

## Notes on the genus *Olibrus* Erichson, 1945 (Coleoptera: Phalacridae) with the description of a new species

Zdeněk ŠVEC

Kamenická 4, 170 00 Praha 7, Czech Republic

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**Abstract.** *Olibrus snizeki* sp. n. from Kenya is described and distinguished from related species. The lectotype of *O. bicolor* var. *obscurus* Guillebeau, 1892 and the lectotype of *O. bicolor* var. *apicatus* Guillebeau, 1892 is designated. *O. bicolor* var. *apicatus* is proposed as a junior synonym of *O. stierlini* Flach, 1888. Status of *O. bicolor* var. *obscurus* is changed for *O. obscurus* Guillebeau, 1892; species being considered for a valid one is recorded for the Italy and Slovakia for the first time.

### INTRODUCTION

Since the beginning of the 20<sup>th</sup> century the family Phalacridae has been belonging to the most neglected beetle groups. It implies that the basic works - monographs or synopses were published before the year 1899 (Flach, 1888; Guillebeau, 1892 and 1894). The last principal paper about Phalacridae was published 80 years ago (e.g. Champion, 1925). An important work about African *Olibrus* Fabricius, 1792 was also published by Lyubarsky (1997).

The lack of comprehensive modern works on the family causes the fact that the knowledge of Phalacridae is far from completeness. There is a great amount of specimens of a numerous non-described species of the family especially from Africa and Asia waiting for next studies in both museum and private collections including the author's collection. One of them is described in the present paper.

Similarly great gaps in the knowledge of the European Phalacridae still exist. Recent finds of seemingly up to date quite unknown species have been the incentive for the studies of the most resembling forms described as varieties of *Olibrus bicolor* Fabricius, 1792. The studies have brought the results presented below.

### MATERIAL AND METHODS

The studied *Olibrus* material was collected by Fernando Angelini (Italy, Francavilla Fontana; his private collection is indicated as AC), Miroslav Snížek (Czech Republic, České Budějovice), Marion Mantič (Czech Republic, Ostrava-Vítkovice, his private collection indicated as MC) recently. The comparative type material comes from the collections of the National Museum of Namibia, Windhoek (NMNW) and the Muséum d'Histoire naturelle, Lyon (MHNL). The author's collection is mentioned in the following text as SC.

The place of deposition of the material examined is mentioned by abbreviations near the collecting data.

The material examined was treated with 4% acetic acid first, secondly rinsed in water and then

dissected. Dissected genitalia were mounted in water soluble mediums, mainly in dimethylhydantoin formaldehyde (DMHF) or gum arabic.

The measurements were taken from all specimens examined. They were rounded to the 1st decimal place; the ratios were taken from holotype only and were reckoned from non-rounded measurements. The ratios represent the holotype only and should be considered as indicating the relative lengths of each segment. Except for measurements the descriptions are based on the holotype. The differences occurring in paratypes or in other specimens examined are mentioned in the paragraph "variation".

Label data of the material examined are presented in quotation marks. Text of individual labels is separated by semicolons. The author's remarks are presented in brackets near the data about the material examined.

## DESCRIPTION

### *Olibrus snizeki* sp. n.

(Figs 1-3)

**Type material.** Holotype (♂): "Kenya, VOI (Tsavo), 22.xi.-2.xii.1996, M. Snížek lgt. Paratypes (43 ♂♂, 46 ♀♀): the same data, all in SC.

**Other material examined.** *Olibrus namibiensis* Lyubarsky, 1977: Holotype (♂): "Namibia exp. – ZMB 1992, Kavango: Kaudom-Camp, 18°31'S/20°43'E, lux, 22.-25.ii.92, leg Gölner; Holotype: *Olibrus namibiensis* sp.n.; Namibia National Insect collection, state Museum, P.O. Box 1203, Windhoek, Namibia", NMNW.

**Description.** Length of body 1.7-2.0 mm, in holotype 1.9 mm, head 0.2 mm, pronotum 0.5 mm, elytra 1.2 mm, antenna 0.5 mm, maximum width of head 0.6 mm, pronotum 1.1 mm at base, elytra 1.2 mm in basal third.

Oval, dark brown, legs, antennae and mouth parts reddish. Venter red-yellow, metasternum lightly chest-nut colored.

Head. Without microsculpture, distinctly coarsely and densely punctate, punctures separated by 2-4 times their own diameter. Some small punctures interposed. Ratios of length of antennal segments 2-11 (2<sup>nd</sup> segment equal to 1.0): 1.0-1.3-0.7-0.9-0.4-0.6-0.6-1.1-0.9-1.7. The same ratio of width: 1.0-0.7-0.5-0.7-0.5-0.5-0.7-1.5-1.8-1.8. Ratio of width:length of antennal segments 2-11: 0.9-0.4-0.6-0.7-1.0-0.8-1.0-1.1-1.8-0.9.

