PARC NATIONAL DE L'UPEMBA
I. MISSION G. F. DE WITTE
en collaboration avec
W. ADAM, A. JANSSENS, L. VAN MEEL
et R. VERHEYEN (1946-1949).
Fascicule 49 (4)

NATIONAAL UPEMBA PARK
I. ZENDING G. F. DE WITTE
met medewerking van
W. ADAM, A. JANSSENS, L. VAN MEEL
en R. VERHEYEN (1946-1949).
Aflevering 49 (4)

PYGOSTENINAE
(COLEOPTERA POLYPHAGA)
Fam. STAPHYLINIDAE

BY

DAVID H. KISTNER (University of Chicago)

This paper is based on a collection of *Pygosteninae* made in the Upemba National Park by the G. F. DE WITTE Mission, 1946-1949, to which have been added some specimens from the « Musée Royal du Congo Belge », Tervuren, and the « Institut royal des Sciences naturelles de Belgique », Brussels. In the following pages, all new species from within the park boundaries will be described and illustrated. In addition, some species not found within the park, but whose morphological affinities approximate species therein will also be described, the names of which will be enclosed in brackets. Species collected within the park but known primarily from other localities will be merely cited.

Descriptions of genera and higher categories in addition to keys for the identification of all species will be given in a monograph which is in preparation at this time. The genus *Typhloponemys* REY is used as defined previously in my Albert National Park paper.

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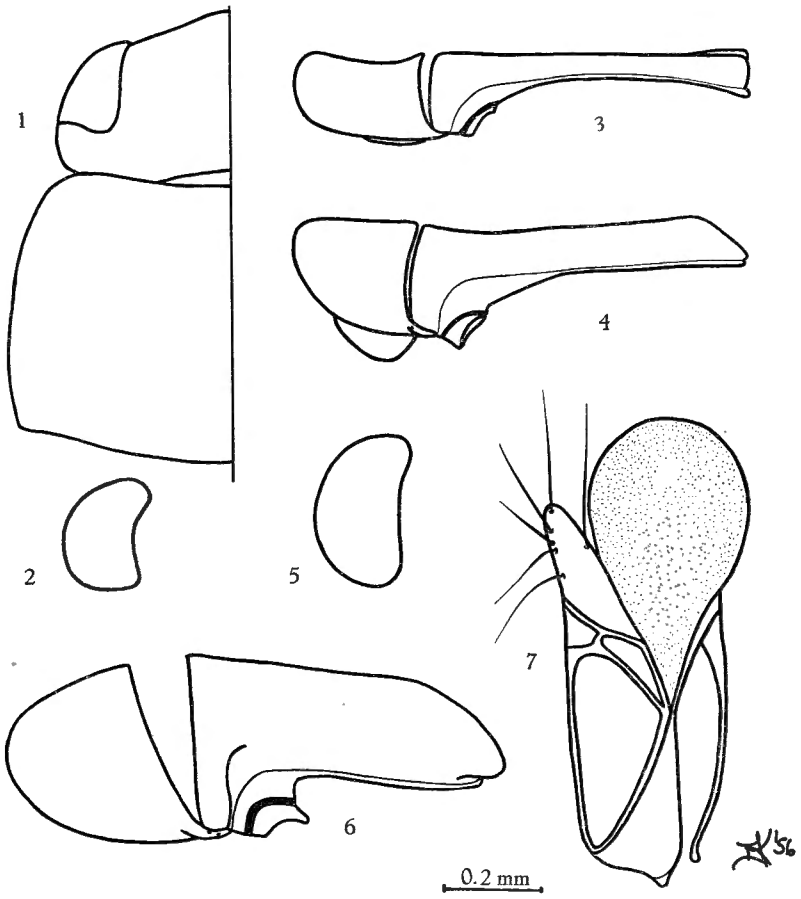
1. — [**Typhloponemys gabonensis** FAUVEL].

(Figs. 1, 2, 3, 7.)

Pygostenus gabonensis FAUVEL, Rev. d'Ent., 18, 1899, p. 19.

