

NEW HESPERIIDAE RECORDS FOR TEXAS AND THE
UNITED STATES

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AND

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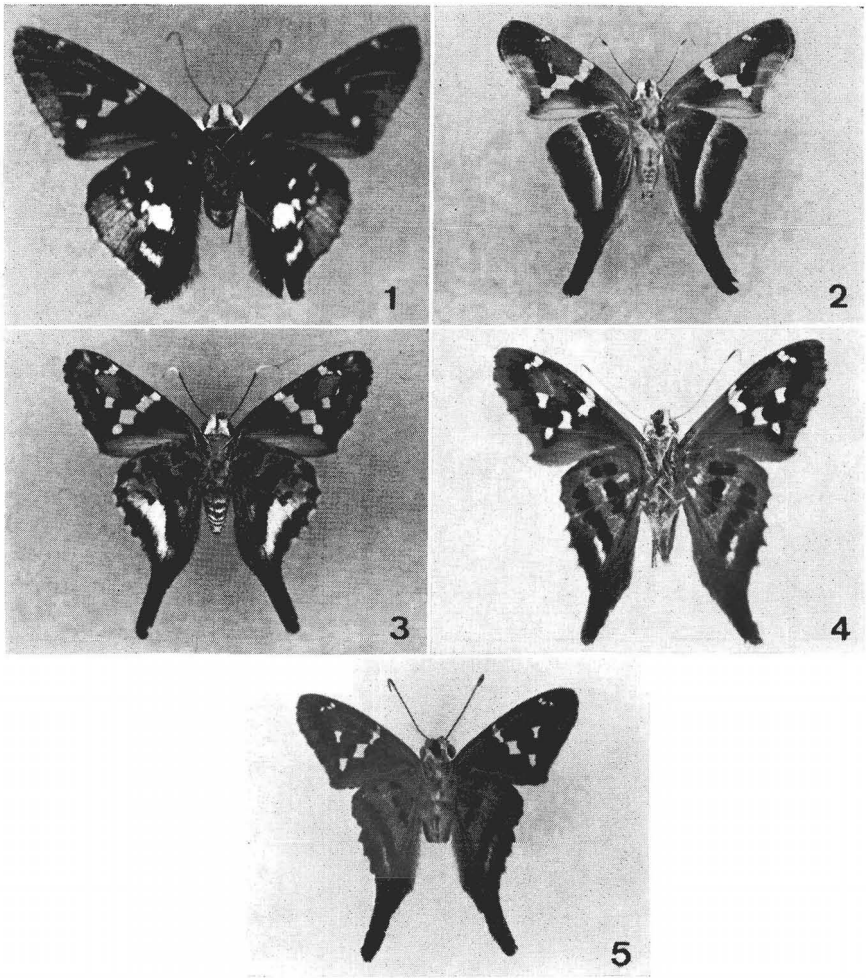
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The Rio Grande Valley of Texas, located in the extreme southern section of the state and encompassing areas of essentially neotropical habitat, offers a unique opportunity for the study of Lepidoptera in the U.S.A. The authors have had the good fortune to collect this area rather frequently during the past several years and during that time some interesting and important new records of HesperIIDae have been obtained.

During 1972–1974 specimens of several rare HesperIIDae, previously known in the U.S.A. from only a few examples, were taken: *Aguna asander* (Hewitson), *Aguna claxon* Evans, *Typhedanus undulatus* (Hewitson), *Polythrix mexicanus* Freeman, *Proteides mercurius* (Fabricius), *Urbanus doryssus* Swainson, *Panoquina fusina evansi* (Freeman), *Asatraptus gilberti* Freeman, *Carrhenes canescens* (R. Felder), *Gorgythion begga pyralina* (Moschler) and *Lerema ancillaris liris* Evans. In addition 12 species of HesperIIDae were taken that represent apparent new U.S.A. records, another that is at least a new Texas record, and two others that substantiate previous but little known Texas records. Nomenclature and arrangement follows that of Evans (1952, 1953, 1955) and determinations, unless otherwise indicated, were made by Rickard.

