Notes on hypopi of the family *Acaridae* from Central Africa

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We describe here two new genera and four new species of hypopi in the family Acaridae found in Central Africa.

The holotypes of these new species are deposited in the Musée Royal de l’Afrique Centrale, Tervuren, Belgium.

Genus *DYNASTOPUS* gen. nov.

*Definition*: This genus is known only after the hypopus. With the characters of the Rhizoglyphinae. Anterior border of body membranous and short covering the base of legs and the palposoma. In the midline this border is pointed forming a short rounded cone bearing the *vi* setae. This genus differs from the other genera known in this subfamily mainly by the structure of the posterior coxae III and IV which are fused and form one large punctate area without epimera but bearing the *g a* and the *cx III* setae. The setae *cx I*, *cx III* and *gp* are conoids. Palposoma more or less trapezoidal and relatively short, it is entirely covered by the tegmen and its base is articulated with a small chitinous plate. Suctorial plate with lateral conoids slightly in front of posterior suckers. Sternum as long as the epimera II and arriving close to the furrow separating posterior coxal field from the anterior fields. Legs with all segments relatively short. Tarsi I-II with 8 setae, among them 4 are foliate, 1 saucerlike, 2 are simple
and thin and 1 is a spine. Tarsi III with 5 foliate and 2 simple setae; tarsi IV with 5 foliate and 3 simple setae. Tibiae I-II with posterior seta forming a strong spine.

*Type species:* *Dynastopus camerikae* sp. n.

*Hosts:* On dynastid beetles (Scarabaeidae).

1. **Dynastopus camerikae** spec. nov.

This species is named for R.Sr. A.M. Camerik, O.S.U. who collected the mite which is studied here.

*Hypopus* (fig. 1-5): Length 345 μ, width 234 μ. *Dorsum:* Sejugal furrow very anterior. Hysteronotum with a few number of small setae.
pits located mostly laterally and rare or absent in the median region or in the opisthontum. Setae \( v_{i} \) shortly barbed, 30 \( \mu \) long. The \( v_{e} \) are very small. The \( s_{i} \) are 66 \( \mu \), the \( s_{e} \) 50 \( \mu \). They also carry very short barbs. Other dorsal setae thin and short. Venter: posterior coxal III field (coxae III and IV fused) 87 \( \mu \) long in midline and 105 \( \mu \) wide (maximum width) (ratio length : width = 1 : 1.2). Lateral borders of body flat and finely striate longitudinally. Palposoma 33 \( \mu \) long and 21 \( \mu \) wide (maximum). Tarsi I-IV 28 \( \mu \) - 29 \( \mu \) - 21 \( \mu \) and 24 \( \mu \) long respectively, all ending in a long slightly curved claw.

Host and locality

On a beetle (Coleoptera) of the subfamily Dynastinae, from Monrovia airport, Liberia, 17.XII.1974 (specimen no. 8) (Holotype, MRAC 149.455, and 4 paratypes, all hypopi).

2. Dynastopus augosomae spec. nov.

This species differs from \( D. \) camerikae by the presence of long barbed setae on the dorsal surface.

Hypopus (fig. 6-7): Holotype 350 \( \mu \) long and 260 \( \mu \) wide. There is a great variability in the size of the body. The smallest specimen measures 245 \( \mu \) x 185 \( \mu \), the largest 370 \( \mu \) x 290 \( \mu \). Between these extreme measurements we find all the intermediates in body size. Dorsum: propodosomal and hysteronotal setae much longer than in \( D. \) camerikae. The \( s_{i} \) are 120 \( \mu \) long. Venter as in \( D. \) camerikae but the posterior coxal shield is shorter and wider, and measures 76 \( \mu \) long (in midline) and 125 \( \mu \) wide (ratio length : width = 1 : 1.6). Palposoma 33 \( \mu \) long and 24 \( \mu \) wide. Tarsi I-IV 27 \( \mu \) - 27 \( \mu \) - 25 \( \mu \) and 27 \( \mu \) long. Leg chaetotaxy: as in \( D. \) camerikae but the saucer-like setae of tarsi I-II are longer.

