

アジアにおけるイシムカデ目の分類学的研究(3)

本州中部の日本海沿岸地域から採集されたヒトフシムカデ属の一新種について

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Taxonomic Study of the Order Lithobiomorpha (Chilopoda) in Asia.
III. A New Species of the Genus *Monotarsobius* (Lithobiiadae)
from an Area Facing the Japan Sea in Central Honshu, Japan

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Abstract A species of the *Monotarsobius* centipedes, *M. nunomurai* sp. nov. is described from an area facing the Japan Sea in central Honshu, Japan. This new species can be easily discriminated from the other congeners by combinations of such characters as spinulation on legs, ocelli arrangement, the number of antennal segments, the number of coxal pores and the form of female gonopod.

Introduction

Eason (1973), Pocock (1895), Takakuwa (1938, 1941), Murakami (1960), Takano (1979) and Ishii and Tamura (1994) have reported the eight species of the genus *Monotarsobius* with 20 or more antennal articles and a single tarsus of leg; *M. holstii*, *M. purpureus*, *M. ramulosus*, *M. subdivisus*, *M. nihamensis*, *M. shinoharai*, *M. mistinensus* and *M. primrosus*.

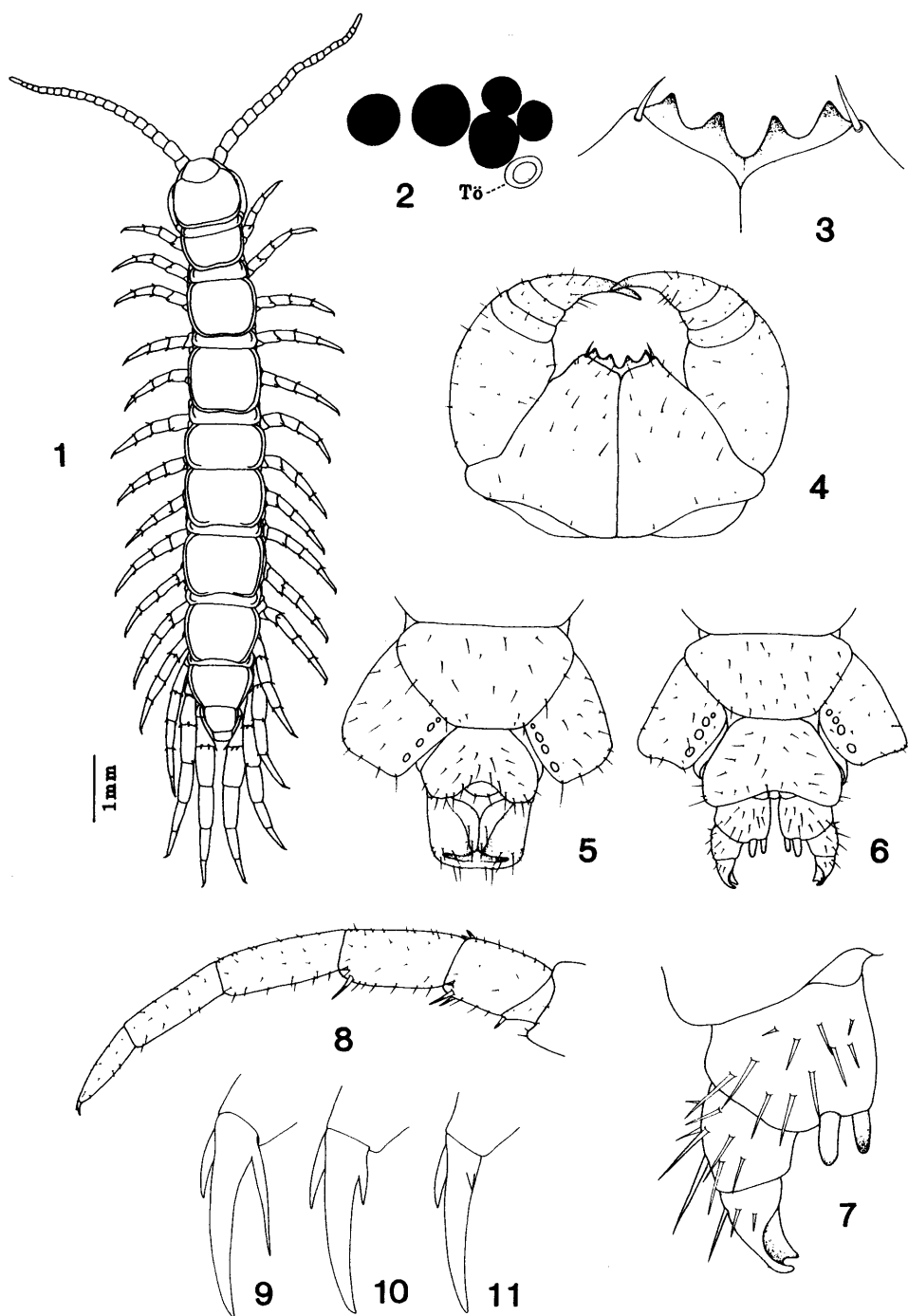
Recently, I examined some specimens belonging to the genus *Monotarsobius* with 20 antennal articles, which were collected from an area facing the Japan Sea in central Honshu, Japan by Dr. Noboru NUNOMURA, Toyama Science Museum. They are all conspecific and clearly different in some aspects from the other congeners, being described here as a new species.

