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A new species of *Pseudachorutes* TULLBERG, 1871 (Collembola, Neanuridae) from Israel

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Abstract. New species of the genus *Pseudachorutes* is described and illustrated.

Key words: Collembola, new species, Mt. Caramel, Israel.

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The Collembola of Mt. Caramel in northern Israel were studied in several papers (GRUIA 1995; GRUIA et al. 1999, 2001; BRETFELD et al. 2000; KAPRUS' & NEVO 2003).

Till now, the genus *Pseudachorutes* was not represented in the fauna of Israel and adjacent countries (Lebanon and Syria). *P. libanensis* was described from Lebanon as *Aetiopella libanensis* by CASSAGNAU and DELAMARE (1955) and subsequently redescribed by ELLIS (1976) on the basis of the material from Central Crete. The comparison of both descriptions shows, that they concern two separate species. In the present paper the description of a new species of this genus is given.

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Pseudachorutes caramel sp. n.

(Figs 1- 8)

D i a g n o s i s. Habitus typical for the genus *Pseudachorutes*. Buccal cone elongated. Labral formula with 0/242 setae. Antennal segment IV with six sensilla. Postantennal organ with 11-14 vesicles. 8+8 eyes present. Formula of sensory setae s per half tergum: 022/11111. Head without seta a0 and d0. Thoracic tergum I with 2+2 setae. Furca with five-six setae on each dens. Mucro slightly hooked with lamella. Tibiotarsi I, II and III with 18, 18 and 17 setae, respectively; seta M

absent. Subcoxae "1" I, II and III with 1, 2 and 2 setae, subcoxae "2" I, II and III with 0, 2 and 2 setae, respectively. Each anal valve with three setae hr.

D e s c r i p t i o n. Holotype (female) length 0.86 mm, length of paratypes (males and female): 0.64 and 0.82 mm. Colour in alcohol bluish-grey, ocular plate bluish-black. Tegumental granulation rather strong.

Antennae as long as head. Antennal segment I with 7 setae, antennal segment II with 11 setae. Antennae III and IV fused dorsally, ventral separation well marked. Sensory organ of antennal segment III consisting of: two small, globular internal sensilla, two subcylindrical guard sensilla (ventral sensilla longer two times than dorsal ones) and two guard setae between them; ventral microsensillum present. Antennal segment IV with ordinary setae, with 6 distinct subcylindrical sensilla; dorsoexternal microsensillum present, truncated subapical organite present; apical vesicle trilobated, ventral side with a few truncated setae (Fig. 2 & 3).

Postantennal organ oval with 11-14 vesicles, 1.7 times larger than ocellus B (Fig. 4). Eyes 8+8. Buccal cone alongated. Mandible with four teeth, styliform maxilla with two lamellae; each of them with two small teeth. Labrum long pointed at apex, labral chaetotaxy: 0/242, labium as in Fig. 5 without seta L.

Dorsal chaetotaxy as in Fig. 1, with mesochaetae and with longer sensory setae s. Their formula per half tergum: 022/11111. Microsensilla on thoracic tergum II present. Head without setae d0 and a0. Thoracic tergum I with 2+2 setae. Seta a2 absent on the thoracic terga II and III. Abdominal terga I-IV with seta s = seta p4, abdominal tergum V with seta s = p2. Thoracic sterna without setae. Ventral tube with 3+3 setae, abdominal sternum I without setae, abdominal sternum II with 3+3 setae, abdominal sternum III with 6+6, (Fig. 8).

Furca with six setae (six and five in the holotype) on each dens (Fig. 7). Mucro slightly hooked with lamella which obtain apex. Manubrium with 11+11 setae. Tenaculum with 3+3 teeth. Each anal valve with three setae hr (Fig. 8).