Pronotum. Without microsculpture. Broadest at base. Similarly punctate as on head, punctures more densely arranged toward posterior angles, before basis and along lateral margin. Anterior margin slightly bordered, base bordered in middle half of its length. Posterior angles acute with broadly rounded tip in dorsal view; obtuse, rounded in lateral view.

Scutellum. Smooth with few small punctures.

Elytra. Without microsculpture. Suture entirely bordered, bordering sutural line merging basal margin line. First elytral stria more distinct and a little deeper than the others confining to apical 2/3 of elytral length. Second stria less developed than 1<sup>st</sup>, similar to other elytral striae. Both

1<sup>st</sup> and 2<sup>nd</sup> striae well distant at their posterior end before elytral apex. Except of 1<sup>st</sup> stria all elytral striae very feebly expressed, reaching base of elytra ending closely to elytral apex. Each stria accompanied by row of well developed punctures on each side. Punctures a little larger and more distinct than those on head and pronotum.. Interval between sutural and 2<sup>nd</sup> stria furnished by 2 rows of well developed punctures separated by about 2 times their own diameter. Discal intervals of elytra with 1- 2 irregularly arranged rows of punctures separated by 2-4 times their own diameter. Three laterally located intervals densely punctate with large elongated punctures separated by about 0.5-1 times their own diameter tending to arrange in up to 3 rows. Some small punctures interposed in intervals between the large punctures.

Metasternum. Metasternal process wide, with sparsely arranged small punctures separated by about 5-6 or more times their own diameter (Fig. 1). Punctures bearing long lightly colored setae. Space between meso- and meta-coxae almost smooth with several long light setae bearing punctures. Lateral, obliquely microsculptured, parts of metasternum with individual setae bearing punctures.

Legs. Segments 1-3 of anterior tarsi distinctly dilated in male. Anterior tibiae with 2 latero-apical spurs and 1 antero-medial spur. Meso- and meta-tibiae feebly bent.

Genitalia. Male genitalia as in Figs 2, 3.

**Variation.** Some of the paratypes lack punctures on metasternum between meso.- and meta-coxae. Some of the paratype specimens dark chest-nut with lighter strip along base and lateral borders of pronotum.

**Differential diagnosis.** *Olibrus snizeki* sp. n. is similar to *O. namibiensis* Lyubarsky, 1977 by presence one well developed medial stria only and by dark color of dorsum. It differs clearly by distinctly punctate elytral intervals, by lacking of elytral microsculpture and by the shape of male genitalia.

**Derivatio nominis.** The species is dedicated to the collector Miroslav Snížek, specialist in Chrysomelidae.

#### NOMENCLATORIAL CHANGE

#### *Olibrus obscurus* Guillebeau, 1892 **stat.n.** (Figs 4-5)

*Olibrus bicolor* var. *obscurus* Guillebeau, 1892: 184.

*Olibrus bicolor*: Svec & Ponel, 1999: 236.

**Material examined.** *Olibrus bicolor* v. *obscurus* Guillebeau, 1892, lectotype (here designated), ♂, “Desbrochers; bicolor Fab. v. obscuratus G.; [label shared by this and the next specimen]: coll. Guilleb.”; paralectotype, ♂, “Lyon”; MHNL.

**Further material.** *O. obscurus*: 18 ♂♂, 21 ♀♀: “[IT] Piemonte (CN) Valle Maira, Prazzo, 24.v.2000, 1 030 m, leg. F. Angelini, 30 spec. AC, rest SC; 4 ♂♂, 4 ♀♀, “[IT] Piemonte Valle,

Chisone Pourières (TO), 30.v.2000, 1 420 m, leg. F. Angelini”, 5 spec. AC, rest SC; 2 ♂♂, “Slovakia or. 7597, Solníčka, 07.07.1999, lgt. M. Mantič”, sandy dene, sweeping, MC.

**Remark.** Although any of both specimens coming from MHNL has not been labeled as a type, thanks to the personal communication with Harold Labrique, the curator of the Muséum d’Histoire naturelle, Lyon where a part of the Guillebeau’s collection is deposited, it was recognized that both specimens represent the types of *Olibrus bicolor* v. *obscurus* Guillebeau, 1892. Therefore the lectotype was designated in order to prevent future doubts about the status of the Guillebeau’s type.

**Redescription.** Length of body 2.5-2.9 mm, in lectotype 2.5 mm, head 0.2 mm, pronotum 0.7 mm, elytra 1.6 mm, antenna 0.7 mm, maximum width of head 0.8 mm, pronotum 1.5 mm at base, elytra 1.5 mm just behind base.

