

# A species of the armadillid isopod crustacean from Iwate, northern Japan

journal or	Bulletin of the Toyama Science Museum
publication title	
number	21
page range	65-68
year	1998-03-30
URL	http://repo.tsm.toyama.toyama.jp/?action=repos
	itory_uri&item_id=710

# A Species of the Armadillid Isopod Crustacean from Iwate, Northern Japan\*

#### Noboru Nunomura

Toyama Science Museum

Nishinakano-machi, Toyama-shi, 939-8084 JAPAN

岩手県から発見されたコシビロダンゴムシ科(甲殻綱,等脚目)の1種

## 布村 昇

富山市科学文化センター

〒939-8084 富山県富山市西中野町1-8-31

コシビロダンゴムシ科 Armadillidae は従来、新潟-茨城県より南に知られていたが、岩手県釜石市両石の飛沫帯ないしそこに隣接する灌木からコシビロダンゴムシ科の等脚類が採集された。これは我が国における本科の最北の記録であるとともに記載された全ての種と違いがみられる。これらの標本は関東地方ならびに韓国から知られている  $Venedillo\ obscurus$  (Budde-Lund) と最もよく類似するが、(1)胸部付属肢に剛毛が多いこと,(2)第1-3胸部の連結構造がより深く複雑であること,(3)第1触角の先端の剛毛がより多いこと等で区別される。なお、雄の個体が採集されないので、新種としての記載は行わない。

キーワード: コシビロダンゴムシ, 等脚目, 分類, 岩手県, 北日本

During a faunal survey on the shore animals was conducted at the neighborhood of the Kamaishi City, Iwate Prefecture, Pacific Side of Northern Japan, I happened to find a queer looking terrestrial isopods in the supra-littoral zone of sea shore, At the closer examination of mine, it proved to be an unreorded species of the genus *Venedillo*. And this is the north most record of this species of this family in Japan.

### Venedillo sp.

(Fig.  $A \sim Q$ )

Material examined:  $12 \stackrel{\circ}{+} \stackrel{\circ}{+} (7.2 \sim 10.6 \text{ mm} \text{ in body length})$ , subtidal zone and bushes near the shore, Ryoishi, Kamaishi City, Iwate Prefectue, Aug.3 1993 coll. Noboru Nunomura. These specimens are deposited at the Toyama Science Museum (TOYA Cr-12536 $\sim$ 12547)

Description: Body oval lanceolate, 2.2 times as long as wide. Color grayish brown with paler irregular patterns and both sides are also paler. Eyes relatively small, each eye composed of 10-11 ommatidia. The structures of first to second pereonal somites strongly protruded. Pleotelson hour- grass- shapes, its posterior margin almost straight. Ventral side of epimeron of perenite 1(Fig. J) with a deep grove and schisma. Ventral side of epimeron of pereonite 2 (Fig. J) with a deep tooth.

Antennule (Fig. C) small and 3-segmented; first segment rectangular second segment square; terminal segment with 6 short aesthetases at the tip. Antenna (Fig. D), reaching the middle part of first pereonal somite; Flagellum 2-segmented; first segment 2.8 times as long as the terminal one.

Right mandible (Fig. E). Pars incisiva weakly 2-headed; lacinia mobilis thin and single- toothed; processus molaris is represented by a single plumose seta. Left mandible (Fig. F). Pars incisiva weakly 3-headed; lacinia mobilis thin and single- toothed; processus molaris is represented by a single plumose seta. Maxillula (Fig. G). Outer lobe with 10 simple tooth at the tip; inner six of which are narrow and outer four are stouter. Inner lobe slender with 2 plumose setae at the tip. Maxilla (Fig. H) rectangular Maxilliliped

Key word: Armadillidae, Isopoda, Taxonomy, Iwate, Northern Japan.

<sup>\*</sup> Contribution from the Toyama Science Museum No.196

(Fig.I). Endite rectangular with 2 shorter spines near the distal end; first palpal segment with a stout set on inner margin; second segment with 2 stout setae on inner margin and 3 shorter setae terminal segment terminates toward the tip and with a bundle of setae at the tip.

Pereopod 1 (Fig. K). Basis rectangular, 3.5 times as long as wide, with many small spines and a longer spines at the inner distal corner; ischium half the length of basis, inner margin with many short setae and with a sternal margin; merus 2/3 time as long as ischium with a long bifid setae at the inner distal corner; carpus 1,5 times as long as merus with 5 long setae and 8-9 short setae on inner margin and many shorter setae on outer margin; propodus, almost as long as ischium, with many finer setae on the basal half of inner margin and 3 relatively long setae on the distal half of inner margin; dactylus bifid, inner finger small.

Pereopod 2 (Fig. L). Basis slender with many short setae on both margins; ischium 1/3 time as long as basis with 11-13 setae on inner margin and a few of short setae on outer margin; merus a little shorter than ischium with 2 long setae and about 20 short setae on inner margin and 2 short setae on outer distal corner; carpus as long as ischium with 5 longer setae and 8 shorter setae on inner margin and many fine seta on outer margin; propodus a little longer and narrower than carpus with 3 longer setae and 6-8 shorter setae on inner margin dactylus bifid.

Percopod 3, Basis long, 5.5 times as long as wide with 6-7 setae ion outer margin and 10-12 seta on inner marginal; ischium 1/2 time as long as basis with 7-8 setae on inner margin; merus 3/4 time as long as ischium, with a long and 10 shorter setae on inner margin and a seta at outer distal corner; carpus as long as ischium, with 5 long setae and 7 shorter setae on inner margin and a series of fine setae on outer margin; propodus as long as carpus with 5 longer seta and 3-5 shorter setae on inner margin and about 10 setae on outer margin; dactylus bifid.

