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55	ENTOMOLOGIE	7

TATERACARUS QUADRISSETOSUS N. GEN., N. SP.  
(ACARI: TROMBICULIDAE, LEEUWENHOEKIINAE)  
FROM TATERA LEUCOGASTER (PETERS, 1852)  
(MAMM. RODENTIA) IN NAMIBIA, AFRICA (1)

BY

M. Lee GOFF (2)

(With 1 textfigure)

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ABSTRACT

*Tateracarus quadrisetosus*, n. gen. & n. sp. (Acari: Trombiculidae, Leeuwenhoekiinae), is described from specimens collected from a Naked-soled Gerbil, *Tatera leucogaster* (PETERS, 1852) (Mamm. Rodentia Cricetidae), taken in Namibia, Africa.

Examination of ectoparasites from small mammals collected in Namibia, Africa, by members of the Namaqualand-Namibia Expedition of the King Leopold III foundation for the Exploration and Protection of Nature (1980) has resulted in the recognition of a new, monotypic genus of chiggers in the subfamily Leeuwenhoekiinae from a series collected from a Naked-soled Gerbil, *Tatera leucogaster*. This genus exhibits a unique palpal tarsal setation for the subfamily in having only 4 branched setae on the palpal tarsus and 1 solenidion. The holotype is in the collection of the U. S. National Museum of Natural History/Smithsonian Institution (chiggers collection currently housed at B. P. Bishop Museum, Honolulu)

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(2) Department of Entomology, University of Hawaii at Monoa, 3050 Maile Way, Honolulu, Hawaii 96822, USA.

and paratypes there and in the Institut Royal des Sciences Naturelles de Belgique, Brussels, Katholiek Universiteit, Nijmegen, South African Institute for Medical Research, Johannesburg, and B. P. Bishop Museum, Honolulu. All measurements are given in micrometres. Terminology follows GOFF et al. (1982).

### Tateracarus GOFF, new genus

Type species. — *Tateracarus quadrisetosus* GOFF, new species.

Diagnosis. — Leeuwenhoekiinae larvae with palpal tarsus 4B; galeala B; cheliceral blade with dorsal subapical tooth and ventral tooth row; palpal claw 3-pronged; spiracles and tracheae absent; scutum with anteromedian nasus; sensillae flagelliform, nude; AM setae with an accessory branch; legs all 6-segmented; onychotriches absent; 2 genualae I, genuala II and III, microgenuala II; tibiala III; no mastisetae III; parasubterminala I absent.

### Tateracarus quadrisetosus GOFF, new species

(Fig. 1)

Description of species. — Larvae. *Idiosoma*. Measuring  $255 \times 220$  in partially engorged specimen. Eyes  $2/2$ , on ocular plate, anterior measuring 13 diam., posterior 11 diam. 2 pairs of humeral setae, measuring 35-40; 44 dorsal idiosomal setae, measuring 25-33; anterior rows shorter, arranged 10 (4 + 6)-8-10-8-6-2; 1 pair of sternal setae between coxae III, 28-30; 24-26 preanal setae, 19-23; 30 postanal setae, 24-26; total idiosomal setae 104-106. *Gnathosoma*. Palpal setal formula B/B/BfB/4B; palpal claw 3-pronged; galeala B; cheliceral blade (29-31) with dorsal subapical tooth and 5-6 ventral teeth; gnathobase lightly punctate, bearing a pair of branched setae. *Scutum*. Lightly punctate with shallowly biconcave anterior margin; posterior margin rounded; nasus present, measuring  $16 \times 11$ ; AM bases in line with AL bases; SB slightly anterior to level of PL bases; AM setae with an accessory branch;  $PL > AL > AM$ ;  $PW/SD = 1.47-1.62$ ; sensillae flagelliform, nude. Scutal measurements of holotype followed by means and ranges of type series given in parentheses: AW 50 (50, 47-52); PW 64 (66, 63-69); AA 9 (9, 9-10); SB 21 (21, 19-23); ASB 25 (26, 25-29); PSB 16 (16, 15-17); AP 23 (23, 21-25); AM 29 (28, 26-29); AL 30 (30, 29-31); PL 34 (34, 32-38); sens. 74 (75, 73-78). *Legs*. All 6-segmented, terminating in a pair of claws and a clawlike empodium. Onychotriches absent. IP 695-706. *Leg I*. 239-241; coxa with 2 branched setae (2B); trochanter 1B; femur 6B; genu 4B, 2 genualae ( $\sigma$ ), microgenuala ( $k$ ); tibia 8B, 2 tibialae ( $\Phi$ ), microtibiala ( $k$ ); tarsus ( $57 \times 19$ ) 24B, tarsala ( $\omega$ ) (15), microtarsala ( $e$ ), subterminala ( $\gamma$ ),