Epargyreus exadeus cruza Evans. Fig. 1. McGuire collected 1 ♀ in McAllen, Hidalgo County on 18 October 1973 as it fed on blossoms of Queen's Crown, *Antigonon leptopus* H. and A. (Polygonaceae). Previous records for this species are confusing: Holland (1931), p. 330, listed *E. exadeus* (Cramer) as "a straggler in southern California, New Mexico and Arizona." However, Evans (1952) stated that what Holland illustrated was *E. exadeus cruza* rather than *exadeus exadeus* (Cramer), and noted other distribution for *cruza* as Mexico, Guatemala, Nicaragua, Salvador, Costa Rica, and Panama (transitional to *exadeus exadeus*). This is the first known record of this skipper for Texas.

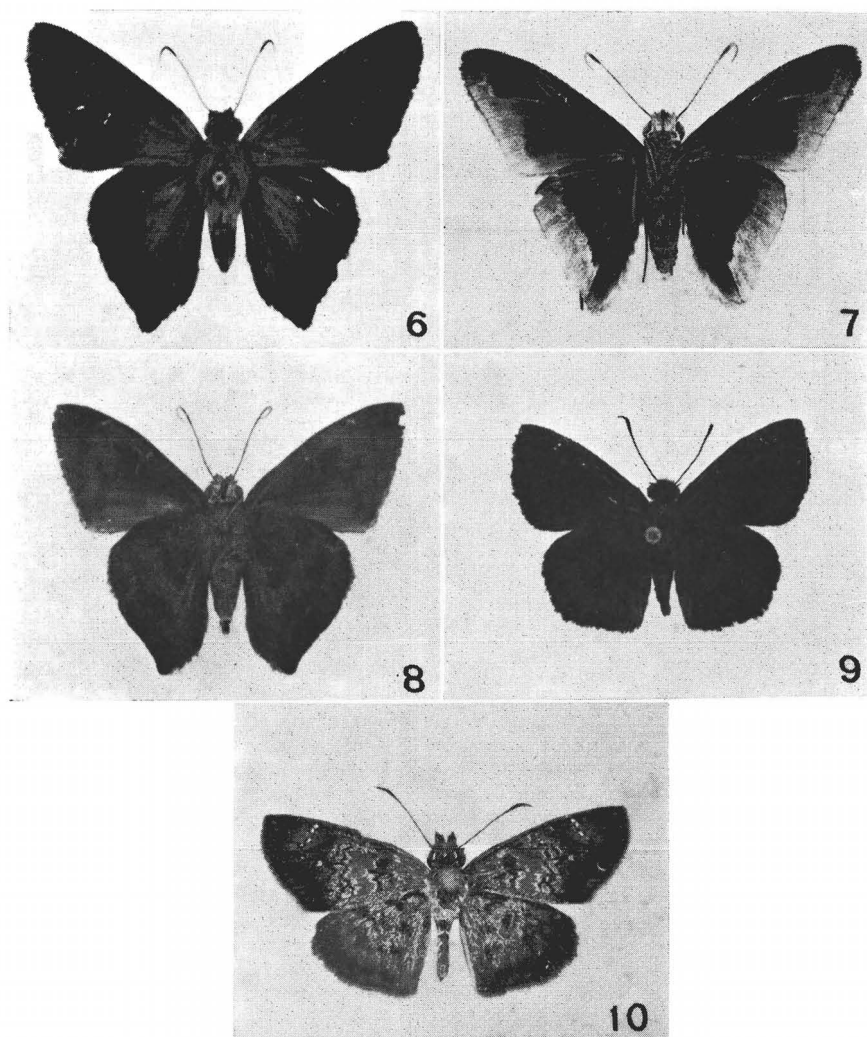
Aguna metophis (Latreille). Fig. 2. Rickard took a worn ♀ in Bentsen-Rio Grande Valley State Park, Hidalgo County, 6 September 1969, *det.* H. A. Freeman. Other Texas records include Mission, Hidalgo County, 10 September 1972, 1 ♀ (Roy O. Kendall); Santa Ana National Wildlife Refuge, Hidalgo County, 10 and 27 October 1973, 1 ♂ each date (Rickard); Loop 374 west of Mission, Hidalgo County, 18 October 1973, 1 ♂, and 19 October 1973, 1 ♀ (McGuire) and 26



