METAMORPHOSIS

LEPIDOPTERISTS' SOCIETY OF AFRICA

Volume 36: 92–95

ISSN 1018–6490 (PRINT)
ISSN 2307–5031 (ONLINE)

Note on *Cupidesthes robusta* Aurivillius, 1895 (Lepidoptera: Lycaenidae: Lycaenesthini).

urn:lsid:zoobank.org:pub:9969F259-4008-4109-9357-49B1F7D583B1
Published online: 14 November 2025
DOI: https://dx.doi.org/10.4314/met.v36i1.13

Michel Libert [1] & Szabolcs Sáfián [2]
[1] 8 rue Henry Barbet, 76000 Rouen, France. Email: michelibert@free.fr
[2] African Butterfly Research Institute, P.O. Box 14308, 0800 Nairobi. Email: szsafian@gmail.com

Abstract: Two distinct species have been previously confused under the name *Cupidesthes robusta* Aurivillius, 1895. The newly recognised species is described here as *C. ultramarina* **sp. nov.**, occurring from central Cameroon to northeastern Democratic Republic of the Congo. In contrast, *C. robusta* has only been observed from western Cameroon to Liberia, where a recently collected male specimen has enabled the description of a new subspecies, *C. robusta marginata* **ssp. nov.**, endemic to West Africa.

Résumé: Deux espèces distinctes ont été jusqu'à présent confondues sous le nom de *Cupidesthes robusta* Aurivillius, 1895. La nouvelle espèce, qui est décrite ici sous le nom de *C. ultramarina* **sp. nov.**, est présente du centre du Cameroun au nord-est de la République démocratique du Congo. Par contre, *C. robusta* n'a été observé que de l'ouest du Cameroun au Liberia, où un mâle récemment capturé a permis la description d'une nouvelle sous-espèce, *C. robusta marginata* **ssp. nov.**, endémique d'Afrique occidentale.

Key words: Africa, new taxa, Papilionoidea.

Citation: Libert, M. & Sáfián, Sz. 2025. Note on *Cupidesthes robusta* Aurivillius, 1895 (Lepidoptera: Lycaenidae: Lycaenesthini). Metamorphosis **36**: 92–95.

Peer reviewed

INTRODUCTION

According to the Revision of the African *Anthene* (Libert, 2010: 207), the distribution of *Cupidesthes robusta* Aurivillius, 1895 extends from Nigeria to north-eastern DRC. However, most of the 30 examined specimens (22 ♂, 8 ♀) had been collected in Central Africa, and only one in West Africa, a male captured in Lekki swamp, near Lagos. A few years later, another male was caught by ABRI collectors in coastal swamp forest at Bolomi, near Lake Piso (Southwest Liberia), and it appears that the two West African males are sufficiently distinct from those collected in Central Africa to justify the description of a new taxon, as first mentioned in Sáfián (2021). In addition, the female mentioned by Larsen (2005: 246), which could not be examined in Libert (2010: 207), was also found among the specimens from the Boorman collection, now in ABRI.

The first difference is the most apparent: while the coloured areas of the upperside are intense cobalt blue in the Central African males, the blue is much lighter in the West African ones, with a slight greenish tinge, which could not be well reproduced on digital photographs (Figs 1, 2, 4). The second difference concerns the biotopes in which the butterflies live: whereas most males were collected in the lowland or mid-altitude rainforests of Central Africa, the males from Lekki and Lake Piso inhabit coastal swamp forests, a very specific environment. This constitutes the strongest argument in favour of the existence of two distinct taxa, especially if one considers that the two West African localities are about 1600 km apart.

