

TWO NEW SPECIES IN THE AFRICAN SKIPPER GENERA *BORBO* (HESPERIINAE, BAORINI) AND *PLATYLESCHES* (HESPERIINAE, INCERTAE SEDIS)

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Abstract- *Borbo cottrelli* is described as a new species from Zambia. It is close to the sympatric and widespread *B. holtzi*, but differs in both external features and genitalia and the two species are sympatric. *Platylesches morigambia* is described as a new wholly West African species; Evans (1937) listed it under the name *P. batangae*, but the latter is a very different, rare skipper from Cameroun and Congo.

Key words: *Borbo cottrelli* sp. nov., *Platylesches morigambia* sp. nov., *Platylesches batangae*.

INTRODUCTION

When I began my review of the African Hesperidae, I had expected the *Borbo* to be a potential problem genus. Many of the sixteen or so named species are very similar. All are brown with hyaline forewing spotting that may be variable. In some species, white or light ochreous postdiscal spots on the hindwing may be present. More junior synonyms are listed than there are currently recognized species, and the early literature is full of erroneous identifications. It came as a pleasant surprise that nearly all the material that I examined in many collections fell neatly within existing species (ABRI, CM, Hope, NHM, NMS, MNHG, MRAC, ZMUC and smaller private collections – see end of this section for key to the abbreviations). I found only two that were new, one of which is described in this paper (*B. cottrelli*).

The reason that there were relatively few problems in revising this genus lies in the male genitalia. These permit dividing the genus into several groups, each with its own characteristic genitalia structure. There are usually no more than two or three species in each of these groups, and in some cases just a single species fully characterized by the genitalia, which are – generally – stable and characteristic.

Also described in this paper is *Platylesches morigambia*, a species from western West Africa that I discussed in *Butterflies of West Africa* (Larsen, 2005) as *P. batangae* Holland. This needs description now since M. J. W. Cock and T. C. E. Congdon are in the process of documenting host-plants and early stages of *Platylesches* in a paper soon to be published and have data for this species.

Abbreviations for collections studied: **ABRI** = African Butterfly Research Institute, Nairobi; **CM** = Carnegie Museum, Pittsburgh; **BMNH** = British Museum of Natural History, London (older name for NHM); **Hope** = Hope Entomological Collections, Oxford University Museum, UK; **McGUIRE** = McGuire Center for Lepidoptera and Biodiversity, University of Florida, Gainesville; **MN** = collection Mike Newport; **MNHG** = Museum of Natural History, Geneva; **MRAC** = Musée Royal de l’Afrique Centrale, Tervuren; **NHM** = Natural History Museum, London; **NMS** = National Museums of Scotland, Edinburgh; **TBL** = coll. Torben B. Larsen; **ZMUC** = Zoological Museum, University of Copenhagen;

Borbo cottrelli Larsen, sp. nov.

Type locality: Zambia, Kasama District, Lower Chambezi Valley. Type depository: ♂ Hope Entomological Collections, Oxford University Museum, UK.

Probably listed as *Parnara [Baoris] auritinctus* Butler, 1898 by Neave (1910), but this is definitely a junior synonym of *Borbo detecta*, which Neave frequently collected in the same area as *B. cottrelli* and already knew from Kenya, from where Butler also described *P. auritinctus*. However, Neave would probably not have seen the type of *P. auritinctus*.

When I first examined the butterflies in the Hope Entomological Collections at the Oxford University Museum, UK, I came across a series of *Borbo* from Zimbabwe that had been studied and dissected by C. B. (“Kit”) Cottrell from Zimbabwe and considered to be an un-named species distinct from *B. holtzi*, which it most resembles and which is also represented in the Neave material in the Hope Collections, though not listed as such by Neave (1910). It appears have been accidentally omitted, since none of the other species seem to fit. The two species are sympatric.

