

A new species of *Microcheyla* VOLGIN from Turkey  
(Acarina: Cheyletidae)

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ABSTRACT: A new species of *Microcheyla*, namely *M. ozkani* from Turkey, is described and illustrated. A key to the known species is given.

Key words: Acarology, taxonomy, *Cheyletidae*, new species, Turkey.

INTRODUCTION

The genus *Microcheyla*, comprising a single species, was erected by VOLGIN in 1966 with the type-species *Microcheyla parvula* VOLGIN, 1966 from Tadzhikistan.

During the study of cheyletid mites of Artvin province, Turkey, another member of this genus was found.

The description of the new species, *M. ozkani*, is given below.

The terminology and setal designations follow KETHLEY (1990). Type material is deposited in the senior author's collection.

LIST OF LOCALITIES

08-07-51: Turkey, Artvin, c. 25 km S Şavşat, 540 m, 15.9.1993. - Sample of litter and soil from under *Juniperus* sp. and *Quercus* sp.

08-07-52: Turkey, Artvin, c. 25 km S Şavşat, 540 m, 15.9.1993. - Sample of litter and soil in mixed forest (mostly, *Quercus* sp. and *Ulmus* sp.).

08-07-62: Turkey, Artvin, Şavşat, c. 20 km S Meydancık, 850 m, 15.9.1993. - Sample of litter and soil from under *Juniperus* sp..

08-07-69: Turkey, Artvin, Şavşat, Rabat village, 970 m, 15.9.1993. - Moss on the rotten wood.

08-08-13: Turkey, Artvin, Yusufeli, N side of Mihaben mt., 850 m, 20.9.1992.  
- Sample of mosses and litter.

## SYSTEMATICS

**MICROCHEYLA** VOLGIN, 1966

Type species: *Microcheyla parvula* VOLGIN, 1966

Palp tarsi with only one pectinate seta. Palp femora with three broadly squamiform setae. Genua without setae. Dorsum of idiosoma with two types of setae. Posterior pair of anal setae squamiform, the other setae of genito-anal group piliform. Setae on all trochanteres, femora and genua squamiform. Femora IV with one seta; tibia I with five setae. Protective seta large and squamiform.

KEY TO THE KNOWN SPECIES OF THE GENUS *MICROCHEYLA* (FEMALES)

1. Outer palp femora with lobes laterally; tarsi of all legs with ventrocentral setae  
..... *M. ozkani* sp. nov.
- , Outer palp femora smooth; only tarsus I with ventrocentral setae  
..... *M. parvula* VOLGIN.