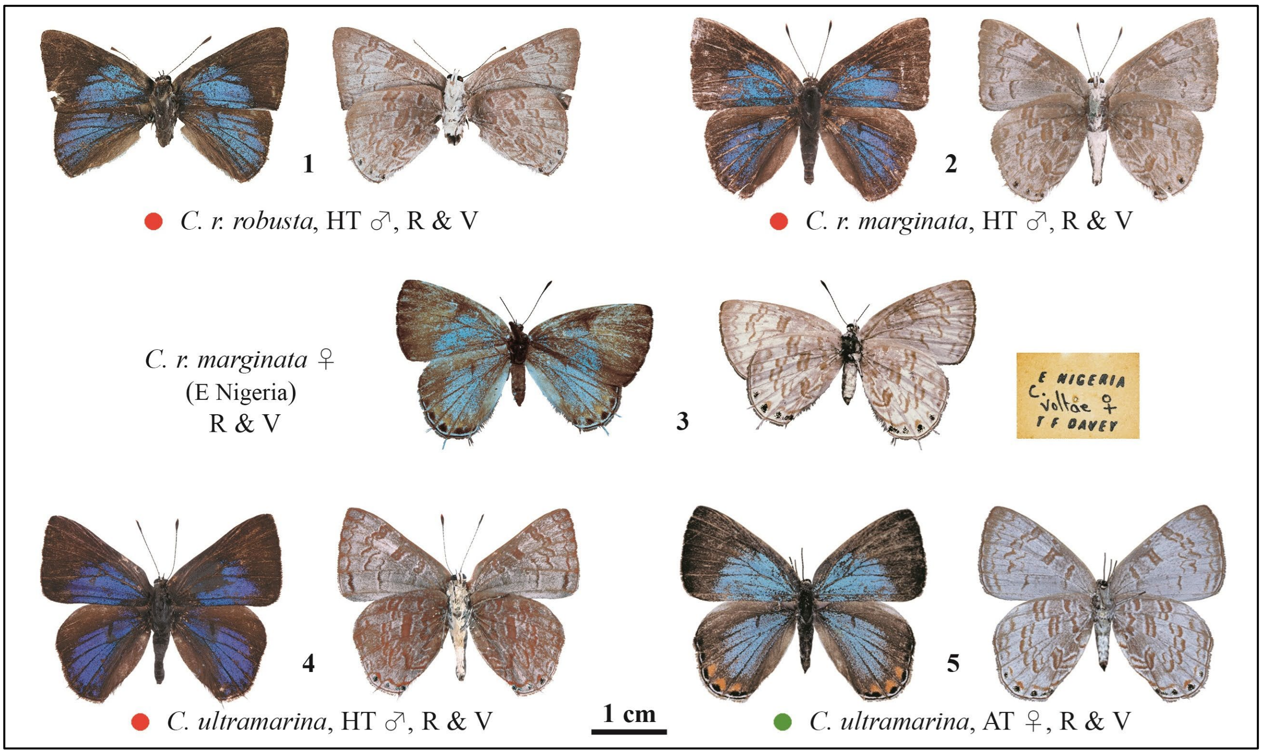
METHODS AND MATERIALS

As there are two taxa, we first determined which specimen the male holotype belonged to. Concerning facies, photos of the holotype taken by Tobias Malm at the Stockholm Museum indicate that the colour of the upperside is comparable to that of West African males.

Regarding environment, the type-locality (Kitta) is in western Cameroon (between Mount Cameroon and the Rumpi Hills), and a detailed map of the region shows that there are two villages named Kitta (or Kita), both close to Ekondo Titi; they are about 10 km apart, and one is surrounded by mangroves (the other being 5–6 km from the mangroves). These data show that in both facies and biotope the type is much closer to males from West Africa than to those from Central Africa. This is not surprising given that all other Cameroonian specimens (16 ♂, 7 ♀) were collected on the Cameroon Central Plateau in Ebogo (some 50 km south of Yaoundé) and near Lolodorf; these two localities are separated from Kitta, not only by some 250 km, but also by the two major geographical barriers of the Sanaga River and the southern part of the Cameroon Highlands.

