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# Ricla saudeki sp.n., a new Hypeninae from western Africa (Lepidoptera: Noctuidae)

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#### Abstract

Ricla saudeki sp.n. from Nigeria and Bioco is described, the adults as well as the genitalia are illustrated.

#### Zusammenfassung

Ricla saudeki sp.n. aus Nigeria und Bioco wird als neu beschrieben und abgebildet. Beide Geschlechter werden als Adulte sowie mit ihren Genitalstrukturen illustriert.

Key words: Bioco, Ethiopian Region, Hypeninae, new species, Nigeria, Noctuidae, Ricla.

#### Introduction

Recently four papers have been published contributing to the knowledge of the African genus Ricla WALKER, 1869. LODL (1997a) published the first part of the revision of the genus. Focus of this paper was the redescription of the type-species Ricla expandens WALKER, 1869. The genus Ricla was characterized with a punctation of characters and was defined as distinct from the genera Hypena SCHRANK, 1802 (LODL 1994) and Sarmatia GUENÉE, 1854. The genus was recognized as being closely related to Harita MOORE, 1882. Harita turned out to be the Asian representative of this genus-complex and Ricla the African representative. In this first paper the species Hypena malagasy (VIETTE, 1968) was erroneously treated as a member of Ricla. This mistake was corrected in LODL (1998) and the species transferred to the subgenus Trichypena JOANNIS, 1915. LODL (1997b) described a further species closely related to the type-species of the genus: Ricla renatae LODL, 1997. The most recent paper dealing with this interesting genus-group was published by LODL & PAUMKIRCHNER (2001). The genus Itmaharela NYE, 1975 is reported as a monotypic genus representing a Ricla-lineage in India. The close relationship of the African continent with India also became evident within the genus Hypena (LODL (1994).

In the incomparable collections of The Natural History Museum, London (BMNH) a couple of a *Ricla*-species could be located which turned out to be new to science. The author is most grateful for the support of his work with Hypeninae, especially he thanks David Carter and Martin Honey for their hospitality. The new species is descibed as follows:



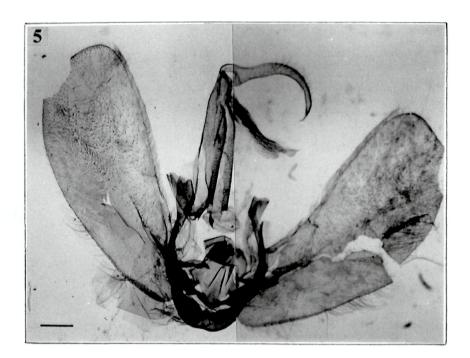


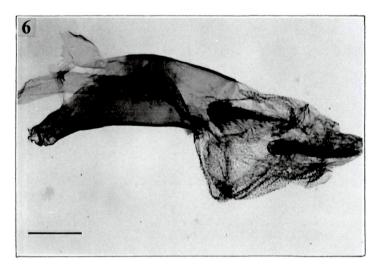


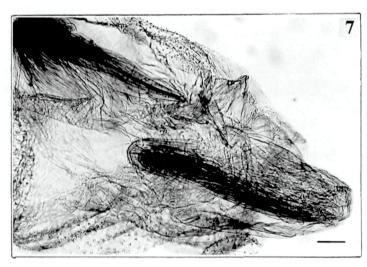


Figs. 1-4 Ricla saudeki sp.n.:

**Fig. 1**: Paratype  $\Im$  (BMNH).- **Fig. 2**: Holotype  $\Im$  (BMNH).- **Fig. 3**: Holotype  $\Im$ , genital, total. Noctuidae Brit. Mus. slide No. 15358. Scale = 0.5 mm.- **Fig. 4**: dto.- Frilly pad of bursa. Scale = 0.1 mm.







