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The Skipper Butterflies (Hesperiidae) of Trinidad. Part 12, Heteroptinae Genera Group H and Hesperiinae Genera Group N

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ABSTRACT

Heteroptinae (Genera Group H) are represented in Trinidad by one doubtful record of a *Dalla* sp.: *D. quasca* Bell or near. Because this is such a colourful and distinctive species, it seems strange that there are no other records if it were a true Trinidad species. Furthermore, members of this genus normally occur at relatively high altitude. Hence, this may well prove to be either a vagrant or a mis-labelled specimen, and is unlikely to be a resident Trinidad species. Genera Group N of the Hesperiinae is represented in Trinidad by just one record of a single species, *Lerodea eufala eufala* Edwards, which is widespread in North and South America. The only previous record of *L. eufala* from Trinidad is shown to have been based upon a misidentification. However, a new record is reported, the first and only one for the island to date, so that this species is retained on the Trinidad list. Neither species has been reared in Trinidad. Both species are described and illustrated as adults, and the male genitalia of *L. eufala* are illustrated.

INTRODUCTION

This contribution continues my series on the Hesperiidae of Trinidad and Tobago (see Cock 2003 and earlier papers). Abbreviations and protocols established in earlier papers are continued here.

HETEROPTINAE (GENERA GROUP H)

Evans (1955) treats this genera group as part of Hesperiinae, although he notes that in the New World fauna, it could well stand as a valid subfamily. I follow more recent authors and treat this group as a subfamily here. It is distinguished from Hesperiinae by the porrect hairy palpi (cf. Genera Group E; see Cock (1991)), stout arcuate antennal club, and long hindwing cell. The antennae are not longer than half costa F, the club stout, arcuate, tip blunt or pointed, and the nudum 7-12 segments. The wings are broad, F cell short, H cell much longer than half wing, with vein 1A shorter than vein 8, and the abdomen = or > dorsum H. There are no secondary sexual characters in this subfamily. Palaeartic and African representatives are known to be grass feeders, and it is likely that this is true of the Neotropical representatives as well.

There are six genera represented in this group in the Americas, but one genus dominates: *Dalla* Mabille, with over 80 species. Just one species of *Dalla* is doubtfully recorded from Trinidad; none from Tobago.

[134. H6/33 *Dalla sp. ?quasca* Bell 1947]

D. quasca quasca was described from Colombia, and Evans (1955) lists a male from Venezuela (Merida) in the NHM. A second subspecies, *equatoria* Bell, is found in Ecuador. The inclusion of this species in the Trinidad list is based on a specimen in the Booth Museum, Brighton, UK, collected by A. Hall, and labelled *D. fraternans*. The name *fraternans* is not a valid name in the Hesperiidae (Bridges 1988), and it may be that *D. frater* Mabille (range Panama to Bolivia, TL Peru) was intended. Referring to the same A. Hall specimen, Kaye (1921) lists this species as *Cyclopides caenides* Hewitson, a species now placed in *Dalla* (range Venezuela, Colombia, Ecuador, TL Venezuela); this is a misidentification. My identification is based on Evans' (1955) key and comparison of a photograph of the Hall specimen UPS with the NHM collection curated by Evans. S.R. Steinhauser (pers. comm. 2003) has examined my photograph and suggests it could be one of several species, including *D. quasca*. My identification must be considered provisional pending examination of the genitalia.

The Hall specimen is labelled St. Ann's, x-xi.1920. There is no more information regarding this species in Trinidad, yet it seems unlikely that such a brightly coloured skipper would have been overlooked if resident.

This is a genus of predominantly high altitude butterflies, and the presence of *D. quasca* in Trinidad seems unlikely. It is possible that this specimen is mis-labelled. For example, *Stalachtis susanna* Fabricius is a large and brightly coloured riodinid restricted to central and southern Brazil and perhaps Paraguay (D'Abrera 1994), yet there is an A. Hall specimen in the Booth Museum labelled St. Ann's, xi-xii.1931 which must surely be mis-labelled. On balance, the retention of this species on the Trinidad list does not seem justified.

Fig. 1. *Dalla ? quasca*, St. Ann's, x-xi.1920, A. Hall (specimen in Booth Museum)

Male. UPS dark brown; slightly yellow hyaline spots in spaces 2, 3, 6-8 and cell F; fringes F brown. UPH with a large orange discal spot; fringes brown-orange. F male 14 mm according to Evans (1955).

Life history and food plants unknown.

HESPERIINAE (GENERA GROUP N)

Evans (1955) treats four genera and 52 species from the Americas in this Genera Group. Most are restricted to North America, but *Lerodea* Scudder occurs in tropical South America, and one species, *L. eufala* Edwards, is widespread. This is the only species of the

group known from Trinidad; it has not been reported from Tobago.

This group is not well distinguished from others in the subfamily, lying between Genera Group M (tawny species with short antennae with hardly any apiculus) and Genera Group O (Cock 2003). The length of the nudum on the club of the antenna is equal to the length on the apiculus (reflexed portion); the quadrate palpi resemble those of Genera Group J (which I have yet to treat); the mid tibia are always spined; and there are no secondary male characters (brands, stigma, costal fold etc.)

It seems likely that most members of the group are grass feeders; *Lerodea eufala* almost certainly is.

