

BULLETIN OF THE ALLYN MUSEUM

3701 Bayshore Rd.
Sarasota, Florida 33580

Published by
The Florida State Museum
University of Florida
Gainesville, Florida 32611

Number 79

7 March 1983

NOTES ON *RIDENS* EVANS, 1952 WITH DESCRIPTION OF A NEW SPECIES FROM MEXICO

Stephen R. Steinhauser
Research Associate Allyn Museum of Entomology

Introduction

While studying material in the *Urbanus/Astraptus* complex for a revision of that group, it soon became apparent that there were some incorrect generic placements of species in Evans (1952). Javier de la Maza E. is currently preparing an updated version of Hoffman's (1941) catalog of the Hesperioidea of Mexico and it seemed advisable to publish some of these new data now in order that they may be included in his work, rather than wait until the eventual publication of my proposed review of *Ridens*, which will not be done until I have finished my current revisional work on *Urbanus/Astraptus*. In addition to the taxa discussed below, there is a probable new species (subspecies?) from Chiapas which will not be described at this time as I have insufficient material on hand. I hope to be able to include it in the future generic review.

The correct new combinations and the description of a new species from Mexico are given below:

Ridens miltas (Godman & Salvin), 1893, new combination

Figures 1 (♂ genitalia), 2 (♀ genitalia)

Eudamus miltas Godman & Salvin, 1893, *Biologia Centrali-Americana*. Insecta. Lepidoptera-Rhopalocera (2): 282, pl. 75 f.18, 19.

E. miltas was placed by Evans in the genus *Urbanus* Hübner, [1807]. Superficially it is very similar to *Ridens bridgmani* (Weeks), 1902, differing slightly in the narrower forewing central band of *bridgmani* (see Weeks, 1905, pl. 38 f. 1) with a much smaller spot in M_3-Cu_1 , and on the under hindwing by the paler discal area of *miltas* showing more or less distinct *proteus*-like dark markings in contrast with *bridgmani* wherein the discal area is darker with some indistinct pale spotting.

The ♂ genitalia of the two species are distinctly different. Godman & Salvin did not

illustrate the genitalia of *miltas*, apparently because they had but one specimen. The ♂ genitalia of *bridgmani* are well illustrated by Williams and Bell (1933, pl. 4 f. 5) and differ from *miltas* principally in the shape of the valvae which, in *miltas*, have the cucullus short and blunt, whereas in *bridgmani* it is very long and pointed. I have not seen the ♀ of *bridgmani*.

From the records I have seen, *miltas* occurs in Mexico and *bridgmani* in Ecuador, Peru and Bolivia. There is a specimen in the BMNH from Guerrero, Mexico, determined by Evans as *bridgmani*, which I expect will prove to be *miltas*.

***Ridens telegonoides* (Mabille & Boulet), 1912, new combination.**

Figure 3 (♂ genitalia)

Thymele telegonoides Mabille & Boulet, 1912. Essai de Révision de la Famille des Hespérides. Ann. Sci. Nat., Zool. Paris 16: 104, pl. 2 f. 7.

Dr. Pierre Viette of the Muséum National d'Histoire Naturelle, Paris kindly loaned me the type series (3 ♂) of *T. telegonoides* from western Columbia. Evans (1952) considered *telegonoides* to be a synonym of *bifascia* Herrich-Schäffer, 1869, not realizing that it had a costal fold unlike *bifascia* which he apparently misidentified as well, placing it as a subspecies of *latimargo* Herrich-Schäffer, 1869, which it is not.

As can be seen from the ♂ genitalia (fig. 3), *telegonoides* clearly belongs in *Ridens*. Mabille & Boulet, in their description, say of the ♀: "Femelle plus grande, avec la frange d'un jaune très pâle." I do not know what has happened to this ♀; Dr. Viette sent me the entire type series of three ♂. Perhaps one was mistaken for a ♀. According to Evans there are two ♀ *bifascia* from Guatemala and three ♀ from Panama in the BMNH. Until I have the chance to see these specimens I do not know to what species they really belong, but the chance that one or more will prove to be *telegonoides* is slight. The ♂ of *telegonoides* is readily distinguishable from other superficially similar skippers of the *chiriquensis* group by its forewing costal fold and by the shining blue hairs of its upper side being restricted to the body and not extending to the wing bases.

