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A new species of *Pongeiella* from Bulgaria (*Collembola*: *Onychiuridae*: *Tullbergiinae*)

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ABSTRACT. *Pongeiella stojanovorum* sp. n. is described and illustrated. The springtails were collected in lichens on a sand dune near Ropotamo National Park, Arkutino, Bulgaria.

Key words: entomology, taxonomy, new species, Bulgaria, *Collembola*, *Onychiuridae*, *Tullbergiinae*.

The genus *Pongeiella* RUSEK, 1991 included only two, very rare subspecies: *Pongeiella falca falca* (CHRISTIANSEN et BELLINGER, 1980) from North America and *Pongeiella falca europea* RUSEK, 1991 from France. In the material collected in south-east Bulgaria, a new species of the genus *Pongeiella* was found.

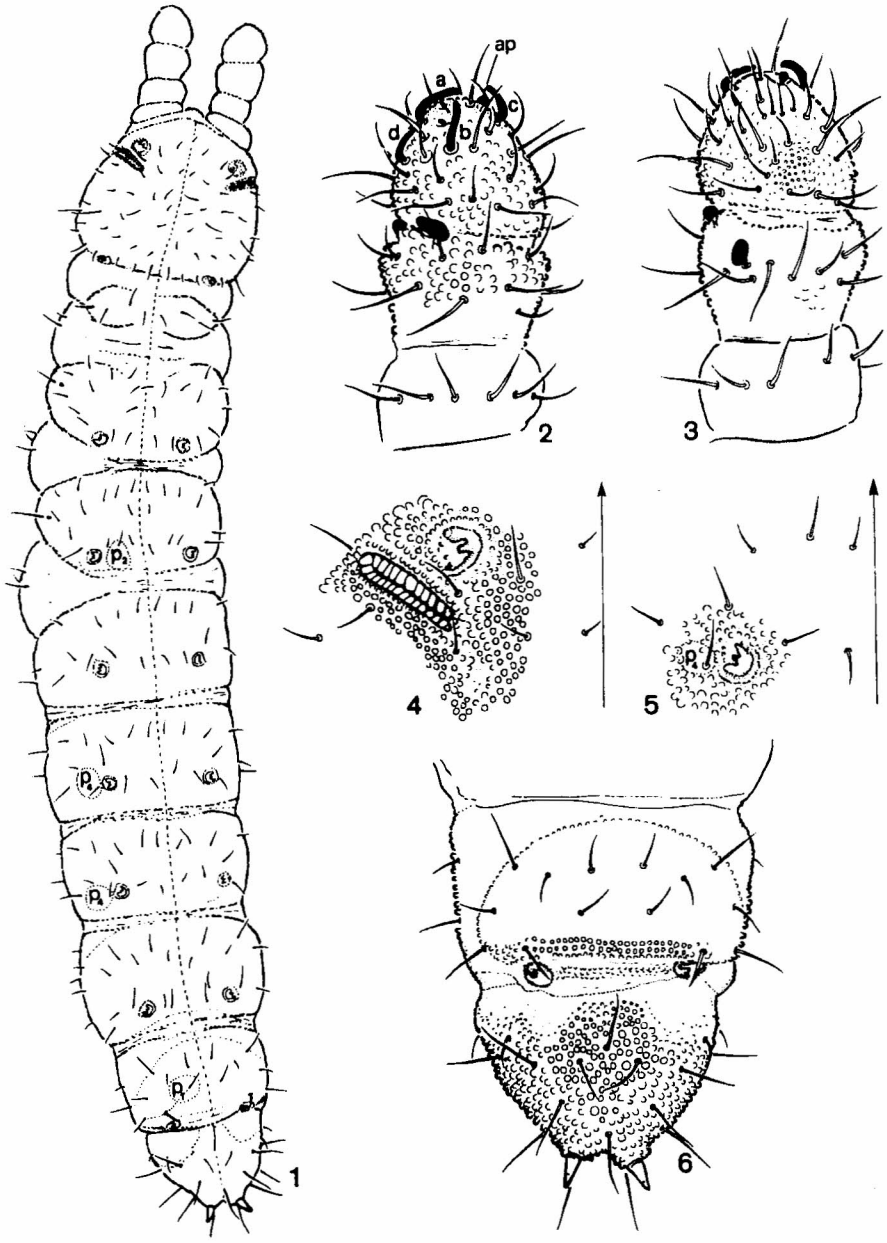
***Pongeiella stojanovorum* sp. n.**

TYPE MATERIAL

Holotype, male on slide; lichens on sand dune near border of Ropotamo National Park, Arkutino, Bulgaria, 6.09.1996; leg. D. SKARŻYŃSKI, R. J. POMORSKI (preserved in authors' collection).

DIAGNOSIS

