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12-31-1965

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### Recommended Citation

Higgins, Harold G. (1965) "Two new mites from the United States (Acari: Oribatei, Microzetidae and Oribatellidae)," *Great Basin Naturalist*. Vol. 25 : No. 3 , Article 2.

Available at: <https://scholarsarchive.byu.edu/gbn/vol25/iss3/2>

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TWO NEW MITES FROM THE UNITED STATES  
(ACARI: ORIBATEI, MICROZETIDAE AND ORIBATELLIDAE)<sup>1</sup>

Harold G. Higgins<sup>2</sup>

The family Microzetidae is composed of small, "winged" mites with large, often bizarre lamellae. Until the present time this family has been reported only once from the United States, but has been found in many collections from South America, Europe, Africa and Madagascar. In a collection of oribatid mites from North Carolina was an undescribed species of microzetid as well as a new species of *Ophidiotrichus*, a genus not previously recorded from North America. Figures and descriptions of these new species follow.

*Allozetes* n. gen.

DIAGNOSIS: Lamellae long, extending over tip of rostrum, broad, incurved lateral margins; lamellar hairs heavy, incurved, strongly setose and extended beyond tip of lamellae by about one-half their lengths; sensillus with brush-like tip and long pedicle; fixed digit of chelicerae with a long, racemose, thorny spine as shown in figures 3 and 4.

*Allozetes harpezus* n. gen., n. sp.

(Figs. 1-4)

DIAGNOSIS: Lamellar hairs heavy, incurved, strongly setose and extended beyond tip of lamellae by nearly one-half their lengths; sensillus brushlike, not proclinate.

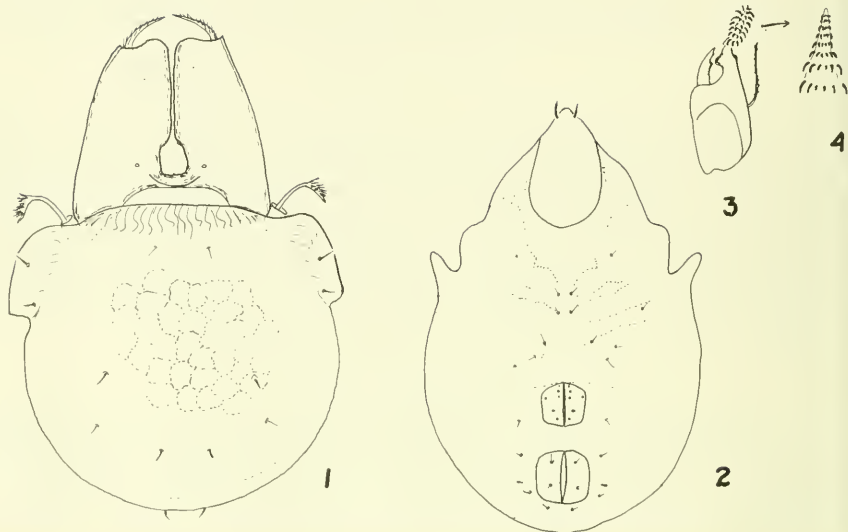
DESCRIPTION: Propodosoma longer than wide; rostral hairs small, not visible from above; lamellae covering propodosoma, with smooth, incurved, lateral margins, anterior ends with rounded medial edges and a short, lateral point, medial edges nearly parallel, separated near base by a rectangular space; lamellar hairs heavy, setose, inserted under the lamellae and attached nearer the medial edge of lamellae, curving laterally and then medially, extending beyond tip of lamellae by about one-half their lengths; insertions of interlamellar hairs located on each side of the rectangular space between the lamellae, but interlamellar hairs missing in type specimen; pseudo-stigmata cup-like, located at junction of lamellae and pteromorphs; sensillus brush-like with a long pedicle.

Hysterosoma round in outline; sclerotized lines extending posteriorly from the straight dorsosejugal suture; pteromorphs not directed forward, each pteromorph with two setae on upper surface; dorsal setae as shown in figure 1; hysterosoma covered with an irregular, reticulate pattern.

Camerostome egg-shaped; chelicerae heavy, fixed digit with a long, racemose, thorny spine that is about as long as the movable

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- Fig. 1. *Allozetes harpezus* n. gen., n. sp. dorsal view, legs omitted.  
 Fig. 2. *Allozetes harpezus* n. gen., n. sp. ventral view, legs omitted.  
 Fig. 3. *Allozetes harpezus* n. gen., n. sp., chelicera.  
 Fig. 4. *Allozetes harpezus* n. gen., n. sp., spine on fixed digit of chelicera.

digit, as shown in figures 3 and 4; genital plate about as long as wide with parallel sides, each plate with six setae (figure 2).  $g_3$  even with  $g_4$  but located near lateral edge of cover; anal opening about as long as wide, larger than genital aperture, each anal plate with two setae; aggenital setae located posterolaterad of genital plate; three pairs of adanal setae,  $ada_3$  located at anterior level of anal plate; pore  $iad$  located between  $ada_2$  and  $ada_3$ ; ventral apodemata and setae as shown in figure 2.