244a. N3/1 *Lerodea eufala eufala* Edwards 1869

This species occurs from southern USA to Argentina (not the Guianas), Cuba and Jamaica, but appears to be more common in North America; a second subspecies, *concepcionis* Strand, is restricted to Patagonia (Evans 1955).

Kaye (1940) records *Lerodea fusca* Grote and Robinson from Trinidad on the basis of specimen collected by Sir Norman Lamont at Morne Diable, 10.xi.1929; he gives the range of this species as Chile. *Lerodea fusca* Grote & Robinson was described from Georgia and is a synonym of a North America species, *Nastra l'herminieri* Latreille. Probably, Kaye intended to refer to *Lerodea fusca* Reed, described from Chile, which is a homonym of *fusca* Grote & Robinson, and has been subsequently named *concepcionis* Strand, the Patagonian subspecies of *Lerodea eufala*. In Cock (1982) I assumed that Kaye had made a misidentification for *Cymaenes tripunctus theogenis* Capronier, since the two are similar, and Kaye (1921, 1940) did not include this common species. I have since examined Lamont's specimen, which is in the RSM labelled as *Lerodea fusca*, and find that although it is similar to *L. eufala* and C. *tripunctus*, it is actually another species, probably *C. campestris* Mielke. Thus, the published record of this species is based on a misidentification.

However, I am retaining this species on the Trinidad list on the basis of a single male specimen collected by Sir Norman Lamont at Guayaguayare, 29.iii.1922 (specimen in RSM). Lamont had identified this specimen as *Vehilius subplanus* Kaye, which is considered to be a synonym of *V. inca* Scudder, Genera Group J (Evans 1955, Cock 1982). My identification is based on the adult markings and comparison of the male genitalia (Fig. 2) with figures in Evans (1955) and Lindsey *et al.* (1931). There is nothing else known about the occurrence of this species in Trinidad.

Fig. 2. *Lerodea eufala eufala* (male) Guayaguayare, 29.iii.1922, N. Lamont, (specimen in RSM).

Fig. 3. *Lerodea eufala eufala* (male) UNS of plate 3. The darker tone in spaces 6 and 7, and at the tornus UNH are shadows due to the positioning of the camera flash; the UNH is rather uniformly pale brown.

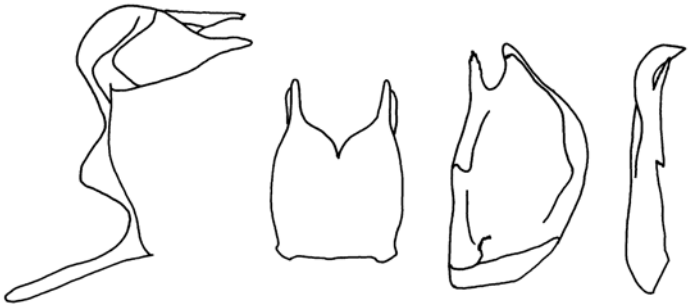

Fig. 4. Male genitalia of *Lerodea eufala eufala,* Guayaguayare, 29.iii.1922, N. Lamont (specimen in RSM). From left: genitalia with valves and aedeagus removed, lateral view; uncus and gnathos, dorsal view**;** left valve, internal view; left valve, ventral view.

Male. UPS brown; sharply bordered white hyaline spots in spaces 2 (just beyond origin of vein 3, inner edge straight, outer edge angled), 3 (just beyond end of cell, slightly quadrate), 6-8 (dots in a straight line, angled slightly towards apex at costa); two indistinct spots in cell, aligned parallel to spots in spaces 6-8; fringes brown, paler at tornus UPH. Evans (1955) states that there may be a spot in space 1B, but that is not present in the Trinidad specimen. UNS light brown, paler towards apex UNF, and over whole of UNH; spots as UPS, except the lower spot in the cell is not visible; space 1 UNF slightly paler in distal half. I have not seen the female. F male 13 mm according to Evans (1955).

Although this species is superficially similar to several others that occur in Trinidad, the combination of the arrangement of spots F, plain UNH, and absence of a stigma or brand in the male seems unique. *Morys compta compta* Butler (genera Group J) is perhaps closest, but there are no cell spots, the apical spots are aligned at right angles to the costa, and the male has strong black brands in spaces 1B and 2.

The life history has been described in California, USA, by Coolidge (1922) and Comstock (1929) based on larvae hatched from ova laid by field-collected females, and reared on grass, i.e. the field host in unknown. There are illustrations of ovum, larva and pupa on the internet (DCLS 2003). Dethier (1939) reports that larvae will feed on sugar-cane in the laboratory in Cuba, and Kendall (1959) obtained ova from field collected females which he reared on St. Augustine grass, *Stenotaphrum secundatum* in Texas. Finally,

Hayward (1926), as cited by Brown and Heineman (1972), states that the larvae will accept *Cyperus* sp. (Cyperaceae) in Argentina, and subsequently (Hayward 1941) lists this as a food plant. Other Poaceae food plant records which I have found on the internet include *Cynodon dactylon*, *Echinochloa crus-galli*, *Sorghum halepense*, *Pennistem ciliare*, *Sorghum bicolor, Setaria verticillata*, *Oryza sativa* and *Zea mays* (DCLS 2003), but it is not stated whether these are field records or rearing hosts. Thus, although it seems clear that the larvae feed on various grasses, the normal field host plants remain unclear.

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