Neave (1910) listed from his expedition the following species in the genus *Parnara* Moore, in what was then the closest to the present genus *Borbo* Evans. Four of these are now placed in *Borbo*, two remain in *Parnara*, and two have been removed to other genera:

- *B. detecta* Trimen – there is a long, correctly identified series that is very different from *B. cottrelli*.
- *B. auritinctus* Butler, 1898 (plate XXXII) – this is currently considered a junior synonym of *B. detecta* that differs significantly from *B. cottrelli* (holotype viewed in NHM). However, I believe that he probably placed *B. cottrelli* under this name.
- *B. micans* Butler – there are a few correctly identified specimens, very different from *B. cottrelli* and with distinctive genitalia.
- *Parnara chambezi* Neave, 1910 (plate III, no. 9) – currently considered a junior synonym of *Parnara [naso] monasi* Trimen, in my view correctly, and very different from *B. cottrelli*.
- *Parnara subochracea* Holland, 1896 (plate IV, no. 11)



Fig. 1. **Upper row:** 1 *Borbo cottrelli* ♂ Holotype. Lower Chambezi River, Kasama District, Zambia (Hope collection, genitalia slide 1989); 2 *Borbo cottrelli* ♀ Paratype. Kasama District, Zambia (Hope collection); 3 *Borbo holtzi* ♂ Bamako, Mali (Natural History Museum, London). **Lower row:** (undersides of the same specimens as upper row) 4 *Borbo cottrelli* ♂ Holotype; 5 *Borbo cottrelli* ♀ Paratype; 6 *Borbo holtzi* Bamako, Mali ♂ (Natural History Museum, London).



Fig. 2. **Left column:** *Borbo cottrelli* Top. ♂ genitalia, uncus in lateral view (Zambia, Kasama Dist) (Hope slide 1990); Below. ♂ genitalia, uncus in ventral view (Zambia, Kasama Dist) (Hope slide 1983); **Right column:** *Borbo holtzi* Top. ♂ genitalia, uncus in lateral view (Rhodesia, Salisbury) (Hope slide 1938); Below. ♂ genitalia, uncus in ventral view (Zambia, Kasama Dist) (Hope slide 1995).



Fig. 3. The valves of *Borbo cottrelli* (two left columns) are from the general type locality (from 4 or 5 specimens from Kasama District); the valves of *B. holtzi* (two right columns) are from slightly north of there (3 or 4 specimens from Mporokoso, High Plateau, and one from Kasama District). The size is more or less to scale.

– with a dark brown upperside and a reddish-brown underside, an additional spot on the forewing space 4, and a larger size. Currently considered a junior synonym of *Parnara [naso] monasi* Trimen, in my view wrongly, but very different from *B. cottrelli* in size, colour, and pattern.

- *Parnara ilias* Plötz – currently considered to be the ♀ of *Semalea pulvina* Plötz, in my view correctly. No affinity with *B. cottrelli*.
- *Parnara entebbea* – currently considered to be the ♀ of *Monza alberti*, in my view correctly. No affinity with *B. cottrelli*.

All the above species were part of the huge material collected in North Rhodesia (now Zambia) by S.A. Neave during his amazing collecting trip up the Luangwa River to the Bangweolo Lake system and the mountains north of there (see the detailed report by Neave 1910). A total of 25,000 specimens pertaining to 450 species, of which 100 were HesperIIDae, were collected during the trip (Neave, 1910). Many of these species were new to science, including a number of interesting HesperIIDae. Most of these were placed in the Hope Collections, with duplicates in the BMNH, London and/or Lord Rothschild's Tring Museum) [now also incorporated in the BMNH].

Description: Male forewing 13.5-14.5 mm – on average slightly smaller than *B. holtzi*, though there is some overlap in size (figure 1). The forewings are less pointed and the hindwing tornus less drawn out than in *B. holtzi*. The new species is here described in relation to the variable *B. holtzi*. The upperside ground-colour is rather light and with a distinct ochreous tone that covers both wings. The hindwing costa is rather darker than the rest of the two wings. *B. holtzi* is a much darker brown, as is more usual in the genus. The hyaline spotting is modest. There is no cell-spot. The subapical spots are small; there may be one, two, or three (when three spots are present, the middle one is slightly recessed). There is a small hyaline spot in space 3, a larger one in 2, and there are at least traces of a non-hyaline spot in 1b. The hindwing has no spots on the upperside. In both sexes the cilia is has the same ochreous tone as the wings.

The underside has the same uniform ochreous tinge as the upperside, covering both wings; the forewing bases of spaces 1a and 1b are darkened and the costa of the hindwing is slightly darker, reflecting the upperside. In *B. holtzi* the underside is overlaid with greyish scaling, which on the forewing gives a strong contrast between a grey subapical area and a darker discal area; *B. cottrelli* has the same colour on the disc as the subapical area. The light ochreous spotting is as on the upperside except that the spot in 1b is better developed. The hindwing underside has rather faint postdiscal spots from spaces 2 or 3 to 6; these spots are in line, though with that in 6 displaced inwards.

