Oskar Brattström - Nigerian butterflies

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Version 1.0

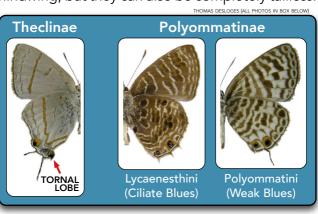
WEAK BLUES

Family Lycaenidae Subfamily Polyommatinae Tribe Polyommatini



Identification of subfamilies and tribes

The subfamily **Polyommatinae** can be separated from the somewhat similar subfamily **Theclinae** by looking at the tornal end of the hindwing. In **Theclinae**, there is always a more or less pronounced tornal lobe (see red arrow on image below on the left), while the hindwing tornus is more evenly rounded in **Polyommatinae**. **Theclinae** species are usually tailed, sometimes with tails as long as the hindwing, but they can also be completely tailless.



There are two related groups within Polyommatinae: the Ciliate Blues (Tribe Lycaenesthini) and the Weak Blues (Tribe Polyommatini). They can generally be told apart by looking at the small hindwing tails. In the Ciliate Blues, there are usually three short tails on the hindwing, formed by elongated hairs at the wing edge. Weak Blues are often completely tailless, or have either one or two tails per wing. When they have tails, these are usually longer than those found in the Ciliate Blues.

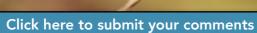
WEAK BLUES

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Weak Blues (Tribe Polyommatini) are typically small butterflies, and about 70 species are known to occur in Nigeria. Males are frequently blue on the dorsal surface, with some dark markings. Females tend to have more pronounced dark markings than the males of the same species. However, there are many exceptions, and many species are black, white and brown. Their ventral patterns usually have multiple small dark spots, and these can merge together, forming bands. Most Nigerian species can be identified in the field, but some genera are very tricky and not discussed at species level in this version of the field guide. The host-plants are normally from the family Fabacae, and most Polyommatini species have some links to

ants during their early lifestages. In some cases, the larvae mimic the scents used by the ants in order to get adopted by a colony. They will then feed on the ant larvae once they are inside

the nest!



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This project is dedicated to the memory of Dr. Torben B. Larsen. Without his early support I would probably never have begun my work with Nigerian butterflies.



PHOTOGRAPHERS

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WEAK BLUES

Family Lycaenidae Subfamily Polyommatinae Tribe Polyommatini

INCLUDED GENERA (CLICKABLE LINKS)

<u>Pseudonacaduba</u>

<u>Thermoniphas</u>

Lampides

<u>Oboronia</u>

Uranothauma

Azanus

Cacyreus

<u>Zizina</u>

Leptotes

Zizeeria

Tuxentius

Zizula

Tarucus

Chilades

<u>Actizera</u>

<u>Freyeria</u>

Eicochrysops

Licociii yaopa

<u>Cupidopsis</u>

Euchrysops

Lepidochrysops



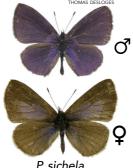
Pseudonacaduba aethiops (Mabille, 1877) Dark African Line Blue

Pseudonacaduba sichela (Wallengren, 1857) African Line Blue

In these two species, the ventral markings are more or less identical and consist of fine light streaks forming irregular bands on a homogeneous grey background. On the hindwing there are two small tornal spots (usually without any orange crown), but no tails. The two species of Line Blues can only be accurately separated by looking at the dorsal surfaces. Both sexes of the Dark African Line Blue (Pseudonacaduba aethiops) are blackish brown (male are usually slightly darker), while there is always some degree of blue scaling in the African

Line Blue (P. sichela). Females have blue scaling at the base of all four wings, while the smaller males are deep violet all over the dorsal surface of the wings.