Figs. 1-5. 1, *Epargyreus exadeus cruza* Evans, ♀, ventral, McAllen, Texas, 18 October 1973; F 28 mm. 2, *Aguna metophis* (Latreille), ♀, ventral, Loop 374, Mission, Texas, 19 October 1973; F 23 mm, tail 10 mm. 3, *Codatractus alcaeus alcaeus* (Godman & Salvin), ♀, ventral, McAllen, 19 October 1973; F 26 mm. 4, *Urbanus pronta* Evans, ♂, ventral, Ciudad Victoria, Tamaulipas, Mexico, 24 December 1973; F 23 mm, tail 5 mm. 5, *Urbanus esmeraldus* Butler, ♂, ventral, McAllen, 18 August 1972; F 20 mm, tail 10 mm.

October 1973, 1 ♂ (Rickard); Galveston, Galveston County, 7 August 1973, a worn ♀ (McGuire). Distribution noted by Evans (1952) includes Mexico, Nicaragua, Panama, Venezuela, Matto Grosso and South Brazil.

Codatractus alcaeus alcaeus (Godman & Salvin). Fig. 3. The first record for this species in Texas was given by Freeman (1951) as a single specimen from the Davis Mountains, no data. A single worn specimen was collected and reported



Figs. 6-10. *Astraptus egregius egregius* Butler, ♀, dorsal, Bentsen-Rio Grande Valley State Park, Texas, 18 October 1973; F 24 mm. 7, *Astraptus alardus latia* Evans, ♂, ventral, San Fernando, Tamaulipas, Mexico, 23 October 1973; F 28 mm. 8, *Achalarus jalapus* (Plötz), ♂, ventral, Sullivan City, Texas, 31 July 1972; F 25 mm. 9, *Bolla clytius* (Godman & Salvin), ♂, dorsal, Abrams, Texas, 18 October 1973; F 15 mm. 10, *Sostrata bifasciata nordica* Evans, ♂, dorsal, Bentsen-Rio Grande State Park, 26 October 1973; F 15 mm.

by J. Richard Heitzman (1970) from Boca Chica, Cameron County, 27 June 1968. On 19 October 1973 McGuire collected 1 ♂ at Penitas and 1 ♀ at McAllen, both Hidalgo County. Obviously uncommon in Texas, it is at times abundant at Ciudad Valles, San Luis Potosi, Mexico (H. A. Freeman, pers. comm.) which is about 500

mi south of the Texas border and was recorded by Evans (1952) from Honduras, Nicaragua and Costa Rica, as well as Mexico.

Urbanus pronta Evans. Fig. 4. Rickard took a ♀ along a railroad track near Madero, Hidalgo County on 19 October 1969. It was visiting blossoms of *Lantana horrida* H. B. K. It was papered as *U. proteus* (Linnaeus) and the true identity not discovered by the author until September 1973. Previous distribution records are from throughout Mexico and Central America south to Paraguay (Evans, 1952).

Urbanus esmeraldus Butler. Fig. 5. A single specimen of this species was found by McGuire among his *Urbanus* material following Rickard's discovery of *U. pronta*. The specimen is a fresh ♂, collected 18 August 1972 at McAllen. This species is rather widespread from Mexico south to Paraguay (Evans, 1952) and at times rather common in southern Tamaulipas, Mexico, within 350 mi of the Texas border.