The female is almost identical with the male, but the hyaline spots are larger and that in 1b better developed. Traces of the hindwing light ochreous postdiscal spots can sometimes be seen on the female upperside and they are better developed than in the male on the underside.

It should be mentioned that most specimens of *B. holtzi* in Zambia do not have white hindwing spots; they are replaced by dark grey, as also in the Mali male shown on figure 1. However, it is an extremely variable skipper as regards spotting. The underside never has the ochreous tone of *B. cottrelli*.

The head and the abdomen in dorsal view is brown but in ventral view greyish with an ochreous tone like the hindwing underside. The abdomen is not annulated. The antennae are just shorter than half the costa and strongly chequered, with the tip sharply bent. The second segment of the palpi is semi-erect, grey with an ochreous tinge; the third is segment short and bent slightly forwards, but not wholly porrect. The upperside of the thorax and abdomen is brown. The underside is grey with an ochreous tinge, lighter in tone than the hindwing ground-colour, and the abdomen is not annulated.

Male genitalia

The male genitalia of *B. cottrelli* and *B. holtzi* are structurally similar but differ considerably in detail. The genital structures of *B. cottrelli* are distinctly smaller, more so than warranted by the slight difference in adult size. The dorsal projections of the uncus and the lateral branches below the uncus are much shorter. The basal ends of the valves are narrower.

The dorsal lobe of the valve is much smaller and less arched above the cucullus. The tip of the cucullus is wider and the recurved process is longer than in *B. holtzi*; the teeth on the recurved dorsal process of the cucullus in *B. holtzi* has rather stronger teeth than *B. cottrelli*.

Finally the open basal end of the penis is shorter. This is illustrated on figures 2 and 3 from the material in the Hope Entomological Collections dissected by Cottrell.

Material included

Holotype: ♂ Zambia, Kasama District, Lower Chambezi River (figure 1).

Paratypes: 6 ♂♂ Zambia, Kasama District, Luwingu to mouth of Chambezi R; 2 ♀♀ Zambia, Kasama District.

All in the Hope Entomological Collections, Oxford.

The type series consists of specimens collected during Neave's 1910 expedition. I have looked out for additional material, but found none in any collections apart from the Hope Entomological Collections, Oxford. All are from the area around Lake Bangweolo in northern Zambia (10.00-11.00S 30.00-32.00E), collected by Neave and his excellent local collectors. This is curious, since most *Borbo* have extensive ranges – possibly this is a very rare species that by chance had a population explosion at the time of the expedition. Little collecting has taken place recently in that area, but much in nearby localities. Thus, Heath *et al.* (2002) collected in most of Zambia, and over the past fifteen years ABRI collectors caught large numbers of butterflies in the area just north of the type localities (Shiwa Ngandu and Tanzania border), but there are no specimens of *B. cottrelli*.

Etymology

The species is named after the late Dr. C. B. Cottrell who isolated it. He was at the time (1980s) engaged in large-scale dissection of both sexes of African butterflies, but no-one knows exactly what he was planning to do. He certainly concentrated on the Hesperidae and was probably contemplating a revision of the African skippers (A. Gardiner pers. comm.). His numbering shows he did at least 500 excellent Hesperidae dissections, but these are only from his museum labels and do not include his own substantial collection, which he presumably also dissected (Cottrell list of Hesperidae dissection in the Hope Collection). Cottrell's own material is in deep storage in Bulawayo, Zambia since his death and not accessible.

Platylesches morigambia Larsen, sp. nov.

as *Platylesches moritili* – in error: All records from the westernmost countries by authors before Evans (1937) were placed as *P. moritili*.

as *Platylesches batangae* Holland, 1894 – in error: misidentification. Evans (1937), Gillies (1982), Larsen (2005), and many others.