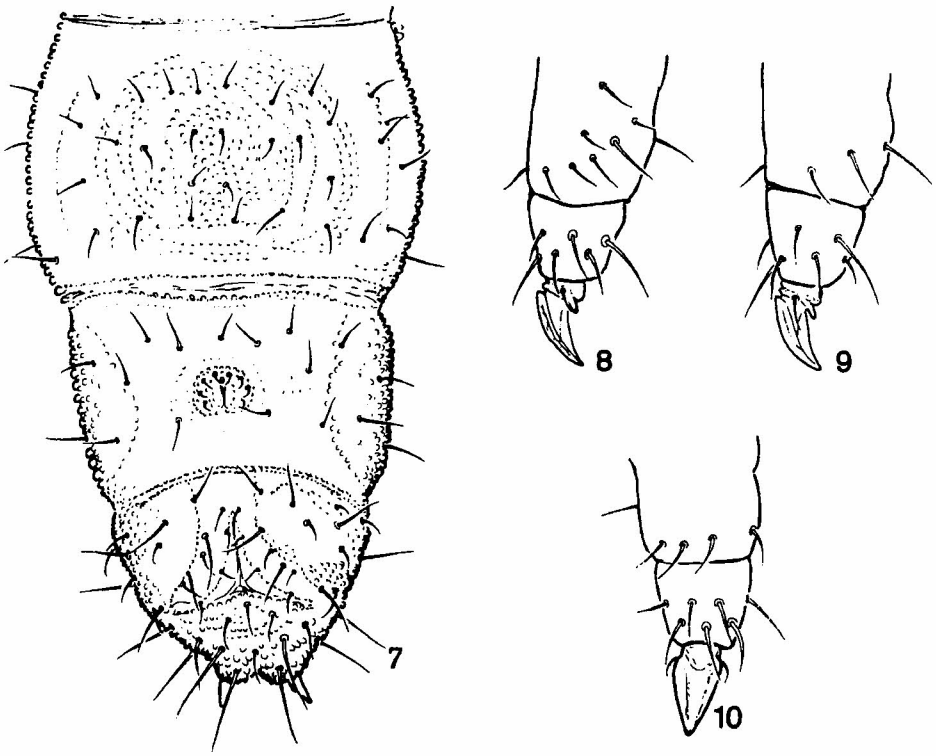
Body 0.6 mm long, yellowish in alcohol. Lateral sensilla s on meso- and metanotum thin, setaceous. Thickened sensillae missing on abdominal segments I-IV, sensillum p_3 on abdominal tergum V slightly thickened. Formula of pseudocelli:



1-6. *Pongeiella stojanovorum* sp. n.: 1 - dorsal chaetotaxy, position of pseudocelli, 2 - left antenna, dorsal view; ap - apical papilla , 3 - left antenna, ventral view, 4 - postantennal organ and pseudocellus, 5 - seta p_4 and pseudocellus on abdominal tergum II, 6 - chaetotaxy and granulation on abdominal terga V and VI

11/011/11111. Thoracic pseudocelli between setae p_3 and p_4. Antennal segment IV with apical papilla, two subapical sensory pegs and strongly thickened sensillae a-d. Postantennal organ with 27 simple vesicles. Dorsal side of head without unpaired medial seta v_0. Thoracic tergum III with seta p_2 present (on th. II seta p_2 absent). Abdominal terga II and III with seta p_4 present (on abd. I seta p_4 absent). Abdominal tergum V with seta p_1 displaced forward into m_1 position. Anal lobes with seta l_2.