Lampides boeticus (Linnaeus, 1767) Pea Blue

The **Pea Blue** (Lampides boeticus) is an extremely widespread butterly found all over Africa, southern Europe, the Middle East, most of the Oriental Region and parts of Australia. The species is highly migratory, constantly tracking suitable breeding conditions, and on most locations it can only be found at specific times of the year. The Jos Plateau has been suggested as one of few places in West Africa where the species could potentially be found all year round. The broad white band close

to the ventral margin of the hindwing is a reliable character for identification. Dorsally, the male is almost uniformly violet blue, apart from the tornal spots. The female has a more varied greyish-brown colouring with some blue scales.







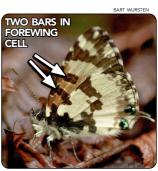
Uranothauma falkensteini (Dewitz, 1879) Lowland Branded Blue

The genus *Uranothauma* has six species in Nigeria, of which four are only found on the Obudu and Mambilla Plateaux. The males of most species have distinctive androconial scales on the dorsal forewings (see image on lower left) that help to separate the species, but females are more similar to each other. The ventral patterns are species-specific and similar in both sexes. In lowland forests, only two species exists; The distinct <u>Pied Blue</u> (*U. cyara*) and the appropriately named **Lowland Branded Blue** (*U. falkensteini*). The

latter is similar to some of the highland species (and they fly together at intermediate altitudes). Males are often found mudpuddling in large numbers, but females are only seen rarely.







Uranothauma frederikkae frederikkae Libert, 1993 Cameroon Branded Blue

Uranothauma nubifer nubifer (Trimen, 1895)
Black-heart Branded Blue

In Nigeria, these species are only found on the Obudu and Mambilla Plateaux. Males can be told apart by the differently shaped dark forewing androconial patches (see red arrows). The female Cameroon Branded Blue (U. frederikkae) is similar to the Lowland Branded Blue (U. falkensteini), but

has three (instead of two) dark bars in the ventral forewing cell. The female of the **Black-heart Branded Blue** (*U. nubifer*) lacks the white dorsal patches found in other *Uranothauma* females.







U. frederikkae



TWO BARS IN FOREWING CELL

U. nubifer

Uranothauma antinorii bamendanus Libert, 1993 Antinori's Branded Blue

Uranothauma heritsia heritsia (Hewitson, [1876]) **Light Branded Blue**

In Nigeria, these species are only found on the Obudu Plateau. Both have a pure black and white ventral pattern, while similar *Uranothauma* species also have more lighter brown spots. The male of Antinori's Branded Blue (U. antinorii) has a shiny blue dorsal colour, without any androconial patches, while the female looks similar dorsally to both U. falkensteini and U. frederikkae. The Dorsal surface of both sexes of the Light Branded

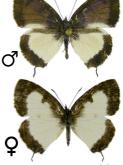
Blue (U. heritsia) look similar to the Pied Blue (U. cyara), but the species do not co-occur as the latter is a lowland species.







U. antinorii





U. heritsia

Uranothauma cyara cyara (Hewitson, 1876) Uranothauma cyara stactalla (Karsch, 1895) Pied Blue

The **Pied blue** (*Uranothauma cyara*) is a fairly common lowland species. In Nigeria, the nominate subspecies *cyara* is only found in the Oban Hills area (set specimens show the similar subspecies *tenuimarginata*). Moving west through the forest zone, it gradually transitions into the subspecies *stactalla* (images to the left), with more ventral black markings. Dorsally, the species looks similar to the <u>Light Branded Blue</u> (*U. heritsia*), but the ventral pattern is highly distinct because of its orange base. Males have shiny blackish-blue dorsal forewings, while females are purely black and white.