Head and pronotum shaped as in figure 1. Eye, viewed from the side, shaped as in figure 2. Color reddish brown throughout, head and antennae much darker than the rest of the body. Dorsal surface of the head, pronotum, and elytra smooth and shiny, very finely and evenly punctate.



FIGS. 1-7.

1 : Head and pronotum, *Typhloponemys gabonensis* FAUVEL; 2 : Eye, lateral, *T. gabonensis* FAUVEL; 3 : Median lobe of the male genitalia, *T. gabonensis* FAUVEL; 4 : Median lobe of the male genitalia, *T. hirsuto-pudenda* n. sp:; 5 : Eye, lateral, *T. afer* n. sp.; 6 : Median lobe of the male genitalia, *T. zodium* n. sp.; 7 : Lateral lobe of the male genitalia, *T. gabonensis* FAUVEL.

Macrochaetotaxy of abdominal tergites II-VIII : 0, 0, 0, 0, 4, 4, 0. Macrochaetotaxy of abdominal segment IX as follows : dorso-lateral plates, 7, most anterior chaeta smaller, thinner, and lighter in color than the more posterior ones; median dorso-lateral part, 5; ventro-lateral part, 4; median lobe, 7. Lateral lobe of the male genitalia with 6-7 long black chaetae on the apical portion, shaped as in figure 7 (shaded area membranous). Median lobe of the male genitalia with a narrow median ventral anterior carina, shaped as in figure 3. Female unknown.

Measurements. — Pronotum length, 0,60 mm; elytra length, 0,52 mm; eye length, 0,24 mm; gula width, 0,15 mm; interocular distance, 0,46 mm; head length, 0,34 mm. Number measured, 1.

This species can be distinguished from all other species by the shape of the median lobe of the male genitalia.

Material examined. — 1 ♀ : No. 1146 : Holotype, *P. gabonensis* Fauvel, det. A. Fauvel, French Equatorial Africa : Gabon : Lambaréné (I.R.S.N.B.).

2. — **Typhloponemys hirsutopudenda** n. sp.

(Figs. 4, 10.)

Head shape, pronotum shape, eye shape, shape and chaetotaxy of the lateral lobe of the male genitalia as in *T. gabonensis* Fauvel (figs. 1, 2 and 7). Color reddish brown throughout, head and antennae much darker than the rest of the body. Dorsal surface of the head, pronotum, and elytra smooth and shiny; finely and evenly punctate. Macrochaetotaxy of abdominal tergites II-VIII : 0, 0, 0, 0, 4, 4, 0. Macrochaetotaxy of abdominal segment IX as follows : dorso-lateral plates, 6, most anterior chaeta smaller, thinner, and lighter in color than the more posterior ones; median dorso-lateral part, 6; ventro-lateral part, 4; median lobe, 7. Spermatheca shaped as in figure 10. Median lobe of the male genitalia with a wide median ventral anterior carina, shaped as in figure 4.

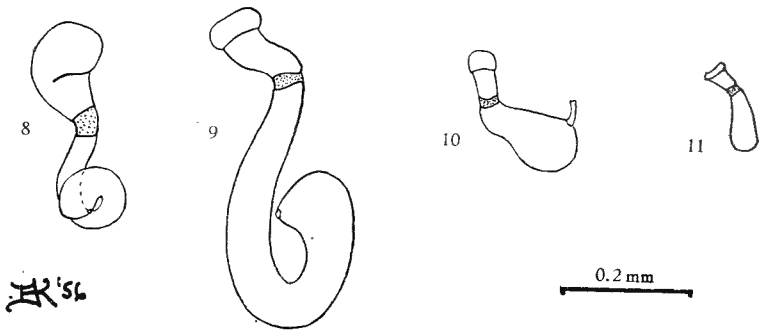
Measurements. — Pronotum length, 0,64-0,80 mm; elytra length, 0,60-0,64 mm; eye length, 0,26-0,33 mm; gula width, 0,13-0,15 mm; interocular distance, 0,52-0,54 mm; head length, 0,34-0,40 mm. Number measured, 6.

This species is distinguished from all other species by the shape of the spermatheca and the median lobe of the male genitalia.