***Microcheyla ozkani* sp. nov.**

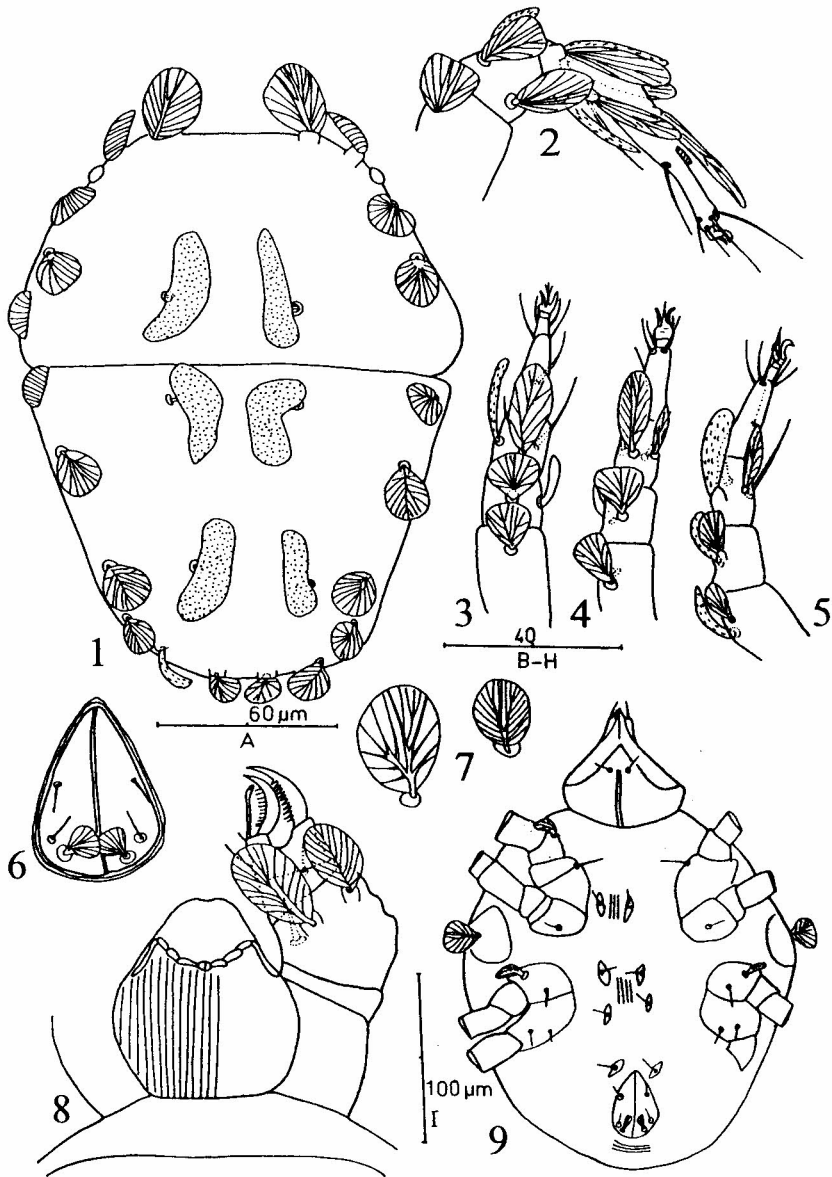
## HOLOTYPE

Female (Fig. 1-9)

Length of idiosoma 200  $\mu\text{m}$ , with rostrum 260  $\mu\text{m}$ , width of idiosoma 130  $\mu\text{m}$ .

Gnathosoma 0.29 times idiosoma length and 0.33 its width. Palp femora bulging, with three lobes on the outer side; claws with 14 teeth; tarsi with one comb-like, one thickened dorsal seta and two short and smooth ventral setae. Outer dorsal seta on tarsi with 14 teeth. Rostral shield with two fine lobes anteromarginally. Gnathosoma mediodorsally with narrow longitudinal striation along line of peritremes. Idiosoma oval, its length 1.5 times maximum width, and on dorsal side with two large shields. Propodosomal shield trapezoidal, with slightly convex lateral margins, almost covering propodosomal area; width of shield almost 1.5 times length; shield with 4 pairs of lateral flabelliform setae and 1 pair of large discoidal median setae. Hysterosomal shield somewhat narrower than propodosomal shield, but 1.28 times longer; shield with 6 pairs of lateral and 2 pairs of discoidal median setae.

Leg lengths: I- 0.61 length of idiosoma, II- 0.46, III- 0.64 and IV- 0.53. Outer seta on coxae of leg III short, squamiform; other setae on coxae piliform. Tibia I with short dorsal solenidion, four elongated squamiform setae, and one smooth piliform seta; tibia II, III and IV dorsally with one elongated squamiform seta, laterally with one narrowly squamiform and one lanceolate seta, and ventrally with one smooth



1-9. *Microcheyla ozkani* sp. nov. (female): 1 - dorsal view of idiosoma, 2 - leg I, 3 - leg II, 4 - leg III, 5 - leg IV, 6 - genito-anal cover, 7 - dorsal setae, 8 - dorsal view of gnathosoma, 9 - ventral view of idiosoma

piliform seta. Setae and solenidion on the leg segments: coxae 2-1-2-2; trochanter 1-1-1-1; femur 3-2-2-2; genu 3-2-2-2; tibia 4(+1)-4-4-4; tarsus 8(+1)-7-6-5. Tarsus I almost 2.0 times longer than tibia of the same pair of legs. Pretarsi present on all legs. Solenidion wl length c. 0.5 basal width of tarsus I; protective seta shifted from solenidion wl, its length 5.37 times that of solenidion. Ventrocentral setae on tarsi of all legs piliform and situated level with solenidion wl. Tarsi II with very short solenidion located in its basal half.

#### MALE

Unknown.

#### MATERIAL EXAMINED

Holotype; female. No. 08-07-62: Turkey, Artvin, Şavşat, c. 20 km S Meydancik, 850 m, 15.9.1993. Sample of litter and soil underlying *Juniperus* sp. Paratypes: 89 females: from the same sample; other paratypes from: 08-07-69, 1 female; 08-07-51, 3 females; 08-07-52, 13 females; 08-08-13, 5 females.

#### REMARKS

The new species differs from *Microcheyla parvula* VOLGIN, 1966, in the following characters:

1. Outer palp femora with three lobes laterally (smooth in *parvula*);
2. Ventrocentral setae present on tarsi of all legs (tarsus I only in *parvula*);
3. Ventrocentral setae located level with solenidion wl (somewhat removed from solenidion wl in *parvula*);
4. Rostral shield with two fine lobes anteromarginally (convex anteromarginally in *parvula*);
5. Flabelliform setae subequal in length on the propodosomal and hysterosomal shield (setae of different length on propodosoma and hysterosoma in *parvula*);
6. Tibia I dorsally with one elongated squamiform, laterally with one narrowly squamiform and one smooth piliform seta and ventrally with one smooth, piliform seta (dorsally with one elongated squamiform, laterally with one narrowly squamiform seta and one lanceolate and ventrally with one crenate, piliform seta in *parvula*);
7. Ventrocentral setae on all legs smooth (crenate in *parvula*).

#### ETYMOLOGY

The new species is dedicated to Prof. Dr. Muhlis ÖZKAN (Atatürk University, Erzurum), our teacher and colleague.

#### REFERENCES

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