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A New species of the genus *Exalloniscus* (Isopoda, Oniscidea) from Tochigi Prefecture, Eastern Japan*

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栃木県から発見されたオカメワラジムシ属の一新種

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栃木県小山市の土壌から発見された等脚目甲殻類の一種を新種 *Exalloniscus tuberculatus*（和名：ハリダシオカメワラジムシ）として記載した。本種はオカメワラジムシ *Exalloniscus cortii*とは（1）雄第1腹肢内肢先端付近に複雑な突起を持つこと，(2) 雄第2腹肢内肢が短いこと（3）頭部の形態，(4) 腹尾節後端の形態，(5) はっきりした目が存在すること，(6) 胸脚状に3分岐した剛毛の存在などにより区別される。なお，本種は日本での*Exalloniscus*属の3番目の種類である。

A new species is described from Oyama, Tochigi Prefecture. It is most closely allied to *Exalloniscus cortii* known from the various parts of Japan and other countries of east Asia, but the former is separated from the latter in the following features: (1) shape of structure of apical part of male first pleopod, (2) shorter endopod of second pleopod, (3) shape of cephalon, (4) shape of posterior end of pleotelson, (5) distinct eyes, (6) presence of trified setae on pereopods.

During the soil zoological survey of Tochigi Prefecture, carried out by an Soil Animal Surveying Group of Tochigi a small but queer looking terrestrial Isopod was found. The specimen was sent to me for identification. As the result of my study, it proved to be represented a new species of the genus *Exalloniscus*. It is the third species of the genus in Japan.

Order Isopoda
Family Oniscidae
Genus *Exalloniscus*
***Exalloniscus tuberculatus* sp. nov.,**
[Jap.name: Haridashi-okame-warajimushi, new]
Fig.A-S

Description: Body long, 2.1 times as wide. Surface covered with low scale-like spines. Color pale yellow in alcohol. Eyes small, each eye composed of 5-6 ommatidia. Cephalon with lateral lobe prot-

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ruded laterally. Posterior margin of pleotelson triangular, whose tip is rounded.

Antennule (Fig.E); terminal segment with 2 aesthetascs at the tip. Antenna (Fig.F); reaching the posterior end of pereonite 2. Flagellum consists of 3 segments. Right mandible (Fig.G); pars incisiva 4-headed; lacinia mobilis not chitinized and weakly 3-headed; 15-17 hairy bristles; processus molaris is represented by 3 short plumose setae. Left mandible (Fig.H); pars incisiva 4-headed; lacinia mobilis 3-headed; 15-18 hairy bristles; processus molaris is represented by 2 tufts of setae. Maxillula (Fig.I); inner lobe with 2 plumose setae; outer lobe with 8 teeth at the tip; inner four teeth bifid. Maxilla wide. Maxilliped (Fig.J); endite rectangular with a seta and 2 spurs on distal margin. Palp.

Pereopod 1(Fig.K); basis 4.0 times as long as wide; ischium less than half length of ischium; merus as long as ischium; carpus 1.5 times as long as merus with 3 long setae on inner margin and 3 setae on distal margin and setae on outer margin; propodus 4/5 as long as carpus with 3 setae on inner margin and 5 setae on outer margin. Pereopod 2 (Fig.L); basis 3.0 times as long as wide with a seta on inner distal angle; ischium 45% as long as wide; merus a little shorter than ischium with 6 setae on inner margin and a seta at outer distal angle and a seta at outer distal angle; carpus 1.3 times longer than merus with 8 setae on inner margin, the distal one long and bifid; propoduswith 5 setae on inner margin and 5 trifid setae on inner margin. Pereopod 3 (Fig.M); basis 3.8 times as long as wide; ischium 45% as long as basis with 2 setae on inner margin; merus a little shorter than ischium with 4 setae on inner margin; carpus 1.6 times longer than merus with 5 setaeon inner margin and 7 setae on outer margin; propodus as long as basis with 4 setae on inner margin and 3 trifid spines on outer margin. Pereopod 4 (Fig.N); basis 3.0 times as long as wide; ischiumhalf the length of basis; merus as long as ischium with 4 setae on inner margin; carpus 1.7 times as long as merus with 6-7 setae on Inner margin and 2 setae on outer margin; propodus as long as merus with 4 setae on inner margin and 3 trifid spines on outer margin. Pereopods 5-6 were broken off. Pereopod 7 (Fig.O); basis rectangular, 2.5 times as long as wide; ischium 0.6 time as long as basis and narrow with 3 short setae on each margin; merus a little shorter than ischium with 2 setae on inner margin and 2 setae on outer margin; carpus with relatively long setae on inner margin, a seta on distal margin and 3 trifid spines on outer margin; propodus 1.3 times as long as carpuus with 5 setae on inner margina and 5-6 trifid spines on outer margin.