Cacyreus lingeus (Stoll, 1782) Common Bush Blue

The **Bush Blues** (Cacyreus) have three Nigerian representatives, all with a highly distinctive ventral pattern that should make confusion with other genera impossible. As the name implies, the **Common Bush Blue** (Cacyreus lingeus) is always the most common of the three, and is normally found in transition habitats between savannah and forests. The **Alternative Bush Blue** (Cacyreus virilis) is more of a true savannah species, and the **Bright Bush Blue** (Cacyreus audeoudi), is more linked to forests. The species can be separated by the angle of the middle costal spot

on the ventral hindwing. In *Cacyreus lingeus*, this spot points towards the tornal end of the wing (upper right image). The male is dull blue on the dorsal side, while the female has a darker border and often pronounced white spotting.







Cacyreus virilis (Stempffer, 1936) Alternative Bush Blue

Compared to the Common Bush Blues (C. lingeus), the ventral hindwing costal spot of the Alternative Bush Blue (C. virilis) is angled inwards, pointing towards the inner wing margin. On the dorsal side males are almost identical, but females of C. virilis tend to lack white spots. The species is generally rare in West Africa, but can be common on the Jos Plateau.





Cacyreus audeoudi (Stempffer, 1936) Bright Bush Blue

Amongst Nigerian *Cacyreus*, the **Bright Bush Blue** (*Cacyreus audeoudi*) male has the strongest blue

colour, and the female has more pronounced white spotting. The ventral surface is strongly contrasting with a darker base colour than other *Cacyreus*. The ventral hindwing costal spot is angled more outwards. This species is linked to forests.







Leptotes pirithous (Linnaeus, 1767) Leptotes babaulti (Stempffer, 1935) Leptotes jeanneli (Stempffer, 1935) Leptotes brevidentatus (Tite, 1958) Zebra Blues

The ventral pattern of all Leptotes species is distinctive and sets them apart from similar genera. The four species on this page cannot be separated in the field and are called the 'Leptotes pirithous complex'. The females can only be separated with genetic data, but males can be identified with genitalia dissections. The distinctive valves are shown below. L. pirithous is normally the most common of the species. The **Beautiful Zebra** Blue (Leptotes pulchra) is similar, but can be separated from the others by wing patterns.









Leptotes pulchra (Murray, 1874) Beautiful Zebra Blue

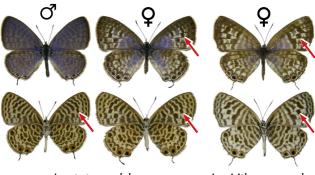
In Nigeria this is the only Zebra Blue (Leptotes) that can be identified by wing patterns alone. Both sexes have a longer band on the ventral forewing that includes a spot that is separated from the band in all of the four species of the **Leptotes pirithous** complex. This spot is also visible on the dorsal side in the females. The Beautiful Zebra Blue (Leptotes pulchra) is generally linked to swampy habitats, and tends to be both local and rare in West Africa.



Leptotes pulchra



L. pirithous - complex



Leptotes pulchra (Spot merged)

L. pirithous-complex (Spot free)

Tuxentius cretosus nodieri (Oberthür, 1883) Savannah Pied Pierrot

Tuxentius carana carana (Hewitson, 1876) Tuxentius carana kontu (Karsch, 1893) Forest Pied Pierrot

Tuxentius margaritaceus (Sharpe, 1892) Mountain Pied Pierrot

As the names imply, these species have different habitat choices, and in Nigeria that means they can generally be separated by location alone. The **Savannah Pied Pierrot** (*Tuxentius cretosus*) is normally found in Sudan Savannah and has more merged dark ventral markings. The **Forest Pied Pierrot** (*T. carana*) is a common forest butterfly and has better separated ventral spots. The

Mountain Pied Pierrot (T. margaritaceus) is found on the Obudu and Mambilla Plateaux. It is the only Nigerian Tuxentius species with a black spot at the end of the ventral hindwing cell.



