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Metazercon rafalskii sp. nov. a new species of mite from South Korea
(Acari: Gamasida: Zerconidae)

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ABSTRACT. *Metazercon rafalskii* sp. nov. a new species of the mite genus *Metazercon* BŁASZAK, 1976 (Acari, Zerconidae) is described from South Korea. A key to all known species of *Metazercon* BŁASZAK, 1976 is provided.

Key words: acarology, taxonomy, *Gamasida*, *Zerconidae*, new species, South Korea.

***Metazercon rafalskii* sp. nov.**

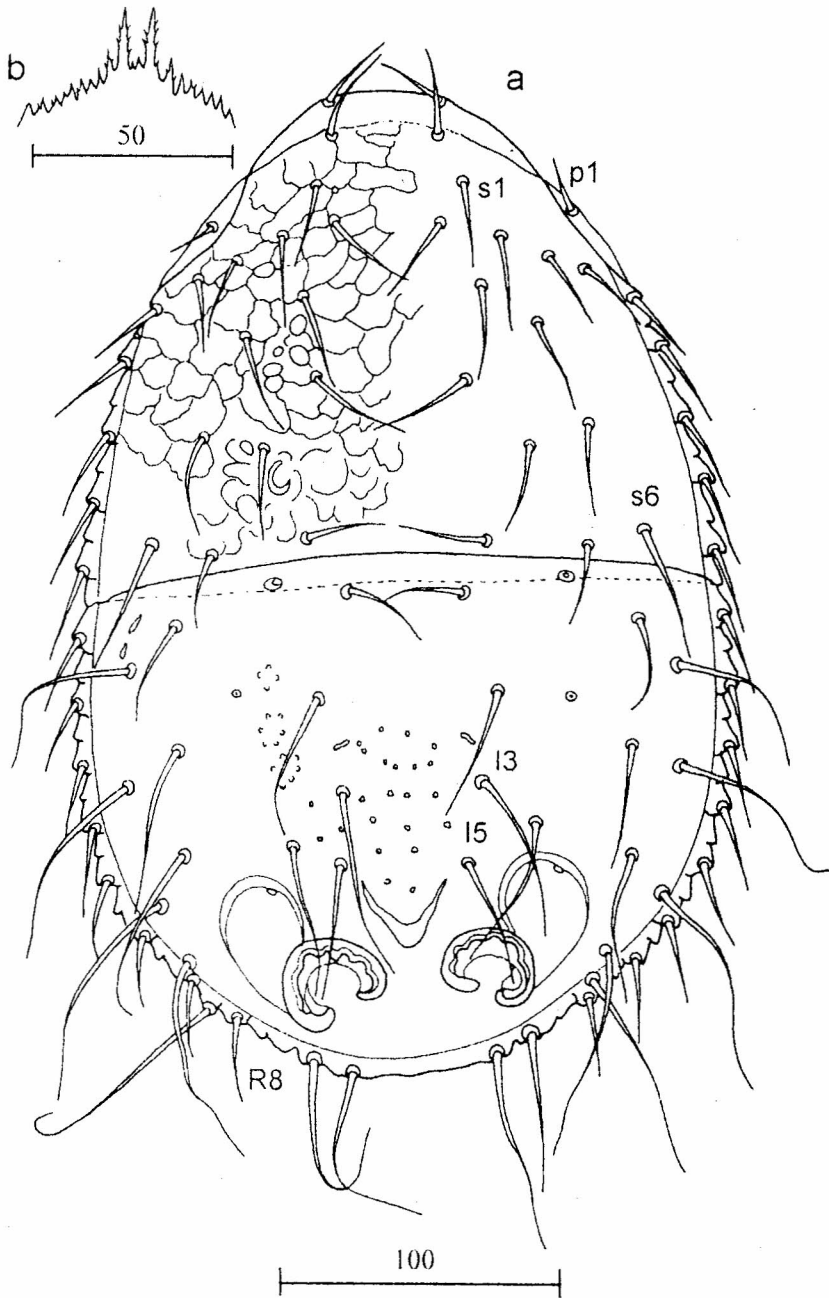
ETYMOLOGY

We dedicate the new species to Prof. J. RAFALSKI for showing the captivating world of mites to us (C.B.,S.K) and having introduced one of us (C.B.) to the *Zerconidae* family 30 years ago.

