A New Species of Sphaeromatid Isopod Crustacean of the genus Dynoides collected from Tachibana Bay, Shikoku, Southern Japan

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徳島県橘湾から発見された Dynoides 属コツブムシ科（甲殻類，等脚目）の一新種

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A New Species of Sphaeromatid Isopod Crustacean of the genus Dynoides collected from Tachibana Bay, Shikoku, Southern Japan*

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During the survey at Tachibana Bay, Tokushima Prefecture, Dr. Michio Ohtani, Nara City, happened to find a queer-looking sphaeromatid isopod from the bottom of Tachibana Bay, off Anan City, Tokushima Prefecture. He handed them to me for identification. At the result of closer examination of mine, it proved to represent a new species belonging to the genus Dynoides.

Before going further, I wish to express my sincere gratitude to Dr. Michio Ohtani for his kindness in giving me a chance to examine such interesting specimens.

Dynoides artocanalisis sp. nov.
(Jap. name: Hosomizo-umisemi, new)

Material examined; 2♂♂(1♂ holotype, 8.3 mm in body length and 1♂ paratype, 8.2 mm in body length), and 2♀♀(1♀ allotype, 9.6 mm in body length and 1♀ paratype 9.3 mm on body length). Type series is deposited as follows: Holotype (TOYA-Cr 12470), allotype (TOYA-Cr 12471) and a paratype (TOYA-Cr 12472) at the Toyama Science Museum, and a paratypes (OMNH-Ar 3917) at the Osaka Museum of Natural History. These specimens were collected from the intertidal zone of Tachibana Bay, Anan City, Tokushima Pref. coll. Michio Ohtani, May 16, 1991.

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Fig. 1  *Dynoides artocanalis* n. sp.

A. Dorsal views of male; B. Posterior end of female; C. Antennule; D. Antenna; E. Clypeus and frontal lamina; F. Mandible; G. Maxillula; H. Maxilla; I. Maxilliped. (A, C-I: Holotype male, B. Female allotype)
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Description: Body oval lanceolate, 1.9 times as long as wide. Color almost white in alcohol. Eyes rather small and composed of 26~27 ommatidia. Almost all the pereonal somites in length. Pleotelson with 2 rows of 3 tubercles on the surface of pleotelson. Posterior end with a very narrow concavity at the tip.

Fig.2 Dynoides artocanalis n. sp.
A-G.Pereopods 1-7; H.Penses; I-M. Pleopods 1-5; N.Uropod (All: Holotype male).
Antennule (Fig.1C) reaching the posterior part of cephalon and composed of 2 peduncular segments and 18 flagellar segments.

Antenna (Fig.1D) long, reaching third pereonal somite, and composed of 5 peduncular segments and 20 flagellar segments.

Frontal lamina (Fig.1E) broad. Clypeus (Fig.1E) pentagonal.

Mandible (Fig.1F); pars incisiva 3-headed; lacinia mobilis 2-headed; a long penicil between lacinia and processus molaris. Palp long and three segmented; first segment long without seta; second segment about half the length as the first, with 6~7 long setae on inner distal area; terminal segment as long as the second one with 15 pectinated setae on inner margin.

Maxillula (Fig.1G); outer lobe bears 9 teeth at the tip, inner lobe with four long plumose setae on the distal margin.

Maxilla (Fig.1H) setae; each lobe of exopod with 3 longer and a shorter setae on the distal corner, with setae at the distal margin. Endopod with 3 setae on the distal end.

Maxilliped (Fig.1I). Endite rectangular with 8 spines and 6~7 setae on the distal margin and a coupling hook on lateral margin. Palp five-segmented; first segments short; second segment big with 6~7 setae on inner distal corner; third segment with 12 setae on inner distal corner; fourth segment with 7~8 setae on inner distal corner and 3 setae on outer distal corner; terminal segment with 10~12 setae on the margin.