The ♂ syntype from San Antonio, Colombia has been selected as lectotype and bears the following labels: printed red label "TYPE"; white label with red printing "Coll. Boulet Museum Paris" and hand-written data "St. Antonio West Cordillères, Colombie 1800m. v.1909 A. H. Fassl"; hand-written green label "T. Telegonoides Mab. et Boull."; hand-written white label "*Thymele telegonoides* Mab.-Boull. Ann. Sci. Nat., Zool., 1912 (9) 16 p. 104"; printed and hand-printed red label "Lectotype ♂ *Thymele telegonoides* Mabille & Boulet 1912 S. R. Steinhauser Designated 24-XI-82"; printed and hand-printed white label "Allyn Museum Photo No. 821124-1, 2, 3". Blue paralectotype labels are affixed to the other two syntypes, one same data as lectotype, one same collector, R. Aguatal, Columbia, 1600m. 18-VII-08.

***Ridens mercedes*, new species**

Figures 4, 5 (♂), 6 (♂ genitalia)

Male: Forewing with prominent costal fold. Upperside brownish black with dark blue glaze in unworn specimens; forewing with central band of hyaline spots from about midcosta directed toward inner margin slightly proximad of tornus and consisting of two conjoined narrow spots at the costa in costal cell and Sc-R₁; one large spot in discal cell, usually longer on its caudal margin; one large spot in Cu₁-Cu₂, its distal and proximal margins more or less excavate; one small, more or less triangular spot in Cu₂-1A, in the type series not extending caudad of 1A; a medium sized quadrate spot in M₂-Cu₁, more or less separate from the main central band and connecting it to the subapical band of small spots which form an arc from R₂ to M₃; the spot in R₄-R₅ offset proximad; spot in

M₁-M₂ centrally constricted and may be broken into two separate dots; fringe concolorous. Hindwing appears slightly paler basad due to over-scaling of grey-brown hairs; otherwise unmarked except for short white tails along vein 2A; fringe white from about M₁ around tail to nearly 3A; rest of fringe black-brown. Palpi, antennae, head, thorax and abdomen black-brown.

Underside ground color as above; forewing somewhat paler along inner margin caudad of 1A; hyaline spots as above; there may be a few white scales bordering some of the hyaline spots and randomly scattered over the wing; fringe concolorous but with a few white scales around tornus and inner margin. Hindwing a bit darker than forewing with more of a dark blue glaze; unmarked except for white tails as above and narrow white distal border from tail where it is about 1 mm wide to M₁ where it may exceed 3 mm; in M₃-Cu₁ the white border may be more or less speckled with dark scales and there may be some white scales in M₂-M₃; fringe white on tail and extending to M₁, rest black-brown but with a few admixed white scales in the apical area; body black-brown; legs black-brown with a few whitish scales; palpi grizzled due to admixture of white scales, some white scaling around eyes; antennae black except for white along inner arc of the club.

Genitalia very much like *R. crison* (Godman & Salvin), 1893; uncus arms widely separate; gnathos strongly spiculate; penis with teeth on right side distally, without cornutus; valvae broad, cucullus sharply pointed distally with single or double point and bearing a long dorsal process, densely toothed and relatively straight as in *R. c. howarthi* Steinhauser, 1974 and *R. c. cachinnans* (Godman), 1901, not curved as in *R. c. crison*.

Female: unknown.

Wing measurements: ♂ forewing length x width 24 x 12.5 mm (HT); 23 x 12; 23.5 x 12.5 in two paratypes; wing length 22; 22; 24 in 3 paratypes, widths not measured. Average forewing length 24.9 mm.

Antennal nudum: 24 (HT and two paratypes), not measured in 3 paratypes.

Type material: HOLOTYPE ♂, MEXICO: GUERRERO. Filo de Caballo, 2300 m., 18/i/82, Javier de la Maza E.; 5 ♂ PARATYPES same locality and collector: 18/i/82; 7/ii/82; 27/iii/82; 23/iii/82; 24/iii/82. Holotype ♂ and 2 ♂ paratypes in the Allyn Museum; 3 ♂ paratypes in the collection of Javier de la Maza E.