This species was routinely recorded from all over western West Africa as the common and widespread *P. moritili* Wallengren, 1857 by authors writing before Evans (1937), when he included *P. batangae* Holland, 1894 as a valid species from Sierra Leone. On the other hand, while Evans listed the common *P. moritili* from most of Africa, he did not record it from west of Sierra Leone and Guinea. *P. batangae* soon began to be recorded also from Senegal (Evans in BMNH), Gambia (Gillies 1982), Guinea (ABRI), Sierra Leone (Evans 1937), Burkina Faso (H. Boersma pers. comm.), and even Côte d'Ivoire (Vuattoux 1999).

During a visit to the Carnegie Museum some years ago, I examined the female holotype of *P. batangae*. A search of the collection revealed the presence of a matching male caught at Efulen, not far from the type locality. These two were quite different from Evans' concept of *P. batangae*, and the genitalia were even more different. It was definitely a species that I had never encountered in nature or in other collections. A careful search in the Royal Africa Museum (MRAC), Tervuren yielded a further male *P. batangae* from Kinshasa (genitalia H.1071) matching the Carnegie male fairly well and with almost identical genitalia. A detailed re-description of the true *P. batangae* was published by Collins & Larsen (2008) with both sexes and the male genitalia figured. This leaves the West African "*P. batangae*" without a name.

I gave up on this issue in *Butterflies of West Africa*, though I did include *P. moritili* as well as images of a male from Senegal identified as *P. batangae* by Evans in the Natural History Museum (London). I also figured two genitalia drawings from the Gambia from specimens kindly sent to me in Hanoi by Linda Barnett and felt these were not quite right for *P. moritili*. But I had little material to hand in Hanoi.

So while *P. moritili* is found through most of West Africa, though apparently not west of Guinea and Sierra Leone, Evans' "*P. batangae*" is now known from the Gambia, Senegal, Guinea, Sierra Leone, Côte d'Ivoire, and Burkina Faso, and remains without a valid name. It is described below as *P. morigambia*. The Upper Kasai (DRC) population of Evans' "*P. batangae*" is not the same species as the West African, since the genitalia

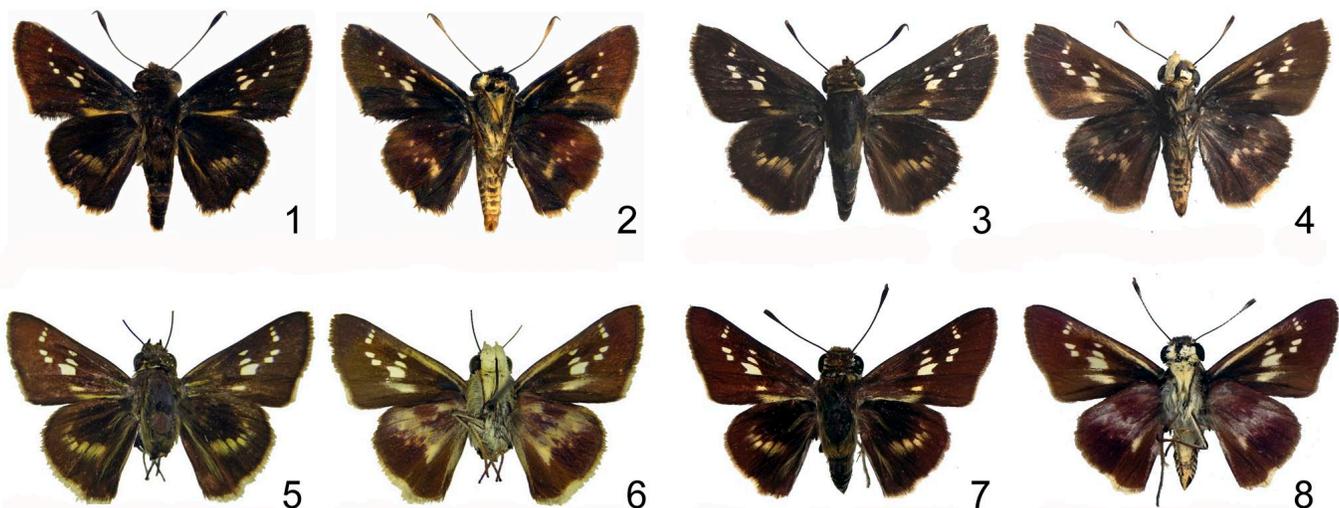


Fig. 4. Upper row: *Platylesches morigambia*. 1 & 2 ♂ Holotype, recto & verso, Gambia, Tintinto (J. Baker leg., in coll. ABRI); 3 & 4 ♀ Paratype, recto & verso, Gambia, Fajara (J. Baker leg., in coll. ABRI). Lower row: *Platylesches moritili*. 5 & 6 ♂ recto & verso, DRC Kinshasa (in coll. MRAC, Tervuren). 7 & 8 ♀ recto & verso, Malawi, Mt Mlanje (in Hope Collections, Oxford).