**Figs. 5-7** *Ricla saudeki* sp.n., paratype *♂*-genital, Noctuidae Brit. Mus. slide No. 15357:

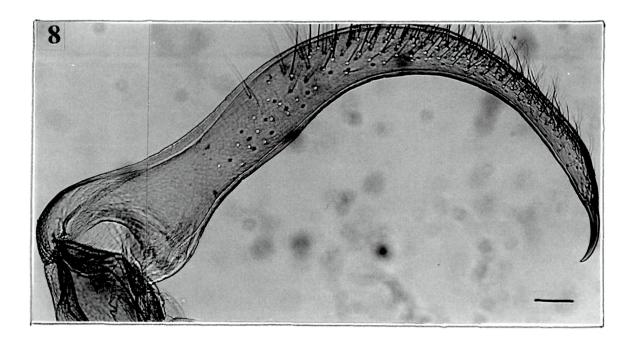
Fig. 5: Genital, corpus total.

Scale = 0.5 mm.- Fig. 6:

Aedeagus. Scale = 0.5 mm.- Fig.

7: Vesica with cornuti-pockets.

Scale = 0.1 mm.





**Figs. 8-9** *Ricla saudeki* sp.n., paratype ♂-genital, Noctuidae Brit. Mus. slide No. 15357:

**Fig. 8**: Uncus. Scale = 0.1 mm.- **Fig. 9**: Anellus and juxta (with longitudinal bar). Scale = 0.1 mm.

## Ricla saudeki sp.n. (Figs. 1-9)

Type material:

Holotype: 9, "Nigeria. Warri Dist., S. Provinces. B. Claydon. 1914-322. \NHMW gen. pracp. M. Lödl no. 643 9 \Noctuidae Brit.

Mus. slide No. 15358 9" (BMNH) (Fig. 2).

Paratype: 1 &, [Bioco] "West Africa: Fernando Po. Rev. W. Cooper. \ Brit. Mus. 1925-176. \ NHMW gen. praep. M. Lödl no. 642 &\ Noctuidae Brit. Mus. slide No. 15357 &" (BMNH) (Fig. 1).

#### Description

**Derivatio nominis**: The new species is named after Jan Saudek, the famous photographer of the Czech Republic. This is to honour a man who payed tribute to the wide field of erotic challenges and never stopped in portraying himself.

**Head:** Dark brown with obliquely upright labial palps, Third joint spatulate with white markings and tip. Antennae of the male shortly ciliate.

Thorax and abdomen: The thorax is dark chocolate brown, the abdomen is pale brown and has dark brown tufts on the first tergites. The legs are pale greyish brown.

Wings: Wingspan = 27-32 mm. The forewings are rounded, in the female more elongate. Most striking feature is a white zigzag median line which runs almost straight from the costa to the posterior margin. The inner part of the forewing is dark chocolate brown. An antemedial band is insignificantly marked with dark brown. A reniform spot is marked with white. The outer part of the forewings is pale reddish brown with dark brown lines and bands. The "Ricla-dash" of the outer margin is present but a little bit faded. Apical dashes are significant and black. The fringe of the forewing is marked with ochreous dots. The hindwings are greyish brown with greyish brown fringe.

Male genitalia (Figs. 5-9): A typical Ricla-genital with long and flat valves. The vinculum is relatively broad and rounded. The uncus is very big, hook-shaped with a knob-like base and a distinct, fine pointed terminal tip (Fig. 8). The anellus is covered with small, sclerotized spines. The juxta is a coriaceous skin with a longitundinal bar (Fig. 9). The aedeagus (Fig. 6) is slightly kneed, the coecum small and narrow. The vesica is densely covered with small, sclerotized spines and contains two distinct pockets with a bundle of cornuti (Fig. 7). The length of the longest cornutus is about 30% of the total length of the aedeagus. The opening angle (measured with regard of the dorsal margin) is about 140°. The ventral margin is quite straight.

