

アジアにおけるイシムカデ目の分類学的研究(5)

山形県から発見されたヒトフシムカデ属の1新種について

誌名	Edaphologia
ISSN	03891445
著者名	石井,清
発行元	日本土壌動物研究会
巻/号	65号
巻号補足	
掲載ページ	p. 19-23
発行年月	2000年2月

農林水産省 農林水産技術会議事務局筑波産学連携支援センター

Tsukuba Business-Academia Cooperation Support Center, Agriculture, Forestry and Fisheries Research Council
Secretariat



Taxonomic Study of the Order Lithobiomorpha (Chilopoda) in Asia. V. A New Species of the Genus *Monotarsobius* from Yamagata, Northeast Japan

Kiyoshi ISHII

Department of Biology, Dokkyo University School of Medicine, Mibu,
Tochigi 321-0293, Japan

Received: 28 July 1999; Accepted: 10 December 1999

Abstract A new species of *Monotarsobius* centipede is described from the Yura Pass of Tsuruoka City, Yamagata Prefecture, northeast Japan. This species is separable from the congeners by having four ocelli, VmpP spinulation on legs and 14 and 15th legs thickened.

Key words: Chilopoda, Lithobiomorpha, *Monotarsobius*, new species, Japan

Introduction

ISHII (1988, 1991) has so far been reported two species of *Monotarsobius* centipede with characteristic accessories on tarsus I of 15th legs in male.

Recently, some specimens of a small centipede species belonging to the genus *Monotarsobius* were collected from the Yura Pass of Tsuruoka City, Yamagata Prefecture, northeast Japan by Mr. H. SAKAYORI. These specimens are apparently different in several characters from the other congeneric species. Therefore, it is described herein as a new species.

Monotarsobius yuraensis n. sp.

(Figs. 1–14, Japanese name: Yura-hitofushimukade)

Type material. Holotype: ♂, the Yura Pass, Tsuruoka City, Yamagata Prefecture, *Quercus serrata* forest, 80 m alt., 14 December 1998, H. SAKAYORI leg. Allotype: ♀, same data as for holotype. Paratypes: 2 ♂ 5 ♀ Tamugimata, Asahi-mura, Yamagata Prefecture, *Fagus crenata* forest, 500 m alt. 3 May 1999, H. SAKAYORI leg. These type specimens will be deposited in the collection of National Science Museum, Tokyo.

Other specimens examined: 4 ♂ 7 ♀, same data as for holotype. 8 ♀, same data as for paratypes. These specimens will be deposited in the collection of Dokkyo University School of Medicine, Mibu, Tochigi.