We therefore consider that *C. robusta* is a (quasi) West African endemic and the Central African specimens represent a different taxon. The importance of the differences between the ecological preferences of the two taxa, combined with the distribution patterns, justify treating them as distinct species. The Central African species is described here as *C. ultramarina* **sp. nov.**

Received: 09 September 2025
Accepted: 28 October 2025



Figures 1 to 5 – Illustrations of *Cupidesthes robusta* and *C. ultramarina* **sp. nov.**: 1 – *C. r. robusta*, male holotype, R & V.; 2 – *C. r. marginata*, male holotype, R & V.; 3 – *C. r. marginata*, female (E. Nigeria), R & V.; 4 – *C. ultramarina* **sp. nov.**, male holotype, R & V.; 5 – *C. ultramarina* **sp. nov.**, female allotype, R & V.

Male genitalia illustrated by Libert (2010, Figs 38a–d) are those of a *C. ultramarina* **sp. nov.** male from the type-locality.[1] These genitalia were found to be very similar to those of the male holotype of *C. robusta*, which was dissected by Stempffer (1945, Fig. 11); the genitalia of the males from Bolomi and Lekki are not significantly different.[2] It therefore follows that *C. ultramarina* belongs to the group of *C. robusta*.

Acronyms
ABRI: African Butterfly Research Institute, Nairobi, Kenya
NMK: National Museums of Kenya, Nairobi, Kenya
NRM: Naturhistoriska Riksmuseet, Stockholm, Sweden
CAR: Central African Republic
DRC: Democratic Republic of the Congo
CRD: Collection of Robert Ducarme

Results

Cupidesthes robusta Aurivillius, 1895 (Figs 1–3)

Although *C. robusta* is confined to West Africa, the three known males are not homogeneous, and two subspecies are distinguished: the nominate subspecies, which is restricted to the holotype from western Cameroon, and the subspecies *marginata* **ssp. nov.** for the two males from Nigeria and Liberia.

The only female from West Africa was captured by Davey in 'E. Nigeria', i.e. probably in the Umuahia region (J. Boorman, personal communication). It differs from all those in Central Africa in the near absence of orange lunules at the extremities of spaces 1b, 2 and 3 on the hindwing's upperside, and is certainly a female of *C. robusta*.

Umuahia being closer to the type locality (approximately 240 km) than to Lagos (approximately 400 km), it could be considered that the female belongs to the nominate subspecies. However, this female has a black border on the upper surface of the hind wings, as seen in West African males, whereas the holotype of *C. robusta* does not, which is a better character to associate this female with the subspecies *marginata*.

Cupidesthes robusta robusta Aurivillius, 1895 (Fig. 1)

Cupidesthes robusta Aurivillius, 1895. – Beiträge zur Kenntniss der Insektenfauna von Kamerun. 2. Tagfalter. *Entomologisk Tidskrift* **16**: 215 (male, SW Cameroon).
Cupidesthes robusta Aurivillius, 1895, male *s.* Libert, 2010: 207, *partim*;
Nec Cupidesthes robusta Aurivillius, 1895, female neallotype *s.* Libert, 2010: 207.

Holotype: male, Kitta, Cameroon, 27 IV 1891 (*Sjöstedt*); genitalia Stempffer 2962; NRM.

The male holotype is the only representative of this subspecies: the neallotype of *C. robusta* designated in Libert'S revision (2010: 207) is a female of *C. ultramarina* **sp. nov.**, and the female from eastern Nigeria is most probably subspecies *marginata* (see above).

[1] Preparation Libert 107-216 (and 107-215 for a female of the same locality).

[2] Both specimens were dissected by Jadwiga Lorenc-Brudecka (Gen. prep.: SAFI00108/prep.genit.476/31.10.2016 and SAFI00111/prep.genit. 476/31.10.2016, respectively).