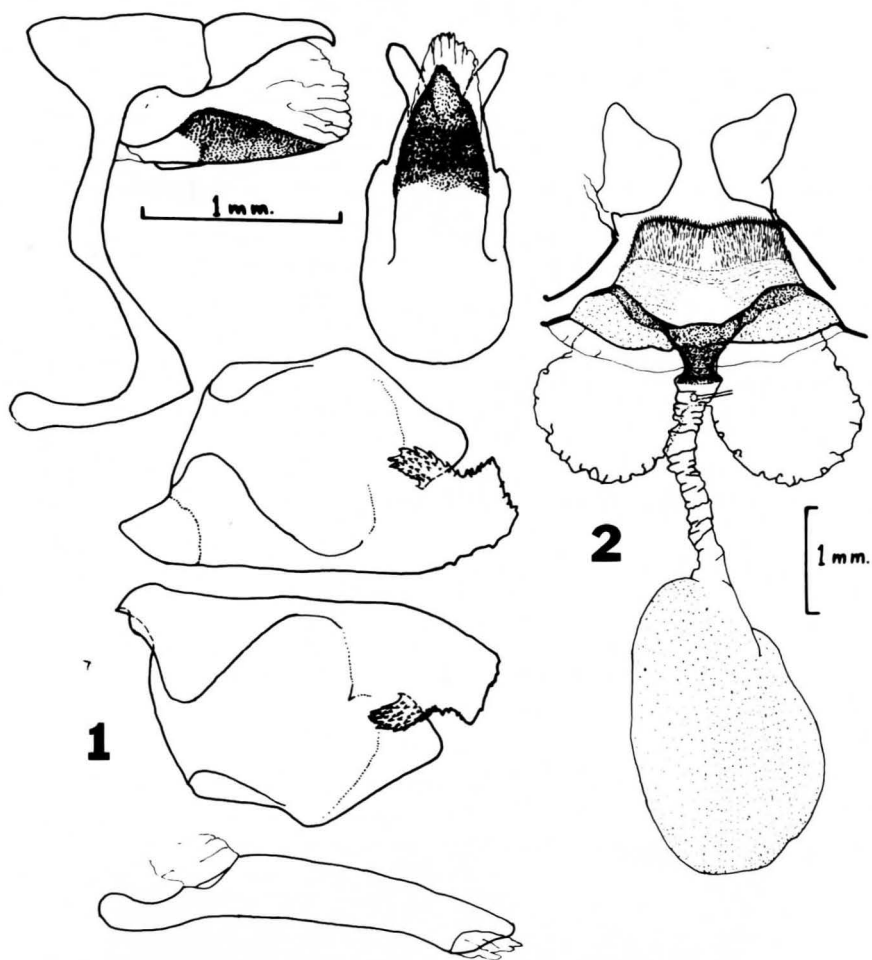
R. mercedes is closely related to *R. crison* and to *R. biolleyi* (Mabille), 1900 but abundantly distinct from both. It differs from them in lacking a central white band on the underside of the hindwing. The ♂ genitalia are very similar in all three species and not very useful to separate *mercedes* from the other two. This new species is another example of the diverse fauna found in cloud forest environments of the Neotropics.

I wish to thank Dr. Lee D. Miller and his wife, Jacqueline Y. Miller, curatorial staff of the Allyn Museum, for critical review of this manuscript and for their freely given helpful advice. I also thank Mr. Julian P. Donahue for the loan of material from the Los Angeles County Museum, Dr. Frederick H. Rindge for the loan of material from the American Museum of Natural History, Dr. Pierre Viette for the loan of type material from the Muséum National d'Histoire Naturelle, Paris and Arthur C. Allyn Jr. for processing the photos used and for photo reduction of the genitalia sketches.

Unless otherwise designated (AMNH, American Museum of Natural History; MNHN, Muséum National d'Histoire Naturelle), material used is from the Allyn Museum of Entomology, the Los Angeles County Museum (1 ♂ *R. bridgmani*) and the collection of Javier de la Maza E. (3 ♂ paratypes of *R. mercedes*).