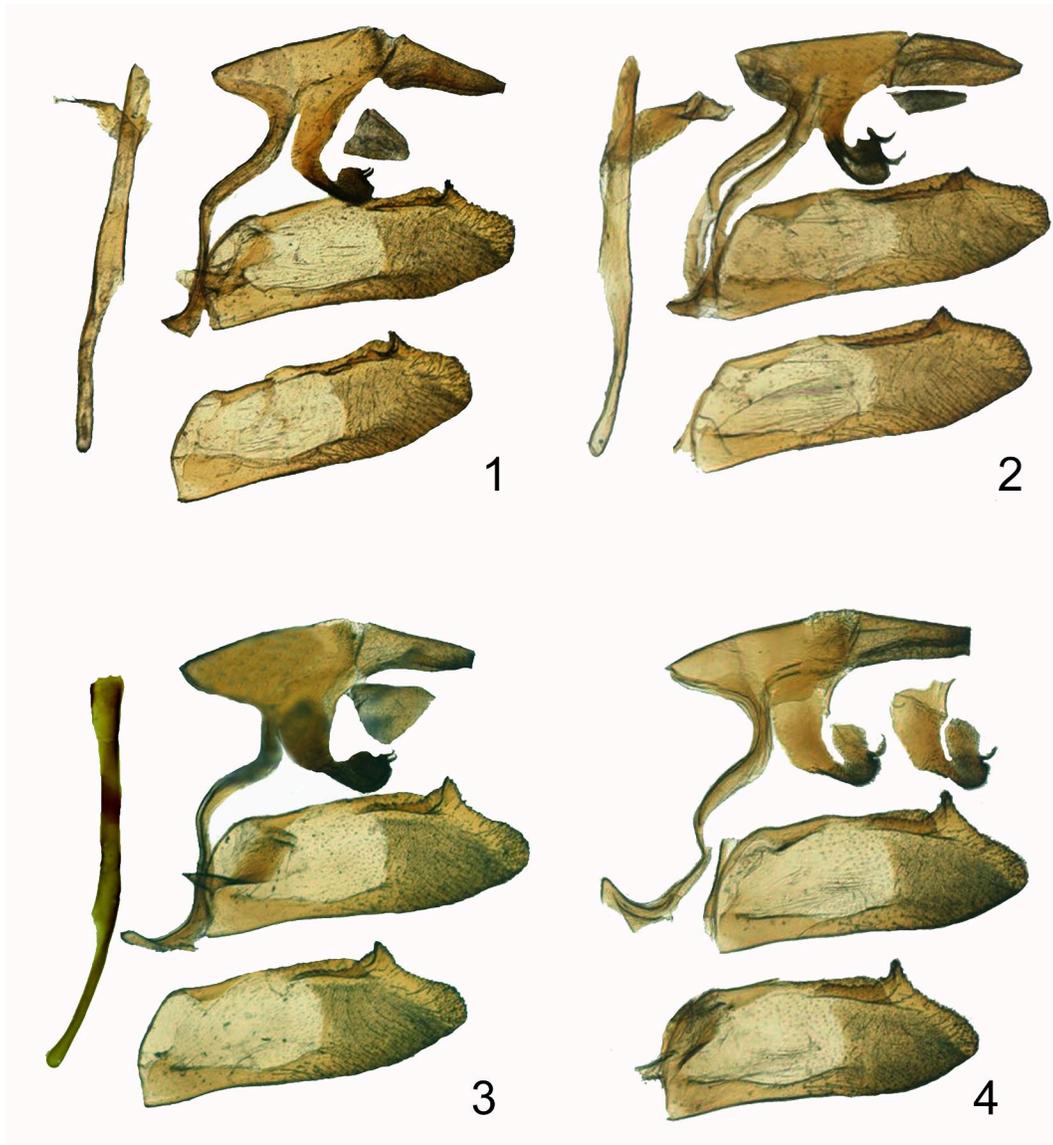


Fig. 5. Upper row: *Platylesches morigambia*. 1 ♂ Paratype, Gambia, Tintinto (genitalia tbl BLB, in coll. TBL ex J. Baker); 2 ♂ Paratype, Sierra Leone, Bumbuna (genitalia tbl BPX, in leg. et coll. TBL). Lower row: *Platylesches moritili*. 3 ♂ Ghana, Boabeng-Fiema (genitalia tbl BLA, leg. et coll. TBL); 4 ♂ no locality data (genitalia tbl BPP, in coll. ZMUC/tbl) [one gnathos branch detached, scaphium missing].