Tuxentius cretosus



Tuxentius margaritaceus



Tuxentius carana

Genus Tarucus - Blue Pierrots

The **Blue Pierrots** (*Tarucus*) is a group of quite similar butterflies, which are hard to accurately identify to species level in the field. They all have

a highly distinctive black and white pattern on the ventral side with small greenish metalliclooking marginal spots on the hindwing. Males are light blue on the dorsal side, while females have more varied and spotted markings. They are adapted to very dry habitats and five species can be found in northern Nigeria, often flying in mixed swarms close to their Zizyphus hostplants.







Tarucus theophrastus



Tarucus rosacea

Actizera lucida (Trimen, 1883) Rayed Blue

Both sexes of the **Rayed Blue** (Actizera lucida) have a distinct white line stretching from the end of the cell on the ventral hindwing out to the margin. There is no other species in West Africa with such a line, making identification very easy. The male is dull violet with dark borders on the dorsal side. The hindwing border is sometimes made up of small dots, rather than an intact line. The female is generally brown on the dorsal side,

but can sometimes have violet basal scaling. The species is usually linked to wet grasslands and appears to be very rare in West Africa. It most likely has small local populations and there are records from a few sites in southern Nigeria.







Eicochrysops hippocrates (Fabricius, 1793) White-tipped Cupid

Eicochrysops dudgeoni Riley, 1929 Dudgeon's Cupid

The male **White-tipped Cupid** (Eicochrysops hippocrates) has distinct white tips on the dorsal forewings. The female lacks the white tips, but has steel-blue scaling at the base of both wings. The ventral pattern is light, with just a few markings, making it quite distinctive. Both sexes are tailed.

Dudgeon's Cupid (E. dudgeoni) is a tiny species, and lacks any basal markings on the ventral side. It is also untailed. The single tornal spot is crowned with red. The male dorsal surface is dark blue, with a broad black margin while the female is dark brown, with a clear red tornal spot.



Eicochrysops dudgeoni







Eicochrysops hippocrates

Cupidopsis cissus cissus (Godart, 1824) Meadow Blue

Cupidopsis jobates mauritanica Riley, 1932 Tailed Meadow Blue

The two species in this small genus are similar to Euchrysops and Lepidochrysops, but both of the Cupidopsis species generally have smaller and darker ventral spots. The two species are similar, but can easily be told apart as C. jobates has a tailed hindwing. It is also smaller and has more extensive red markings. Females of both species have more black and red markings compared to the males. C. cissus is mainly found in Guinea Savannah, while C. jobates is linked to Sudan Savannah, but both species are quite ecologically tolerant and overlap at many locations.







Cupidopsis cissus

DARKENED **FOREWING**

Cupidopsis jobates

Euchrysops malathana (Boisduval, 1833) Smoky Bean Cupid

The **Cupids** (*Euchrysops*) is a genus of medium sized **Weak Blues**, with eleven species known from Nigeria. Just like the much larger **Giant Cupids** (*Lepidochrysops*), only a few of the ventral spots tend to be black, compared to the similar **Meadow Blues** (*Cupidopsis*). The **Smoky Bean Cupid** (*E. malathana*) is the most common member of the genus. The hindwing is untailed and has a single well-developed orange crown above the tornal spot, visible on both sides of the wing. The male is silky brown-grey on the dorsal side, while the female

has dark blue basal scaling on all wings. The ventral pattern is similar to that of the much rarer **Ashen Smoky Cupid** (E. subpallida), but this species has a much less developed orange tornal crown.







Euchrysops subpallida Bethune-Baker, 1923 Ashen Smoky Cupid

The ventral surface of this rare species is similar to the **Smoky Bean Cupid** (E. malathana), but

with a less developed orange hindwing crown. The dorsal surface is darker in both sexes compared to similar species. In Nigeria, it is recorded from Kaduna, Jos and Gashaka-Gumpti. The closest known population is in eastern DRC!





Euchrysops reducta Hultstaert, 1924 Jackson's Cupid

This is quite a small species, patchily distributed in mainly Guinea Savannah habitats across West Africa. Compared to similar species, most of the ventral forewing spots are heavily darkened.