Oval, dark brown, elytra unicolorous a little lighter apically, hind pronotal angles lighter colored. Legs, antennae and mouth parts dark yellow-reddish. Venter red-brown, metasternum black-brown.

Head. Without microsculpture, irregularly punctate, punctures separated by 3-10 times their own diameter, punctures stronger developed caudally. Ratios of length of antennal segments 2-11 (2<sup>nd</sup> segment equal to 1.0): 1.0-1.1-0.5-0.5-0.4-0.6-0.6-1.0-0.8-1.8. The same ratio of width: 1.0-0.9-0.7-0.7-0.7-0.7-0.9-2.0-2.4-2.4. Ratio of width:length of antennal segments 2-11: 0.6-0.5-0.8-0.8-1.0-0.7-0.9-1.2-1.7-0.8.

Pronotum. Without microsculpture. Broadest at base. Similarly punctate as on head, punctures separated by about 2-8 times their own diameter, a little more densely arranged at posterior angles, before basis and along lateral margin. Anterior margin and base not bordered. Posterior angles obtuse, with broadly rounded tip in dorsal view; obtuse, shortly rounded in lateral view.

Scutellum. Smooth, with few small punctures.

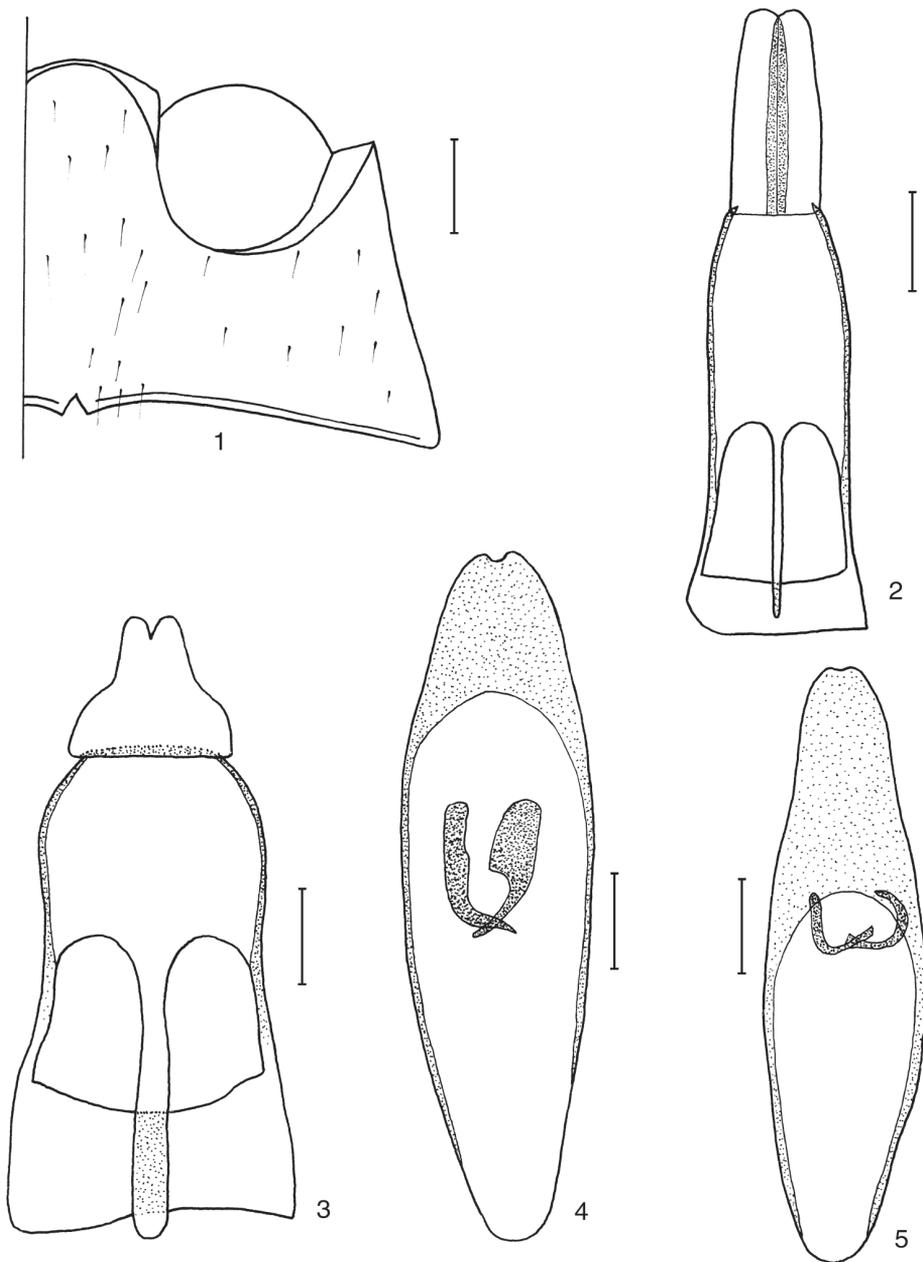
Elytra. With feeble microsculpture at caudal half of elytra. Sutural border interrupted, not merging basal margin line. Both medial elytral striae well developed approaching, each other before apex but not connecting. All other elytral striae feebly expressed, almost reaching base of elytra ending closely to elytral apex. Each stria accompanied by row of punctures on each side. Punctures at medial side of striae stronger, separated by about 5 times their own diameter. Row of punctures located on lateral side of striae irregular, punctures smaller and sparser. Intervals with irregularly dispersed punctures separated by about 3-8 times their own diameter; those punctures tend to arrange in irregular rows in some places.