are clearly different. This species is now more widely known from the DRC, even just spilling over the borders into Zambia, Burundi, Angola, and perhaps Gabon. This species, too, has no valid name, but its description demands further research in the Shaba area, where an additional species may also be present.

Description: Male forewing 12.5-13.5 mm – normally smaller than *P. moritili* (and much smaller than true *P. batangae* (15.5 mm)). Both sexes of *P. morigambia* and *P. moritili* are shown in figure 4. It is a small but very typical member of the genus that can (and was) easily be confused with the partly sympatric *P. moritili* when single specimens are involved. Once small series of even four or five are available, the differences are more easily perceived.

The male upperside is a slightly glossy brown with the white hyaline spotting typical of the genus, but the ground-colour is darker in tone than *P. moritili*. The forewing has two (sometimes a single, rarely three as usual in *P. moritili*) small subapical spots and two well separated cell-spots. There are always small spots in spaces 3 and 4 – a line drawn through them will reach the wing apex. The spot in space 2 is narrow, in the male almost comma-shaped, where it is larger and almost quadrate in *P. moritili*. The spot in 1b is usually poorly developed. The basal half of space 1a has a diffuse ochreous streak that does not quite reach

the base, most prominently in the male; this is a general generic character also present in *P. moritili*.

The hindwing upperside has light ochreous postdisical spots in spaces 1b/2 to 4/5, often diffuse. The hindwing cilia* from the tornus to space 3 and further is brownish and not whitish as in *P. moritili*. (* I consider cilia to be a collective noun)

The forewing underside is like the upperside except for a long, narrow whitish streak along the costa and slightly larger light markings in space 1b (both these features are more strongly developed in *P. moritili*). The hindwing underside is brown with a postdisical row of very visible, irregular spots from space 1c to 6. The surrounding discal band is slightly lighter than the base and margin of the wing but not at all sufficient to obscure the white spots. In contrast *P. moritili* has a discal band that is actually composed of greyish-blue shading and usually strong enough almost to obliterate all or most white spots that may be present. *P. moritili* usually has a diffuse whitish patch at the base of the hindwing costa that is absent in *P. morigambia*. The cilia and margin is hardly white, far less so than in *P. moritili*.

The antennae are just longer than half the costa. They are black above and somewhat overlaid with grey below, ringed with white before the apiculus, which is hooked. Segment 2 of the palps is semi-erect and blackish on the upperside; they are white below and segment 2 is strongly flattened – a sufficient character for identifying any member of the genus. Segment 3 is pointed and

bent down to an almost correct position. The head is wider than the thorax, as also in *Andronymus* Holland and *Fresna* Evans. The abdomen is dark brown above, but ringed with white below. The legs are dark brown on the upperside, more greyish on the underside. The hindlegs have two pairs of spurs.

Male genitalia: The male genitalia of many *Platylesches* are very similar and this is true also for the two species under discussion. When writing *Butterflies in West Africa* in Hanoi I had only two Gambian specimens and gave up reaching a final conclusion on its status. With more material to hand, differences did appear (figure 5.). The uncus and tegumen are of the same length, but in *P. morigambia* the tip of the uncus is not quite as broad as in *P. moritili*. Both have a scaphium, which is frequent, but not universal, in the genus. The two branches supporting the gnathos are narrower than in *P. moritili*. The dorsal thorn on the cucullus is less strongly developed, while its serrated ridge below the dorsal edge of the valve itself is slightly longer and the serration finer. The gnathos shows no relevant difference, being heavily chitinized with two fine curving thorns (similar to those of *P. picanini* and *P. neba* – among others). The tip of the valve is rather evenly rounded instead of sloping down from the dorsal thorn, giving the cucullus a more rounded look (in a specimen from Côte d'Ivoire, it is actually semi-circular). The penis is longer than the valve (x 1.26-1.30) in both species. The saccus is far shorter than in *P. moritili* (confirmed in seven specimens examined).