Euchrysops osiris (Hopffer, 1855)

African Cupid

Euchrysops barkeri (Trimen, 1893) Barker's Cupid

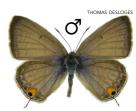
These two species can be told apart from the similar **Smoky Bean Cupid** (*E. malathana*) as they both have hindwing tails. Both are broadly distributed savannah species, but the **African Cupid** (*E. osiris*) is much more common than **Barker's Cupid** (*E. barkeri*). They can be told apart by the number of black tornal spots on both sides of the hindwing; two in *E. osiris*, but only one in *E. barkeri*.







Euchrysops osiris







Euchrysops barkeri

Genus Lepidochrysops - Giant Cupids

The **Giant Cupids** (Lepidochrysops) is one of the most complex of all African butterfly genera with over 130 known species, of which seven occur in Nigeria. Many species are rare and highly

localised, but a few are quite widespread and reasonably common. They are similar to the Cupids (Euchrysops), but as the name implies, the Giant Cupids are considerably larger. They are hard to identify without specialist literature and therefore not treated in detail in this guide. The pictures will still give a general idea of their mophology. The species in the lower row do not occur in Nigeria, but are shown to give a better idea of the variation within this genus.



Lepidochrysops quassi



Lepidochrysops polydialecta



Lepidochrysops glauca



Lepidochrysops labeensis

Thermoniphas micylus (Cramer, 1780)
Common Chalk Blue

Thermoniphas togara (Plötz, 1880) Bright Chalk Blue

Thermoniphas alberici (Dufrane, 1950)
Alberic's Chalk Blue

The **Chalk Blues** (*Thermoniphas*) is a small genus of similar looking forest species with lightly coloured ventral wings. *T. micylus* is found all over southern Nigeria, but the other two species are limited to the south-east. Males can be identified to species level by the amount of white around the dorsal hindwing marginal spots. Females are instead told apart

by the pattern at the edge of their dorsal forewings. A rare fourth species, the **Smoky Chalk Blue** (*T. fumosa*) is known from the south-east. It differs from the others as the male lacks any blue colouring, and the female is white.



THOMAS DESIGNES

T. micylus

T. togara

T. alberici

Oboronia punctatus (Dewitz, 1879) Common Ginger White

The **Ginger Whites** (Oboronia) are all quite similar, but a few clear characters make it possible to separate them from each other. They are all tightly linked to their foodplants, **Spiral Gingers** (Costus), and can be found in small swarms around these plants in forest habitats. The **Common Ginger White** (O. punctatus) differs from all other Nigerian species by having a complete black margin along the forewing costa. There is a small hindwing tail.





Oboronia pseudopunctatus (Strand, 1912) Light Ginger White

The **Light Ginger White** (O. pseudopunctatus) is similar to the **Common Ginger White** (O. punctatus), but the dark forewing costal margin is

broken up by the white ground-colour. This can even be seen ventrally, as the wings are almost translucent. The <u>Untailed Ginger White</u> (O. ornata) is similar, but lacks the hindwing tail.



Oboronia guessfeldti (Dewitz, 1879) Güssfeldt's Ginger White

Güssfeldt's Ginger White (Oboronia guessfeldti) stands out from all other **Oboronia** species by

having a small yellow patch at the base of the ventral hindwing. It also lacks the black spot found on the ventral hindwing costa in all the other species. The hindwing has a small tail.



Oboronia ornata ornata (Mabille, 1890) Untailed Ginger White

As the name implies, the **Untailed Ginger White** (Oboronia ornata) lacks a hindwing tail making identification easy. It is usually the most common Nigerian **Oboronia** species and just like the other species it is tightly linked to its hostplants (**Costus**), that can be identified by their distinctive flowers.