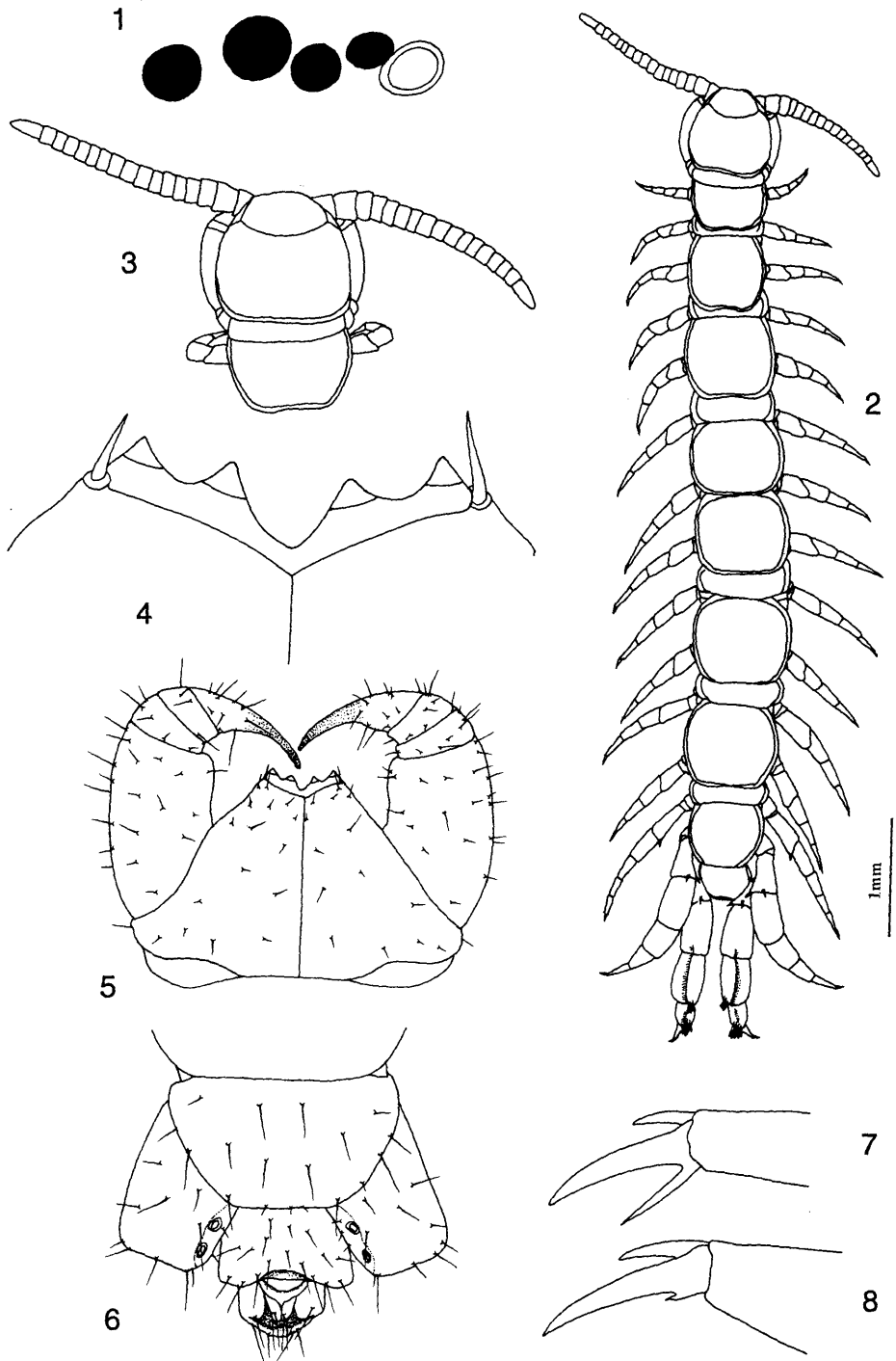


Fig. 1. *Monotarsobius yuraensis* n. sp. 1. Right ocelli; 2. habitus, adult male, dorsal side; 3. head and tergite I, dorsal side; 4. forcipular teeth, ventral side; 5. forcipules, ventral side; 6. posterior end of body in male, ventral side; 7. apical claw of 13th leg; 8. ditto of 14th leg.