LITERATURE CITED

- Evans, W. H., 1952. A Catalogue of the American Hesperidae — in the British Museum (Natural History) Part II (Groups B, C, D) Pyrginae Sect. 1. London, 178 pp. pl. 10-25.
- Godman, F. D., 1899-1901, in Godman & Salvin, 1879-1901, *Biologia Centrali-Americana*. Insecta. Lepidoptera-Rhopalocera. Vol. 2.
- & O. Salvin, 1879-1901, *Biologia Centrali-Americana*. Insecta. Lepidoptera-Rhopalocera. 3 Vols. London.
- Herrich-Schäffer, G.A. W., 1869, *Prodromus systematis lepidopterorum*. Versuch einer systematischen Anordnung der Schmetterlinge. Corresp.-Blatt zool.-min. Ver. Regensburg 23 (11): 163-172; (12): 184-204.
- Hoffman, C. C., 1941. Catálogo sistemático y zoogeográfico de los Lepidópteros Mexicanos. Segunda parte - Hesperioidea. An. Inst. Biol. Mex. 12:237-294.
- Hübner, J., 1806-[1832]. Sammlung exotischer Schmetterlinge. Augsburg, Bd. 1, 213 Taf.
- Mabille, P., 1900. Bull. Soc. Ent., Fr.:230.
- & E. Boulet, 1912. Essai de Révision de la Famille des Hespérides. Ann. Sci. Nat. Zool. 16: 1-159, pl. 1, 2.
- Steinhauser, S. R., 1974. Notes on Neotropical Nymphalidae and Hesperidae with descriptions of new species and subspecies and a new Genus. Bull. Allyn Mus. 22:1-38.
- Weeks, A. G. Jr., 1902. Descriptions of Six New Butterflies from Bolivia. Proc. N. Engl. Zool. Club III: 1-7.
- , 1905. Illustrations of Diurnal Lepidoptera. Univ. Press. Cambridge, USA: i-xii, 1-117, pl. 1-45.
- Williams, R. C. Jr. & E. L. Bell, 1933. Studies in the American Hesperioidea (Lepid.) Paper 1. Trans. Amer. Ent. Soc. 59: 69-84, pl. 4.



Figures 1-2. *Ridens miltas* (Godman & Salvin). 1-♂ genitalia (AMNH); MEXICO: VERACRUZ: Jalapa (Genit. Prep. SRS-749). 2-♀ genitalia; MEXICO: VERACRUZ: Presidio (Genit. Prep. SRS-1072).

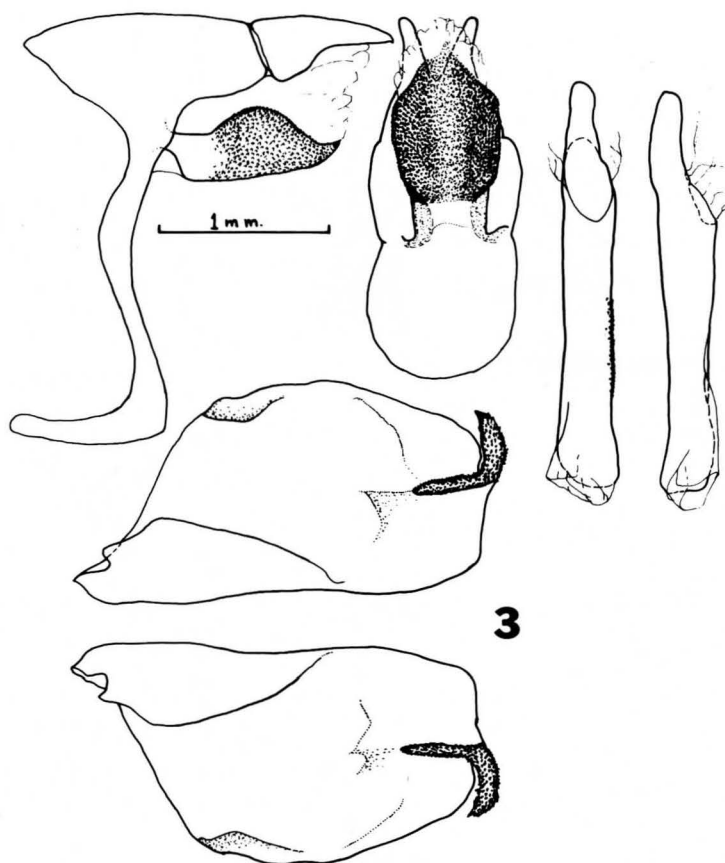
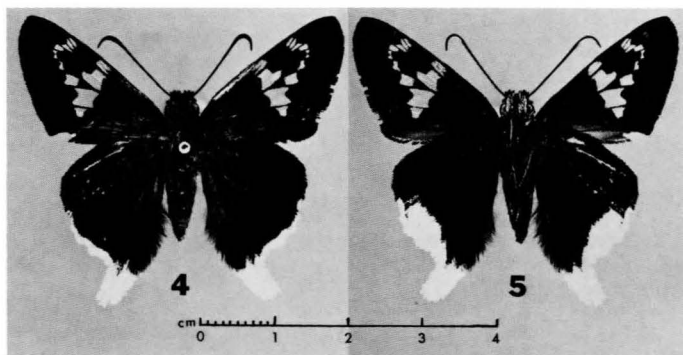


Figure 3. *Ridens telegonoides* (Mabille & Boulet) Paralectotype ♂ genitalia; COLOMBIA: Rio Aguatal 1600 m. (Genit. Prep. SRS-1071).