Astrartes egregius egregius Butler. Fig. 6. A ♀ was taken by McGuire, 18 October 1973 in Bentsen State Park. The usual habitat of this species is central Mexico south to the Amazons (Evans, 1952) and this record, as confirmed by Mr. H. A. Freeman, represents a significant range extension as well as a new United States record.

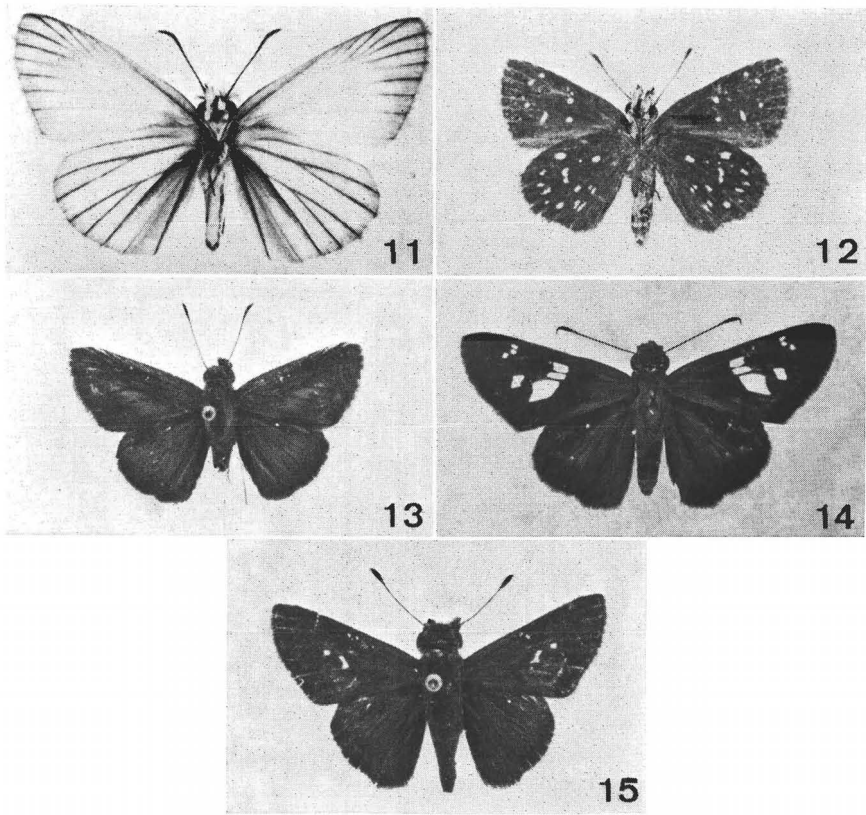
Astrartes alardus latia Evans. Fig. 7. Rickard took three specimens in 1973: Bentsen State Park, 16 June (1 worn ♀) and 10 October (1 fair ♀), and Santa Ana Refuge, 1 September (1 fresh ♂). All were collected in wooded areas as they rested under large leaves. This distinctive *Astrartes* has been recorded from Central America and Colombia by Evans (1952), and found rarely by McGuire in Tamaulipas, Mexico, within 200 mi of Texas.

Achalarus jalapus (Plötz). Fig. 8. A fresh ♂ was taken by McGuire, 31 July 1972 near Sullivan City in western Hidalgo County. Roy O. Kendall collected (and det.) 1 ♀ on 8 September 1972 and 1 ♂ on 9 September 1972 in Mission, Hidalgo County. In 1973, Rickard took 2 ♂♂ at McAllen, 23 September and 20 October, and John B. Vernon collected 1 ♀ at the same location on the latter date. This species has probably been often confused with the more common *A. toxeus* (Plötz), from which it can be distinguished by the presence of the lobed hindwing in *jalapus*. Recorded by Evans (1952) from Mexico (Jalapa; Granahl; Guadalupe), Guatemala, Honduras and Columbia, it is not uncommon 300 mi south of Texas (McGuire).

