

# A new species of *Otidoecus* (Phloptoridae, Mallophaga)

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## A New Species of *Otidoecus* (Phloptoridae, Mallophaga)

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(with 2 photographs and 6 drawings)

On the occasion of a visit paid to the National Museums of S. Rhodesia, Bulawayo, in 1950 an opportunity was offered to collect a number of Mallophaga from bird skins. The insect specimens were kindly examined by Dr. T. CLAY, British Museum (Nat. Hist.), London.

The following is a description of a new phlopterid species found on the Giant Bustard (*Choriotis kori* BURTCHELL), based partly on the material collected in Bulawayo. A further series of specimens was kindly supplied by Dr. T. Clay for comparison; in particular the holotype male specimen was made available from the collections of the British Museum (Nat. Hist.), London.

### Genus *Otidoecus* BEDFORD, 1931

*Otidoecus* BEDFORD, 1931. Rep. vet. Res. S.Afr. **17**; 285. Type species: *O. dimorphus* BEDFORD.

*Otilipeurus* BEDFORD, 1931, l. c.: 287. *Esthiopterum turmale* "(NITZSCH)".

According to HOPKINS and CLAY (1952) the genus *Otilipeurus* can be separated from *Otidoecus* if only the described species are considered; undescribed species however completely bridge the gap between the two groups.

### *Otidoecus carpi* \* sp. n. (Fig. 1-6)

Type host: *Choriotis kori* (BURTCHELL) \*\*, (Otidae, Aves)

Female (fig. 2) — Length 2.76 mm.

*Head*: pale brown with the exception of the temples, which are slightly darker in colour. Gular plate indistinct. All specimens generally strongly sclerotized, in particular the tergal plates. The temples

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\* This species is dedicated to Mr. BERNARD CARP, Cape Town (S. Africa), the keen naturalist and generous sponsor of many scientific expeditions in Southern Africa.

\*\* The systematics of the Otidae is according to PETERS (1934).

are well rounded in contrast to those of related species (e. g. *O. bedfordi*, *O. neotis*). Only *O. dimorphus* has also round temples. *Pronotum* (of prothorax): fused not divided longitudinally in 2 parts but with an indication of a separation thereof. *Pteronotum* (of the meso-metathorax): with a distinct line of division longitudinally, with six setae on each side on the posterior margin, the outer one being the shortest. On the venter there are two setae between the mid coxae and four more in a line beneath them. *Abdomen*: Tergite plates and setae as shown in figure 1. Tergites i to vi separated medially and tergites vii to viii fused, but tergite vii with a slight indication of a separation. The number of tergites and intertergital sclerites separated medially are 6 and none respectively.

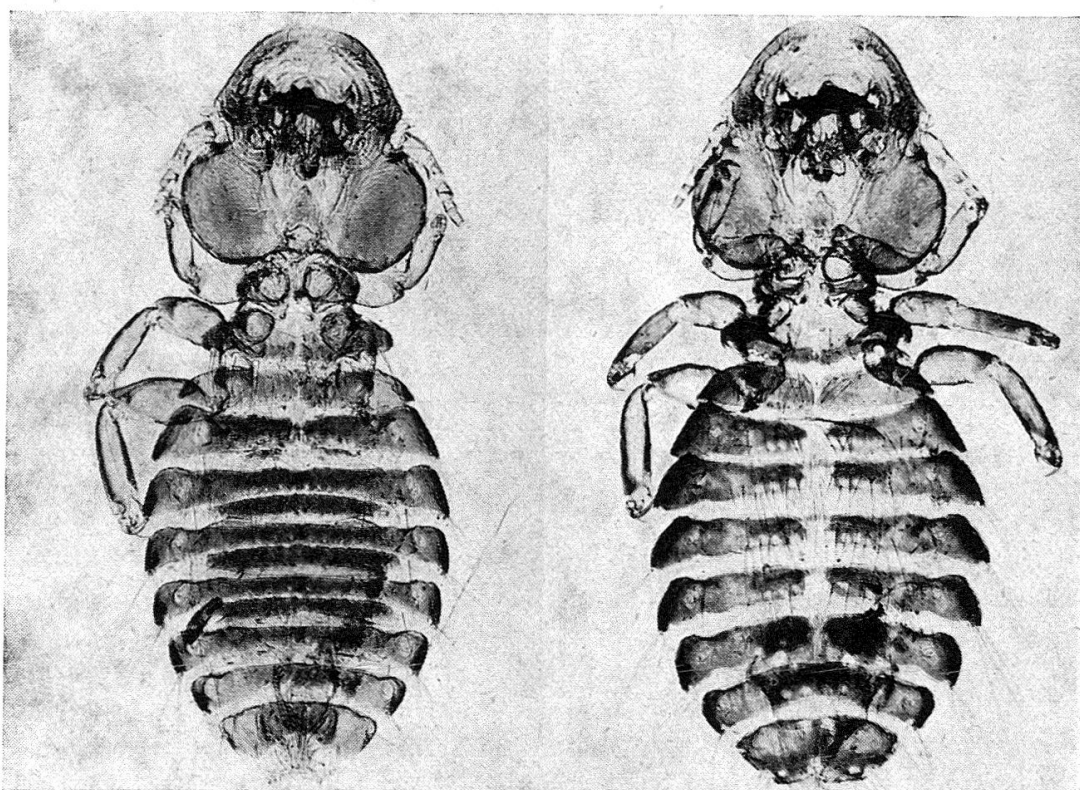


Fig. 1 ♂

Fig. 2 ♀

Fig. 1 and 2. *Otidoecus carpi* sp. n. from Isiolo, Kenya. — 1. Male (holotype specimen). — 2. Female.

Male (fig. 1) — Length 2.64 mm. Slightly smaller than female.