Holotype ♂ : No. 1622 : Lusinga, 1.760 m, 28.III.1947. In the collection of the Institut des Parcs Nationaux du Congo Belge, Brussels.

Allotype ♀ : No. 2266 : [Kivu : Bitale, Bukaru, near Kalehe, 19.III.1950, G. Marlier]. In the collection of the Musée Royal du Congo Belge, Tervuren.

Paratypes : [1 ♂ : Kivu : Mutakato, near Masisi, 800 m, IX.1953, N. LELEUP, at light (M.R.C.B.)]; [1 ♀ : Kivu : Contr. S.E. du Kahuzi, near Kabare, 13.VIII.1951, N. LELEUP, collected from leaf mold in *Hagenia* forest (D.K.)]; [1 ♂ : Equator : Bokatola, 20.II.1932, R.P. HULSTAERT (M.R.C.B.)]; [1 ♂ : Equator : Flandria, 1931, R.P. HULSTAERT (M.R.C.B.)].



FIGS. 8-11. — Spermathecae.
8 : *Typhloponemys zodium* n. sp.; 9 : *T. afer* n. sp.; 10 : *T. hirsutopudenda* n. sp.; 11 : *T. raignieri* n. sp.

3. - - [**Typhloponemys raignieri** n. sp.]

(Fig. 11.)

Head shape, pronotum shape, and eye shape as in *T. gabonensis* FAUVEL (fig. 1 and 2). Color reddish brown throughout, head and antennae much darker than the rest of the body. Dorsal surface of the head, pronotum, and elytra smooth and shiny; very finely and evenly punctate. Macrochaetotaxy of abdominal tergites II-VIII : 0, 0, 0, 0, 4, 4, 0. Macrochaetotaxy of abdominal segment IX as follows : dorso-lateral plates, 6, most anterior chaeta smaller, thinner, and lighter in color than the more posterior ones; median dorso-lateral part, 5; ventro-lateral part, 4; median lobe, 7. Spermatheca shaped as in figure 11. Male unknown.

Measurements. — Pronotum length, 0,45-0,50 mm; elytra length, 0,36-0,44 mm; eye length, 0,20-0,21 mm; gula width, 0,11-0,12 mm; interocular distance, 0,36-0,40 mm; head length, 0,20-0,28 mm. Number measured, 3.

This species can be distinguished from all other species by the shape of the spermatheca.

Holotype ♀ : [No. 1783 : Belgian Congo : Kivu : Mutakato, near Masisi, 800 m, 1.IX.1953, N. LELEUP, at light]. In the collection of the Musée Royal du Congo Belge, Tervuren.

Paratypes : 2 ♀♀ : same data as the holotype (M.R.C.B., D.K.).

Remarks. — This species is named for R.P. A. RAIGNIER, Louvain, who has contributed much to the knowledge of the behaviour of the old world doryline ants with which the pygostenines are closely associated.

This species and the two preceeding fall into a single species group (*hirsutopudenda* group) which can be distinguished from all other species groups of *Typhloponemys* by the following characters in combination : shape and sculpture of the head and pronotum, the eye shape, the abdominal macrochaetotaxy, and the peculiar lateral lobe of the male genitalia.

4. — **Typhloponemys lujae** WASMANN.

Pygostenus lujae WASMANN, Zool. Jahrb., Suppl., 7, 1904, p. 648.

Material examined. — 1 ♀ : Lusinga, 1.760 m, 28.III.1947 (I.P.N.C.B.).

5. — **Typhloponemys afer** n. sp.

(Figs. 5, 9.)

Color blackish brown throughout; head darker, approaching black. Dorsal surface of the head, pronotum, and elytra smooth and shiny; finely and evenly punctate. Eye, viewed from the side, shaped as in figure 5. Macrochaetotaxy of abdominal tergites II-VIII : 2, 4, 4, 4, 4, 4, 0. Macrochaetotaxy of abdominal segment IX as follows : dorso-lateral plates, 8, most anterior chaeta smaller, thinner, and lighter in color than the more posterior ones; median dorso-lateral part, 6; ventro-lateral part, 4; median lobe, 7. Spermatheca shaped as in figure 9. Male unknown.

