

931

BULLETIN DE L'INSTITUT ROYAL
DES SCIENCES NATURELLES
DE BELGIQUE

BULLETIN VAN HET KONINKLIJK
BELGISCH INSTITUUT VOOR
NATUURWETENSCHAPPEN

ENTOMOLOGIE
VOL. 56



BRUXELLES 1986 BRUSSEL

Michaelopus tridens spec. nov. (Acari, Acaridae) from a North American rodent.

by A. Fain (1) and F.S. Lukoschus (2).

Abstract

Michaelopus tridens spec. nov. (Acari, Acaridae) is described from the fur of a North American rodent *Reithrodontomys megalotis*. Probably that this mite was living in the nest of this rodent.

Résumé

Michaelopus tridens spec. nov. (Acari, Acaridae) est décrit du pelage d'un rongeur nord américain, *Reithrodontomys megalotis*. L'habitat véritable de cet acarien était probablement le nid de ce rongeur.

We describe herein a new mite that had been found in the fur of a North American rodent, *Reithrodontomys megalotis*. As the genus to which this mite belong does not contain parasitic forms we surmise that the presence of this mite was accidental and that the true habitat is the nest of this rodent.

Fain (1982) has revised the genera *Thyreophagus* Rondani, 1874 and *Michaelopus* Fain and Johnston, 1974. He listed 15 species in *Michaelopus* and 3 in *Thyreophagus*.

All the measurements given here are in micrometers (μm).

Michaelopus tridens spec. nov.

Female (figs. 1-10) : Holotype and only known specimen 425 long (idiosoma) and 195 wide. The holotype contains an egg 150 long and 75 wide. **Dorsum** : Propodonal shield slightly longer (64) than wide (58); it is finely punctate in its anterior two thirds or three quarters, the rest bears very short and numerous longitudinal lines. Lengths of setae : *vi* 25 ; *sc e* 45 ; *ll* 42 ; *l2* 25 ; *l3* (ventral) 30 ; *l5* 28 ; *d4* broken off ; *d5* 25 ; *a1* (ventral) 30. All these setae are very thin. Copulatory papilla very small, situated between setae *d4*. **Venter** : Epimera III and IV widely

separated. Diameter of genital suckers 4,5 to 5. Spermathecal sclerite crescentic ; bursa very narrow and poorly sclerotized. Inside of the body and close to the anal area there are two sclerotized canaliculi with thick walls ; one of the extremities of these canaliculi is abruptly curved, the other extremity is widened and funnel like ; the walls of these small funnels are reinforced by three longitudinal sclerites. The function of these sclerites is unknown. Chelicerae 65 long. Legs : Lengths of tarsi : 18-18-11-12. Chaetotaxy of legs : Tarsi I-II with 4 small spines and 4 thin setae ; tarsi III with 7 spines and 3 thin setae ; tarsi IV with 6 spines and 4 thin setae. Tibiae with 2-2-1-1 setae. Solenidia *phi* III and *phi* IV 35 and 4 long respectively Solenidion *w1* (tarsus I) dilated at apex ; *w1* of tarsus II spindle-shaped ending in a fine point.

HABITAT

Holotype and only known specimen, from the fur of a North American rodent, *Reithrodontomys megalotis*, form California.

