow bands on posterior edge of all segments except segment 3; ventrally pale yellow to white on segments 1, 2 and most of 4-7, segment 3 brown black; anal tuft wedge shaped, brown black. Legs mostly brown black with some yellow on forecoxa and somewhat around tibiae near spur pairs. Forewing hyaline with narrow brown black apical margins and narrow discal spot, perhaps some yellow in thin line on costal margin; ventrally with light powdering on costal and apical margins on well marked specimens. Hindwing hyaline. Genitalia (Fig. 19) with bare area of valvae extensive on posterior half; saccus about one-half length of valvae.

Female: Like the male, but with yellow powdering dorsally on forewing on apical margin between veins and ventrally powdering more strongly than on male. Abdomen ventrally yellow, not white as on male; anal tuft brush-like, medially with some white and yellow scales. Head with occipital fringe laterally yellow. Genitalia (Fig. 20) with antrum elongate, straight, sclerotized except where constricted near middle; ductus bursae swollen, sclerotized, transversly wrinkled then becoming membranous, more slender, longitudinally wrinkled; corpus bursae globose, without distinct signum.

**Host plant.** Unknown.

**Distribution.** BRAZIL: Sta. Catarina, Nova Teutonia; Parana, Curitiba; Rio de Janeiro, Itatiaya.

**Types.** *plaumanni*: Holotype male - Brasilien: Nova Teutonia, 27 11 B 52 23 L, 15.10.1937, Fritz Plaumann; F. Plaumann Colln. (USNM).

Allotype female - same as Holotype except: 4.(?).1940 (USNM).

Paratypes (12 males): (10) same as Holotype except dates of capture ranging from 1936- 1944 and 2 taken in 1968 (8 in PMY, 2 in USNM); (1) 52 (in red circle), Itatiaya, I.27, Saarbrucken (IGUS); (1) CURITYBA-PARANA, (Parolim), 8.X.1939, Coll, Clarentianc (UCR).

**Etymology.** This species, *plaumanni*, is so designated in recognition of Fritz Plaumann (Fig. 25) who collected most of the type series. Moreover, a great many specimens of several insect orders were accumulated by Mr. Plaumann and are currently found in collections around the world, especially in the Western Hemisphere and Europe.



**FIGURE 25.** Fritz Plaumann, December 29, 1939 (photo provided by C. S. Papp).

**Remarks.** Fritz Plaumann's material comes mostly from the heavily forested region of the Rio Uruguay near the boundary of the states of Sta. Catarina and Rio Grande do Sul (see translation of Plaumann by Calvert 1956), as is indicated above on the specimen labels of most of the type series. On the male paratype in the IGUS, the abdominal banding dorsally is obscure or lacking.

*Carmenta splendens* Eichlin, sp. nov.

**Diagnosis.** Wing length: 10-12 mm. The wings are clear with very narrow margins and a narrow discal spot. The scaling is dark overall and with a blue-green iridescence.

**Description.** Male: Head structures blue black. Thorax blue black but with white scales on ventroposterior surface of metathorax. Abdomen blue black but with white on tip of exposed genital valves. Legs blue black, some white mixed on tibial tufts near spur pairs on hindtibia. Wings hyaline: forewing with very narrow margins and narrow discal spot. Genitalia (Fig. 18) with valvae broad; saccus thick, long, about one-half length of valvae; scopula androconialis short, less than one-fourth length of valvae.

Female (Fig. 12): Same as for male. Antenna ventrally with short but noticeable setae. Genitalia (Fig. 24) with antrum elongate, nearly straight, sclerotized; ductus bursae initially greatly expanded, sclerotized, distal portion narrower, membranous, wrinkled; corpus bursae globose, without signum.

**Host plant.** Unknown.

**Types.** *splendens*: Holotype male - BRAZIL: S. Paulo, V.51, S. Amaro, V. Lane (UCR).

Allotype female - BRAZIL: 43 (red circle), 6.5.25, Bud 23; *Conopia scarabitis* Meyr.; Marten II, *scarabitis*, 6; Saarbrücken (IGUS). Paratypes (2 females): (1) 42 (red circle), 3.4.19; 3/4-1919, (zu Lic..(?)) (unreadable); Saarbrücken (IGUS); (1) 2.4.1921, An Plau-  
mann (?), i. Sorten (?); Saarbrücken (IGUS).

**Etymology.** The name *splendens* is derived from the Latin *splendor* (luster), referring to the blue-green sheen of the scales on this species.

**Remarks.** The specimen labels of the IGUS types provide little more than dates, and the handwritten labels are mostly unreadable.

### Acknowledgments

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