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Trichopsyllopus oregonensis g.n., sp. n. (Acari, Acaridae), a new hypopus phoretic on a flea *Trichopsylloides oregonensis*, parasitic on the rodent *Aplodontia rufa* in the United States

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***Trichopsyllopus oregonensis* g.n., sp. n. (Acari, Acaridae), a new hypopus phoretic on a flea *Trichopsylloides oregonensis*, parasitic on the rodent *Aplodontia rufa* in the United States**

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Trichopsyllopus oregonensis g.n., sp. n. (Acari, Acaridae), a new hypopus phoretic on a flea *Trichopsylloides oregonensis*, parasitic on the primitive rodent *Aplodontia rufa* from the United States is described.

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On trouvera ici la description d'un nouveau genre et d'une nouvelle espèce, *Trichopsyllopus oregonensis* g. n., sp. n., (Acari, Acaridae), hypopus en association phorétique avec la puce *Trichopsylloides oregonensis*, elle-même parasite du rongeur primitif *Aplodontia rufa* des États-Unis.

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Introduction

Many species of acaridid mites possess a phoretic nymphal instar known as a hypopus. The hypopus employs a ventral sucker plate to attach itself to an invertebrate host for dispersal. A new genus and species based on hypopodes found on a flea from *Aplodontia rufa* are described.

Genus *Trichopsyllopus* gen. nov.

DESCRIPTION: This genus is known only from the hypopus. Body ovoid and the dorsum bears short setae. The setae *vi*, *ve*, and *scx* present. Venter: epimeres I fused in a long sternum; other epimeres free, coxal fields I–IV open. Palposoma short, ending in two small articles bearing the solenidia alpha. Suctorial plate well developed with posterior suckers slightly larger than anterior suckers; lateral conoids situated at the same level as posterior suckers. Setae *cx* I, *cx* III, and *gp* modified into conoids. Legs well developed, all ending in a nonpedunculate, well-formed claw. Chaetotaxy of legs: tarsi I and II with five foliate setae, one saucerlike preapical seta, and three thin setae; tarsi III with seven foliate and one simple setae; tarsi IV with four foliate and five simple setae, of which one is very short and three are long. This very short seta was not observed in all of the specimens. Tibiae (I–IV) with 2-2-1-1 setae.

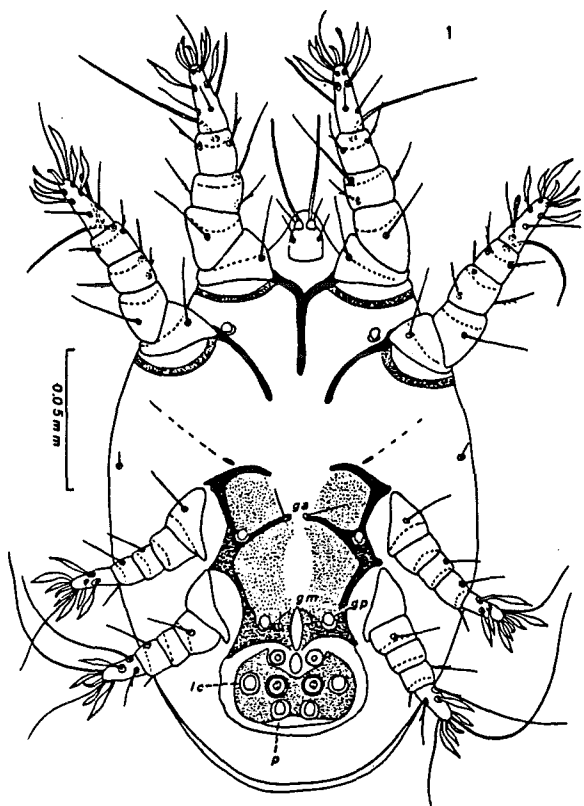
Solenidia: tarsi I with one basal and three situated in the middle of the tarsus. Genu I with one solenidion. Tibiae I–IV with 1-1-1-1 solenidia. Type species: *Trichopsyllopus oregonensis* sp. n.