Pereopod 4 (Fig. M). Basis long about 4 times as long as wide with 12-14 setae on inner margin ischium 2/5 time as long as wide with 6 setae on inner margin and 3 setae on outer margin; merus 3/4 time as long as ischium with 4 longer setae and 2-3 shorter setae on inner margin and 2 short setae at outer distal corner; carpus as long as merus with 8 longer setae on inner martin and 7-8 shorter setae on outer margin; propodus as long as carpus with 3 longer setae and 5-7 shorter setae on inner margin and 12 setae on outer margin; dactylus bifid.

Pereopod 5 (Fig. N). Basis long 4,5 times as long as wide, with 6-7 setae on inner margin; ischium 2/5 time as long as basis with 2 longer and 5-6 shorter setae on inner margin and a long seta at outer distal corner; merus relatively short with 2 longer and 5-6 shorter setae on inner margin and a seta at outer distal corner; carpus as long as ischium with 3 longer and 8-10 shorter setae on inner margin and many fine setae on outer martin; propodus as long as carpus with 7-8 setae on inner margin; dactylus bifid.

Pereopod 6 (Fig. O). Basis 3.5 times as long as wide; ischium half the length of basis, with 8-11 setae on inner margin; merus 2/3 time as long as wide with 2 longer and 4-6 shorter setae on inner margin and a seta at outer distal corner; carpus, as long as ischium, with 6 long setae; propodus as long as carpus with 7-8 long setae on inner margin and 8-10 setae on outer margin; dactylus bifid.

Perception 7 (Fig. P). Basis relatively stout with a long seta at the inner distal corner and 9-12 small setae on both margins; ischium elongated with a sternal margin on outer margin and 7-10 short setae on inner margin; merus rectangular with 12-13 setae on inner margin and 2 setae at the outer distal corner; carpus rectangular with 3 stouter setae and 5 thinner setae on inner margin; propodus with 8 setae on inner margin.

All the pleopods (Fig. Q) similar in shape and transverse.

Uropod. Endopod slender; exopod small.

Remarks: The present specimens are separated from the all the species, but they are most closely allied to Venedillo obscurus, reported from Kanto District, but the former is separated form the latter in the following features (1)more numerous setae on pereopod, (2)deeper schisma, (3)more numeous aesthetasc at the tip of antennule. Unfortunately, as no male specimen has collected, I refrained from establishang a new species.

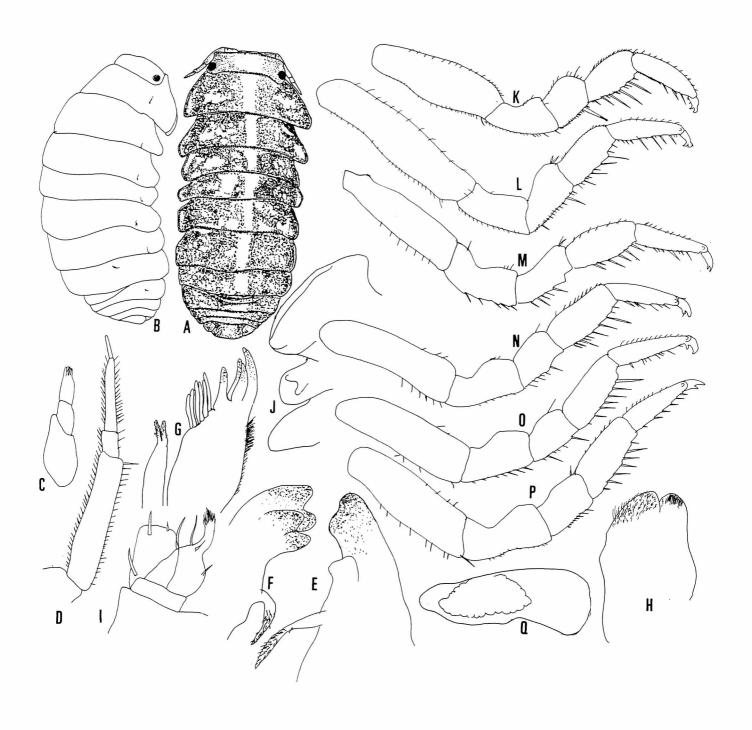


Fig. A~Q: Venedillo sp.

A. Dordsal view; B. Lateral view and position of noduli lateralis C. Antennule; D. Flagellum of antnana; E. Right mandible; F. Left mandible; G. Maxillula; H. Maxilla; I. Maxilliped; J. Ventral view of pereonal somites 1-3; J. Pereopod; K. Pereopod 1; L. Pereopod 2; M. Pereopod 4; N. Pereopod 5; O. Pereopod 6; P. Pereopod 7; Q. Pleopod 1 (All: Female specimens from Kamaishi).

#### Noboru Nunomura

#### References

- Arcangeli, A., 1927. Isopodi terrestri raccolti nell' Estremo Oriente dal Filipo Silvestri. Boll. Lab. Zool., Gen. Agr. R.Scoul. Agroicolt. portici, 20: 211-269.
- Kwon, D.H., 1995. Terrestrial Isopoda (Crustacea) from Cheju Island, Korea. Korean J.Syst. Zool., 11(4): 509-538.
- Nunomura, N., 1990. Studies on the Terrestrial Isopod Crustaceans in Japan, V. Taxonomy of the families of Armadillidiidae, Armadillidae and Tylidae. Bull. Toyama Sci. Mus.13: 1-58.
- Nunomura, N., 1992. Studies on the Terrestrial Isopod Crustaceans in Japan, VII. Supplements to the taxonomy-3. Bull. Toyama Sci. Mus. 15: 1-23.