NEW SPECIES AND RECORDS OF MALLOPHAGA
(TRICHODECTIDAE) FROM NIGERIAN MAMMALS

K. C. Emerson¹ and Roger D. Price²

ABSTRACT—Two new species, Procaviola (Meganariomidae) muuschecki
and Dungongra (Dungongra) smallwoodae, are described and illustrated from
Dendrohyrax dorudus collected in Nigeria. Records are given for four additional
species taken from the Water Mangose and Zorilla.

In 1966 and 1967, J. C. Geist, H. J. Herbert, and Henry W. Setzer,
Division of Mammals, U. S. National Museum, Smithsonian Institution,
collected mammals in Nigeria. Unfortunately, they did not collect
many Mallophaga, but the few that they obtained represent two species
new to science and four which are rare.

A Water Mongoose, Atilax paludinosus (G. Cuvier, 1829), was
collected at Oban, Eastern Region on March 16, 1966 (HJH-2127);
this individual had three species of Mallophaga: Felicola minimus
Werneck, 1948, Felicola pygidialis Werneck, 1948, and Suricatoecus
paralaticeps Werneck, 1948. Felicola acutirostris (Stobbe, 1913),
Felicola rahsi Emerson and Stojanovich, 1960, Felicola macrurus
Werneck, 1948, and Suricatoecus laticeps (Werneck, 1942) have pre-

¹ 2704 North Kensington Street, Arlington, Virginia 22207.
² Department of Entomology, Fisheries, and Wildlife, University of Minnesota,
St. Paul, Minnesota 55101.
viously been reported from this host; however, they were not taken on this occasion. All previous records are from Uganda and the Congo.

Three specimens of the Zorilla, *Paracricotopus libya* (Hempich and Ehrenberg, 1832) were collected at Sokoto, Northern Region on May 10, 1966 (HJH-2399), Panisan on January 29, 1967 (JCC-1567), and Panisan on February 2, 1967 (JCC-1641). *Rhodocricotopus zorilla* Stobbe, 1913 was collected off these three animals. Previous records are from Tunisia and Egypt.

*Procavicaola* (*Meganarionoides*) *nunesbecki*, n. sp.

(Figs. 1–3)

Male.—Head large, typical of subgenus, with numerous short setae on dorsal surface, and few on anterior portion of ventral surface. Posterior margin of head with only short setae. Basal antennal segment enlarged and elongate, with few short and medium setae. Prothorax short and narrow, with 6 short setae. Pterothorax expanded posteriorly, with row of short setae on posterior margin. Central tergal plates on abdominal segments II–VIII short, wide, and entire, with small additional plate on segment VII. Centra sternal plates on abdominal segments II–VI short, wide, and entire. One row of short setae on posterior margin of each abdominal tergal and sternum. Terminal abdominal segments pointed and elongate. Shape of abdominal segments and details of chaetotaxy as shown in fig. 3. Male genitalia extremely long, as in fig. 2, occupying almost length of abdomen; parameres simple and fused distally. Genital sac long, armed with small spines. Total length, 1.62 mm.

Female.—Head, except for filiform antennae, thorax, and chaetotaxy of abdomen, except for terminal segments, similar to those of male. Shape of abdominal sternal and tergal plates as shown in fig. 1. Total length, 1.08 mm.

Type host.—*Dendrolyraeus dorsalis* (Fraser, 1854).

Type material.—Holotype male, allotype female, and 100 paratypes collected at Benin City, Midwestern Region, Nigeria on January 1, 1966 (HJH-1717); 26 paratypes collected at Sapoba, Midwestern Region, Nigeria on January 6, 1966 (HJH-1744). Holotype deposited in U. S. Nat. Mus.

Discussion.—The chaetotaxy and shape of the abdominal sternum and tergal plates, and the structure of the male genitalia are distinctive. The male is closest to those of *P. (M.) angolensis* Bedford, 1956, *P. (M.) jordani* Bedford, 1956, and *P. (M.) scutifer* Wernick, 1941, all of which are illustrated and discussed by Wernick (1941). It can be distinguished from these species by the long, large genitalia which have simple fused parameres and a sac without large spines. The female is closest to that of *P. (M.) angolensis*, but differs from it by having a row of short setae on the posterior margin of the genital plate. This species is named for the noted entomologist C. F. W. Nunebeck, in appreciation of his assistance rendered the authors during the past twenty years.

*Dasonyx* (*Dasonyx*) *smallswoodae*, n. sp.

(Figs. 4–7)

Male.—Head short and wide, typical of subgenus, with numerous short and medium setae on dorsal surface, and few medium setae on anterior portion of ventral surface. Posterior margin of head with only few short setae. Basal antennal segment enlarged and elongate, with numerous short and medium setae. Prothorax short and narrow, with about 8 short setae. Pterothorax short, with row of short setae on posterior margin. Abdominal segments II–III each with 1 central tergal plate; segments IV–VIII each with 2 central plates. One row of short setae on posterior margin of segments II–VIII. Abdominal segments II–VI each with 1 central sternal plate and row of short setae on posterior margin. Shape of abdominal segments and details of chaetotaxy as shown in fig. 4. Genitalia as shown in fig. 5; parameres short, wide, and curved inwardly distally.

Figs. 1–3. *Procavicaola nunesbecki*, n. sp.: 1, dorsal-ventral view of female; 2, male genitalia; 3, dorsal-ventral view of male.

Discussion.—This species is closest to D. (D.) hopkinsi Wernery, 1941. For D. (D.) hopkinsi, the male has only one central tergal plate on abdominal segment IV; the parameres are narrow and pointed outward distally; and the pseudopenis is short. The female genital plate and the uterus sac of D. (D.) smallwoodae are of different shape than those structures for D. (D.) hopkinsi. This species is named for Mrs. Penelope Smallwood, in recognition of her years of outstanding service as slide preparator for Mr. Meusebeck and the authors.

Reference