Type material

Holotype: Gambia – ♂ Tintinto (J. Baker leg., coll ABRI) (figure 4);
Paratypes: Gambia – ♂ Tintinto (genitalia BJX, BLB) (coll TBL); 2 ♂♂ Abuko (genitalia tbl BEV, BEX) (coll TBL); ♂♀ Tintinto (ABRI); ♀ Fajara (J. Baker leg., coll ABRI) (figure 4); ♂♀ Fajara and Bijilo Forest (M. Newport, coll. MN); Senegal – 2 ♂♂ Kedongu, Chobo (ABRI); Guinea – ♂♀ Labé (Popodra), Fouta Djallon (ABRI); Sierra Leone – ♂ Bumbuna (genitalia BPX) (coll TBL); “Sierra Leone” (NHM); Côte d'Ivoire – ♂♀ Lamto (coll. M. Cock (ex Vuattoux)); Burkina Faso – ♂ Kou Forest (H. Boersma, coll TBL).

An additional 30 specimens from Tintinto, Gambia and Senegal in ABRI, and 8 specimens from Fajara, Gambia in coll. M. Newport were inspected but not included as paratypes.

Etymology: The name *morigambia* is an abbreviation of the “*moritili* from Gambia”, which was used as shorthand for many years while the status and identity of the species was being investigated.

Range, habitat, and habits

The species is locally common in several localities around Banjul, the capital of the Gambia. There are records also from Senegal, where collecting has been rather limited. Evans recorded it from Sierra Leone, where I also collected a single male near Bumbuna in the north in 2007. Much to my surprise, I found a specimen from Lamto, Côte d'Ivoire in the MRAC collection that was dissected by L.A. Berger and listed as *P. batangae* by Vuattoux (1999). Finally Hein Boersma sent a male from the Kou Forest in Burkina Faso, a curious habitat based on permanent ground water and yielding many unexpected butterflies. Neither Jon Baker (pers. comm.) nor Mendes *et al.* (2007) recorded the species from Guinea-Bissau despite their intensive collecting there, but it should occur in that country as well.

In Gambia, Mike Newport frequently found it around the Fajara Golf Course close to Banjul, though not in such numbers as at Tintinto. Linda Barnett sent me two from the Abuko Forest inland from Banjul, from where Gillies (1982) also listed it. Jon Baker worked further up the Gambia River at Basse for many months, but he never came across it there.

Most of the available material is from the Gambian coastal areas, where it can be quite common. Jon Baker found it

frequent in the type locality on many occasions under the circumstances shown in figure 6 below. It was most common towards the edges of the vegetation, very close to the sea. It was never found much inland of the low coastal vegetation. The type locality is currently part of a private conservation area set up to protect especially Armitage's skink (*Chalcides armitagei* Boulenger, 1922), which until recently was only known from one dead specimen from exactly this sort of habitat in Gambia (J. Baker pers. comm.) (figure 6). A male foraging on flowers in this habitat is shown in figure 7.

In Côte d'Ivoire, Vuattoux (1999) recorded caterpillars of *P. batangae* [identified as such] reared on *Parinari congensis*, a large tree on the banks of the Bandama River and *Maranthes polyandra*, a small tree of the burnt savannahs. *M. polyandra* was previously placed in the genus *Parinari* but is now the only recorded *Platylesches* host plant not in the genus *Parinari*. These two plant genera are very close (M. Cock, pers. comm.).

P. morigambia and the very rare *P. rossi* Belcastro, 1986 are the only members of the genus limited to West Africa. Though the former may be numerous in its chosen habitats, it seems to be lacking within much of its range. This is also the case with many other *Platylesches*. On the other hand, there are spots where a large number of *Platylesches* species are found together. Collins & Larsen (2008) reported that an ABRI expedition to the Ikelenge area in Zambia yielded 12 species in the near vicinity of each other, which is half of all the known species (which include four that are endemic to South Africa or limited to West Africa). My single Sierra Leone specimen was taken on a road next to a swampy forest where many *Platylesches* (*P. affinissima* Strand, *P. chamaeleon* Mabille, *P. picanini* Holland, and the single *P. morigambia*) came down to investigate white marble pebbles, in the hope they were bird-droppings, as do many other species of Hesperidae (I once followed a *Callegris lacteus* Mabille along a dirt road in an East Nigerian forest for nearly a kilometre and saw it land about 20 times on white objects (stones and cigarette butts), but only finding one bird-dropping, where it did look very happy!).