Trichopsyllopus oregonensis n. sp.

HYPOPUS (FIGS. 1–6): Holotype 214 μ m long and 141 μ m wide. Three paratypes measuring 205 \times 130, 218 \times 135, and 230 \times 150 μ m. Dorsum: cuticle is poorly sclerotized. Dorsal setae short (less than 15 μ m), comprising *vi*, *ve*, *sc i*, *sc e*, *scx*, *d 1* to *d 5*, *l 1* to *l 5*, and *h*. Oil gland situated slightly behind *l 2*. Venter: epimeres and suctorial plate as described for genus. Coxae III–IV with poorly sclerotized plates. Setae *sh* are short; setae *cx* I, *cx* III, and *gp* are conoids. Palposoma ventral, slightly longer (15 μ m) than wide (12 μ m). Legs well developed and rather thick. Tarsi I–IV 27, 25, 17, and 15 μ m long respectively; tarsal claws 9 μ m long. Chaetotaxy of legs as given for genus. Solenidiotaxy: tarsus I with $\omega 1$ basal, slightly inflated apically and 16 μ m long; $\omega 3$ 20 μ m long, situated in the middle of tarsus. Genu I with a relatively very long (30 μ m) solenidion.

HOST AND LOCALITY: Holotype and seven paratypes from 6 mi (1 mi = 1.609 km) west of Corvallis, Oregon, U.S.A., August 1981; all hypopodes are from the flea *Trichopsylloides oregonensis* Ewing, 1938 (Hystri-chopsyllidae, Rhadinopsyllinae) which is restricted to living on *Aplodontia rufa*. The mites were attached

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under the abdominal tergites of the flea. Holotype in United States National Museum of Natural History, Washington, DC.

REMARKS: Phoretic associations between deutonymphs of astigmatic mites and fleas have been documented for several different genera of mites and fleas. Until now, 13 species, all specific for this habitat, have been described. They belong to six genera and three families (Acaridae, Saprogllyphidae, and Anoeidae) (Fain and Beaucournu 1972, 1973, 1976).

The new genus *Trichopsyllopus* resembles most closely *Schulzea* Zachvatkin, but differs from *Schulzea* in the shape of coxal fields II–IV, which are open (closed in *Schulzea*), and the different chaetotaxy of tarsi I–IV which bear more foliate setae. Also, this genus is close to *Paraceroglyphus* Fain and Beaucournu but differs from *Paraceroglyphus* by the reduction of epimeres III and IV and the chaetotaxy of the tarsi.

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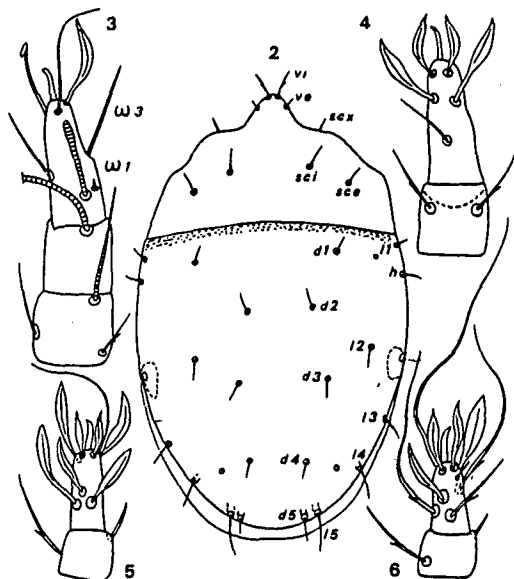


FIG. 1. *Trichopsyllopus oregonensis* sp. n., hypopus in ventral view. FIG. 2. Hypopus in dorsal view. FIG. 3. Leg I in dorsal view. FIG. 4. Tarsus and tibia I in ventral view. FIG. 5. Tarsus and tibia III. FIG. 6. Tarsus and tibia IV.

