



---

9-30-1969

## A new genus and species of oribatid mite (Acari: Liacaroidea, Metrioppiidae)

Tyler A. Woolley  
*Colorado State University, Fort Collins*

Follow this and additional works at: <https://scholarsarchive.byu.edu/gbn>

---

### Recommended Citation

Woolley, Tyler A. (1969) "A new genus and species of oribatid mite (Acari: Liacaroidea, Metrioppiidae)," *Great Basin Naturalist*. Vol. 29 : No. 3 , Article 4.

Available at: <https://scholarsarchive.byu.edu/gbn/vol29/iss3/4>

This Article is brought to you for free and open access by the Western North American Naturalist Publications at BYU ScholarsArchive. It has been accepted for inclusion in Great Basin Naturalist by an authorized editor of BYU ScholarsArchive. For more information, please contact [scholarsarchive@byu.edu](mailto:scholarsarchive@byu.edu), [ellen\\_amatangelo@byu.edu](mailto:ellen_amatangelo@byu.edu).

A NEW GENUS AND SPECIES OF ORIBATID MITE  
(ACARI: LIACAROIDEA, METRIOPIIIDAE)<sup>1</sup>

Tyler A. Woolley<sup>2</sup>

About two years ago Dr. Henry Dybas very kindly sent me a number of collection of mites for sorting. Among the many oribatid specimens was one that slightly resembled *Pyroppia lanceolata* Hammer, 1955, but was larger ( $930\ \mu \times 750\ \mu$  vs.  $620\text{-}670\ \mu \times 400\ \mu$ ), and with different sensilli and lamellae. After comparing this mite with other known genera, I considered it to be a new genus and a new species in the family Metrioppiidae. It is described below.

*Metapyroppia*, n. gen.

DIAGNOSIS. With spindleform sensillus, short lamellar cusps, an incomplete translamella; *Pyroppia* lacks a translamella and the sensillus is clavate-lanceolate. The large, straight, trochanteral setae of *Ceratoppia* and *Pyroppia* are apparently lacking in this new genus. The new genus differs from *Paenoppia* Woolley and Higgins, 1965, in the shorter lamellar cusps, the incomplete translamella and the spindleform sensillus; superficially, it resembles, yet differs from the oribatuloid *Conoppia* in the sensillus, the prodorsal hairs and six pairs of genital setae.

Type-species, *Metapyroppia doratosa* Woolley, monobasic.

*Metapyroppia doratosa* n. sp.

(Figs. 1, 2)

DIAGNOSIS. The new species differs from *Pyroppia lanceolata* Hammer, 1955, in the barbed, spindleform sensillus, contrasting with the clavate-lanceolate sensillus of *P. lanceolata*; it differs also in the presence of transverse, prodorsal carina, in size and in the lack of trochanteral setae. The prefix *meta* implies "near" *Pyroppia*, and *doratos*, a spear-like sensillus.

DESCRIPTION. Color dark reddish-brown, prodorsum broadly triangular in outline; rostrum smooth, rostral hairs barbed, incurved, about as long as lamellar hairs, inserted in slight notches at anterolateral margins of prodorsum (Fig. 1); a slight transverse carina anterior of lamellar cusps across surface of prodorsum; lamellae narrow, extending from dorsojugal suture to bases of rostral hairs, attenuated anteriorly, lamellar cusps short, truncate, about as long as each end of interrupted translamella; lamellar hairs stout, barbed, nearly straight, about the same length as rostral hairs; translamella interrupted medially, short medial bar each side about as long as length of lamellar cusp; interlamellar hairs barbed, slightly longer

<sup>1</sup>Research supported by NSF Grant GB 3872.

<sup>2</sup>Department of Zoology, Colorado State University, Fort Collins.