Metasternum. Metasternum densely punctate with well developed punctures in the same way as in *O. bicolor*.

Legs. Segment 1 of anterior tarsi distinctly dilated in male. Anterior tibiae feebly bent with 2 latero-apical spurs and 1 antero-medial spur. Mesotibiae feebly bent. Metatibiae with lateral outline straight, with medial outline convex.

Genitalia. Male genitalia as in Fig. 4.

**Variation.** Following characters were observed in the specimens collected in Italy. Some specimens black with elytra toward apex dark brown with reddish legs, antennae and mouth-parts.



Figs 1-5. *Olibrus snizeki* sp. n., holotype 1-3: 1 -metasternum; 2- tegmen; 3 - median lobe. *Olibrus obscurus* Guillebeau, 1892, lectotype 4- 5: 4 - tegmen, 5 - median lobe. Scale = 0.1 mm.

Microsculpture covers all surface of elytra or present at least in traces at elytral base in some specimens. Most of the Italian specimens with trace of reddish translucent spot at apical third of each elytron.

**Discussion.** *Olibrus bicolor* v. *obscurus* Guillebeau, 1892 was erroneously considered by Švec & Ponel (1999) for subinfraspecific name due to the fact that there were known specimens of *O. bicolor* Fabricius, 1792 lacking elytral spot and therefore habitually non distinguishable from those described by Guillebeau as var. *obscurus*. It implies that this Guillebeau's taxon was considered a color variety only. New findings of numerous specimens collected in Italy and Slovakia that agree very well with *O. bicolor* lacking elytral spots or with scarcely distinguishable elytral spots but that are characterized by quite different shape of male genitalia, led me to revise the previous conclusion about the status of *O. bicolor* v. *obscurus*. Comparison of the Italian and Slovak specimens with the types of the taxon mentioned brought the conclusion that newly collected specimens belong to a species quite different from *O. bicolor*. Therefore the status of the taxon *O. bicolor* v. *obscurus* is proposed to be changed.

Paralectotype of *Olibrus bicolor* var. *obscurus* was determined by author of this paper as *Olibrus bicolor*.

Regarding to the distribution of the species only newly cited localities in Slovakia and Italy are known up to now. Neither the data on the original labels of the lectotype nor the original description provides any information about the type locality.

#### *Olibrus stierlini* Flach, 1888

*Olibrus stierlini* Flach, 1888: 22.

*Olibrus stierlini* var. *atratus* Guillebeau, 1892: 183.

*Olibrus stierlini* var. *bilunulatus* Guillebeau, 1892: 183.

*Olibrus maximus* Tournier, 1889: 89.

*Olibrus bicolor* var. *apicatus* Guillebeau, 1892: 184 **syn. n.**

**Material examined.** *Olibrus bicolor* var. *apicatus* Guillebeau, 1892, lectotype (here designated), ♂, “apicalis, Bornes [label handwritten, barely legible]; [label shared by this and the next specimen]: Coll. Guilleb.”; paralectotype, ♀, “Tréjus [label handwritten, barely legible]”.

**Remark.** Although any of both specimens coming from MHNL has not been labeled as a type, thanks to the personal communication with Harold Labrique, the curator of the Muséum d'Histoire naturelle, Lyon where a part of the Guillebeau's collection is deposited, it was recognized that both specimens represent the types of *Olibrus bicolor* v. *apicatus* Guillebeau, 1892. Therefore, the lectotype was designated in order to prevent future doubts about the status of the Guillebeau's type.

**Discussion.** Lectotype of *Olibrus bicolor* var. *apicatus* Guillebeau, 1892 was determined by the author of this paper as *O. stierlini* Flach, 1888. Paralectotype has been determined as *O. bicolor*. Therefore, *Olibrus bicolor* var. *apicatus* is proposed as a junior synonym of *O. stierlini*.

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