***Monotarsobius nunomurai* sp. nov.**

(Figs. 1–11)

Diagnosis. Body length 7.0–9.7 mm; antennal articles 20 and ocelli on each side of head 5 in number; 1st to 13th legs each with a single tarsus; 15th leg of male without accessories; the number of coxal pores usually 3, 4, 4, 3 or 3, 4, 4, 4 in both sexes; female gonopod with two conical gonopod spurs of subequal size and spoon-like gonopod claw deeply concave at apex.

Description. Male (Fig. 1): Body length 8.3–9.7 mm ($\bar{x}$ = 8.9 mm, n = 3), head width



Figs. 1-11. *Monotarsobius nunomurai* sp. nov., 1, Adult male (dorsal); 2, ocelli (right), Tö, organ of Tömösvary; 3, forcipular teeth (ventral); 4, forcipules (ventral); 5, posterior end of body in male (ventral); 6, posterior end of body in female (ventral); 7, female gonopod (right, ventral); 8, 15th leg in male (right, lateral); 9, apical claw of 13th leg; 10, apical claw of 14th leg; 11, apical claw of 15th leg.

1.1–1.4 mm ($\bar{x}$ = 1.2 mm), trunk width at T. 10 1.3–1.6 mm ($\bar{x}$ = 1.4 mm).

Body color deep purple-brown, but head slightly paler, forcipules and tarsi of legs yellow.

Head a little broader than long; without marginal ridge.

Antenna composed of 20 articles, rarely of 19.

Five ocelli on each side; anterior 2 ocelli smaller than the others (Fig. 2).

Organ of Tömösvary nearly as large as anterior ocelli.

Forcipular coxosternite with 2+2 teeth almost of the same size, the lateral pair of teeth projected further forwards than the medial pair; parodontal spines slender, long (Figs. 3 and 4).

Tergite I slightly trapeziform with feebly concave posterior border. Posterior border of tergites V, VIII, X, XII and XIV feebly concave. Sternite XV trapeziform (Fig. 5).

Tarsi of 1st to 13th legs fused, but those of 14th and 15th biarticulated. Fourteenth and 15th legs themselves thickened. Fifteenth leg dorsally without all of groove, tubercle and setae (Fig. 8). Coxal pores usually 3, 4, 4, 3 or 3, 4, 4, 4 in number. Anterior accessory claw of 1st to 13th legs well developed, but short on 14th leg and very short or vestigial on 15th leg (Figs. 9, 10 and 11). Posterior accessory claw well developed on all legs. Spinulation of legs as in Table 1. Second genital sternite with a pair of setae.

Female: Body length 7.0–8.8 mm ($\bar{x}$ = 8.0 mm, $n=3$), head width 1.0–1.3 mm ($\bar{x}$ = 1.1 mm), trunk width at T. 10 1.2–1.5 mm ($\bar{x}$ = 1.3 mm); 14th and 15th legs feebly thickened, with no accessories; the number of coxal pores as same as male; sternite XV trapeziform (Fig. 6); gonopod with two conical gonopod spurs of subequal size; spoon-like gonopod claw deeply concave at apex (Fig. 7).

Remarks. The new species resembles *M. holstii*, but is separable from the latter by having spoon-like gonopod claw deeply concave at apex and unique spinulation on legs.

Type material. Holotype: male, Arimine, Ohyama-machi, Toyama Pref., 1,100 m alt., *Fagus crenata-Quercus mongolica* var. *grosseserrata* forest, 27 August 1993, N. NUNOMURA leg.

Table 1. Spinulation on legs of *Monotarsobius nunomurai* sp. nov.

Leg	Dorsal					Ventral				
	C	t	P	F	T	C	t	P	F	T
1			p	a	a				a	m
2			p	a p	a				am	m
3–6			p	a p	a p				am	m
7			a p	a p	a p				am	am
8 • 9			a(m)p	a p	a p				am	am
10			amp	a p	a p			(mp)	am	am
11–13			amp	a p	a p			mp	amp	am
14	a		amp	p		m	amp	am	am	m
15	a		amp			m	amp	am		

Symbols C, t, P, F and T are coxa, trochanter, prefemur, femur and tibia, respectively. Symbols a, m and p indicate anterior, median and posterior spines, respectively.

Allotype: female, same data as holotype. These type specimens are deposited in the collection of Toyama Science Museum.

Other specimens examined: 2 males, same data as holotype. 1 female, Higashidani, Ohyama-machi, Toyama Pref., 1,400 m alt., *Fagus crenata-Quercus mongolica* var. *grosseserrata* forest, 17 October 1993, N. NUNOMURA leg. 1 female, Furudo, Toyama City, 100 m alt., *Quercus serrata-Quercus acutissima* forest, 17 October 1993, N. NUNOMURA leg.

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摘 要

石井 清 (獨協医科大学生物学教室) - アジアにおけるイシムカデ目の分類学的研究. III. 本州中部の日本海沿岸地域から採集されたヒトフシムカデ属の一新種について.

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本州中部の日本海沿岸地域から20触角小節をもったヒトフシムカデ属の一種が採集され, *Monotarsobius nunomurai* sp. nov. (エッチュウヒトフシムカデ) と命名して記載した. 本種は武装棘の配列パターン, 眼の配列と数, 触角節数, 基節腺孔数, 雌生殖肢の形状の組み合わせにより同属の他種から区別できる.

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