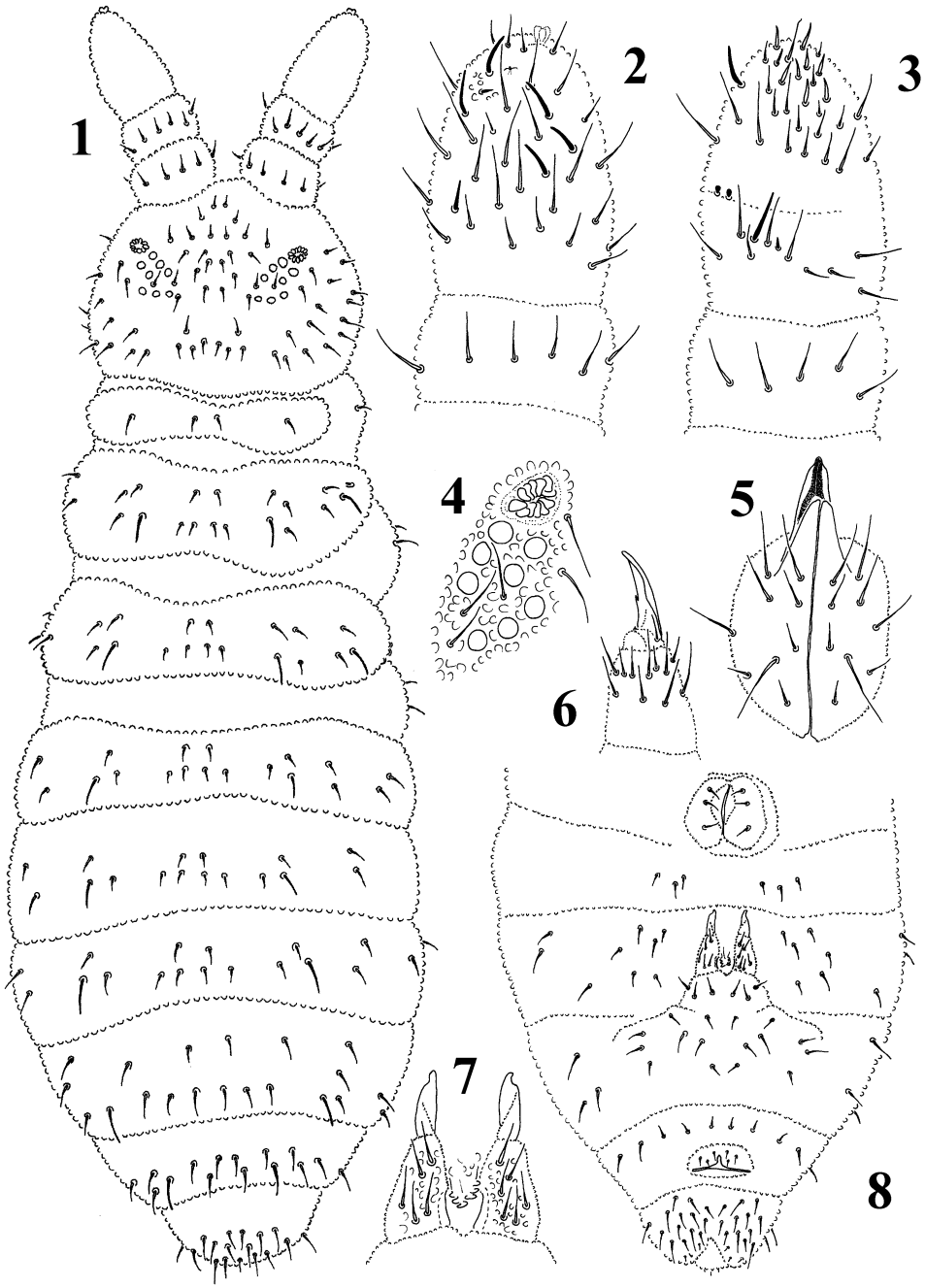
Tibiotarsi I, II and III with 18, 18 and 17 setae, respectively, witout seta M. Seta B7 absent on tibiotarsus III. Femora I, II and III with 12, 11 and 10 setae, trochanters I, II and III with 6, 5, 5 setae, coxae I, II and III with 3, 5 and 7 setae, subcoxae "2" I, II and III with 0, 2 and 2 setae, subcoxae "1" I, II and III with 1, 2 and 2 setae, respectively. Claw with inner tooth and without lateral teeth (Fig. 6). Empodial appendage absent.

T y p e m a t e r i a l. Holotype and three paratypes: holotype (female) and two paratypes (female and juvenile male) in the State Museum of Natural History, Ukrainian National Academy of Science, Lv'iv, paratype (male) in the Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Kraków.

T y p e l o c a l i t y. Israel, Mt. Caramel, lower Nahal Oren ("Evolution Canyon"), N slope, under Quercus caliprinos, litter and soil, 3.iv.1999 (holotype and one paratype female), 16.ii.1999 (paratype male) and 26.xi.1999 (paratype juvenile male). Coll. Tomas PAVLIČEK.

E t y m o l o g y. The name of the new species is derived from the Mt. Caramel.

D i s c u s s i o n. The new species is close to *P. libanensis* (CASSAGNAU & DELAMARE, 1955) sensu ELLIS, 1976. Both species have the same type of chaetotaxy (without seta a2 on thoracic tergum II, the same arrangement of setae s on the abdomen), the elongated buccal cone and furca with 6+6 setae on the dens. They differ in the number of setae on thoracic tergum I (2+2 in the new species and 3+3 in *P. libanensis* sensu ELLIS, 1976), in the shape of internal sensilla in sensory organ of antennal segment III (globular internal in the new species and subcylindrical in *P. libanensis* sensu ELLIS, 1976) and the chaetotaxy of labium (in *P. libanensis* sensu ELLIS, 1976 one microchaeta (seta L) in front of seta A is present, in the new species this seta is absent). They possess the different number of setae on ventral tube (3+3 in the new species, 4+4 in *P. libanensis* sensu ELLIS, 1976), number of sensilla on antennal segment IV (8 in *P. libanensis* sensu ELLIS, 1976 and 6 in the new species) and number of vesicles in postantennal organ (8 vesicles in *P. libanensis* sensu ELLIS, 1976 and 11-14 in the new species).



Figs 1-8. *Pseudachorutes caramel* sp. n. 1 – dorsal chaetotaxy; 2 – antennal segment II-IV dorsally; 3 – antennal segment II-IV ventrally; 4 – postantennal organ and eyes; 5 labial chaetotaxy with labral apex (labral arch); 6 – tibiotarsus III; 7 – furca; 8 – chaetotaxy of abdominal sterna I-VI.

P. caramel sp. n. possesses the elongated buccal cone, quite similar to that of *P. romeroi* described from Spain by SIMON (1986). In both these species seta L on the labium is absent, number of setae on the dens similar (5-6). They differ by another chaetotaxy (thoracic tergum I with 3+3 setae, seta a2 present on thoracic tergum II, seta s on abdominal tergum V = p3 in *P. romeroi*), and by an arrangement of sensilla on antennal segment IV (sensilla e1 present in the new species, absent in *P. romeroi*).

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