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**PSEUDACHORUTES (PSEUDACHORUTES) ORIENTALIS  
(COLLEMBOLA: HYPOGASTRURIDAE), NEW SPECIES  
FROM NEW YORK**

Steven J. Loring<sup>1</sup>

While examining pitfall samples collected at the Brookhaven National Laboratory's "Gamma Forest" in 1968 by Dr. George E. Klee, I encountered an unknown species of *Pseudachorutes*. The purpose of this paper is to describe that species.

*Pseudachorutes (Pseudachorutes) orientalis* **new species**

**COLOR DESCRIPTION:** Dorsum greyish-blue, ventral surface cream colored; legs speckled; dens lightly colored greyish-blue on dorsal and ventral surfaces.

**MORPHOLOGICAL DESCRIPTION:** Ocelli 8+8, subequal, on black patches. Postantennal organ (PAO) elongate elliptical with 9-11, usually 10, tubercles; about 1.5 × length of nearest ocellus (A) (Fig. 1). Antennal segment (ANT) III and IV partially ankylosed—suture visible ventrally. ANT IV with distinct single-lobed apical bulb and eight blunt setae (Figs. 2-3); two distal ventral blunt setae thin and may be mistaken for normal setae. ANT III with two dorsal sense clubs and a long, ventral seta (Figs. 2-3). Mandible with two distal teeth (Figs. 4-5). Maxilla stylet shaped with small hook distally (Fig. 6). Unguis with inner tooth about 1/3 length from base (Fig. 7); unguiculus absent; no clavate tenent hairs. Collophore with 3+3 setae. Tenaculum with 3+3 teeth. Manubrium with 3-3 dorsal setae; dens about 2 × length of manubrium, with six dorsal setae; mucro lamellate (Fig. 8). Long posterior body setae weakly clavate. Male genital plate with 16 setae (Fig. 9). Female genital plate unknown. Maximum length 1.5 mm.

DIAGNOSIS

Using Christiansen and Bellinger (1980), *Pseudachorutes orientalis* keys out nearest *P. subcrassoides* Mills, 1934; nearest *P. simplex* Maynard, 1961 in Massoud (1967); near *P. subcrassus* Tullberg, 1871 in Gisin (1960); and near *P. lunatus* Folsom, 1916 using Stach (1949). *Pseudachorutes orientalis* may be separated from these species by the following characteristics:

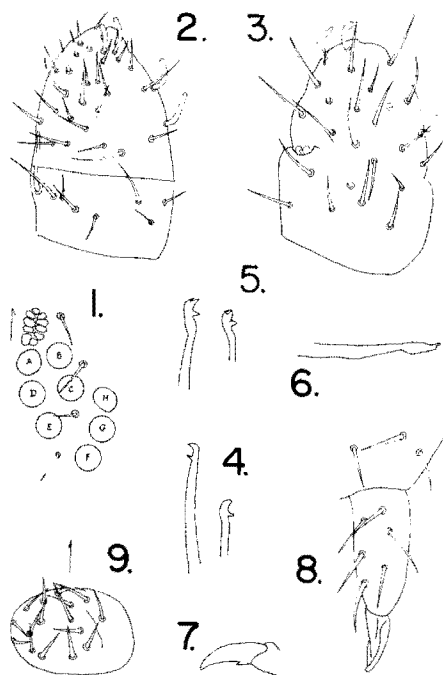
	<i>orientalis</i>	<i>subcrassoides</i>	<i>simplex</i>	<i>subcrassus</i>	<i>lunatus</i>
clavate tenent hairs	absent	absent	absent	absent	present
ANT IV apical bulb lobes	1	3	2-3	3	unknown
PAO lobes	9-11	8-14	14-17	8-10(11)	10-12
mandibular teeth	2	4-5	4	4	unknown
ANT IV blunt setae	6-8	5	6	5-6	unknown

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The number of mandibular teeth and lobes of the antennal apical bulb distinguish *P. orientalis* from *P. simplex*, *P. subcrassoides*, and *P. subcrassus*. These features have not been seen in *P. lunatus*, but the presence of a clavate tenent hair on each leg will separate it from *P. orientalis*.

The posterior body setae of *P. orientalis* appear to be very weakly clavate, but may be mistaken for acuminate setae. One aberrant specimen had three mandibular teeth instead of two.

**TYPES:** Holotype and 45 paratypes in alcohol; eight paratypes on slides. Holotype and paratypes deposited in the Entomology Museum, Michigan State University, East Lansing. All specimens were collected by Dr. George E. Klee in New York, Suffolk County, Brookhaven National Laboratory, Sections 9 and 10 of oak-pine woodlot containing a radiation source, 28 June, 2-5, 8-11, and 23-29 July, and 11-17 August 1968.



Figs. 1-9, (1) Right ocellar pattern and PAO; (2) ANT III & IV, ventral view; (3) ANT III & IV, dorsal view; (4) normal mandible; (5) abnormal mandible; (6) maxilla; (7) hind unguis; (8) left side of furcula, dorsal view; (9) male genital plate.

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