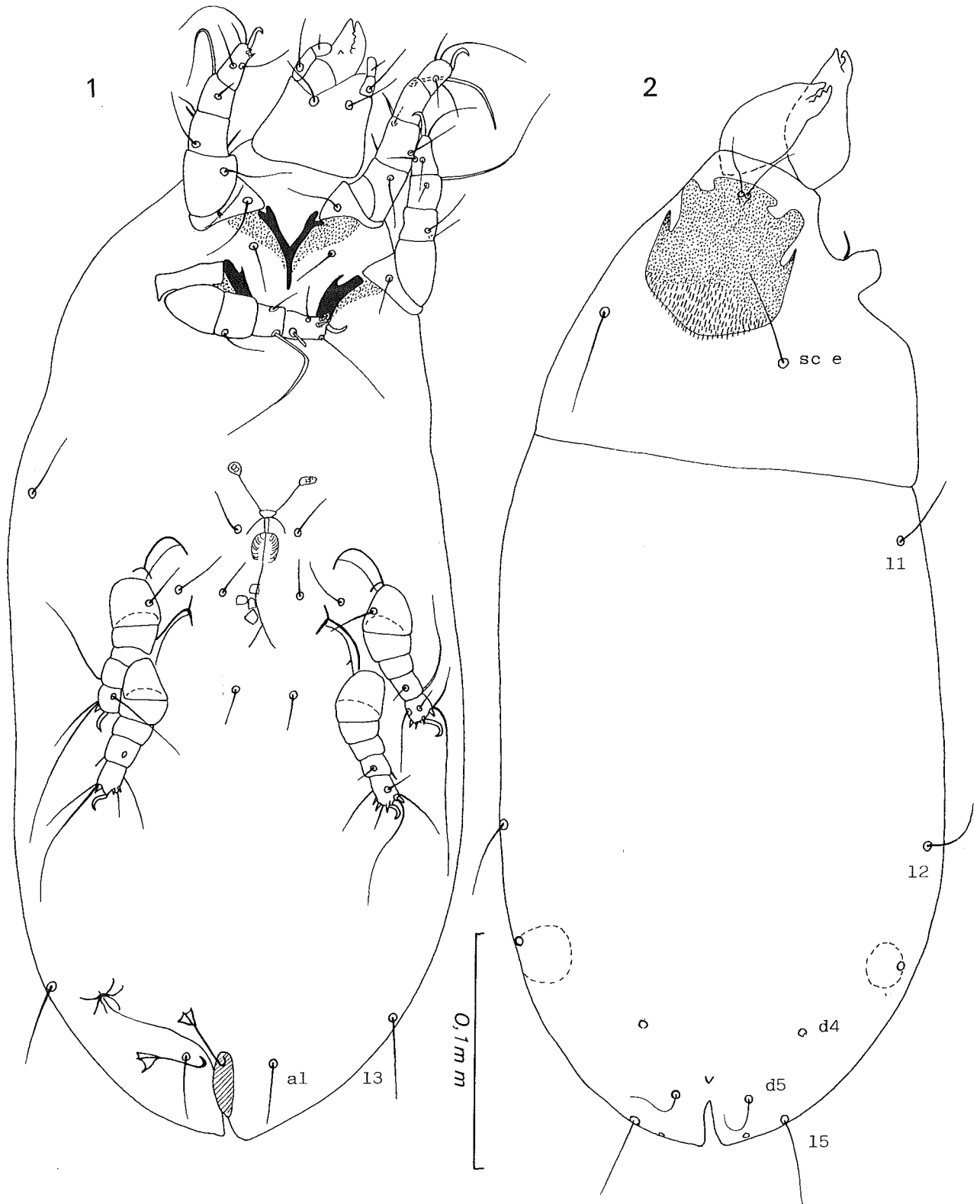
Holotype in Institut royal des Sciences naturelles de Belgique.

Remarks

This species differs from all the known species in the genus *Michaelopus* mainly by the presence of two strong tridentate sclerites in the posterior part of the body. The tarsi III bear 7 spines as in four other species (e.g. *M. vermicularis* Fain & Lukoschus, *M. spinitarsis* Fain, *M. corticalis* (Michael) and *M. gallegoi* (Portus and Gomes)). In all of these species, except *M. vermicularis*, the shield is striated in its posterior two thirds or three quarters, and the tarsal spines are larger. In *M. vermicularis* the pattern of the shield resembles that of *M. tridens* but the shield is much larger, the idiosoma is much more elongate and the tarsal spines are larger.

(1) Institut royal des Sciences naturelles de Belgique, 31, Rue Vautier, Bruxelles.

