Rusekianna bescidica, a new species from Poland  
(Collembola: Symphypleona)

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ABSTRACT. Rusekianna bescidica n. sp. is described from Poland (Beskid Sądecki Mountains, Carpathians).

Key words: entomology, taxonomy, new species, Poland, Collembola, Symphypleona, Rusekianna.

During faunistic investigations in the “Barnowiec” reserve in the Beskid Sądecki Mountains (Carpathians, S Poland), sponsored by University of Wrocław (grants 2020/W/IZ/2003, 1018/IZ/2003), a new species of the genus Rusekianna BETSCH, 1977 was found. Its description is given below.

Rusekianna bescidica n. sp.

ETYMOLOGY  
Named after its terra typica, the Beskid Mountains in Poland.

DIAGNOSIS  
At present two species of the genus Rusekianna are known: R. mongolica BETSCH, 1977 and R. sibirica BRETFELD, 2002 both described from Asia (BETSCH 1977, BRETFELD 1999, 2002). R. bescidica n. sp. differs clearly from them in chaetotaxy of dens. The new species has 2 subapical (R. mongolica 1, R. sibirica 2), 5 proximal (R. mongolica and R. sibirica 4), 3 outer (R. mongolica 3, R. sibirica 4) and 3 inner setae (R. mongolica 1, R. sibirica 2). Moreover R. bescidica n. sp. differs from R. mongolica in the absence of colour pattern and mucro with both serrated edges.
DESCRIPTION

Body length (without antennae) 0.6-0.79 mm (holotype: 0.79 mm). Body uniformly pigmented. Eyepatches with \(8 + 8\) ocelli (D smallest) and \(2 + 2\) setae (Fig. 5). Mandibles normal, maxillae with one enlarged lamella (Figs 10, 11). Chaetotaxy of labrum and labium as in Figs 7-9, 12. Head furnished with short normal setae (Fig. 5).


Abdomen with short normal setae (Fig. 13). Bothriotrichia A, B, C and D present (Figs 13-15). Neosminthuroid setae missing. Abdominal segment V included in the small abdomen. Abdominal segment VI in females with normal seta \(a_o\), other circumanal setae not winged (Figs 15, 16). Appendices anales distally branched (Figs 16, 17).

Subcoxae 1 I, II, III with 0, 1, 1 setae respectively. Subcoxae 2 I, II, III with 1, 1, 1 setae respectively. Coxae I, II, III with 1, 3, 3 setae respectively. Trochanters with 4 setae each. Trochanters II and III with oval organ. Femora I, II, III with 13, 13, 12 setae respectively. Chaetotaxy of tibiotarsi as in Figs 18-21, 23-29. Tita I and II with 6 and tita III with 7 external pores (Figs 19-23, 26, 27). Each tita with 6-7 spatulate setae. Claws small with 2-3 small inner and 2 outer teeth, without tunica. All empodia shorter than claws. Empodium I and II with tooth and short filament, empodium III with tooth but without filament (Figs 19-21, 23-29).

Ventral tube with 2 + 2 setae (Fig. 33). Sacs retracted and vesicles not visible. Retinaculum with 4 + 4 teeth and 2 setae (Figs 34, 35).

Manubrium with \(8 + 8\) posterior setae (Fig. 31). Dens anteriorly with 7 apical and 2 subapical setae, posteriorly with 5 proximal setae. 3 outer, 3 inner and 3 median dental setae present (Figs 31, 32). Mucro as in Figs 30-32. Ratio: length of dens/mucro = 2.2-2.4.

TYPES

Holotype: adult female on slide, rotten wood in a hollow of a beech, beech forest (Luzullo-fagetum) at an altitude 900 m a. s. l., “Barnowiec” reserve near Nowy Sącz (Beskid Sądecki Mountains, Carpathians, S Poland), 9. 05. 2003, leg. A. Smolis, D. Skarżyński; paratypes: adult male and 6 juveniles on slide, same data as holotype (preserved at the Department of Biodiversity and Evolutionary Taxonomy, Wrocław University, Poland).

REFERENCES

1-12. *Rusekianna bescidica* n. sp.: 1 – right antenna, dorsal view; 2 – right antenna, ventral view; 3 – sensilla of antennal III-organ, adult female; 4 – sensilla of antennal III-organ, adult male; 5 – chaetotaxy of head; 6 – papilla of antennal segment III; 7 – labrum; 8 – maxillary outer lobe; 9 – labial palp; 10 – head of maxilla, dorsal view; 11 – head of maxilla, ventral view; 12 – labium
13-17. *Rusekianna bescidica* n. sp.: 13 – thoracic segment III and abdominal segments I-V, lateral view; 14 – botriotrichium A; 15 – abdominal segments V-VI of adult female, dorsolateral view; 16 – abdominal segments V-VI of adult female, ventral view; 17 – appendix analis
Rusekianna bescidica n. sp.: 18 – serrated seta on tibiotarsus I; 19 – tibiotarsus I, dorsolateral view; 20 – tibiotarsus I, ventrolateral view; 21 – trochanter, femur and tibiotarsus of II pair of legs, ventrolateral view; 22 – external pores of tibiotarsi; 23 – trochanter, femur and tibiotarsus of II pair of legs, dorsolateral view; 24 – claw and distal part of tibiotarsus II, dorsolateral view; 25 – claw and distal part of tibiotarsus II, ventrolateral view; 26 – tibiotarsus III, dorsolateral view; 27 – tibiotarsus III, ventrolateral view; 28 – claw and distal part of tibiotarsus III, dorsolateral view; 29 – claw and distal part of tibiotarsus III, ventrolateral view.
30-34. *Rusekianna bescidica* n. sp.: 30 – mucro; 31 – furca, ventral view; 32 – dens and mucro, dorsal view; 33 – tubus ventralis; 34 – retinaculum, lateral view; 35 – retinaculum, ventral view