# New data on the *Uranothauma* from Angola, with description of a new species (Lepidoptera: Lycaenidae: Polyommatinae)

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**Abstract:** The Angolan *Uranothauma* are studied. One of the species, from Kuanza Sul province, is reported for the first time from the country; another one, from Huambo Province, is described and figured as a new species. **Key words:** Lepidoptera, Lycaenidae, *Uranothauma*, new species, faunistics, new records, Angola.

#### Nuevos datos sobre las Uranothauma de Angola y descripción de una especie nueva (Lepidoptera: Lycaenidae: Polyommatinae)

**Resumen:** Se analizan las especies del género *Uranothauma* conocidas de Angola. Una de las especies, de la provincia de Kuanza Sul, se señala como novedad faunística para el país; otra, de la provincia de Huambo, se describe e ilustra como especie nueva.

Palabras clave: Lepidoptera, Lycaenidae, Uranothauma, nueva especie, faunística, nuevas citas, Angola.

Taxonomy: Uranothauma nozolinoi sp. n.

## Introduction

Angolan known representatives of the genus *Uranothauma* (Lepidoptera, Lycaenidae, Polyommatinae) were previously reported to belong to 3 species only. New samples from Angola are studied, one species is assigned by the first time from the country based in a Kuanza Sul sample and one other is described and figured as new, upon material obtained in the Huambo Province.

Most of the studied specimens were collected by the senior co-author and belong to his private collection (in the text, BS) though they are deposited in the Instituto de Investigação Científica Tropical entomological collection (in the text, CZ). One sample belongs to the Museu Nacional de História Natural / Museu Bocage (in the text, MB); it concerns material obtained by the late Colonel Mário Macedo (abbreviated as MM) and was deposited in this institution by his widow, Mrs. Cândida Macedo. One other specimen, the holotype of a new species, originally from the late Eng.<sup>o</sup> Armando Nozolino de Azevedo collection (in the text, NA), is also deposited in the CZ.

The administrative provinces and the approximate coordinates (latitude, longitude and altitude) of each one of the known localities from where *Uranothauma* samples were obtained in Angola are reported afterwards (the old Portuguese names of some localities are remitted to their recent national names). Onschingue was the only place impossible to trace, even in what the administrative province is concerned – though it shall pertain to the Kuando-Kubango province, according to the origin of the remaining material studied by Weymer (1901).

Locality	Province	Latitude	Longitude	Altitude (m)
Cacolo	Lunda Sul	10° 09' S	19° 17' E	1350
Calandula	Malanje	09° 06' S	15° 57' E	1110
Cassoalala	Kuanza Norte	09° 29' S	14° 22' E	< 50
(Roça) Chitonde	Kuanza Sul	11° 46' S	14° 07' E	800-900
Cuiriri, river	Kuando-Kubango	ca 14° 36' S	ca 18°40' E	ca 1300
Dalatando	Kuanza Norte	09° 18' S	14° 55' E	780
Duque de Bragança	See: Calandula			
Gabela	Kuanza Sul	10° 51' S	14° 22' E	1030
Golungo Alto	Kuanza Norte	09° 08' S	14° 46' E	ca 600
Huambo	Huambo	12° 46' S	15° 44' E	1650
Inga, Vale do Loge	Uige	07° 27' S	14° 27' E	ca 600
Longa	Kuando-Kubango	14° 36' S	18° 29' E	1380
Nova Lisboa	See: Huambo			
Onschingue	? Kuando-Kubango ?	?	?	?
Quiriri	See: Cuiriri, river			
Salazar	See: Dalatando			

# Taxonomy

#### *Uranothauma falkensteini* (Dewitz, 1879) Fig. 1-2.

MATERIAL EXAMINED: Angola – Kuanza Norte Province: Golungo Alto, ?/1962, MM, 2 ♂♂ 1 ♀ (MB-17192, 17202, 17208). Salazar, IV/1972, 6 ♂♂ (BS-18073-18078); Ibid, 19/XI/1972, 5 ♂♂ (BS-18079-18083); Ibid, 1/IV/1973, 24 ♂♂ (BS-18084-18107); Ibid, 9/XII/1973, 12 ♂♂ (BS-18108-18119). Kuanza Sul Province: Roça Chitonde, Gungo, Novo Redondo, XII/1962, 1 ♂ (BS-16812). Uige Province: Inga, Colonato do Vale do Loge, XII/1964, 10 ♂♂ (BS-16802-16811)

*U. falkensteini* was described under *Plebeius (Lampides)* from Angola, as "Guinea auf dem 10° S.B., zwischen 17-22° O.L. von Greenw." and was reported by Aurivillius (1928 *in* Seitz) to occur from Sierra Leone and Angola to Kenya; Stempffer (1957) points its quite wide geographical distribution in Africa and studies material from Angola – again, localities not detailed. Ackery *et al.* (1995) registers the species as a typical pan-African element, present along most of the sub-Saharan Africa (South Africa excluded) in forested areas not far from rivers. Larsen (2005) assigns once more its very wide range (most of West Africa, Cameroon, Congo, Angola, Central African Republic, former Zaire, Uganda, Kenya, Zambia, Zimbabwe and Mozambique).

The caterpillars are known to feed on *Acacia* and *Albizia* species (Fabaceae: Mimosoideae).

*Uranothauma antinorii* cf. *felthami* (Stevenson, 1934) Fig. 3-4.