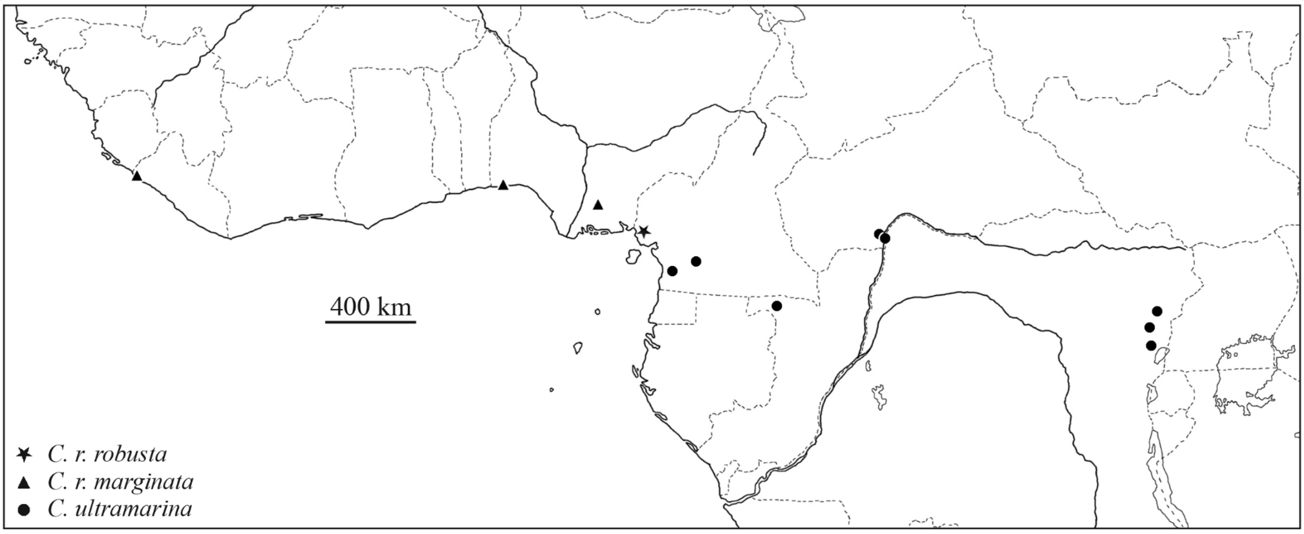


Figure 6 – Distribution map of *Cupidesthes robusta* and *C. ultramarina* **sp. nov.**

Cupidesthes robusta marginata Sáfián & Libert **ssp. nov.** (Figs 1–3)

Holotype: male, Lekki Swamp, Lagos State, Nigeria, i.2004 (*R. Warren*); SAFI00111/prep.genit. 476/31.10.2016; ABRI.
Paratypes: 1 ♂ [Bolomi/Bomi, 30 km from Robertsport, W. Liberia, 6° 39'N, 11° 08'W (*S. Collins*), ABRI]; 1 ♀ [E Nigeria, (*T. F. Davey*), ABRI].

Description and diagnosis
On the upperside, males differ from the holotype in the very low density of blue scales in the margin of the hind wings; to the naked eye, this gives the impression of a black margin (hence the name of the subspecies). The margin is particularly wide in the male from Liberia, less so in the male from Nigeria, but it is completely absent in the male of the nominate subspecies.

The underside is not different from that of the nominate subspecies; it is lighter, with markings not as fine as in most males of *C. ultramarina*, but these characters are variable in the latter, and the difference appears not to be significant. The underside of the female is lighter but similar, on the upperside, the orange lunules at the end of spaces 1b, 2 and 3 of the hindwings are barely visible.

Cupidesthes ultramarina Libert & Sáfián **sp. nov.** (Figs 4, 5)
urn:lsid:zoobank.org:act:37301D9E-0BD1-42A1-A2A4-55257DBE62AC

Cupidesthes robusta Aurivillius, 1895, *s.* Libert, 2010: 207, *partim*;
Cupidesthes robusta Aurivillius, 1895, female neallotype *s.* Libert, 2010, 207 and pl XIX.

Holotype: male Ebogo, Cameroon, i.2000 (*S. Collins*); genitalia: SAFI00110/prep. genit. 477/31.10.2016; ABRI unique number: ABRI-2016-02795; ABRI.
Allotype: female Ebogo, Nyong River, C. Cameroon, i.2000 (*ABRI coll.*); ABRI.

