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Notes on Afrotropical Crambinae. A new species of *Sebrus* Błeszyński, 1970 from Malawi (Lepidoptera: Pyraloidea)

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Abstract

Sebrus kovtunovichi Bassi, sp. n., the sixth known species of the Afrotropical genus *Sebrus* Błeszyński, 1970 is described and illustrated. The characteristics of the genus and distribution of its species are briefly discussed.
KEY WORDS: Lepidoptera, Pyraloidea, Crambidae, Crambinae, distribution, new species, Malawi.

Notas sobre los Crambinae afrotropicales. Una nueva especie de *Sebrus* Błeszyński, 1970 de Malaui (Lepidoptera: Pyraloidea)

Resumen

Se describe e ilustra *Sebrus kovtunovichi* Bassi, sp. n., la sexta especie conocida del género afrotropical del género Błeszyński, 1970. Se discuten brevemente las características del género y distribución de las especies.
PALABRAS CLAVE: Lepidoptera, Pyraloidea, Crambidae, Crambinae, distribución, nueva especie, Malaui.

Introduction

The genus *Sebrus* was erected by BŁESZYŃSKI (1970: 12) for the single Madagascan species *Sebrus amandus* Bassi, 1995 described two additional species and moved two more species from *Crambus* Fabricius, 1798.

Among the very valuable material collected by Russian colleagues V. Kovtunovich and P. Ustjuzhanin in several research expeditions throughout Southern Africa, a pair of small specimens captured by the first in Malawi have proven to be a new species of this genus, and it is described below.

Material and methods

Genitalia preparations were made following ROBINSON (1976). The terminology of the genitalia follows KLOTS (1970) and KRISTENSEN (2003). Genitalia photographs were taken with a Canon S120 digital camera. The habitus photos were made with a Nikon D300 digital camera. The images were enhanced with Adobe Photoshop Elements. The length of the labial palpus is compared to the maximum diameter of the compound eye in side view. The material is in the research collection of Graziano Bassi (CGB).

Taxonomy

Sebrus Błeszyński, 1970: 12
Type species: *Sebrus amandus* Błeszyński, 1970, by original designation.

Diagnosis: *Sebrus* belongs to tribe Crambini Latreille, 1810 and is close to *Culladia* Moore, 1886 and *Pediasia* Hübner, [1825] in features of male and female genitalia. Male genitalia are characteristic in having double costal processes and in the phallus bearing an external subapical process. The female genitalia of the three genera have the same proximal ductus seminalis origin from the ductus bursae (Fig. 4), but *Sebrus* lacks the typical subostial sac of *Culladia*, have the sterigma adorned with sclerotized processes as opposed to the membranous ostial area present in *Pediasia*, and have apophyses anteriores strongly reduced while they are normally developed in *Culladia* and *Pediasia*.

List of the species of *Sebrus* Błeszyński, 1970

Sebrus absconditus Bassi, 1995: 619
Type locality: Republic of South Africa
Distribution: Republic of South Africa, Zimbabwe.

Sebrus amandus Błeszyński, 1970: 12
Type locality: Madagascar
Distribution: Madagascar.

Sebrus argus Bassi, 1995: 619, 621
Type locality: Democratic Republic of the Congo
Distribution: Democratic Republic of the Congo, Zambia.

Sebrus perdentellus (Hampson, 1919: 287) (*Crambus*)
Type locality: Malawi
Distribution: Malawi.

Sebrus pseudosparsellus (Błeszyński, 1961: 188, 190) (*Crambus*)
Type locality: Zimbabwe
Distribution: Democratic Republic of the Congo, Zimbabwe.

***Sebrus kovtunovichi* Bassi, sp. n.**

Holotype ♂: Malawi, Rumphi District, Nyika N. P., 10º43'40S, 33º39'11E, 1923 m, 30-31-XII-2011, V. Kovtunovich leg., genitalia slide 6280, Collezione G. Bassi 54001.

Paratype ♀: Malawi, Rumphi District, Nyika N. P., 10º43'40S, 33º39'11E, 1923 m, 30-31-XII-2011, V. Kovtunovich legit, genitalia slide 6276, Collezione G. Bassi 53030.

Etymology: The species is dedicated to Dr Vasiliy Nikolaevich Kovtunovich, well-known Russian specialist of Pterophoridae, who collected the type series.