SIZE: Length 276  $\mu$ ; width 204  $\mu$ .

TYPE LOCALITY: One specimen from four miles north of Cherokee, North Carolina, 28 May 1957 by W. Mason.

DISCUSSION: Until now only one Microzetid has been reported from the United States. Jacot (1938) described *Microzetes auxiliaris appalachicola* from grass sod at Bent Creek Exp. Forest, North Carolina. However, because of the short description and lack of a figure, I must agree with Balogh (1962a) that it is impossible to put this form in its proper place in the genus *Microzetes*.

*Allozetes harpezus* n. gen., n. sp. is different from all known members of this family in the shape of the lamellae, the size and shape of the lamellar hairs, the brush-like sensillus, and the long, racemose, thorny spine on the fixed digit of the chelicerae. The name *harpezus* means "thicket" or "thorn hedge" and refers to the unusual spine on the fixed digit of the chelicerae.

*Ophidiotrichus exastus* n. sp.

(Figs. 5-6)

DIAGNOSIS: Anterior end of lamellae serrate, median dens longer than lateral dens; rostrum pointed, entire; interlamellar hairs more than two-thirds as long as lamellae; no distinct areae porosae.

DESCRIPTION: Propodosoma longer than wide; rostrum pointed, entire, not visible from above; lamellae long, broad, finely pitted with a serrate tip, the median dens longer than lateral dens; lamellar hairs very heavy, broad, finely setose, located in anterior end of lamellae; interlamellar hairs located close together, medially on prodorsum near dorsosejugal suture, over two-thirds as long as lamellae, setose, with small insertions; pseudostigmata cup-like; sensillus weakly setose with nearly parallel sides and fine tip which extends nearly to ends of lamellae.

Hysterosoma quite round; dorsosejugal suture straight; entire dorsum finely pitted; setae simple and located as shown in figure 5; muscle scars around edge of hysterosoma; pseudoporosae anterior to setae  $r_1$ ; no distinct areae porosae.

Camerostome egg-shaped; genital opening wider than long and separated from the larger anal plate by twice its length, each plate with six setae as shown in figure 6; anal opening larger than genital, nearly as wide as long, each plate with two setae,  $an_1$  near medial edge of plate and  $an_2$  nearer middle of plate; three pairs of adanal setae,  $ada_3$  located at level near middle of anal plate;  $iad$  at antero-lateral margin of anal aperture anterior to  $ada_3$ ; aggenital setae postero-laterad to genital plate; apodemata and setae as shown in figure 6.

SIZE: Length 247  $\mu$ ; width 180  $\mu$ .

TYPE LOCALITY: A single specimen from four miles north of Cherokee, North Carolina, 29 May 1957 by W. Mason.

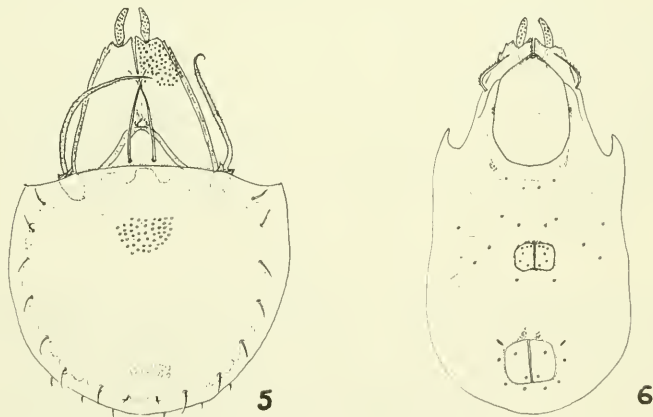


Fig. 5. *Ophidiotrichus exastus* n. sp. dorsal view, legs omitted.

Fig. 6. *Ophidiotrichus exastus* n. sp. ventral view, dorsal plate removed.

DISCUSSION: Although the genus *Ophidiotrichus* (family Oribatelidae) has been previously reported from Europe, this is the first record from North America. This species resembles somewhat *Ophidiotrichus connexus vindobondensis* Piffel in having a pitted body and notched lamellae, but differs from all known forms in having a serrate-tipped lamella with long median dens; longer, heavier, interlamellar hairs more medially located; rostrum entire, pointed; and in the lack of distinct areae porosae. In addition there is a difference in the location of the genital setae. The name *exastus* means "rough edge" and refers to the anterior edge of the lamellae.

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