Bolla clytius (Godman & Salvin). Fig. 9. On 18 October 1973 McGuire collected 2 ♂♂ and 1 ♀ southwest of Mission near the village of Abrams, Hidalgo County; these were all taken along a wooded canal as they visited *Aster* blossoms. Determination of these specimens prompted the authors to contact Mr. J. W. Tilden, who had previously reported *Bolla brennus* from the Rio Grande Valley (Tilden, 1971) and ask that he recheck his *Bolla* specimens. This was done and Tilden confirmed his earlier determination of *B. brennus*, thus establishing the presence of two species of *Bolla* in Texas and the U.S.A. Evans (1953) records this species from only Mexico and Honduras.

Sostrata bifasciata nordica Evans. Fig. 10. Rickard took 2 ♂♂ in Bentsen-Rio Grande Valley State Park on 26 October 1973. They were patrolling small patches of light in a wooded area late in the afternoon. This species has also been found rather commonly by McGuire in the Ciudad Victoria area of Mexico, and is recorded from Mexico, Guatemala, Honduras, Nicaragua, and Costa Rica by Evans (1953).

Helioptetes arsalte arsalte (Linnaeus). Fig. 11. McGuire collected a pair of fresh specimens at Boca Chica, east of Brownsville, Cameron County, late in the evening of 20 October 1973; both were flying about in open chaparral in company with *Helioptetes laviana* (Hewitson) and *H. macaira* (Reakirt). McGuire had previously collected this species within 200 mi of the Texas border, near Ciudad Victoria; Evans (1953) lists distribution throughout Mexico, Central and South America, and Trinidad.



Figs. 11-15. 11, *Heliopetes arsalte arsalte* (Linnaeus), ♀, ventral, Boca Chica, Texas, 20 October 1973; F 16 mm. 12, *Piruna microsticta* (Godman), ♀, ventral, Sullivan City, 20 October 1973; F 10 mm. 13, *Corticea corticea corticea* (Plötz), ♂, dorsal, Bentsen-Rio Grande Valley State Park, 3 September 1972; F 12 mm. 14, *Rhithon osca* (Plötz), ♀, dorsal, Loop 374, Mission, 20 October 1973; F 21 mm. 15, *Conga chydaea* (Butler), ♂, dorsal, Bentsen-Rio Grande Valley State Park, 15 July 1972; F 14 mm.

Piruna microsticta (Godman). Fig. 12. Evans (1955) recorded 1 ♂ from Texas as well as specimens from Mexico. Holland (1931), p. 361 noted the species as occurring in northern Mexico and "reported as having been taken in Arizona near the Mexican border." After finding specimens in arid terrain in southern Tamaulipas, Mexico, a search of similar habitat near Sullivan City, Hidalgo County, led to McGuire's capture of 1 ♀ on 20 October 1973, which reinforces Evans' earlier record for Texas.

Corticea corticea corticea (Plötz). Fig. 13. We have taken a number of examples of this rather common Mexican species to date. Rickard collected 1 ♂ at Madero on 4 November 1973 and 2 ♀♀ in Bentsen-Rio Grande Valley State Park, 16 December 1973. A subsequent search of the authors' collections turned up additional records: Bentsen State Park, 3 September 1972, McGuire (1 ♂) and Santa

Ana National Wildlife Refuge, 9 November 1968, Rickard (1 ♂, 1 ♀). These specimens had been mislabeled *Nastra julia* (Freeman). The obscure appearance and superficial resemblance to *N. julia* has doubtless caused other collectors to overlook or mislabel *corticea*. The species is widely distributed throughout Mexico, Central America and South America as far south as Argentina (Evans, 1955).

Rhithon osca (Plötz). Fig. 14. Rickard captured a fresh ♀ in a wooded area along Loop 374 west of Mission, Hidalgo County, on 20 October 1973; he collected a second ♀ in good condition south of Mission near the village of Madera, Hidalgo County, 26 October 1973 as it visited blossoms of *Eupatorium odoratum* L. Previously, *R. osca* has been considered a subspecies of the Antillean *R. cubana* Herrich-Schaffer, but the authors are advised by H. A. Freeman (pers. comm.) that it should be accorded specific status. McGuire has previously collected specimens as far north as Ciudad Mante, Tamaulipas, Mexico, and Evans (1955) notes distribution from Mexico south to Ecuador.

