

A NEW SPECIES OF CRASPEDORRHYNCHUS FROM THE BATELEUR EAGLE¹

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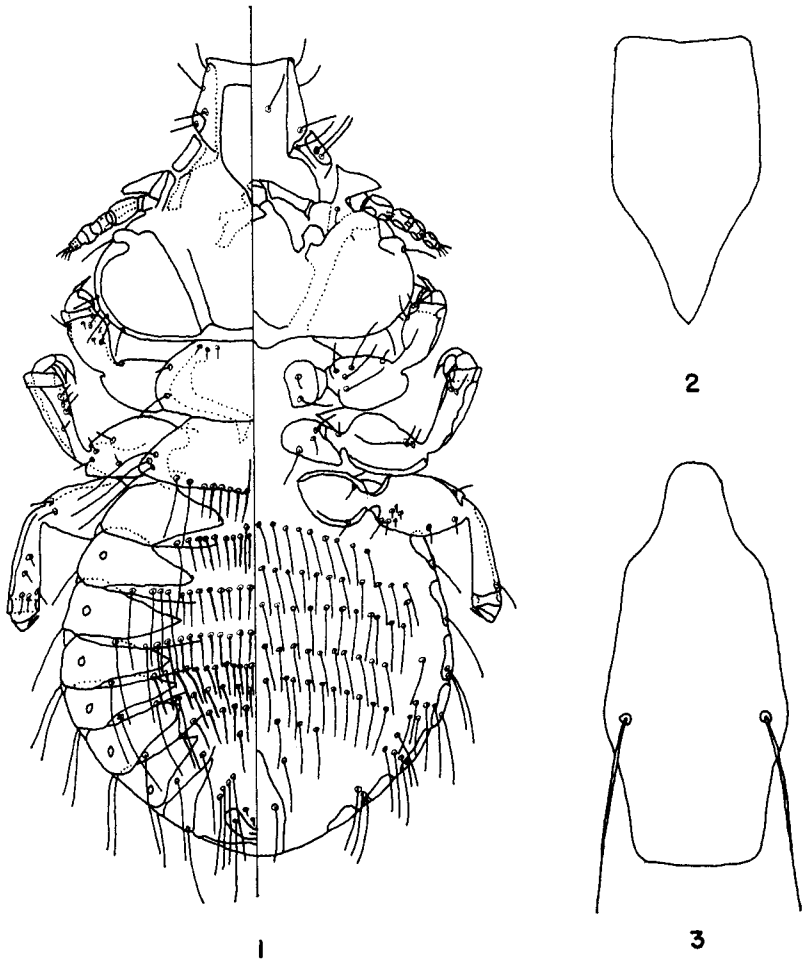
ABSTRACT

Craspedorrhynchus robustisetosus sp. n. is described and illustrated. This species of philopterid Mallophaga is parasitic on the Bateleur Eagle, *Terathopius ecaudatus* (Daudin), from Africa.

During a study of the North American species of *Craspedorrhynchus*, a number of extralimital species were made available to me for comparison. The following species description is based on a series of specimens provided for study through the kindness of Drs. K. C. Emerson and R. D. Price.

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FIGS. 1-3. *Craspedorrhynchus robustisetosus*, sp. n. 1. Dorsal-ventral view of male. 2. Dorsal anterior plate of male. 3. Genital sternal plate of male.

The type series is composed of ten specimens, each mounted or remounted on individual slides. Apparently slide mounts have recently been made for six of the specimens, including the holotype and allotype. These mounts are slightly overcleared, and the data on the labels are in a considerably abbreviated form. The remaining four specimens are considered "original" mounts and were probably made shortly after the date of collection.

The shape of the sclerites in the four uncleaned specimens are quite visible and were used as a key to determine the location and shape of equivalent sclerites in the rest of the series.

The holotype, allotype, and six paratypes are deposited in the United States National Museum. A male and female paratype are deposited in the collection of the Department of Entomology, University of Minnesota, St. Paul, Minnesota.

In the table of measurements, the range of size variation of the paratypes is given in parentheses. All measurements are in millimeters.

***Craspedorrhynchus robustisetosus*, sp. n.**

(Figs. 1-6)

DESCRIPTION. General form of holotype male as in Figure 1. Pre-marginal carinae acute anteriorly, terminating before emarginate hyaline margin. Cephalic setae confined primarily to preantennal region except for single ocular seta and 3 marginal temporal setae. Anterior margin of dorsal anterior plate with slight emargination (Fig. 2), lateral margins parallel to basal $\frac{2}{3}$, tapering to an acute angle.

Prothorax nearly twice as wide as long, with a single small lateral marginal seta, dorsal posterolateral angle with a single seta, 3 small dorsal anterior setae in line with temporal carina.

Pterothorax more than twice as wide as long. Apical $\frac{1}{2}$ of tergite divided medially, dorsal posterolateral angle of each half of tergite with 3 long, slender setae and 6 medium length, robust setae.