MATERIAL EXAMINED: Angola – Kuanza Sul Province: Gabela, V/1971, 1  $\bigcirc$  (BS-15051)

The species is new to Angola; After Ackery *et al.* (1995) and Larsen (2005) *U. antinorii felthami* is known from the high forests and woods along Kenya, Uganda, Tanzania, Zambia, former Zaire (Shaba), Malawi and Zimbabwe; *U. antinorii* Obertür, 1883 nominate subspecies is exclusive from the Ethiopian highlands and *U. a. bamendanus* Libert, 1993 is restricted to the high plateaux in Cameroon and Nigeria.

The only female from the Gabela is slightly different from the typical *U. antinorii felthami*, and shall represent one non-described subspecies or even species, what seems to be reinforced by its geographical isolation and by the several endemic taxa known to occur along the Angolan Escarpment forested areas; indeed, the forewing dorsal, inner postdiscal brown dots of this Angolan specimen are somewhat distinct from the typical condition, as it is the wings ventral brown maculation. The Cameroon subspecies is much lighter and quite different (Libert, 1993). However, this will be confirmed only in the presence of more material, including males.

# *Uranothauma heritsia heritsia* Hewitson, 1876 Fig. 5-6.

MATERIAL EXAMINED: Angola – Malanje Province: Quedas do Duque de Bragança, 5/V/1971, 1 3 (BS-14733). Uige Province: Inga, 5/I/1965, 2 33 (BS-14734, 14735)

U. h. heritsia flies (D'Abrera, 1980, Larsen, 2005) from

Cameroon to the northern Angola (none precise location was previously registered in this last country) and extends eastwards, to the central Zaire; other subspecies occur along Central and East Africa. Stempffer (1967) and Ackery *et al.* (1995) consider the species under *Phlyaria* due to the wing pattern and genitalic similarities (after Ackery *et al.*, 1995 both genera are doubtfully distinct), but most of the recent authors (*vide* Larsen, 1996, 2005) agree with its inclusion in *Uranothauma* according to the larval characteristics.

The caterpillars feed on Bridelia sp. (Euphorbiaceae).

#### Uranothauma poggei (Dewitz, 1879)

#### MATERIAL EXAMINED: None

*U. poggei* was described under *Plebejus (Lampides)* from Angola, as "Guinea auf dem 10° S.B., zwischen 17-22° O.L. von Greenw." Weymer (1901, sub *Cupido (Lycaena)*), assigns the species from Quiriri and Longa (Kuando-Kubango), as well as from Onschingue, near Kuito (also Kuando-Kubango?), Aurivillius (1928, *in* Seitz) reports its presence from Angola and Rhodesia (Zambia?) to Kenya. Ladeiro (1956, sub *Cupido*) studies material from Cassoalala (Kuanza Norte) and from Cacolo (Lunda Sul). After Ackery *et al.* (1995) *U. poggei* is widespread in Angola, former Zaire, Zambia, Malawi, western Tanzania and Uganda where it flies especially in *Brachystegia* woods, along rivers.

# *Uranothauma nozolinoi* sp. n. Fig. 7-13.

MATERIAL EXAMINED: Angola – Huambo Province: Nova Lisboa, 18/IV/1965, NA, ♂ holotype (CZ-5266)

DESCRIPTION: Fore wing: 14.0 mm; wingspan: 30 mm. Wings (dorsal) general colour golden brown, uniform, with a light violet tinge. A subtriangular, velvety black androconial patch extends from  $R_2$  to  $Cu_1$  on the subapical/discal area of the forewing. Ventrally the brown maculation is not very dark and clearly approaches that of *U. nubifer*; there is a short tail.

Genitalia as in Figs. 9-12, the valves ending on one strong and long tooth plus 1-2 much smaller, more proximal, teeth. Etymology: New subspecies is dedicated to the memory of the collector of its only known specimen, Eng.<sup>o</sup> Armando Nozolino de Azevedo, who organized a wide and diverse collection of (mainly) Lepidoptera of some hundreds of butterflies and moths during his permanence of about twenty years in Nova Lisboa (now Huambo).

DISCUSSION: New species agrees in most of the presented morphological features with *U. nubifer* Trimern, 1895, reported to occur (D'Abrera, 1980, Ackery *et al.*, 1995) in forests and wooded areas from Ethiopia to South Africa (Natal) and central West Africa (Cameroon and Nigeria), as well as (Larsen, 2005) in Zambia and Zimbabwe. The population from Ethiopia was described by Libert (1993) as a different subspecies (*U. n. abyssinica*) considered to be distinct from the nominate one due to the valves shape; it was defended later (Larsen, 2005) to be a junior synonym of *U. n. distinctesignatus* Strand, 1911, described from the same country.

In the new species, the wings are lighter, though their ventral pattern is not substantially different from that of the *U. nubifer* – however, the brown elements of the hindwing









Fig. 1-2. Uranothauma falkensteini male, 1. dorsal. 2. ventral. Fig. 3-4. Uranothauma antinorii cf. felthami female, 3. dorsal. 4. ventral. Fig. 5-6. Uranothauma h. heritsia male, 5. dorsal. 6. ventral. Fig. 7-8. Uranothauma nozolinoi sp.n. male holotype, 7. dorsal. 8. ventral



**Fig. 9-13.** Uranothauma nozolinoi sp.n.  $\mathcal{S}$  holotype. **9.** tegumen, uncus and subuncus. **10.** valves. **11.** aedeagus. **12.** detail of the apical area. **13.** detail of the spiny pre-apical region. Scales: 0.1 mm

pattern are not so well individualised. The velvety androconial patch of the forewing is smaller in the new species (Larsen, 1996, 2005) and the shape of the valves and the development of the valve's apical teeth in *N. nozolinoi* sp.n. is quite distinct relatively to the case of *N. nubifer* (see Libert, 2003, fig. 6).

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