

Notes on *Pseudachorutes pratensis* RUSEK 1973 (Collembola: Neanuridae: Pseudachorutinae), a springtail species new for the Polish fauna

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ABSTRACT. *Pseudachorutes pratensis* Rusek, 1973 is recorded for the first time from Poland. Notes on its morphology are given.

KEY WORDS: Collembola, Neanuridae, *Pseudachorutes pratensis*, new record, morphology, faunistics, Poland.

INTRODUCTION

The genus *Pseudachorutes* TULLBERG 1871 is the most species-rich genus within the subfamily Pseudachorutinae and currently comprises 90 species (HOPKIN 1997, KAPRUS' et al. 2004, NAJT & WEINER 1997, TAMURA 2001). According to the recent checklist of Polish Collembola (SKARŻYŃSKI et al. 2002) six species were reported from Poland: *P. boernerii* SCHÖTT, 1902 (presently included in the genus *Pratanurida* RUSEK 1973; JORDANA et al. 1997); *P. corticolus* (SCHÄFFER 1896); *P. dubius* KRAUSBAUER 1898; *P. parvulus* BÖRNER, 1901; *P. subcrassus* TULLBERG 1871 and *P. palmiensis* BÖRNER 1903. Among them the last species deserves special attention, since it is a South European element, very rare in the Collembola fauna of Poland.

During the research in a arable field in the Lower Silesia (near Wrocław) we found a few specimens of *Pseudachorutes* characterized by the presence of two chaetae do on the head, the absence of chaeta B on labium (Fig. 1) and the absence of chaetae do on thoracic tergum II. We identified them as *P. pratensis* RUSEK 1973, a species described from

Central Moravia in Czech Republic, where it was found in the soil of dry meadows (*Serratuleto-Festucetum commutatae*).

Morphological characters of the Polish specimens generally fit the original description, however there are some differences which extend the range of variability of this species. Additionally, the detailed examination of the Polish specimens (unfortunately the type material was not analyzed), revealed two important characters on the buccal cone which had been omitted in its description. Since *P. pratensis* is a species new for the Polish fauna, we have decided to make some notes on its morphology.

Body size (without antennae) extends from 0.75 to 1.2 mm (0.6 mm in the original description). Antennal segment IV (Fig. 3) with apical vesicle, subapical organite "or", microsensillum "ms", chaeta "i" and 6 thin, cylindrical sensilla "s" (4 sensilla "s" according to RUSEK 1973: 193, Figs 39, 43). The apical vesicle is slightly divided into three lobes (Fig. 3) (simple in the original description). The arrangement of all chaetae and structures on dorsal side of antennal segments III and IV as in Fig 3. The postantennal organ (PAO) is composed of 9-10 lobes (10 in the original description). Labium with 11+11 chaetae (9+9 chaetae in the original description) and 1+1 small papillae "x", hard to detect (Fig. 1). Labral edge distinctly ogival (Fig. 2). The chaeta a_0 on the head is usually absent in the Polish individuals (in the original description chaeta a_0 present).

Pseudachorutes pratensis is the most similar to *P. parvulus*, from among six members of the genus known from Poland. It differs clearly from the mentioned species in chaetotaxy of head (two chaetae d_0 , in *parvulus*: one chaeta d_0), labium (chaeta B absent, in *parvulus*: present) and thorax II (chaetae a_2 absent, in *parvulus*: present). Moreover *P. pratensis* has 9-10 lobes in PAO (in *parvulus*: 5-8) and labrum ogival (in *parvulus*: non ogival).

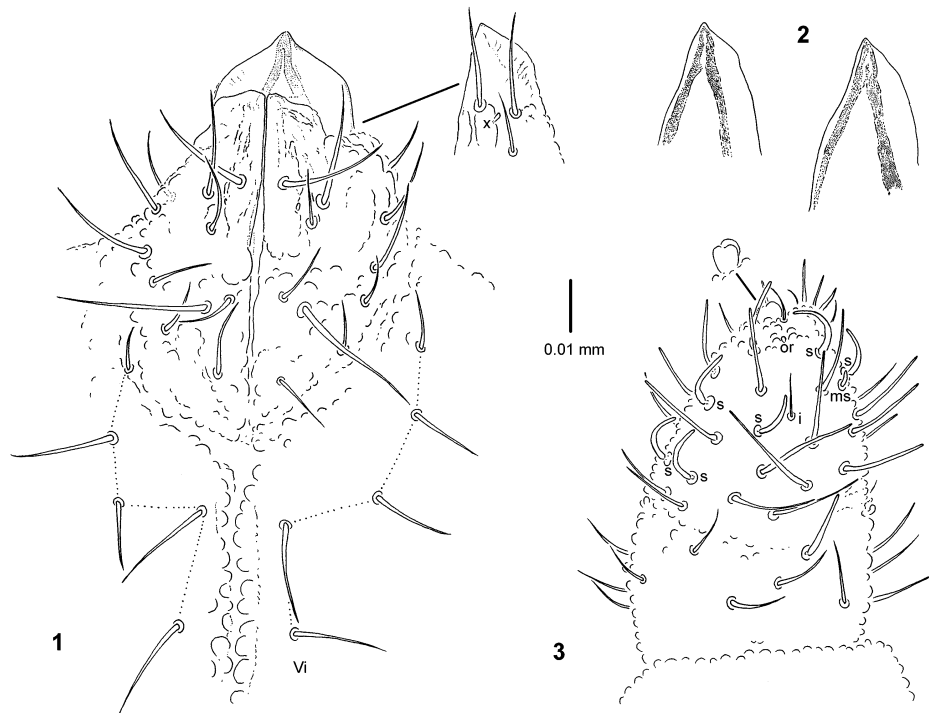
Till now *P. pratensis* was known only from Czech Republic (RUSEK 1973, 1995) and Slovakia (soil of herbaceous pasture *Glechomo-Festucetum*, KOSTŮROVÁ et al. 2005).

Material examined

Poland: the Lower Silesia, the Nizina Śląska Lowland, Pawłowice near Wrocław, soil, 6 adult females, 11.05.2004, leg J. TWARDOWSKI. Soil samples were taken from winter wheat field, from no-tillage treatment and conventional ploughed treatment. Additionally one individual (adult female) was identified from soil taken from field margin, near winter wheat field (07.03.2003, leg. J. TWARDOWSKI).

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Figs 1-3. *Pseudachorutes pratensis*. 1 - chaetotaxy of labium and group Vi; 2 - edge of labrum; 3 - segments III and IV of right antenna, dorsal view.

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