Measurements. — Pronotum length, 1,02 mm; elytra length, 0,96 mm; eye length, 0,32 mm; gula width, 0,24 mm; interocular distance, 0,76 mm; head length, 0,44 mm. Number measured, 1.

Distinguished from all other species, including *T. lujae* (WASMANN) to which it is most closely related, by the shape of the spermatheca.

Holotype ♀ : No. 1644 : Lusinga, 1.760 m, 22.IV.1949. In the collection of the Institut des Parcs Nationaux du Congo Belge, Brussels.

6. — **Typhloponemys schoutedeni** BERNHAUER.

Pygostenus schoutedeni BERNHAUER, Rev. Zool. Afr., 15, 1927, p. 236.

Material examined. — 1 ♂, 1 ♀ : Lusinga, 1.760 m, 7.V.1949 (I.P.N.C.B.).

7. — **Typhloponemys zodium** n. sp.

(Figs. 6, 8.)

Dorsal surface of the head, pronotum, and elytra very dark reddish brown; head approaching black. Abdomen and venter reddish brown,

appendages with a golden sheen caused by the abundant yellow setae thereon. Dorsal surface of the head, pronotum, and elytra smooth and glistening, with extremely fine punctures scattered evenly over them. Macrochaetotaxy of abdominal tergites II-VIII : 2, 4, 4, 4, 4, 4, 0. Macrochaetotaxy of abdominal segment IX as follows : dorso-lateral plates, 7, most anterior chaeta smaller, thinner, and lighter in color than the more posterior ones; median dorso-lateral part, 7; ventro-lateral part, 4; median lobe, 7. Spermatheca shaped as in figure 8. Median lobe of the male genitalia shaped as in figure 6.

Measurements. — Pronotum length, 0,84-0,90 mm; elytra length, 0,62-0,68 mm; eye length, 0,27-0,28 mm; gula width, 0,20-0,24 mm; interocular distance, 0,64-0,68 mm; head length, 0,40-0,42 mm. Number measured, 2.

Distinguished from *T. kapangae* (BERNHAUER) by its extremely dark color, the shape of the spermatheca, and the shape of the median lobe of the male genitalia. Distinguished from all other species by the latter two characters.

Holotype ♀ : No. 1641 : Kankunda, 1.300 m, 16-19.IX.1947. In the collection of the Institut des Parcs Nationaux du Congo Belge, Brussels.

Paratype : 1 ♂ : same data as holotype (D K.).

8. — **Typhloponemys rufotestaceus** BERNHAUER.

Pygostenus rufotestaceus BERNHAUER, Rev. Zool. Afr., 15, 1927, p. 237.

Material examined. — 19 (including 5 ♂♂, 2 ♀♀) : Lusinga, 1.760 m, 27-28.III.1947 (I.P.N.C.B., D.K.); 24 (3 ♂♂, 6 ♀♀) : same locality and altitude, 19.III.1947 (I.P.N.C.B., D.K.); 1 ♂ : same locality and altitude, 7.IV.1947 (I.P.N.C.B.); 16 (2 ♂♂, 3 ♀♀) : same locality and altitude, 28.III.1947 (I.P.N.C.B., D.K.); 1 ♀ : [riv. Kenia, 1.700 m, 28.III.1947] (I.P.N.C.B.).

9. — **Doryloxenus kohli** WASMANN.

Doryloxenus kohli WASMANN, Zool. Jahrb., Suppl., 7, 1904, p. 654.

Material examined. — 1 : Kaswabilenga, bank of the Lufira River, 600 m, 5-9.I.1949, from the stomach of *Phrynobatrachus* sp. B, No. 2106-7 (I.P.N.C.B.).

10. — **Mimocete torpilla** FAUVEL.

Mimocete torpilla FAUVEL, Rev. d'Ent., 18, 1899, p. 8.

Material examined. — 1 : [riv. Kenia, 1.700 m, 28.III.1947] (I.P.N.C.B.).

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