Diagnosis: *Sebrus kovtunuvichi* is similar to its congeners in habitus, but *S. absconditus*, *S. amandus* and *S. perdentellus* are larger and darker, *S. pseudosparsellus* has a well-defined post medial fascia on the forewing and *S. argus* has brown maculations on the forewing. The male genitalia of the new species cannot be confused with those of any congener in possessing two long and pointed subapical teeth on the phallus and two slender cornuti in the vesica. In female genitalia, the produced sterigma and the shape of the ductus bursae are diagnostic.

Description (Figs 1-2): Wingspan of both specimens 15 mm. Labial palpi 4 X longer than

widest diameter of eye, white with double brown grey band on outer side. Maxillary palpi white with brown grey at base. Antennae weakly serrate in male, thickened in female, brown with silvery white costa. Frons rounded, slightly produced, white. Ocelli well developed. Chaetosemata minute. Head, patagia and tegulae white. Thorax white suffused with yellow. Forewing ground colour white sprinkled with brown, especially on dorsum; costa grey, streaked with brown; antemedial fascia ill-defined, narrow, brown, bowed in medially; postmedial fascia brown, deeply serrated; terminal line dark brown; outer margin with three small dots in medial sector; fringes silvery white, with both short and long scales bordered brown; female more deeply suffused with brown than male; underside bright bronze brown, terminal line dark brown and fringes white with both short and long scales tipped dark brown. Hindwing ivory yellow suffused with brown near apex; fringes with short scales ivory yellow and long scales white; underside in male white with costa suffused with bronze brown, terminal line brown and fringes white; in female underside darker than in male, fringes white with short scales tipped brown. Legs dorsally white with tarsi annulated with brown and ventrally bronze brown. Abdomen yellow suffused with white in male, orange yellow in female.

Male genitalia (Fig. 3): Uncus narrow, apically slightly down curved and pointed; gnathos slightly longer than uncus, with rounded apex; tegumen slender, subrectangular; juxta U-shaped, lightly sclerotized; vinculum triangular, with long dorsal projection; pseudosaccus subconical, well developed; valva triangular, narrowing distally and strongly upcurved toward rounded cucullus; costa separated from valva by a sclerotized bridge and ending with two pointed and strongly upcurved spurs, the distal about twice as long as the proximal; phallus longer than valva, with two pointed subapical teeth of different lengths; vesica with two slender cornuti, the basal twice as long as the distal, and several scobinations.

Female genitalia (Fig. 4): Papillae anales subtriangular, with sclerotized section narrowing dorsally. Apophyses posteriores subtriangular, rather short. Apophyses anteriores strongly reduced. Abdominal segment VIII a moderately sclerotized, narrow ring. Ostium bursae slightly produced and bent outwards. Sterigma forming a sclerotized hood on ostium bursae, and with a spiny, shield like lamella postvaginalis. Ductus bursae more than twice as long as corpus bursae, sinuous, narrowing medially, strongly sclerotized in basal half, then membranous. Ductus seminalis branching off close to ostium bursae. Corpus bursae suboval.

Biology: Unknown. The adults were attracted to an artificial light in a mixed vegetation habitat of grasses, shrubs, *Protea* sp., *Brachystegia* sp. and *Acacia* sp. trees in the undulated Nyika Plateau (Fig. 5).

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BIBLIOGRAPHY

BASSI, G., 1995.– Contributi allo studio delle Crambinae (Lepidoptera: Crambidae). IX. Note sui generi *Sebrus* Bleszynski e *Alphacrambus* nov., con descrizione di nuove specie.– *Revue suisse de zoologie, Genève,* **102**(3): 615-627.

BŁESZYŃSKI, S., 1970.– New genera and species of tropical Crambinae (Studies on the Crambinae, Lepidoptera, Pyralidae, Part 48).– *Tijdschrift voor Entomologie,* **113**: 1-26.

KLOTS, A. B., 1970.– Lepidoptera.– *In* S. L. TUXEN (Ed.). *Taxonomist's glossary of genitalia in insects*: 115-130. Munksgaard, Copenhagen.

KRISTENSEN, N. P., 2003.– Skeleton and muscles: adults.– *In* N. P. KRISTENSEN (Ed.) Lepidoptera, moths and butterflies. Morphology, physiology, and development.– *Handbook of Zoology* IV, **2**(36): 39-131. Walter de Gruyter, Berlin, New York.