Female genitalia (Figs. 3-4): The overall-length of the genital is 7 mm. The papillae anales are relatively small and rounded off. The apophyses are long, the apophyses anteriores are longer than the apophyses posteriores. The relation of apophyses anteriores: apophyses posteriores is 1.26. The ostium is simple, there are no complex sterigma-structures. The ductus bursae is short and skinny and runs into a complex bursa with different torsions and portions of folded areas. A typical "Ricla-pad" (frilly pad) in the caudal portion of the bursa is present (Fig. 4). The most cephal part of the bursa is a skinny sack without signa or folds. The ductus seminalis runs into the bursa in the caudal portion.

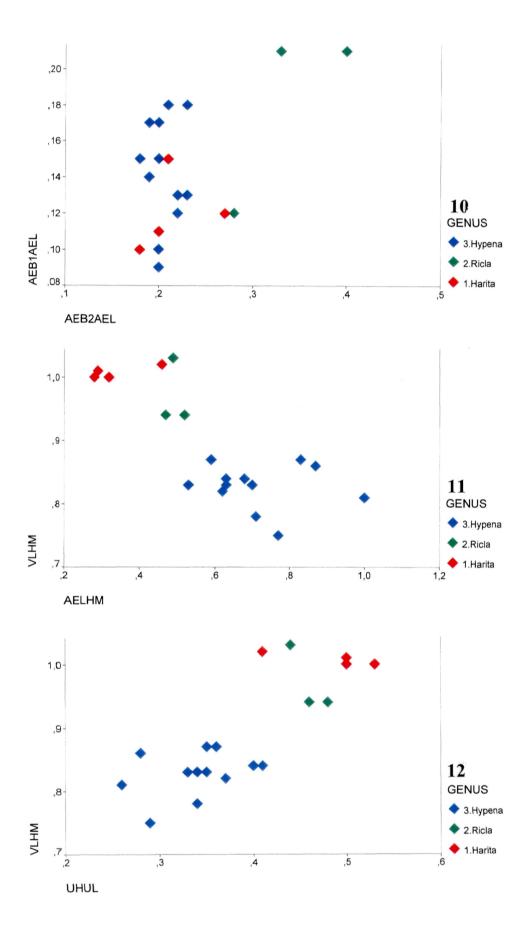
Distribution: Known only from two specimens, both from western Africa.

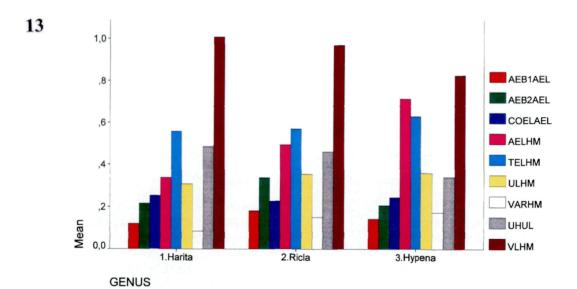
#### Discussion

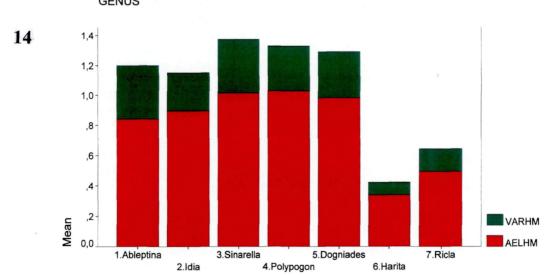
Ricla-species are quite uniform in the appearance of their male genitalia. So are the members of the genus Harita. Differences just can be found in proportions, the ground plan is the same in the whole set of species. Figs. 10-15 demonstrate relations of typical characters and measurments on male genitalia of the genera Ricla, Harita and Hypena s.str. as well as a selection of genera of Herminiinae. The isolation of the genera complex Ricla-Harita is obvious. The definition of characters and measurements follows LODL (2001).