Azanus ubaldus (Cramer, 1782) Desert Babul Blue

zanus jesous (Guérin-Méneville, 1849) frican Babul Blue

Azanus moriqua (Wallengren, 185 Black-Bordered Babul Blue

zanus mirza (Plötz, 1880) ale Babul Blue

Azanus natalensis (Trimen & Bowker, 1887) latal Babul Blue

The Babul Blues (Azanus) are all quite small butterflies, and the males can often be found mudpuddling in large numbers. They typically sit with their wings closed, and therefore the identification key uses their ventral patterns, as they are easily seen in the field. Six species occur in Nigeria, but the White-Banded Babul Blue (A. isis) is treated on a separate page. Most species have broad ecological tolerances, but are generally linked with savannah habitats. A. ubaldus is the best adapted to dry areas, while A. mirza and A. isis are frequently found in open forest habitats.









Identification key for Babul Blues

1. Azanus ubaldus has two clear dark spots on the ventral forewing costa (in rare cases only one). These are generally missing in the other species, but sometimes a single tiny spot can be present in those as well.



2. Azanus jesous has a darker ground colour on the ventral wing surfaces than the other three species below. Many of the spots and bands are also lighter compared to the other species, where they are almost black.



3. In **Azanus natalensis**, a small tooth points out from the dark apical band on the forewing, in the direction of the wing margin. This is not found in any other Azanus species.



looking at the upper of the two tornal spots on the hindwing. **Azanus mirza** has a small orange crown next to this spot, while Azanus moriqua has no such orange marking.





Azanus isis (Drury, 1773) White-Banded Babul Blue

Ventrally, the **White-banded Babul Blue** (Azanus isis) is similar to the <u>Pied Pierrots</u> (Tuxentius), but the black markings form broader continuous bands. The male has a shiny blue overlay over the dorsal black and white pattern. The female pattern is similar, but lacks any of the blue overlay.





Zizina otis antanossa (Mabile, 1877) Dark Grass Blue

This is the first of three small, similar, and widely distributed savannah species that all lack any orange spots. They can all be identified by their ventral patterns. Both sexes of the

patterns. Both sexes of the **Dark Grass Blue** (Zizina otis) are dark brown, often with basal blue scaling. Compared to **similar species**, the **Dark Grass Blue** (Z. otis) has fewer ventral forewing spots.



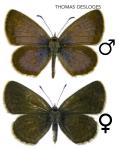


Zizeeria knysna knysna (Trimen, 1862) African Grass Blue

This small species is found in a range of habitats across Africa. The male has a dull violet-blue dorsal colour, with broad brown margins. In contrast, the female

with blue basal scaling. The ventral pattern helps set it apart from the similar <u>Dark Grass Blue</u> (<u>Zizina otis</u>) and the **Tiny Grass Blue** (*Zizula hylax*).

is dark brown, sometimes

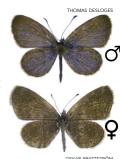




Zizula hylax (Fabricius, 1775) Tiny Grass Blue

This tiny species is often found

in small swarms above short grass, together with the two preceding species. The male is blue on the dorsal side, with broad dark margins. The female is dark brown, sometimes with blue basal scaling. As opposed to similar species, both sexes have an additional dark spot on the ventral forewing costa and also lack a spot in the celll.





Chilades eleusis (Demaison, 1888) Sky-blue Cupid

Freyeria trochylus (Freyer, [1844])
Brown Grass Jewel

These two tiny butterflies are easy to identify, but still easy to overlook. The **Sky-blue Cupid** (Chilades eleusis) is found in Sahel and Sudan Savannah. The male has a unique light-blue dorsal colour. The female is dark brown with a variable amount of blue basal scaling. The ventral surface is similar to **Euchrysops** species, but these are all larger. The **Brown Grass Jewel** (Freyeria trochylus) is found in most types of savannah habitats. It has three small tornal spots on both sides of the hindwing with a large fused orange crown. The dorsal side has a warm brown colour in both sexes.





Chilades eleusis





Freyeria trochylus