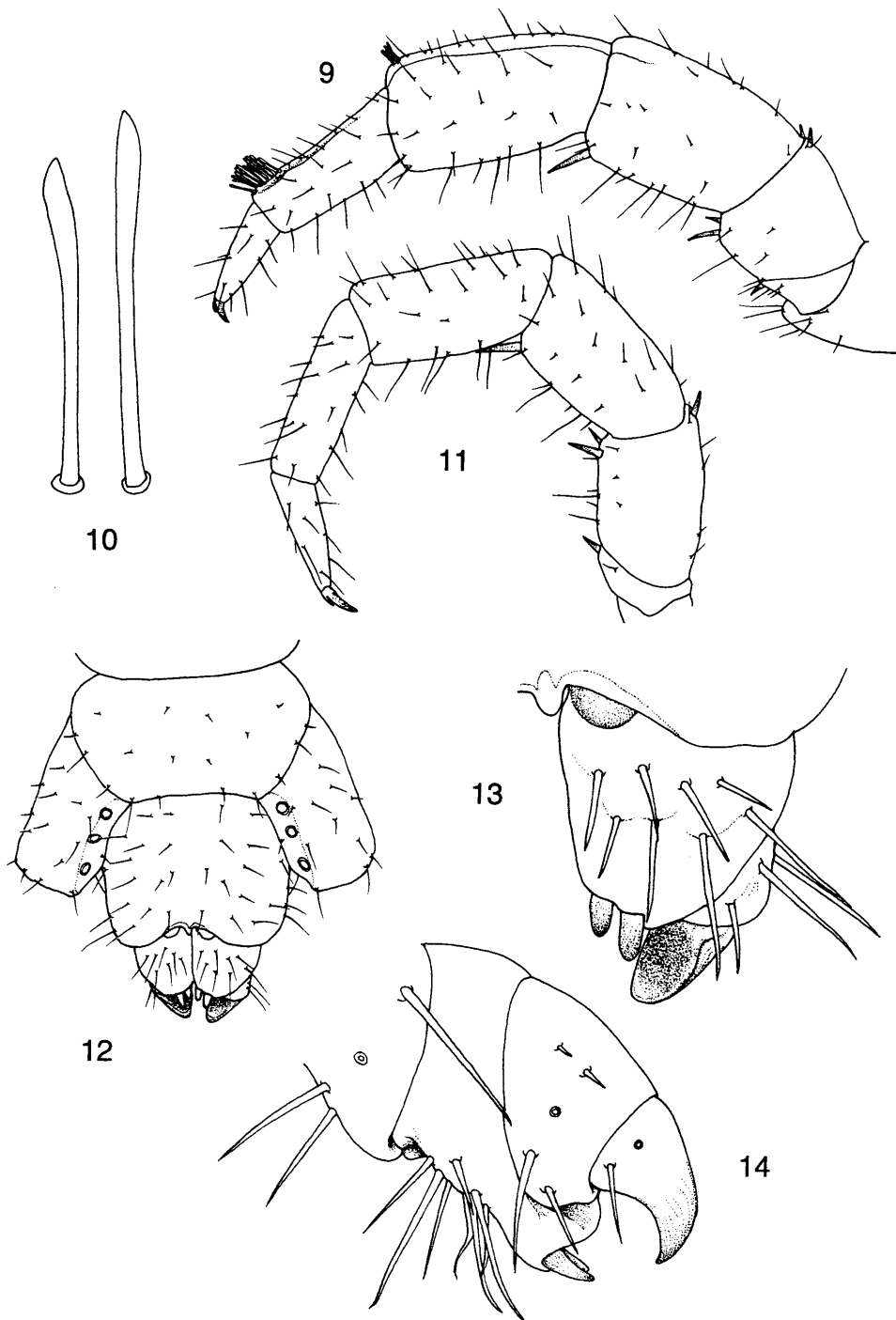


Fig. 2. *Monotarsobius yuraensis* n. sp. 9. right 15th leg in male, lateral side; 10. dorsodistal spatulate setae on 15th tarsus I in male; 11. right 14th leg in male, lateral side; 12. posterior end of body in female, ventral side; 13. left female gonopod, ventral side; 14. left female gonopod, dorsointernal side.

Description

Male (Fig. 2). *Measurements*: Length 5.76–6.88 mm (mean $\pm$ SD: 6.42 ± 0.44 mm, $n=7$), head width 0.66–0.70 mm (0.69 ± 0.02 mm), 3rd tergal width 0.61–0.67 mm (0.65 ± 0.02 mm), 10th tergal width 0.75–0.84 mm (0.81 ± 0.03 mm).

Body color. Reddish brown except 14th and 15th legs which are yellow-colored.

Head. Antenna usually consisting of 17 segments (Figs. 2 and 3).

Four ocelli on each side, arranged in a horizontal row; third ocellus much larger than others, posteroanterior and posterior ones almost the same size, anterior one smallest (Fig. 1).

Organ of Tömösvary nearly same with posteroanterior ocellus in size.

Forcipular coxosternite having 2+2 teeth of almost the same size; lateral pair of teeth projecting further forwards than medial pair; parodontal spines slender, long (Figs. 4 and 5).

Trunk. First tergite somewhat trapeziform with feebly concave posterior border. Posterior border of tergites III, V, VIII and X feebly concave.

Sternite XV semicircular (Fig. 6). Second genital sternite without setae.