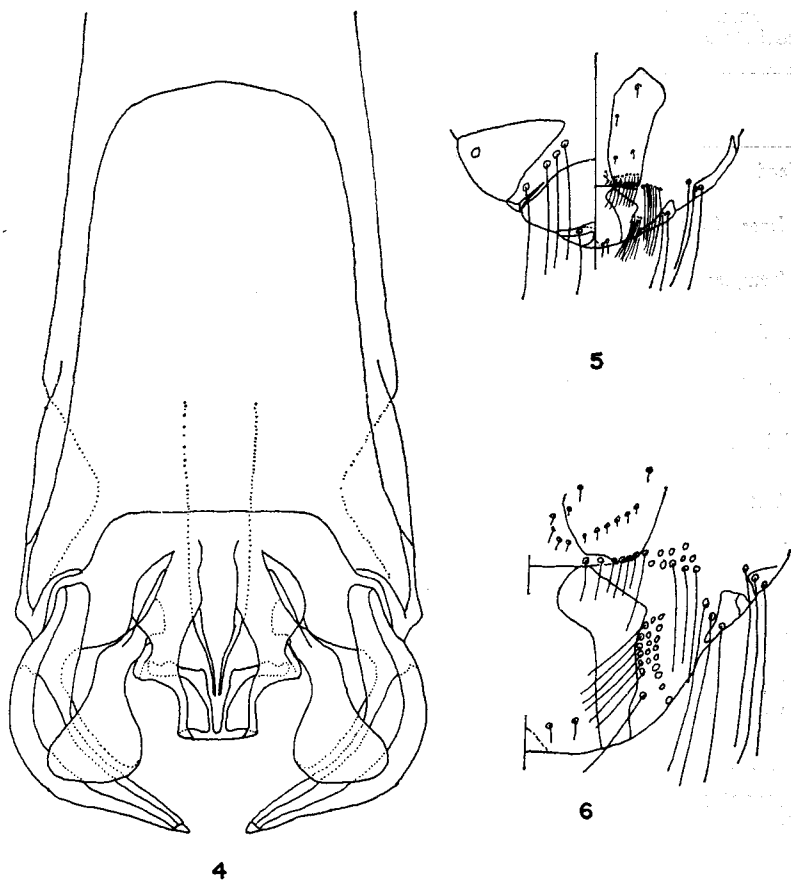
Abdominal tergites as in Figure 1, segmentation indistinct medially, sternites absent. Genital plate not readily discernable in holotype, but as in Figure 3. Dorsal and ventral chaetotaxy as in Figure 1. Stout setae along posterior margins of dorsal abdominal segments slightly shorter and nearly twice as wide (approximately 6.4 microns) as ventral abdominal setae. Sides of stout setae subparallel, ending abruptly in a point or rounded. The longer ventral abdominal setae taper gradually to a definite point.

Legs as in Figure 1, with setae primarily restricted to the femora. Coxae with 2 or 3 short setae.

Male genitalia as in Figure 4. Parameres short, distinctly curved; endomeres paired, lobed; internal margin of parameres fitting within a groove formed by the dorsoanterior and ventroposterior lobes of each endomere.

Allotype female similar to male, differing primarily in chaetotaxy and shape of sclerites of terminal abdominal segments (Figs. 5, 6). A greater proportion of stout dorsal abdominal setae of female have a blunt apex than in male. Setal arrangement of terminal ventral abdominal tufts are indicated in Figure 6.

Type Material. Holotype ♂, allotype ♀, from *Terathopius ecaudatus* (Daudin), Bateleur Eagle, National Zoological Park, Washington,



FIGS. 4-6. *Craspedorrhynchus robustisetosus*, sp. n. 4. Ventral view of male genitalia. 5. Dorsal-ventral view of terminal abdominal segments of female. 6. Enlarged view of ventral region from Figure 5, showing setal arrangement of terminal ventral abdominal tufts.

D. C., 22 Oct. 1926, USNM Catalog No. 70750. Paratypes: 5 ♂, 3 ♀, same data as holotype.

The allotype female appears larger than other specimens examined, primarily due to the greater separation of the abdominal segments as a result of mounting. The size ranges of the males and females overlap, but generally the females are slightly larger.

Carriker (1956) noted that, as a rule, the species of this genus possess extremely slender and delicate setae. The species herein described is unique in that the dorsal posteromarginal setae of the

TABLE 1. Measurements of holotype and allotype of *Craspedorrhynchus robustisetosus*, sp. n. (Measurements in mm; range of paratypes in parentheses.)

	Holotype male		Allotype female	
	Length	Width	Length	Width
Head	0.86 (0.81-0.92)	— —	0.91 (0.83-0.87)	— —
Base of conus	0.31 (0.31-0.34)	0.55 (0.53-0.57)	0.34 (0.30-0.33)	0.60 (0.54-0.55)
Temples	— —	0.96 (0.93-0.99)	— —	1.03 (0.96-1.01)
Prothorax	0.30 (0.24-0.33)	0.60 (0.53-0.58)	0.30 (0.22-0.31)	0.58 (0.54-0.55)
Pterothorax	0.22 (0.22-0.25)	0.75 (0.69-0.79)	0.27 (0.22-0.25)	0.72 (0.70-0.76)
Abdomen	1.05 (0.90-1.10)	1.21 (1.06-1.23)	1.24 (1.02-1.23)	1.30 (1.09-1.14)
Total	2.42 (2.14-2.43)	— —	2.66 (2.40-2.46)	— —

pterothorax and the dorsal abdominal setae are very stout and have a broadly rounded or acute apex.

Cummings (1916) has given a detailed illustration and discussion of the male genitalia of *C. haemotopus* (Scopoli). The male genitalia of many species of this genus are similar to that illustrated by Cummings. The overall form of the genitalia of *robustisetosus* follows the basic pattern of related species. The distinctly lobed endomeres are characteristic of this species and represent a definite variation from the usual form.

LITERATURE CITED

- Carriker, M. A., Jr. 1956. Report on a collection of Mallophaga, largely Mexican (Part II). *Florida Entomol.* 39(1): 19-43.
- Cummings, Bruce F. 1916. Studies on the Anoplura and Mallophaga, being a report upon a collection from the mammals and birds in the Society's gardens. *Proc. Zool. Soc. London.* 1916: 643-693.

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