Figures 4-5. *Ridens mercedes*, new species, Holotype ♂ upper (4) and under (5) surfaces (Photos 821208-13/14); MEXICO: GUERRERO: Filo de Caballo, 2300 m.

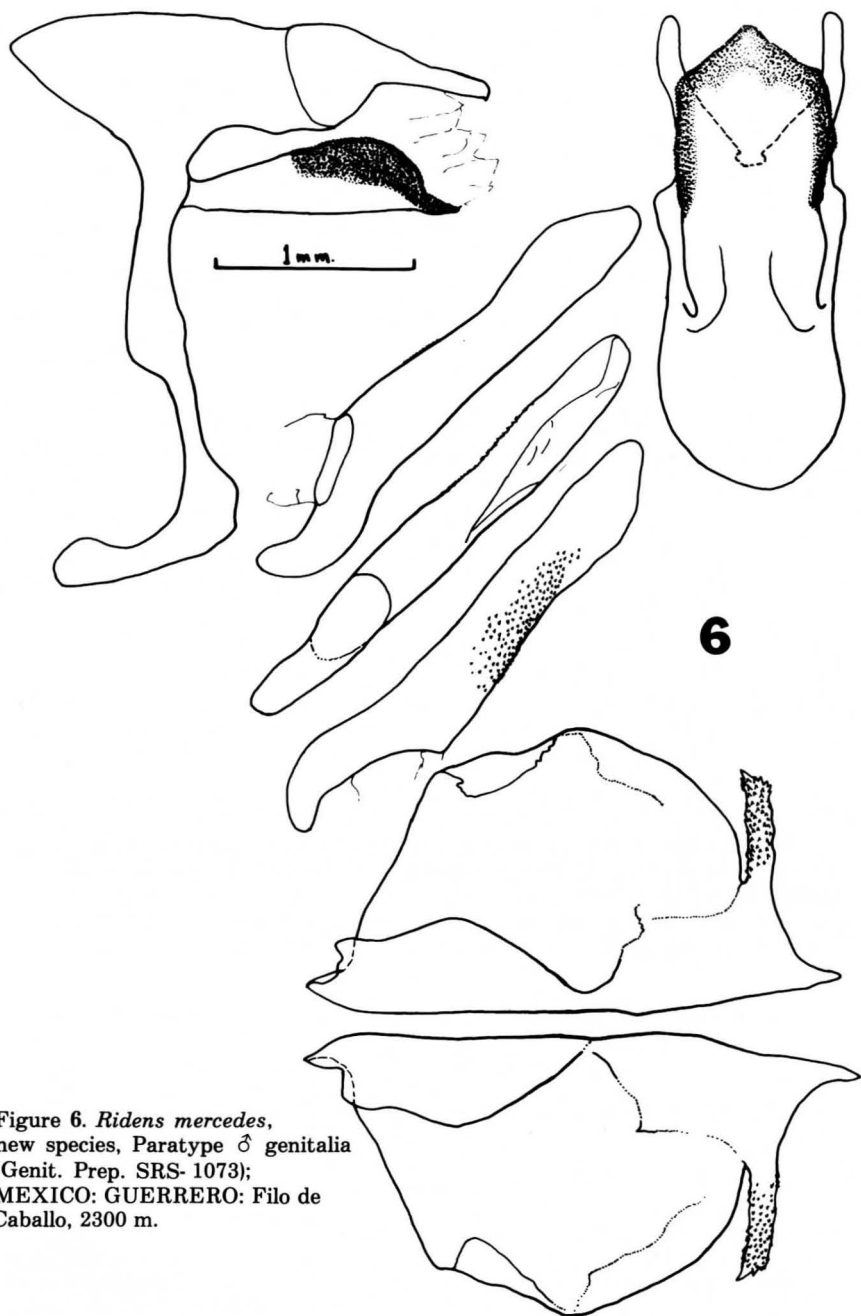


Figure 6. *Ridens mercedes*,
new species, Paratype ♂ genitalia
(Genit. Prep. SRS- 1073);
MEXICO: GUERRERO: Filo de
Caballo, 2300 m.

This public document was promulgated at a cost of \$327.00 or \$0.545 per copy. It makes available to libraries, scholars and all interested persons the results of researches in Entomology.