Leg. Tarsi of 1st to 13th legs fused, but those of 14th and 15th legs separated into tarsi I and II. Fourteenth and 15th legs particularly thickened (Figs. 2, 9 and 11). In 15th leg, tibia and distal part of femur dorsally with a marked groove; tibia with a group of 4 or 5 spatulate setae on postero-dorsal surface; tarsus I dorsally with a characteristic distal small swelling, which is clothed with a group of about 20 spatulate setae; tarsus II shorter than tarsus I; apical claws small (Figs. 9 and 10). Anterior accessory claw well developed in 1st to 13th legs, but short on 14th leg and very short or vestigial on 15th leg (Figs. 7 and 8). Posterior accessory claw well developed in all legs. Number of coxal pores arranged in a row usually 1, 2, 2, 2, rarely 1, 2 (3), 2, 2.

Spinulation of legs as in Table 1.

Female. *Measurements*: Length 6.00–7.76 mm (6.83 ± 0.53 mm, $n=21$), head width 0.66–0.72 mm (0.69 ± 0.02 mm), 3rd tergal width 0.60–0.68 mm (0.65 ± 0.02 mm), 10th tergal width 0.70–0.86 mm (0.81 ± 0.04 mm).

Trunk. Sternite XV trapeziform (Fig. 12).

Leg. Coxal pores usually 2, 3, 3, 3 in number, rarely 2, 2 (3), 3, 3.

Gonopod. Genital coxa with two conical spurs of almost equal size (Fig. 13). Secondary genital segment with two small dorsal spines (Fig. 14). Genital craw simple, spoon-like.

Table 1. Spinulation on legs of *Monotarsobius yuraensis* n. sp.

Leg		Dorsal			Ventral			
No.	t	P	F	T	t	P	F	T
1 • 2				a				
3				a				(m)
4 • 5				a				m
6–9				a			(m)	m
10 • 11				a			m	m
12		(p)		(a)		(m)	m	m
13		p				(m)(p)	m	m
14 • 15		mp			m	mp	m	

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

A New Species of *Monotarsobius* from Japan

Remarks. This new species resembles *M. tamurai* ISHII, 1991, but differs from it in having four ocelli and 14–15 VmpP in spinulation of legs. The variation in number of antennal segments in this new species is as follow: 17 (left seg.) + 17 (right seg.) (12 individuals), 17 + 18 (2 ind.), 17 + 15 (2 ind.), 17 + 10 or 10 + 17 (2 ind.), 9 + 17 (2 ind.), 17 + 16 (1 ind.), 16 + 16 (1 ind.), 15 + 18 (1 ind.), 15 + 16 (1 ind.), 14 + 17 (1 ind.), 9 + 16 (1 ind.), 9 + 13 (1 ind.), 8 + 15 (1 ind.).

Etymology. The specific name is derived from the name of the type locality.

Acknowledgments

I wish to express my sincere thanks to Mr. H. SAKAYORI, Shimotsuma Daini Senior High School, Ibaraki, for offering valuable specimens and Dr. Hiroshi TAMURA, Kanegasaki-cho, Iwate Pref., for useful advice and reading through the manuscript.

摘 要

石井 清 (獨協医科大学医学部生物学教室) : アジアにおけるイシムカデ目の分類学的研究. 5. 山形県から発見されたヒトフシムカデ属の 1 新種について.

Edaphologia No. 65: 19–23, 2000.

山形県からヒトフシムカデ属の 1 新種が発見され, *Monotarsobius yuraensis* n. sp. (ユラヒトフシムカデ) と命名して記載した。本種は, 雄の第15歩肢腿節末端の一部, 脛節および第 1 附節の背面に縦溝があり, さらに脛節と第 1 附節背面末端にへら状毛群がある点で *M. tamurai* ISHII, 1991 に形態が似ている。しかし, 本種は, 1) 一列に並んだ 4 個の単眼を有すること, 2) 第14–15歩肢は雌雄ともに太いこと, 3) 14–15歩肢は VmpP 棘を有することにより *M. tamurai* ISHII, 1991 と区別される。

References

- ISHII, K., 1988. A new species of the genus *Monotarsobius* (Chilopoda: Lithobiidae) from Japan. *Can. Ent.*, **120**: 717–720.
- ISHII, K., 1991. Three new species of the genus *Monotarsobius* (Chilopoda: Lithobiidae) from Japan. *Edaphologia*, (45): 25–31.