Distribution (Fig. 6)
Only two specimens were captured after Libert's revision (Libert, 2010: 207) was published, a female in Cameroon (Biwong-Bane, near Lolodorf, approximately a 100 km south-east of the type locality) and a male in NE RDC (Biakatu, north of Beni). The distribution area is vast (about 2000 km between Epulu in the DRC and Biwong-Bane), but *C. ultramarina* has only been observed in eight localities: two in Cameroon, Sembe in the Congo (1 ♀), two near Bangui in CAR (3 ♂, 1 ♀) and three in NE RDC (Biakatu, Epulu and Makusa; 2 ♂, 1 ♀). In total, 31 specimens were collected (21 ♂, 10 ♀), 70% of which were from the type locality (16 ♂, 6 ♀).[3] All specimens are in the ABRI collection, except one from the Congo (in NMK), and two from the DRC (in CRD).

Description and diagnosis
The deep blue colour of the males' upperside, which gives the species its name, distinguishes it from *C. robusta*. Blue occupies the basal part of the forewings, including the cell, and intervals 1b to 5 of the hindwings, except for a narrow black margin (1 to 1.5 mm). A small amount of blue may extend into the black margin, particularly in one male from the Central African Republic. The colour of the underside varies between reddish brown and purplish red ('wine lees'), with markings that are not much darker than the background colour; the markings are thinner than in *C. robusta*, but rarely as thin as in the male holotype. On the upperside, females can be distinguished from those of *C. robusta* by the orange lunules that crown the black marginal spots at the end of intervals 1b to 3 of the hind wings. Their underside is much lighter than in males, with a whitish background colour and browner markings.

ACKNOWLEDGEMENTS

Tobias Malm, Lepidoptera Curator in NRM, provided photos of the holotype of *C. robusta*. Jadwiga Lorenc-Brudecka helped with dissection and photography of male genitalia of *C. robusta marginata* and *C. ultramarina*.

[3] It is rather surprising that none of the many people who have collected in the type locality, including the authors, have not observed *C. ultramarina* there. The second author has also carried out extensive research also in the swamp forests at Lake Piso, Liberia, but *C. robusta* was not observed by him.

Zsolt Bálint and Thomas Desloges are thanked for reviewing the manuscript.

SUPPLEMENTARY MATERIAL

High resolution digital images of adult males of *C. robusta* and *C. ultramarina* and also of male genitalia, including the genitalia illustrations of the holotype of *C. robusta marginata* and *C. ultramarina*, and digitally improved photos of the original genitalia slide and genitalia illustrations of the holotype of *C. robusta* by Stempffer (1967: 185) are available on the African Butterfly DataBase (www.abdb-africa.org) website following the direct permanent URL to each taxon:
https://abdb-africa.org/species/Cupidesthes_robusta
https://abdb-africa.org/species/Cupidesthes_robusta_robusta
https://abdb-africa.org/species/Cupidesthes_robusta_marginata
https://abdb-africa.org/species/Cupidesthes_ultramarina

LITERATURE CITED

LARSEN, T. 2005. *Butterflies of West Africa*. 2 vol. Apollo Books, Stenstrup, Denmark. 596 pp., 125 col. pl. https://doi.org/10.1163/9789004531093

LIBERT, M. 2010. *Révision des* Anthene *africains (Lepidoptera, Lycaenidae)*. ABRI – Lambillionea, Nairobi – Brussels. 420 pp., 33 col. pl.

SÁFIÁN, Sz. 2021. *The butterfly fauna (Lepidoptera: Papilionoidea) of Liberia*. PhD thesis. University of Sopron, Sopron, Hungary. 260 pp., 101 col. pl.

STEMPFFER, H. 1945. Contribution à l'étude des Lycaenidae de la faune éthiopienne. *Annales de la Société entomologique de France* **114**: 77–83. https://doi.org/10.1080/21686351.1945.12279028

STEMPFFER, H, 1967. The genera of the African Lycaenidae (Lepidoptera: Rhopalocera). *Bulletin of the British Museum (Natural History) (Entomology)* Supplement 10. 332 pp. https://doi.org/10.5962/p.145446