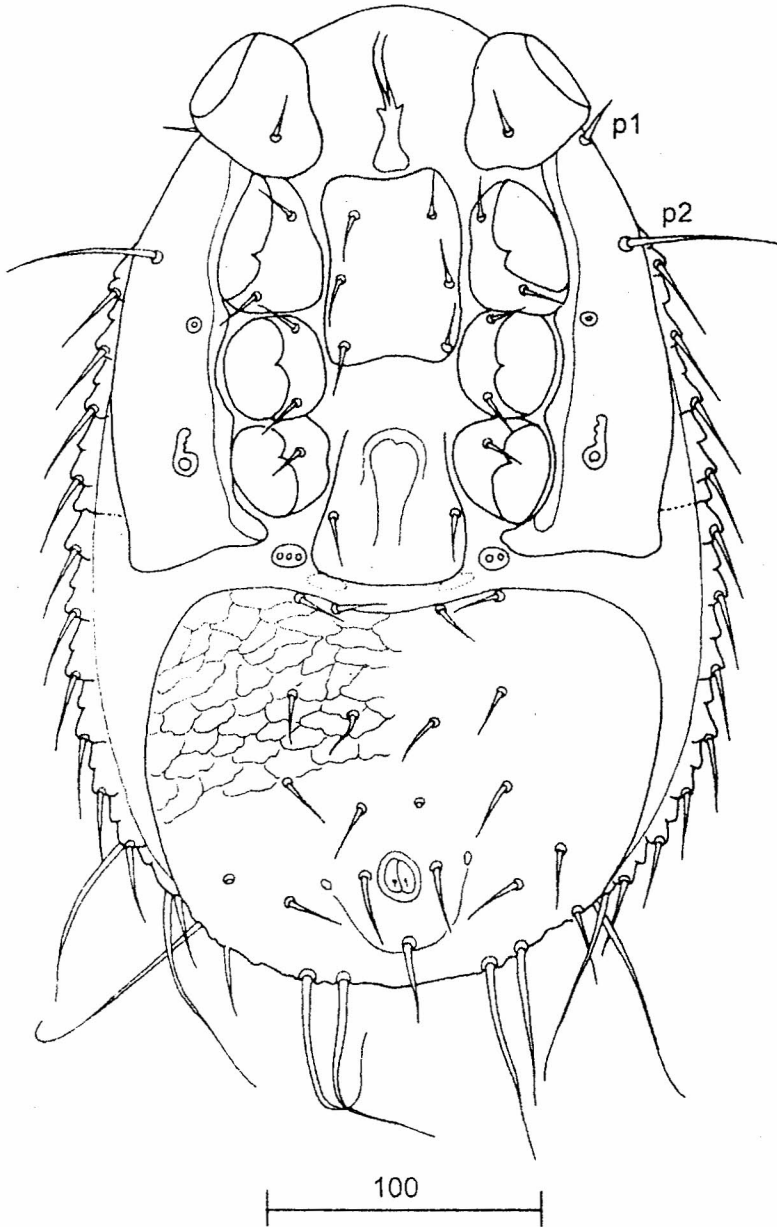
DESCRIPTION OF HOLOTYPE

Female -Holotype: Length: 350 µm, width: 240 µm.

Dorsal side. (Fig. 1a)



1. *Metazercion rafalskii* sp. nov. - a) dorsal side, b) tectum



2. *Metazercon rafalskii* sp. nov. - ventral side

Setae: All setae of the podonotum are long and smooth. Podonotal rows i with six pairs of setae, z with two pairs, s and r with six pairs of setae. On the podonotum setae s6 are the longest and reaching the insertion of setae S1.

Opisthonotal row I with six pairs, Z with five pairs, S with four pairs, and R with eight pairs of setae. On the opisthonotum all setae smooth. The distance of insertions of the setae I6 - Z5 is 12 μ m.

