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Myianoetus copromyzae sp. nov. (Acari, Astigmata, Anoetidae) phoretic on Copromyza atra (Meigen 1830) in Scotland

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Introduction

We describe here a new species of *Myianoetus*, *M. copromyzae* (Acari, Anoetidae) from the hypopial stage. The hypopi were attached to the body of an acalypterate fly, *Copromyza atra* (Meigen 1830) (Diptera, Sphaeroceridae), found associated with Orkney voles on the Mainland, Orkney Island, Scotland.

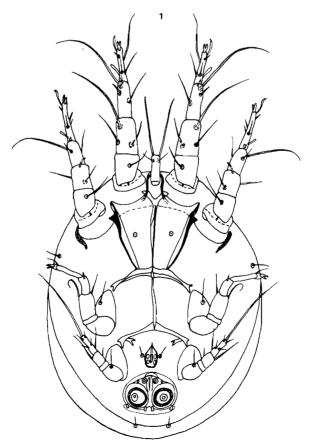
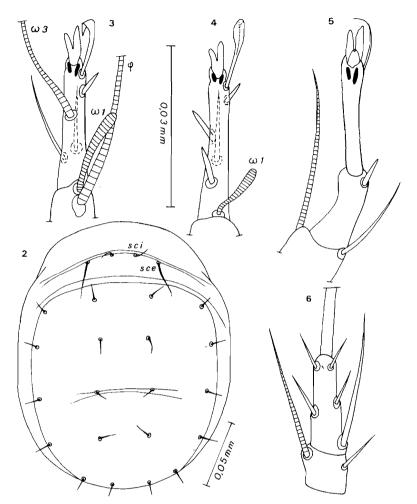


Fig. 1. Myianoetus copromyzae sp. nov. Hypopus, ventral view.



Figs. 2-6. Myianoetus copromyzae sp. nov. Hypopus-(2); Dorsal view; (3-6); tarsi and apices of tibiae I (3), II (4), III (5) and IV (6).

Myianoetus copromyzae sp. nov

Hypopus (figs. 1–6): Holotype 190 μ m long and 165 μ m wide. In 3 paratypes these measurements are 204 μ m × 160 μ m; 201 μ m × 165 μ m and 180 μ m × 156 μ m.

Dorsum: Cuticle finely punctate, without lines or pits. Lengths of setae: $sc~i~9~\mu m$, $sc~e~24~\mu m$. Other dorsal setae 9–12 μm long.

Venter: There is a long sternum fused posteriorly to a transverse, very poorly sclerotized sclerite which is also fused to the second epimera. Genital slit oval. Suctorial plate with a pair of very small anterior suckers and a pair of large slightly oval posterior suckers ($18 \times 15 \,\mu\text{m}$). Behind the posterior suckers there are 4 narrow conoids arranged in a transverse line. Palposoma 19 μ m long bearing 2 apical solenidia 45 μ m long and 2 shorter preapical dorsal setae. Legs: Tarsi I–IV 24 μ m, 27 μ m, 33 μ m and 17 μ m long, respectively. Solenidion ω 3 of tarsus I 40 μ m long, situated in apical half close to the mid line of tarsus. The solenidion ω 1 is situated dorsally on apex of tibia I; it is inflated in its apical half. Solenidion ω 1 of tarsus II

thick, but with a very thin and curved base. Tarsi I and II end in a short seta, leaflike apically.

Systematic position of Myianoetus copromyzae sp. nov. The species described here presents some characters which are shared by Myianoetus mystacis Mahunka (1972), phoretic on a fly of the genus Fannia. These characters are: (1) The presence on tarsus I of a short apical hair, leaflike in its apical half ('hafthaare' of Mahunka 1972); (2) Presence behind the posterior pairs of opisthogastric suckers of 2 pairs of small conoids; (3) Shortness of the seta of genu I which is less than the length of genu and femur together; (4) Great length of the setae sce compared to sci.

The new species is distinguished from M. mystacis by the following characters: (1) The solenidion $\omega 3$ (of tarsus I) is closer to the middle of the tarsus and is very long (40 μ m), more than 1.6 times longer than the tarsus (24 μ m). In M. mystacis $\omega 3$ is only slightly longer than the tarsus; (2) The solenidia $\omega 1$ of tibiae I and II are distinctly enlarged apically and $\omega 1$ of tarsus II is abruptly bent at the base; (3) The internal seta of tibia II is distinctly longer (23 μ m); (4) Setae sce are 2.6 times longer (24 μ m) than sci (9 μ m). In M. mystacis sce are 4 times longer than sci.

HOST AND LOCALITY: On an acalypterate fly Copromyza atra (Meigen 1830) (Diptera: Sphaeroceridae). The fly was collected by one of us (D.P.B.) while trapping Orkney voles (Microtus arvalis orcadensis Millais) at Hill of Dale, Mainland, Orkney Island, Scotland, (G.R. HY 32 06) in August 1978. Only one of three flies taken carried hypopi. Holotype and 15 paratypes, all hypopi. The holotype is deposited in the British Museum (Natural History).

Reference

Mahunka, S., 1972, Untersuchungen über taxonomische und systematische Probleme bei der Gattung Myianoetus Oudemans, 1913 und der Unterfamilie Myianoetinae (Acari, Anoetoidea), Annales Historico-Naturales Musei Nationalis Hungarici, 64, 359-372.