First pereopod (Fig.2A); basis stout; ischium rectangular, as long as basis; merus triangular with on inner margin and short dense setae on outer margin; carpus short with a dense setae on inner margin and dense hair on outer margin; propodus rectangular with many setae on inner margin.

Second pereopod (Fig.2B); basis stout; ischium rectangular with many setae on outer margin; merus rectangular with a series of dense hair on inner margin and short dense setae on outer margin; carpus almost as long as merus, with dense setae on inner margin and shorter dense hair on outer margin; propodus rectangular with many setae on inner margin.

Third pereopod (Fig.2C); basis stout; ischium rectangular with many setae on both margins; merus short but broad with a series of dense hair on inner margin and shorter dense setae on outer margin; carpus almost square with dense setae on inner margin and shorter dense hair on outer margin; propodus rectangular with many setae on inner margin.

Fourth pereopod (Fig.2D); basis stout; ischium rectangular with 10~12 setae on outer distal half; merus square with a 10 setae on inner margin; carpus almost square with dense setae on inner margin and shorter dense hair on outer margin; carpus rectangular with many setae on inner margin.

Fifth pereopod (Fig.2E); basis relatively long; ischium rectangular with a few of setae on outer margin; merus almost square many setae on inner margin and shorter dense hair on outer margin; carpus rectangular with many setae on inner margin.

Sixth pereopod (Fig.2F); basis stout; ischium rectangular with many setae on both margins; merus with a series of dense hair on inner margin and shorter dense setae on outer margin; carpus almost rectangular with dense setae on inner margin and shorter dense hair on outer margin; carpus rectangular with many setae on inner margin.

Seventh pereopod (Fig.2G); basis stout; ischium rectangular and as long as basis with many fine setae on outer margin; merus short but broad with a series of dense hair on inner margin and shorter dense setae on outer margin; carpus almost square with dense setae on inner margin and shorter dense hair on outer margin; propodus rectangular with many setae on inner margin.

Penes (Fig.2H) long. Basal to middle part fused along the distal exterior margin with many minute spinules and posterior end thin.
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Pleopod 1 (Fig.2I) basis endopod elliptical with about 30 plumose setae around the margin; exopod lanceolate with 21~23 setae around the margin.

Pleopod 2 (Fig.2J) endopod lanceolate with 52~53 plumose setae around the margin; stylet long and bend almost at the medial area; with 70~73 setae around the margin.

Pleopod 3 (Fig.2K) basis rectangular; endopod triangular with 21 plumose setae; exopod lanceolate in 21 setae on the margin.

Pleopod 4 (Fig.2L) endopod lanceolate and with folds; exopod lanceolate.

Pleopod 5 (Fig.2M) endopod lanceolate and with folds exopod with 2 bosses.

Uropod (Fig.2N) basis almost round; endopod elliptical; exopod also elliptical and a little longer than endopod.

Remarks: The new species is similar to D. harrisoni Kussakin and Malyutina collected from the intertidal zone Gulf of Tonkin kat Ba I in the shape of notch of the pleotelson but is separated from harrisoni in the following features: (1) lack of medial process on the dorsal surface of male, (2) smaller eyes (3) more setose pereopods, (4) shorter but more numerous flagellum of first antenna (5) shorter but more numerous flagellum of second antenna.

The present species is also separable from the commonest species of Dynoides brevispina, distributed in Japan and Korea in the following features: (1) bigger body size, (2) absence on the grooves of cancavity of posterior of border of pleotelson, (3) more conspicuous protuberances of the middle part of anterior margin of cephalon, (4) shape of posterior border of pleotelson, (5) longer and more numerous segmentation of flagella of both antenna, (6) denser hair on the margin of pereopods, (7) presence of slender tip of penes, (8) absence of (9) smaller eyes and (10) paler body color and on.

Etymology: The Articanalis, from Latin, “Artus” means “narrow” and “canalis” means “groove”; this refers to the shape of groove of pleotelson.

References