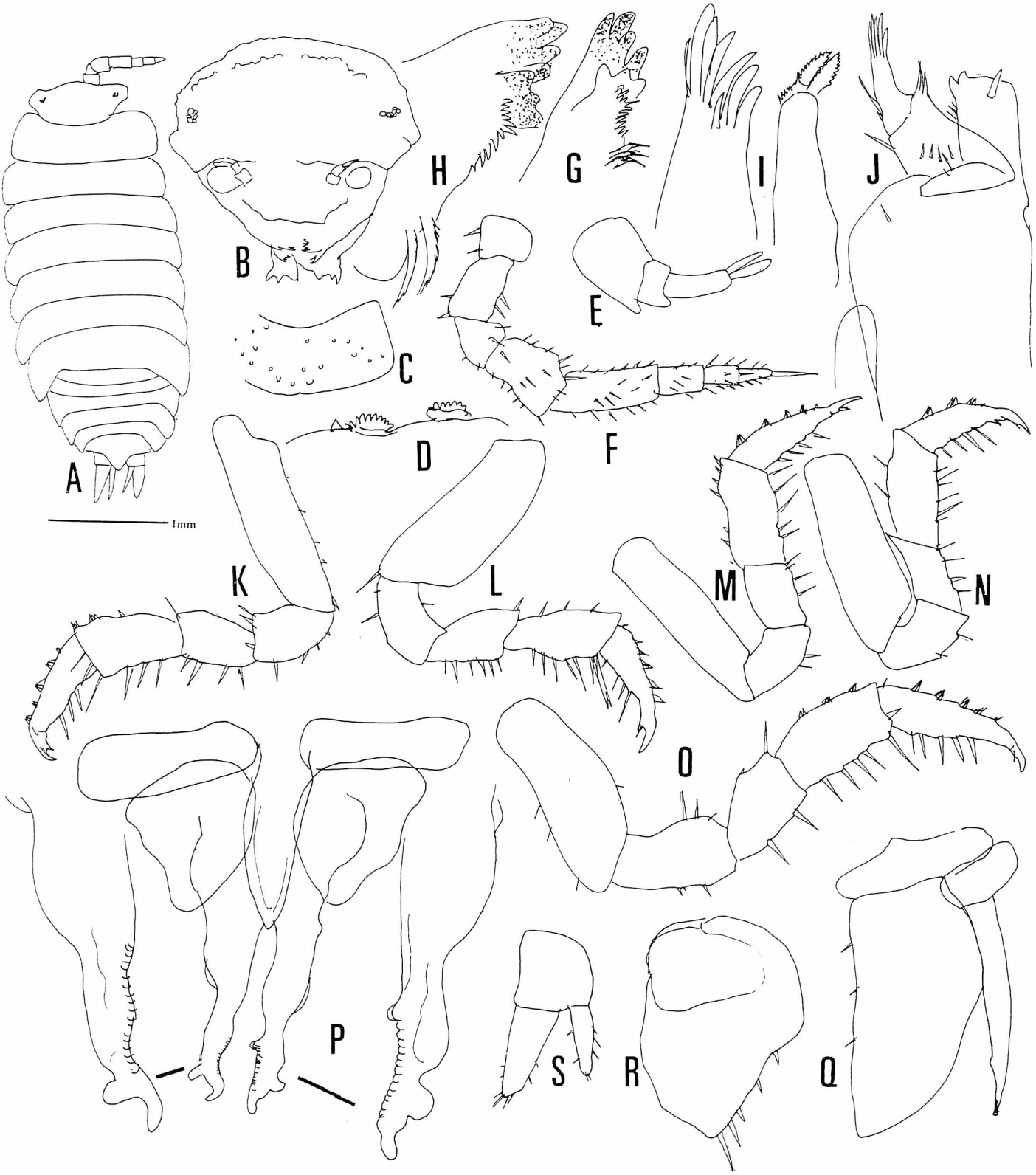
Penes (Fig.P) fusiform. Pleopod 1 (Fig.P); endopod with projection protruded outwards and 22 setae on inner margin. Pleopod 2 (Fig.Q); endopod acute but shorter than exopod; exopod semicircular. Pleopods 3-5 (Fig.R); both rami rounded. Uropod (Fig.S); basis square; exopod rather stout and little longer than basis, bears 4-5 setae at the tip; endopod narrower and shorter than exopod.

Material examined; 1♂, Nakajima, Oyama-shi, Tochigi Prefecture, May 7, 1998. Holotype is deposited at the Tochigi Prefectural Museum (TPM Ⅳ-4199)

Etymology: *tuberculatus* means having a small hump in Latin.

Remarks: The present new species is most closely allied to the commonest species, *Exalloniscus cortii* known from the various parts of Japan and its neighbouring countries of east Asia, but the former is separated from the latter in the following features: (1) shape of structure of apical part of male second pleopod, (2) shorter second pleopod, (3) shape of cephalon, (4) shape of posterior end of pleotelson, (5) distinct eyes and (6) presence of trifled setae on pereopod.

The present new species is also allied to the species described as *Exalloniscus* sp. (Taitl & Ferraa 1988) based on the specimen collected from Kawachi-nagano City, Osaka Prefecture. The present species is separated from *E.* sp. in the following features: (1) shape of structure of apical part of male second pleopod, (2) absence of concavity on inner distal angle on merus of male seventh pereopod.



Exalloniscus tuberculatus sp. nov.,
A. Dorsal view; B. Frontal view of cephalon; C. Dorsal view of pereonite 1; D. Scale-like spines on the same; E. Antennula; F. Antenna; G. Right mandible; H. Left mandible; I. Maxillula; J. Maxilliped; K-N. Pereopods 1-4; O. Pereopod 7; P. Penes and pleopod 1; Q. Pleopod 2; R. Pleopod 3; S. Uropod (All: Holotype male).

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