Host and locality

1) On Augosoma (Archon) centaurus (♂) (Col. Dynastinae), at University Lovanium II Kinshasa (Coll. P. Elsen) 1968. All the hypopi were attached under the elytrae of the beetle (Holotype MRAC no. 149.457 and 20 hypopi paratypes).

2) One hypopus unseparable from \( D. \) augosomae has been found on old bread (no. 9) in Lima, Peru (24.11.1973) (Coll. I. Caceres).
3) One paratype hypopus from the litter of a domestic goose in Butare, Rwanda, 23.III.1968 (Coll. A. Fain).

3. *Dynastopus tshuapensis* spec. novo

This species has the same type of dorsal chaetotaxy as *D. camerikae*. It differs from it by the shape of the body more narrow, the shape of the palposoma relatively shorter, the shape of the posterior coxal shield which is approximately as long as wide, the greater length of the saucer-like setae of tarsi I and II.

*Hypopus* (fig. 8): Length 285 µ, width 186 µ wide. *Dorsum*: setae *sc i* and *sc e* with short barbs, 45 µ and 40 µ long respectively. Other dorsal setae very short. *Dorsal pits* as in *D. camerikae*. *Venter*: coxal...
shield III-IV 75 $\mu$ long and 87 $\mu$ wide (ratio length-width = 1:1.16). Conoids of coxa I much smaller than conoids of coxae III. Palposoma 27 $\mu$ long and 21 $\mu$ wide near the base. Legs: tarsi I-IV 25 $\mu$, 24 $\mu$, 18 $\mu$ and 21 $\mu$ long respectively.

Host and locality

On Oryctes sp. (Col. Scarabaeidae), from Etata, on the river Tshuapa, Province de l'Equateur, Zaïre, 22.VII.1971 (Coll. A. Fain) (Holotype hypopus, MRAC no. 149.454).

Genus OMENTOPUS gen. nov.

Definition: This genus is known only from the hypopial stage. It resembles Dynastopus by the aspect of the coxal field III+IV, however it is distinguished from this genus by the following characters: anterior part of body flat, forming a chitinous rounded membranous tegmen extending anteriorly far beyond the palposoma and covering the basal half of the anterior legs and the base of the v5 setae. The anterior legs and the palposoma are longer and thinner than in Dynastopus. Epimera and coxae, as in Dynastopus, except that there are very short and poorly distinct epimera IV. Palposoma articulated basally as in Dynastopus. The spines of legs I-II are thinner and longer than in this genus.

This new genus is distinguished from Garsaultia Oudemans (1916) by the vestigial aspect of epimera IV; the much greater development of the suctorial plate with a different situation of the lateral conoids on the same line as the posterior suckers, and the larger size of these conoids.

Type species: Omentopus avicolus sp. n.

Omentopus avicolus spec. nov.

Hypopus (fig. 9-10): Length 330 $\mu$, width 233 $\mu$. Dorsum: Propodosoma and hysterosoma 75 $\mu$ and 255 $\mu$ long respectively. The sci and sce are 33-38 $\mu$ long; other dorsal setae thinner and shorter (maximum 30 $\mu$ long). Venter: membranous tegmen reaching the base of tibia I. The large posterior coxal field (coxae III+IV) is 66 $\mu$ long in the midline and has a maximum width of 110 $\mu$. Palposoma 31 $\mu$. 
long, 14 μ wide (maximum); it is articulated basally with a small chitinous plate. Tarsi I-IV 39 μ, 33 μ, 22 μ and 28 μ long respectively. Chaetotaxy of legs as in *Dynastopus* but the tibial spines are thinner than in that genus.

![Diagram](image)

**Fig. 9-10.** — *Omentopus avicolus* sp. n. Holotype hypopus, dorsum (fig. 9) and venter (fig. 10).

**Host and locality**

1) A single hypopus (holotype) has been found on a bird *Quelea suelea*, from Waza, Cameroun, 25.VII.1971 (Coll. F. Puylaert), Holotype MRAC 146.739.

2) In the nest of *Spernests cucullatus*, Butare, Rwanda, 3.IV.1970 (1 hypopus, paratype).

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REFERENCE