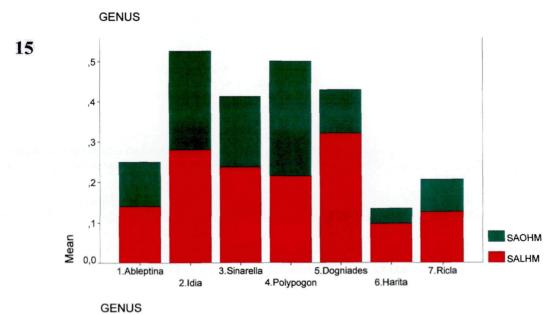
Figs. 10-12 Scatterplots of different relations of characters in the genera *Ricla*, *Harita* and *Hypena* s.str (next page / nächste Seite):

Fig. 10: Demonstrates the isolation of *Ricla* in regard of the aedeagus proportions. *Ricla*-aedeagi are blunt and bulky.- Fig. 11: The length of the aedeagus and of the valves in relation to the overall-length of the genital corpus shows the isolation of the *Ricla-Harita*-complex.- Fig. 12: This isolation becomes also obvious when the proportions of the uncus are taken into consideration.









Figs. 13-15 Bar-diagrams of different relations of characters in the genera *Ricla*, *Harita* and *Hypena* s.str and different genera of Herminiinae (previous page / vorige Seite):

Fig. 13: Demonstrates the longest valves and the smallest aedeagi in the genus *Harita*. Abbreviations see LODL (2001).- Fig. 14: Shows the big sizes of the aedeagi in Herminiinae and the small distances of the valve-articulations in *Harita* and *Ricla*.- Fig. 15: Typical for Herminiinae is the long saccus and its overhang in relation to the hypenine type of genitalia in the *Harita-Ricla*-complex.

The following species have been included in this investigation:

#### Hypeninae:

Genus *Hypena* SCHRANK, 1802 Subgenus *Hypena* SCHRANK, 1802

Hypena cherylae LÖDL, 1995 Hypena euprepes FLETCHER, 1961 Hypena mariachristinae biocensis LÖDL, 1995 Hypena mariachristinae mariachristinae LÖDL, 1995

Hypena martinae LÖDL, 1993
Hypena muscosoides POOLE, 1989
Hypena obacerralis WALKER, [1859] 1858
Hypena padelekorum LÖDL, 1995
Hypena phricocyma FLETCHER, 1961
Hypena porphyrophaes FLETCHER, 1961
Hypena recurvata HAMPSON, 1909
Hypena scotina FLETCHER, 1961

#### Genus Harita MOORE, 1882

Harita brachyphylla (TURNER, 1903) Harita irregularis HOLLOWAY, 1979 Harita nebulosa (MOORE, 1881) Harita nodyna (BETHUNE-Baker, 1908) Harita rectilinea MOORE, 1882

#### Genus Ricla WALKER, 1869

Ricla expandens WALKER, 1869 Ricla renatae LÖDL, 1997 Ricla saudeki sp.n.

#### Herminiinae:

Genus Herminia LATREILLE, 1802 (Polypogon SCHRANK, 1802)

Herminia gryphalis HERRICH-SCHÄFFER, [1851]
Herminia helva BUTLER, 1879
Herminia leechi (SOUTH, 1905)
Herminia reticulatis (LEECH, 1900)
Herminia southi OWADA, 1982
Herminia stramentacealis BREMER, 1864
Herminia strigilata (LINNAEUS, 1758)
Herminia subgriselda (SUGI, 1959)
Herminia sugii (OWADA, 1980)
Herminia tarsipennalis TREITSCHKE, 1835

#### Genus Sinarella BRYK, 1949

Sinarella aegrota (BUTLER, 1879) Sinarella lunifera (MOORE, [1885] 1884-1887) Sinarella punctalis (HERZ, 1904)

#### Genus Idia HÜBNER, [1813]

Idia curvipalpis (BUTLER, 1879)
Idia fulvipicta (BUTLER, 1889)
Idia quadra (GRAESER, [1889] 1888)

Genus Ableptina A.E. PROUT, 1927 Ableptina delospila A.E. PROUT, 1927

Genus Dogniades SCHAUS, 1916
Dogniades renei GAAL-HASZLER, 2000

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115

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