pretarsala ( $\gamma$ ). Leg II. 211-222; coxa 1B; trochanter 1B; femur 5B; genu 4B, genuala ( $\sigma$ ), microgenuala ( $k$ ); tibia 6B, 2 tibialae ( $\Phi$ ); tarsus ( $53 \times 19$ ) 16B, tarsala ( $\omega$ ) (16-17), microtarsala ( $e$ ), pretarsala ( $\gamma$ ). Leg III. 242-245; coxa 2-3B; trochanter 1B; femur 5B; genu 4B, genuala ( $\sigma$ ); tibia 6B, tibiala ( $\Phi$ ); tarsus ( $61 \times 15$ ) 16B.

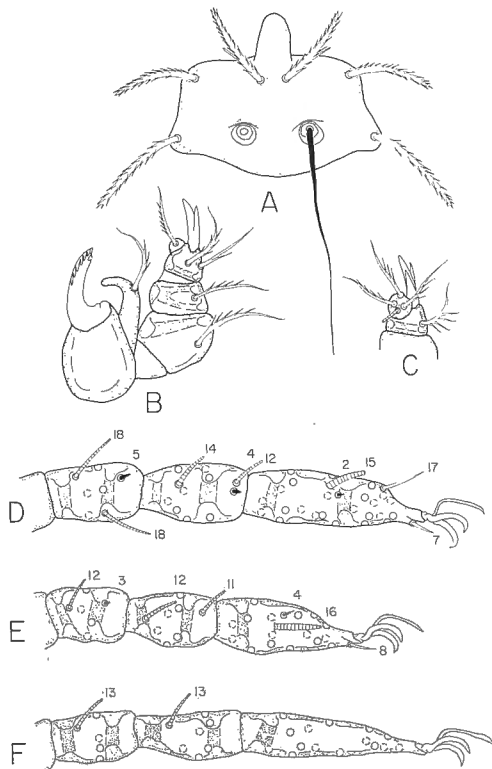


Fig. 1. — Larva of *Tateracarus quadrisetosus*, GOFF, n. gen and n. sp.  
A, scutum; B, dorsal aspect of gnathosoma; C, ventral aspect of palpal tibia and tarsus;  
D, leg I distal 3 segments showing specialized setae (measurements in micrometres)  
and bases of branched setae; E, leg II as above; F, leg III as above.

Type data. — Holotype and 9 paratypes from AFRICA: Namibia, Aminius, ex *Tatera leucogaster*, taken 30.X.1980, X. MISONNE, coll.

Remarks. — Among Leeuwenhoekiiinae, *Tateracarus* resembles *Odontacarus* EWING, 1929, *Acomatacarus* EWING, 1942, *Comatacarus* EWING, 1942, *Morelacarus* VERCAMMEN-GRANDJEAN, 1973, and *Mastalacarus* GOFF & LUKOSCHUS, 1983, in the shape of the scutum and gnathosoma. *Tateracarus* may be separated from *Odontacarus*, as defined by GOFF & LOOMIS (1977), in having palpal tarsus 4B (7B in *Odontacarus*) and lacking spiracles and tracheae (present in *Odontacarus*). In 2 specimens of *T. quadrisetosus*, structures were observed at the base

of the gnathosoma, internally in the idiosoma, which appeared similar to tracheae. No spiracles were observed and the restriction of these structures to the anterior idiosoma suggested a glandular function rather than respiratory. Lack of spiracles and tracheae as palpal setation 4B serve to also separate *Tateracarus* from *Acomatacarus* which has palpal setation 6B and spiracles and tracheae present. *Tateracarus* differs from *Comatacarus*, as redefined by REED (1973) in having palpal tarsus 4B (7B for *Comatacarus* species). *Tateracarus* differs from *Morelacarus* in having palpal tarsus 4B (5B for *Morelacarus* species), 2 genualae I (1 genuala I in *Morelacarus*) and genuala III (absent in *Morelacarus*). *Tateracarus* differs from *Mastalacarus* in palpal setation (5B for *Mastalacarus*) and lacking mastisetae III (present on femur, genu, tibia and tarsus III of *Mastalacarus*). Among Leeuwenhoekiiinae, accessory branches on AM setae have been observed for species of *Comatacarus*, *Odontacarus*, *Chatia* BRENNAN, 1946, and *Shunsennia* JAMESON & TOSHIOKA, 1953, as noted by GOFF & BRENNAN (1980). Presence of a nasus and palpal tarsal setation serve to separate *Tateracarus* from *Chatia* and *Shunsennia*, both lacking a nasus and having the palpal tarsus 7B. The generic name is based on the type host and the species name on the presence of 4 branched setae on the palpal tarsus.

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