Pongeiella stojanovorum sp. n. differs from both known subspecies *P. falca falca* and *P. falca europea* in the following characters: presence of seta p_2 on thoracic tergum III, presence of seta p_4 on abdominal terga II and III, displacement of seta p_1 on abdominal tergum V forward into m_1 position, absence of medial field with primary granules on abdominal sternum IV. Additionally *P. stojanovorum* sp. n. differs from *P. falca falca* in the absence of unpaired seta v_0 on dorsal side of head and number of vesicles in PAO - 27 (*P. falca falca* 23-25).



7-10. *Pongeiella stojanovorum* sp. n.: 7 - chaetotaxy and granulation of abdominal sterna IV-VI, 8 - tibiotarsus, exterolateral view, 9 - tibiotarsus, internolateral view, 10 - tibiotarsus, dorsal view

DESCRIPTION

Body elongated (fig. 1), 0.6 mm. Granulation of whole body coarse, formed by secondary granules. Setae not well differentiated into micro- and macrosetae. Dorsal chaetotaxy as in following formula:

	I	II	III	I	II	III	IV	V
a	-	10	10	10	10	10	10	6
m	-	6[1]	6	-	-	-	-	-
p	8	8[2]	10	10[3]	12	12	10	8[4]
subc/pl	2	3	3	2	2	2	6	2

1) setae m_2 and m_3 missing, 2) p_2 missing, 3) p_4 missing, 4) sensilla p_3 slightly thickened, seta p_1 displaced forward into m_1 position

Lateral sensillae s on meso- and metanotum thin, setaceous (fig. 1). Thoracic terga II and III with microsensilla laterally. Anal lobes with setae l_2, l_3 and without setae l_2,, l_3, (fig. 7) .

Pseudocelli as in figs 1, 4, 5. Pseudocellar formula: 11/011/11111. Pseudocelli on meso- and metanotum between setae p_3 and p_4.

Antennae shorter than head. Antennal segment IV with apical papilla, two subapical sensory pegs and strongly thickened sensillae a - d (figs 2, 3). Antennal organ III consists of two large sensory clubs (outer one smaller) and two small sensory pegs (fig. 2). Ventral side of antennal segment III with one large sensory club (fig. 3). Antennal segment I and II with 7 and 11 setae respectively.

Postantennal organ with 27 simple vesicles lying in two parallel rows (fig. 4).

Legs short, number of setae strongly reduced (figs 8-10). Claws broad, without teeth, empodial appendage rudimentary without setaceous apical filament (figs 8-10). Tibiotarsal tenent hairs absent. Tibiotarsi I-III with 12 setae.

Abdominal tergum IV without transversal groove. Abdominal tergum VI without crescentic ridges. Two anal spines on low papillae present on last abdominal tergite (figs. 1, 6).

Ventral tube with 6+6 setae. Medial field on abdominal sternum IV covered with distinct secondary granulation (fig. 7).

REMARKS

Diagnosis of the genus *Pongeiella* should be supplemented. In his original description RUSEK (1991) did not mention presence or absence of apical papilla (in *P. stojanovorum* it is present). Besides he has regarded the presence of medial field with primary granulation on abdominal sternum IV as a typical character of the genus *Pongeiella*. The mentioned field in *P. stojanovi* is distinctly secondary granulated.

DERIVATIO NOMINIS

We dedicate this species to the Bulgarian-Polish family STOJANOV for their help and hospitality during our faunistic trip to Bulgaria.

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REFERENCES

RUSEK, J., 1991: New Holarctic and Palearctic taxa of *Tullbergiinae* (*Collembola*). Acta Soc. Zool. Bohemoslov., **55**: 65-75.