

DERMACARUS JONESI SP. N. (ACARI : LABIDOPHORINAE : GLYCYPHAGIDAE) FROM PEROMYSCUS MANICULATUS FROM WESTERN NORTH AMERICA

Alex Fain* and John O. Whitaker, Jr.†

ABSTRACT: A new species of labidophorine hypopus, *Dermacarus jonesi*, is described from *Peromyscus maniculatus* from Washington, USA, and British Columbia, Canada. A single individual was also found on *Sorex* sp. from California.

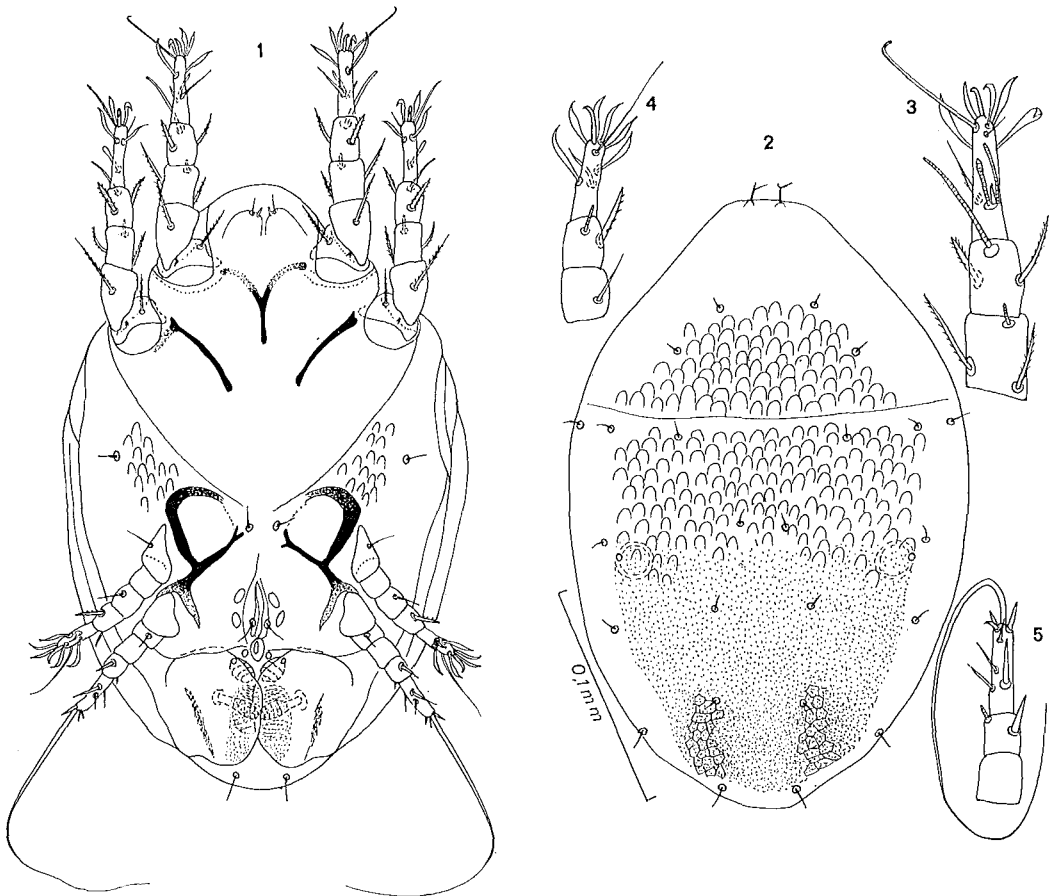
Hypopi of eight North American species of the labidophorine mite genus *Dermacarus* (Glycyphagidae) were previously known, these

from a variety of hosts (Fain and Whitaker, 1973). Two of the species, *Dermacarus hypudaei* (Koch) and *D. newyorkensis* Fain, have been reported from *Peromyscus maniculatus* (Wagner). *Dermacarus hypudaei* (now *Glycyphagus hypudaei*) has also been taken from *Peromyscus leucopus* (Rafinesque) (see Whitaker and Wilson, 1974). *Dermacarus*

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* Institut de Médecine Tropicale, Prince Leopold, Antwerpen, Belgium.

