Dynoides spinipodus, a New Species of Sphaeromatid Isopod (Crustacea) from the South Coasts of Korea

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Dynoides spinipodus

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Up to now seven species of Dynoides are valid: D. serratissimus Barnard, 1914, the type species; D. barnardi Baker, 1928; D. dentisinus Shen, 1929; D. Amblysinus Pillai, 1954; D. castroi Loyola e Silva, 1960; D. brasiliensis (Loyola e Silva, 1960) and D. brevispina Bruce, 1980. Two species, D. dentisinus and D. brevispina, have been recorded from Korea (Yun, 1982; Kim and Kwon, 1985) and Japan (Nishimura, 1976; Nunomura and Nishimura, 1976; Bruce, 1980), while the latter shows rather wide range from the Chinese coast of the Yellow Sea (Shen, 1929) to the Okhotsk Sea (Kussakin, 1974, 1979).

In the course of the extensive study on the classification of Korean isopod crustaceans, we recognized a new species of Dynoides collected from the south coasts of Korea. All the type specimens are deposited in the Department of Biology, Inje College.
Dynoides spinipodus n. sp. 가시다리풀라줄바람개비 (신청) (Figs. 1-3)


Measurements: Holotype male, body length 6.2 mm, width 3.6 mm; allotype female, body length 5.3 mm, width 3.2 mm.

Description: Holotype male — Body ovate, lateral margins subparallel. Cephalon with interorbital ridge and a small rostral process. Eyes small. Coxal plates not distinct, but fused with pereonites. Coxal plates on pereonites V and VI slightly produced posteriorly. Margins of coxal plates heavily setose. Dorsal surface of pereonites smooth but covered with minute setae. Pleon with a conical median process; apex of the process somewhat flexed downwards. Lateral margin of pleon with a longitudinal carina. Pleotelson in the form of bilobed dome covered with minute tubercles. Posterior notch elongated into a closed sinus (foramen); inner border of the sinus produced upwards without

Fig. 1. A-D. Dynoides spinipodus n. sp.: A. holotype male, dorsal view; B. same, lateral view of pleon and pleotelson; C. same, pleotelsonic sinus; D. allotype female, dorsal view of pleon and pleotelson. E-H. Dynoides dentisinus Shen: E. male, lateral view of pleon and pleotelson; F. same, pleotelsonic sinus; G. same, uropod; H. female, dorsal view of pleon and pleotelson. Scale bars in mm.
teeth. Apex of pleotelson A-shaped.

First antenna with peduncular segment 1 swollen, segment 2 one third the length of segment 1, segment 3 as long as the segment 2 and one third the width of the proceeding two segments; flagellum with nine segments, when retracted, reaching the hind margin of pereonite I. Second antenna much longer than the first antenna; flagellum with seventeen segments.

First maxilla with eleven stout, curved spines on exopodite; endopodite bi-articulated, bearing four pectinated setae and one simple setule on distal margin. Second maxilla with exopodite bilobed, bearing four dentate spines on each lobe; endopodite bearing nine setae, five of which are setulose. Maxilliped with a coupling hook; outer margin of palp segments without setae except for one seta at the distal corner of segment 4.

Pereopod I shortest; pereopod II slender, longer than pereopod III; pereopods III-VII similar, progressively becoming longer posteriorly. Pereopod I with two plumose spines on ventral margin

Fig. 2. Dynoides spinipodus n. sp., holotype male: A. first antenna; B. second antenna; C. first maxilla; D. second maxilla; E. maxilliped; F. pereopod I; G. pereopod VII. Scale bars in mm.
of propodus; dorsal margins of basis and ischium with numerous small spines. Pereopod VII setose on ventral margins of propodus, carpus and merus; dorsal margins of basis and ischium with numerous small spines.

Pleopods 1-3 with two coupling hooks; both rami lamellar. Pleopod 2 with appendix masculina longer than twice the length of endopod, distal half slender, tapering, doubled back on the proximal half. Pleopods 4 and 5 with endopods fleshy; exopods lamellar, partially or completely segmented with minute setae on outer margins. Uropod broad, lamellar, extending beyond the pleotelsonic apex; exopod shorter than the endopod; outer margin of exopod not thickened but slightly bent upwards.

**Allotype female** — Smaller than male. Coxal plates as in male. Lateral margins of pleon without

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**Fig. 3.** *Dynoides spinipodus* n. sp., holotype male: A. pleopod 1; B. pleopod 2; C. pleopod 3; D. pleopod 4; E. pleopod 5. Scale bar in mm.
longitudinal carina as the one in male. Bilobed dome-shaped pleotelson covered with minute tubercles. Uropod not reaching the pleotelsonic apex; endopod longer than exopod; apex of endopod truncate, whilst that of exopod round.

Remarks: The proposed new species is allied to *Dynoides serratisinus*, *D. barnardi* and *D. dentisinus* in the presence of a conical median process on the pleon, but it is readily distinguished by the pleotelsonic foramen round without marginal teeth along its inner border. Females of three Korean species of *Dynoides* are very similar. The female of *D. spinipodus* n. sp. has less convex body and truncate apex of uropodal endopod, whilst *D. dentisinus* and *D. brevispina* have highly convex body and round apex of uropodal endopod. Also the uropodal exopod of *D. spinipodus* n. sp. is not arched outwards.

Etymology: The specific name *spinipodus* [spini (spina, L.: spine) + podus (L.: leg)] is based upon “dorsal margins of basis and ischium of pereopods provided with numerous small spines.”

**ABSTRACT**

Collections of isopod crustaceans from the south coasts of Korea contained a new species of sphaeromatid genus *Dynoides*. Description is given under the name of *Dynoides spinipodus*. The proposed new species is allied to *D. serratisinus* Barnard, 1914, *D. barnardi* Baker, 1928 and *D. dentisinus* Shen, 1929 in the presence of a conical median process on the pleon, but it is readily distinguished by the pleotelsonic foramen without maginal teeth along its inner border.

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