ROBINSON, G. S., 1976.– The preparation of slides of lepidoptera genitalia with special reference to the Microlepidoptera.– *Entomologist's Gazette,* **27**: 127-132.

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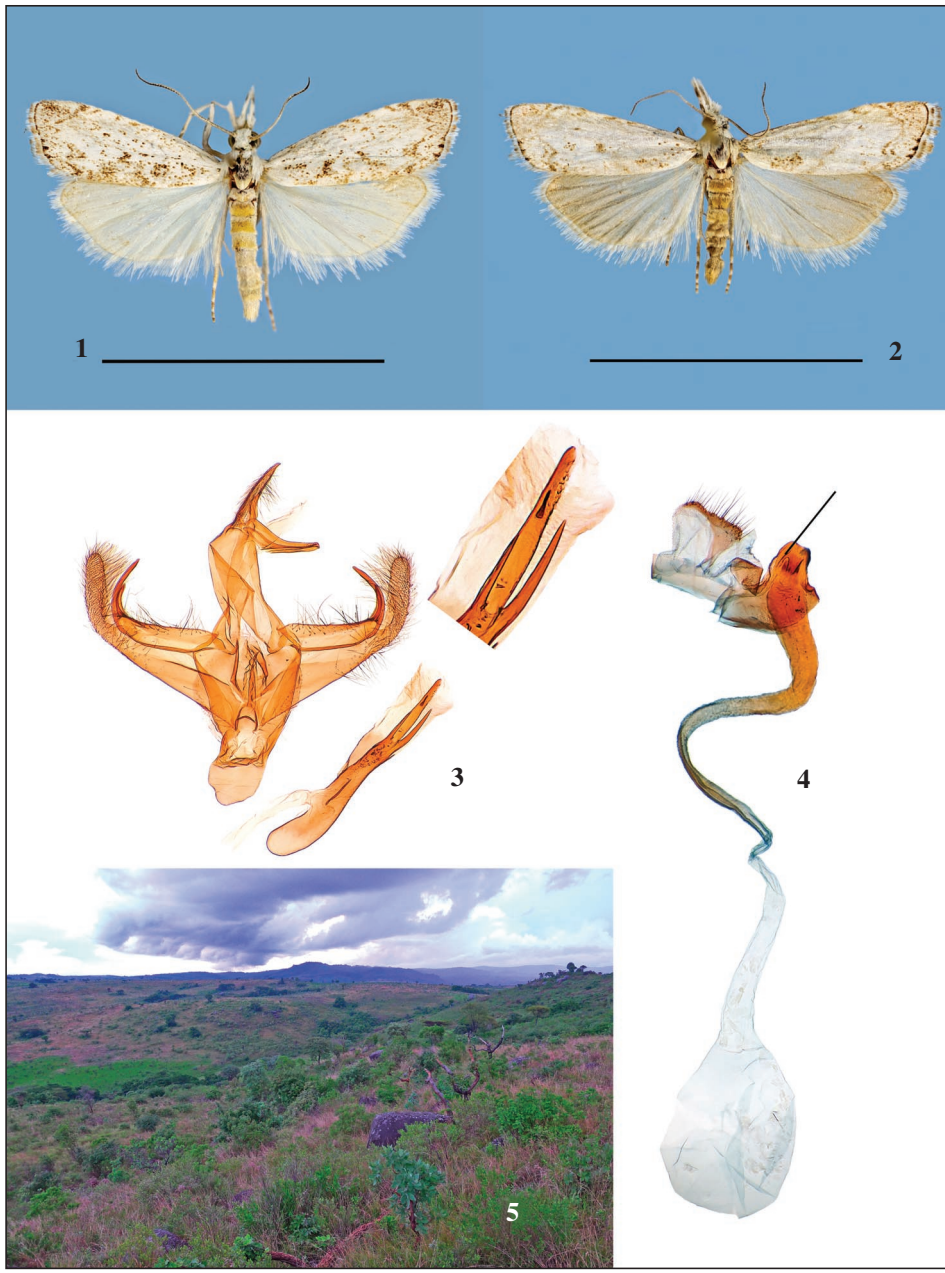

Figs 1-5.– *Sebrus kovtunivichi* Bassi, sp. n. Scale bars of adults = 10 mm. **1.** Male holotype. **2.** Female paratype. **3.** Male genitalia with apex of phallus enlarged. **4.** Female genitalia with evidence of origin of the ductus seminalis. **5.** Habitat (photo V. Kovtunovich).