Conga chydaea (Butler). Fig. 15. McGuire collected specimens in Bentsen-Rio Grande Valley State Park on 15 July 1972 (1 ♂, 1 ♀) and 2 September 1972 (1 ♂); Rickard collected 2 ♀♀ on 25 October 1973 as they visited blossoms of Queen's Crown along a canal in McAllen. This species is relatively common in Mexico to the south of Ciudad Mante, and noted by Evans (1955) to be recorded as far south as Argentina.

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LITERATURE CITED

- EVANS, W. H. 1952. A catalogue of the American Hesperidae indicating the classification and nomenclature adopted in the British Museum. Part II. Pyrginae, Sec. 1, London: British Museum, 178 p., pls. 10-25.
- . 1953. A catalogue of the American Hesperidae indicating the classification and nomenclature adopted in the British Museum. Part III. Pyrginae, Sec. 2, London: British Museum, 246 p., pls. 26-53.
- . 1955. A catalogue of the American Hesperidae indicating the classification and nomenclature adopted in the British Museum. Part IV. Hesperinae and Megathyminae. London: British Museum, 449 p., pls. 54-88.
- FREEMAN, H. A. 1951. Ecological and systematic study of the Hesperidae of Texas. So. Meth. Univ. Studies, 6: 1-64.

- HEITZMAN, J. R. 1970. A new U.S. butterfly record and a migration of *Eunica monima* in Texas (Nymphalidae). Mid-Continent Lepid. Series, 12: 10-11.
- HOLLAND, W. J. 1931. The butterfly book. Rev. ed. New York: Doubleday Doran and Co., Inc., 424 p., 77 pls.
- TILDEN, J. W. 1971. *Aguna claxon* (Hesperiidae) new to the United States. J. Lepid. Soc.: 25: 293.

HAPALIA NIGRISTRIATALIS A SYNONYM OF *UDEA ANGUSTALIS*
(PYRALIDAE: PYRAUSTINAE)

In my recent paper on the *Udea angustalis* group (Munroe, 1974, Can. Ent. 106: 139-142), I did not consider *Hapalia nigristriatalis* Hampson (1918, Ann. Mag. Nat. Hist. 9(2): 395), described from a single male from San Antonio, Colombia, collected by Palmer. Examination of a photograph of the holotype, made by me at the British Museum (Natural History) in 1958 (Fig. 1), shows that *H. nigristriatalis* should be transferred to *Udea* Guenée, 1844, where it becomes *Udea nigristriatalis* (Hampson), new combination, and falls as a synonym of *Udea angustalis* (Dognin, 1905), already known to range from southern Mexico to Bolivia.

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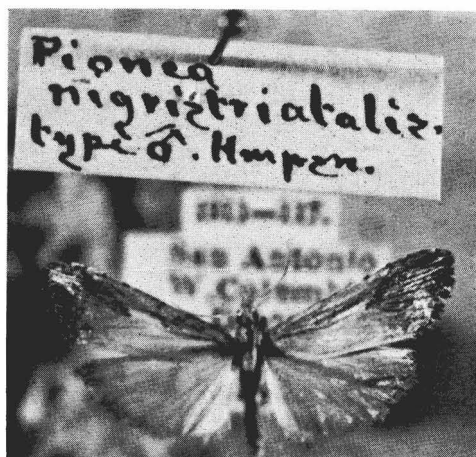


Fig. 1. *Hapalia nigristriatalis* Hampson, 1918, holotype, male, San Antonio, West Colombia, Palmer, British Museum (Natural History). Black and white print from Kodachrome transparency. Wingspan of specimen 22 mm. The type-label was made by Hampson before he began to use the name *Hapalia* Hübner for the collective genus he had for many years called *Pioneer* Guenée.