*Head*: very slightly smaller than in the females. However, the proportions and shape are the same. General shape of body very similar. Antennal segment iii with pronounced wider end (fig. 3). *Pronotum* (of the prothorax): similar to that of female, strongly sclerotized, no division longitudinally. *Pteronotum* (of the mesometa-

thorax): with sixteen long setae on each side on the posterior margin. There is no distinct division longitudinally. *Abdomen*: Only the two first tergal plates of the abdominal segments divided longitudinally, the remaining completely fused with a row of strong setae at the posterior end.

The number of intertergital plates amounts to 4 starting between the 2nd and 3rd abdominal segment. The shape of the genitalia is distinctly different in the species of *Otidocetus* investigated (fig. 4-8).

Holotype male and allotype female from *Choriotis kori* (BURTCHELL) from Isiolo (Kenya), February 1956; collected by Col. R. Meinertzhagen; slide No. 20 452 A; in the collection of the British Museum (Nat. Hist.), London.

#### Measurements of *O. carpi*

	Female		Male	
	Length	Width	Length	Width
Head	0.88 mm	0.88 mm	0.84 mm	0.84 mm
Prothorax	0.20 mm	0.44 mm	0.24 mm	0.44 mm
Meso-metathorax	0.24 mm	0.68 mm	0.24 mm	0.68 mm
Abdomen	1.56 mm	1.20 mm	1.48 mm	1.08 mm
Total	2.76 mm		2.64 mm	

Other material of *O. carpi* from *Choriotis kori* examined:

4 females from Kaluta, Caprivi Strip, S.W. Africa, 16th July 1949, specimens collected from a skin at the National Museum, Bulawayo (S. Rhodesia) by W. Büttiker. First slide with 2 ♀ in the collection of the British Museum (Nat. Hist.). Second slide with 2 ♀ in the private collection of W. BÜTTIKER (Malloph. coll. No. 673). 5 females from Waterberg District, S.W. Africa, collected from skin: No. 21 108, Transvaal Museum, Pretoria (HOPKINS Collection in the British Museum (Nat. Hist.)). 3 females from Tsane, Bechuanaland, 16th January 1955, collected by F. ZUMPT; slide No. 1955-457 in British Museum (Nat. Hist.). 1 male from Isiolo (Kenya), February 1956, collected by Col. R. MEINERTZHAGEN (No. 20 452 B). 1 female from Debeete, Bechuanaland, 27th July 1956. Slide British Museum (Nat. Hist.) 157-219.

A comparison was made with *O. dimorphus* BEDFORD 1931, *O. kori* BEDFORD 1931, *O. neotidis* HOPKINS 1940 and *O. bedfordi* HOPKINS 1943.

*O. carpi*: is considerably larger than *O. dimorphus* from the same host (*C. kori*) and differs amongst other characters in the presence of a prolonged third antennal segment (fig. 3) and in the male genitalia (fig. 4 and 8 respectively).

*O. kori*: collected from the same host (*C. kori*) differs amongst other characters in the shape of the head and abdomen, form of segments of male antennae, and male genitalia (fig. 5).

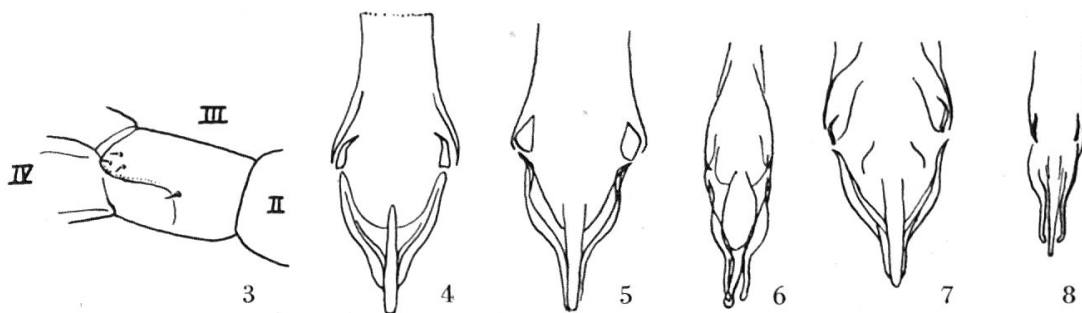


Fig. 3-8. *Otidoecus*. — 3. *O. carpi* sp. n., male antenna, holotype specimen. — 4. *O. carpi* sp. n., male genitalia. — 5. *O. kori*, id. — 6. *O. neotidis*, id. — 7. *O. bedfordi*, id. — 8. *O. dimorphus*, id.

*O. neotidis*: from *Neotis cafra* is rather similar in shape and size to the new species, but differs in the number of posterior setae of the pterothorax and the tergites, and in the male genitalia (fig. 6). The male has no prolonged third antennal segment and the intertergital sclerites in the male are very wide and strongly sclerotized.

*O. bedfordi*: from *Neotis cafra denhami* is rather similar to *O. carpi*. However, it differs in the number and arrangement of the setae of the tergites and in the size of the male genitalia (fig. 7).

*O. dimorphus*: from *Otis tarda*. On the ventral side of the head there are three setae on each side a short distance behind the anterior margin, another further back close to the first lateral seta and one close to the antennal sinus. This species is rather close to *O. carpi*, but distinctly smaller. The male genitalia are considerably smaller than in all the other species investigated (fig. 8).

### Acknowledgments

The best thanks are extended to Dr. T. CLAY for useful information on the different *Otidoecus* species, and for the loan of specimens from the collections of the British Museum (Nat. Hist.), London. I am also very grateful to Mr. R. SMITHERS, Director, National Museums of S. Rhodesia, Bulawayo, for having given the permission to collect mallophaga specimens from bird skins at the Museum.

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