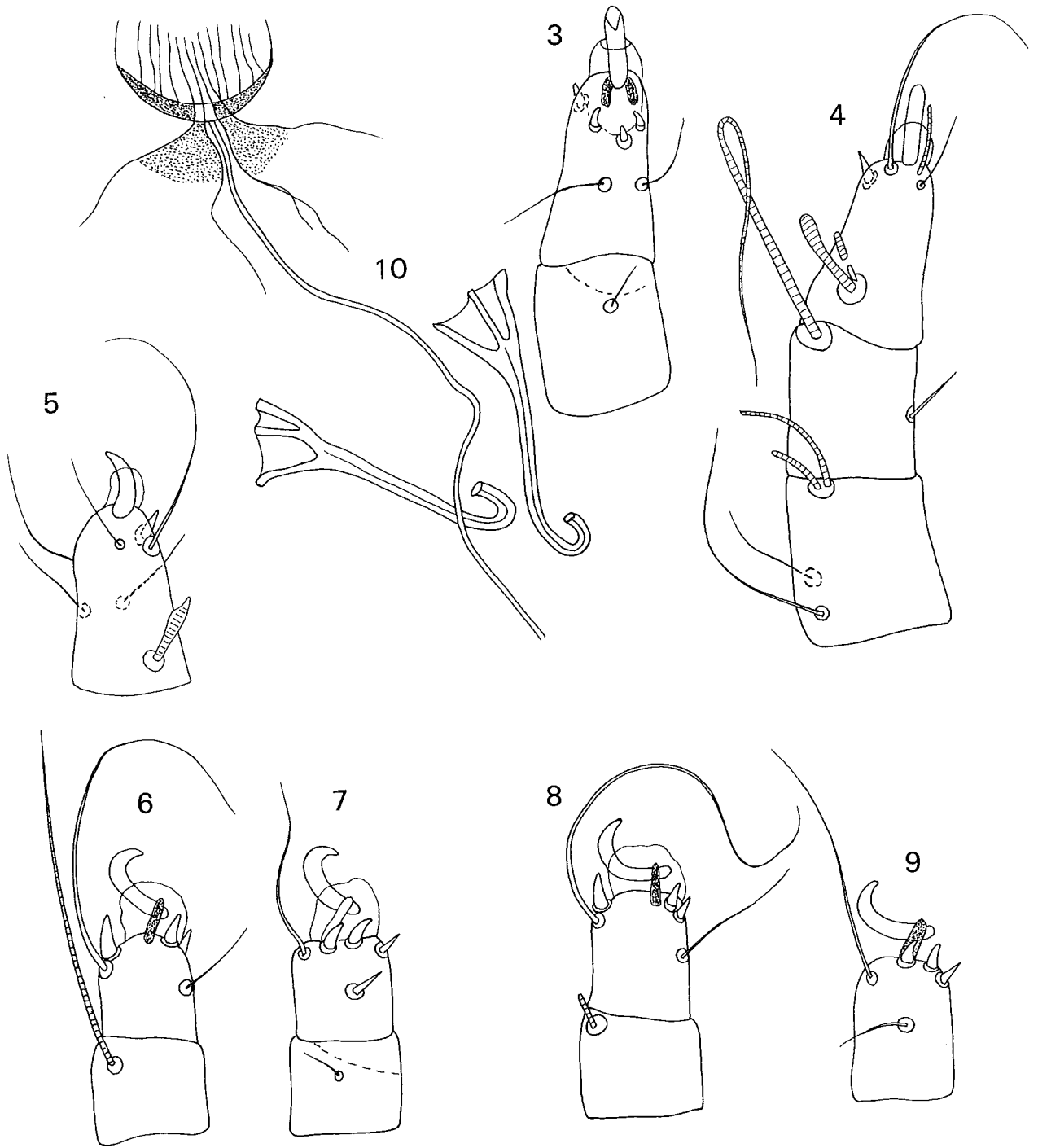
(2) Universiteit Nijmegen, Laboratorium voor Aquatische Ecologie, Toernooiveld, Nijmegen, Nederland.



Figs. 1-2. *Michaelopus tridens* spec. nov. Holotype female in ventral (1) and dorsal view (2).

Reference

FAIN, A. 1982. Revision des genres *Thyreophagus* Rondani, 1874 et *Michaelopus* Fain & Johnston, 1974 (Acari, Acaridae) avec description de neuf espèces nouvelles. Bull. Inst. r. Sci. nat. Belg. 54, 7 : 1-47.



Figs. 3-10. *Michaelopus tridens* spec. nov. Holotype female: Apical segments of leg I ventrally (3) and dorsally (4); tarsus II dorsally (5); leg III dorsally (6) and ventrally (7); leg IV dorsally (8) and ventrally (9); spermathecal sclerite and the pair of tridentate sclerites (10).