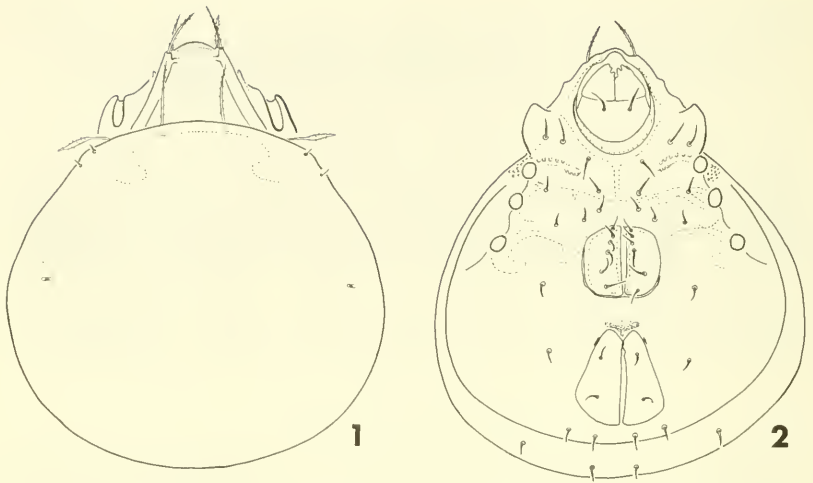


Fig. 1. Dorsum of *Metapyropia doratosa*, legs omitted; hysterosoma broken in type specimen.

Fig. 2. Venter of *M. doratosa*, legs omitted.

than lamellar hairs, inserted mediad of bases of lamellae; pseudostigmata posterior to pedotecta I, slightly beneath hysterosomal margin; sensillus spindleform, barbed; pedotecta I stout, angled inward at anterior margin, forming lateral angles of broad triangular prodorsum.

Hysterosoma glabrous, nearly round in outline (slightly broken across dorsum of type specimen), with two humeral bristles posterior to pseudostigmata at shoulders of hysterosoma. Other setae and fissures as seen in Fig. 1.

Camerostome broadly oval, infracapitulum, ventral setae with prominent alveoli, and apodemata as seen in Fig. 2; trochanteral fossae II with slight tubercles on surface (like some other *Lia-carioidea*); genital aperture nearly square, between insertions of legs IV, each genital cover with six setae, g:1-g:4 in nearly straight line near medial margin of cover, g:5 laterally displaced in posterior half of cover, g:6 near posterior margin, but not as close to medial margin as g:1-g:4; aggenital setae laterally placed at level of posterior margin of genital opening; anal aperture pentagonal, only slightly larger than genital aperture, each anal cover with two setae, a:1 in anterior half of cover, both anal setae about in middle of width of cover; preanal piece large, trumpet-shaped; *iad* fissure very narrow, almost indistinct, closely appressed to rim of anal aperture anterior to level of a:1; three pairs of adanal setae, ada:3 between levels of a:1 and a:2 but closer to a:1 and remote from anal openings by widest width of cover; ada:2, ada:1 posterior to anal opening.

Legs heterotridactylous; middle (empodial) claw only slightly larger than lateral (true) claws; stiff, straight seta of trochanter II (as found in *Ceratoppia* and *Pyroppia*) lacking.

MEASUREMENTS. (As taken in broken type specimen) Length: 930  $\mu$ , prodorsum 180  $\mu$ , hysterosoma 750 $\mu$ ; width 726  $\mu$ .

DISTRIBUTION. One female and type specimen was collected from moss on log on Mt. Le Conte, Sevier County, Tennessee, August 1956, by H. Dybas. The type will be deposited in the U. S. National Museum.

DISCUSSION. This new genus and species represents yet another example of oribatid mites in the family Metrioppiidae. The characteristics of the sensilli, number of genital setae, tuberculous trochanteral fossae II are characteristics that ally these mites with the Liacaridae and Xenillidae in the Liacaroidea. It appears from research completed previously and some currently in progress that these families exhibit many characteristics in common. Delineations of the details of these comparative features and specifically demonstrable relationships await the results of further studies now in progress.

#### LITERATURE CITED

- HAMMER, M. 1955. Alaskan Oribatids. *Acta Arctica* VII:1-36.  
WOOLLEY, T. A., AND H. G. HIGGINS. 1965. A New Genus and Species of Oribatid Mite from Colorado (Acari: Oribatei, Ceratoppiidae). *Great Basin Naturalist* 25(3-4):59-62.