Lengths of setae of opisthonotum and longitudinal distances between setae of single rows in μ m are the following:

S1 - 64	Z1 - 38	I1 - 32
43	43	37
S2 - 74	Z2 - 65	I2 - 50
43	37	37
S3 - 85	Z3 - 65	I3 - 65
43	37	25
S4 - 90	Z4 - 80	I4 - 55
	60	25
	Z5 - 80	I5 - 50
		70
		I6 - 74

Pores: On podonotum pore po1 lies posteroparaxially to insertion of seta s1, po2 lies on line connecting setae s4-i5, po3 lies on line connecting setae s5-z1, close to seta z1. On opisthonotum pore Po1 lies anteroparaxially to the insertion of seta Z1, Po2 lies on line connecting setae I2 and S1. Po3 is very fine and lies near anterior edge of the exterior hillocks. Pores Po4 are not conspicuous.

Sculpture.

The podonotum has a conspicuous reticulated sculpture. The opisthonotum is without reticulation but has fine refracting dots between the rows of setae I.

In the posterior part of opisthonotum there are two large dorsal cavities, which are arranged diagonally relative to the body axis. There are three oval sclerotized hillocks in the region of the dorsal cavities. The smallest and unpaired one lies between the dorsal cavities. The others are paired, and lie in the corners of the dorsal cavities.

Ventral side. (Fig. 2)

The chaetotaxy and the shape of the peritremal shield are typical of the genus *Metazercon* BŁASZAK, 1976.

The peritremal shield is terminated truncately, posteriorly behind the fourth pair of coxae. On the peritremal shield there are two setae, p1 smooth, short and p2 long,

more than twice longer than seta p1. Between the genital shield and the ventro-anal shield there are two delicate narrow sclerites. The adgenital shields are present with 2-3 pores. On the margin of opisthonotum there are 8 setae. On the anterior margin of ventro-anal shield there are four setae.

The tectum (Fig.1 b) has two long, large middle processes, the other side points are essentially shorter and smaller.

SYSTEMATIC POSITION

The new species is most similar to *Metazercon athiasae* BŁASZAK, 1976 from which it differs in the following features:

<i>Metazercon rafalskii</i> sp. nov.	<i>Metazercon athiasae</i> BŁASZAK, 1976
1. Seta I5 long and equal in length to seta I2	1. Seta I5 very short and at least six times shorter than seta I2
2. Seta I5 lies on the line connecting setae I3 and Z5	2. Seta I5 lies on the line connecting setae I4 and S4
3. Seta I3 exceeds insertion of seta I5 by half its length	3. Seta I3 does not reach the insertion of seta I5

KEY TO THE SPECIES OF THE GENUS *METAZERCON* BŁASZAK, 1976

- 1. In the posterior part of opisthonotum four dorsal cavities in one row, close to one another *Metazercon mahunkai* HALAŠKOVÁ, 1979
- . In the posterior part of opisthonotum two large dorsal cavities 2.
- 2. Seta I5 very short and at least six times shorter than seta I2. Seta I3 does not reach to the insertion of seta I5 *Metazercon athiasae* BŁASZAK, 1976
- . Seta I5 is long (50 µm) and equal to seta I2. Seta I3 exceeds insertion of seta I5 by half its length *Metazercon rafalskii* sp. nov.

TYPE MATERIAL

Korea, Mount Jumbong 200 km. north-east of Seul. N.Lat - 38° - 38° 05', E.Long.- 128°20' - 128°30'

Mixed forest: *Fraxinus rhynchophylla*, *Quercus aliena*, *Astilbe chinensis*, 1100 m. alt. 29 7 95. Female - Holotype, 1 Female Paratype. Leg. S. KACZMAREK.

Perennialsasa: *Sassa borealis*, 1000 m. alt., south slope, 18 6 94, 2 Females. Leg. S. KACZMAREK.

Forest with *Quercus mongolica*, *Kalopanax pictus*, *Acer pseudosieboldii*, *Carpinus cordata*, *Corydalis turtschaninovii*, *Erythronium japonicum*, *Anemone raddeana*, *Anemone coraiensis*, *Mehania urticifolia*, *Pimpinella brachycarpa*, *Symplocarpus nipponicus*, 1000 m alt., north slope, 18 6 94, 1 Female. Leg. S. KACZMAREK.

Paratype: Length: 350 - 355 µm, width: 240-245 µm.

Holotype deposited at the Zoological Museum, Hamburg University. Paratype deposited at the Collection of the Department of Animal Morphology, A. Mickiewicz University, Poznań (Poland).

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