† Department of Life Sciences, Indiana State University, Terre Haute, Ind. 47809.



FIGURES 1-5. *Dermacarus jonesi* sp. n. 1. Hypopus in ventral view. 2. Hypopus in dorsal view. 3. Legs I. 4. Legs III. 5. Legs IV.

hypudaei regularly exists on *Peromyscus maniculatus*, *P. leucopus*, and other species of rodents, while *D. newyorkensis* is abundant on zappedids, but is seldom found on other hosts. In this paper, we describe a new species of *Dermacarus* collected by Gwilym S. and Diana B. Jones from *Peromyscus maniculatus* from Washington and British Columbia. A single specimen was also found on *Sorex* sp. from California.

Family Glycyphagidae Berlese, 1887

Genus *Dermacarus* Haller, 1880

***Dermacarus jonesi* sp. n.**

(Figs. 1-5)

This new species is close to *D. caucasicus* Fain 1969, which was described from *Sicista subtilis* in Eurasia. It is distinguished from that species by the following characters (measurements are in micrometers unless otherwise indicated): (1) the setae of tibia III to IV are spines and the spine of tibia III is barbed; (2) epimera I are poorly sclerotized in their basal half; (3) epimera III are narrower; (4) w_1 and w_3 of tarsus I are a little more basal; (5) there are only 3 crests on the anterior claspings club-shaped hairs; (6) the body is smaller and the posterior extremity is broader.

Hypopus (Figs. 1-5): Holotype 295 long by 186 wide. In 4 paratypes, these measurements are: 290 by 168, 255 by 177, 255 by 165, 279 by 195. Dorsum: posterior two-thirds of hysterosoma punctate with a small network posteriorly. Remainder of dorsum not punctate but with numerous small rounded flat scales, as in *D. caucasicus*. Venter: epimera I fused into a rather long sternum. Epimera III strongly curved inside. Claspings organ: anterior club-shaped hair 9.5 long by 7.2 wide, with 3 transverse crests (exceptionally a 4th crest present at one side); posterior club-shaped hair 18 long by 6 wide, with 5 crests. Legs: tarsi I to IV, 28, 27, 18.5, and 21 long,

respectively. Chaetotaxy as in *D. caucasicus* except that tibial hairs of legs III to IV are spines. Solenidia w_1 and w_3 of tarsus I, 12 and 13 long, respectively.

Host and locality

The type host of this species is *Peromyscus maniculatus* (Wagner). All specimens were taken in 1973 by Gwilym S. and Diana B. Jones. We have named the species for Gwilym S. Jones. Hosts and localities are:

- 1) On *Peromyscus maniculatus* from Washington, Mason Co., Olympic National Forest: Lana Creek and Road 249, 30 June; GSJ 1672 (holotype and 7 paratypes). Same locality 1 July; GSJ 1679 (1 specimen), 1683 (1 paratype). Lana Campground 2 July; GSJ 1694 and 1695 (1 and 7 paratypes). On the same host from British Columbia, 1½ mile SW Hope, 6 July, GSJ 1721 (11 paratypes).
- 2) *Sorex* sp. California, Nevada Co., Junction Sagehen Creek and CAL. S.R. 89, 12 June; GSJ 1525 (1 specimen). Types in U. S. National Museum, Washington, No. 3710.

LITERATURE CITED

- FAIN, A. 1969. Les deutonymphes hypopiales vivant en association phoretique sur les mammifères (Acarina: Sarcoptiformes). *Bull Inst R Sci Nat Belg* **45**: 1-262.
- , AND J. O. WHITAKER, JR. 1973. Phoretic hypopi of North American mammals (Acarina: Sarcoptiformes, Glycyphagidae). *Acarologia* **15**: 144-170.
- WHITAKER, J. O., JR., AND N. WILSON. 1974. Host and distribution lists of mites (Acari), parasitic and phoretic, in the hair of wild mammals of North America, north of Mexico. *Am Midl Nat* **91**: 1-67.