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Jon Baker kindly provided the holotype, photographs of the *Platylesches morigambia* type locality, and a specimen in nature. Linda Barnett sent two specimens of *Platylesches morigambia* to Hanoi that at the time left me confused. Matthew Cock sent details of the bred *P. batangae* in the Vuattoux collection and screened an earlier version of the manuscript. Mike Newport sent much information as well as photographs of the specimens in his collection.

Steve C. Collins sent photos and data on the material in the African Butterfly Research Institute (Nairobi), which I was not able to visit while this paper was written. Blanca Huertas and David Lees facilitated my work at the Natural History Museum (BMNH) in London and supported my revisionary work on the African Hesperidae. James Hogan gave me access to the Hope Entomological Collections at the Oxford University Museum, as well as the photography of the new *Borbo cottrelli* and of Cottrell's genitalia slides as illustrated in this paper. Photography of other Hesperidae genitalia slides meticulously



Fig. 6. The Tintinto type locality of *Platylesches morigambia*, where both sexes were found right down to the sand. (photo by J. Baker)



Fig. 7. *P. morigambia* was so common at Tintinto that it was even possible for Jon Baker to photograph a male feeding near the edge of the vegetation shown in fig. 6. (photo by J. Baker)

prepared by Cottrell has saved me weeks of work. It was during a visit to the Carnegie Museum in Pittsburgh that I found the only male of the true *Platylesches batangae* with the kind help of *John Rawlins*. Visits to the “Carnegie” have been essential to my work on the African HesperIIDae. Finally, my visits to the Allyn Museum in Sarasota contributed to laying the foundations for my research, aided by *Jacqueline Miller*, the late *Lee D. Miller*. The collections are now part of the McGuire Center for Lepidoptera and Biodiversity at the University of Florida, Gainesville, where additional help was given by *Andy Warren*, and *Andrei Sourakov*. I am grateful to all of them.

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REFERENCES CITED

Belcastro, C.

1986. A preliminary list of the HesperIIDae (Lepidoptera) from Sierra Leone with description of a new species. *Ricerche biologiche in Sierra Leone; Probleme attuali de Scienza e di Cultura, Accademia nazionale dei Lincei*, 260:165-193.

Collins, S. C. & Larsen, T. B.

2008. Eighteen new species, five new subspecies, and interesting data on other African butterflies - Fourth ABRI research paper. *Metamorphosis*, 19(2):42-113.

Evans, W. H.

1937. *A catalogue of the African HesperIIDae indicating the classification and nomenclature adopted in the British Museum*. British Museum (Natural History). London. xii + 212 pp, 30 plates.

Gillies, M. T.

1982. Notes on the skippers (HesperIIDae; Lepidoptera) of the Gambia. *Bulletin de l'Institut fondamental d'Afrique Noire*, sér. A, 44:160-171. [the paper was possibly only printed in 1985,]

Heath, A., Newport, M. N. & Hancock, D.

2002. *The Butterflies of Zambia*. ABRI & Lepidopterist's Society of Africa (137 pp + CD-Rom).

Larsen, T. B.

2005. *Butterflies of West Africa*. 2 vols., 596 pp. 125 plates. Apollo Books, Stenstrup, DK.

Mendes, L. F., Bivar de Sousa, A. & Consciência, S.

2007. Novos dados sobre os Lepidópteros diurnos (Lepidoptera: Hesperioidea e Papilionoidea) da Guiné-Bissau. I. Introdução e Hesperioidea. *Boletim Sociedad Entomológica Aragonesa*, 41:209-221.

Neave, S. A.

1910. Zoological collections from Northern Rhodesia and adjacent territories: Lepidoptera Rhopalocera. *Proceedings of the Zoological Society of London* 1910: 2-86.

Vuattoux, R.

1999. Les lépidoptères Hesperioidea de la station de Lamto (Côte d'Ivoire). *Lambilliona*, 99:562-568.