

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

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韓國 南海岸에서 채집된 잔벌레과 等脚類(節肢動物門 甲殼上綱)의 1新種
Dynoides spinipodus

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摘 要

인제대학 생물학과에 보관되어 있는 등각류 표본 중 경상남도 양산군 기장읍, 제주도 서귀포, 전라남도 완도군 소안군도의 넓도와 보길도 등 남해안에서 채집된 *Dynoides* 속의 1신종이 확인되어 *Dynoides spinipodus* 라고 명명하며 기재한다. 본 종은 수컷의 복부 후단부의 중앙이 원추형 빨모양으로 길게 돌출되어 있는 점에서 *Dynoides serratisinus* Barnard, 1914, *D. barnardi* Baker, 1928 및 *D. dentisinus* Shen, 1929 와 유사성을 가지나, 복미부 후단부의 등근 홈 안 가장자리에 치아형 돌기열을 전혀 갖지 않는 점에서 이들과 뚜렷히 구분된다.

Key words: Crustacea, Isopoda, Sphaeromatidae, Korea.

Up to now seven species of *Dynoides* are valid: *D. serratisinus* 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. 가시다리뿔잔벌레 (신칭) (Figs. 1-3)

Material examined: **Holotype**—an adult male (IJB: I8601); **Allotype**—an adult female (IJB: I8602), Kijang, Yangsan-gun, Kyöngsangnam-do (35° 11' 20" N, 129° 12' 36" E), under pebbles in rocky intertidal zone, April 26, 1983, D. H. Kwon leg.

Paratypes—5♂, 12♀ (non-ovi.) and 2 juveniles (IJB: I8603), collection details as the holotype; 6♂, 27♀ (24 ovi.) and 3 juveniles (IJB: I8604), Sögwip'o, Cheju I., June 4, 1977, K. S. Lee leg. 8♂ and 3♀ (non-ovi.) (IJB: I8605), Nöpto I., Wando-gun, Chöllanam-do, under pebbles in intertidal zone, August 22, 1982, D. H. Kwon leg.; 2♂ (IJB: I8606), Hwawön-ri, Pogildo I., Wando-gun, Chöllanam-do, August 23, 1982, D. H. Kwon leg.

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

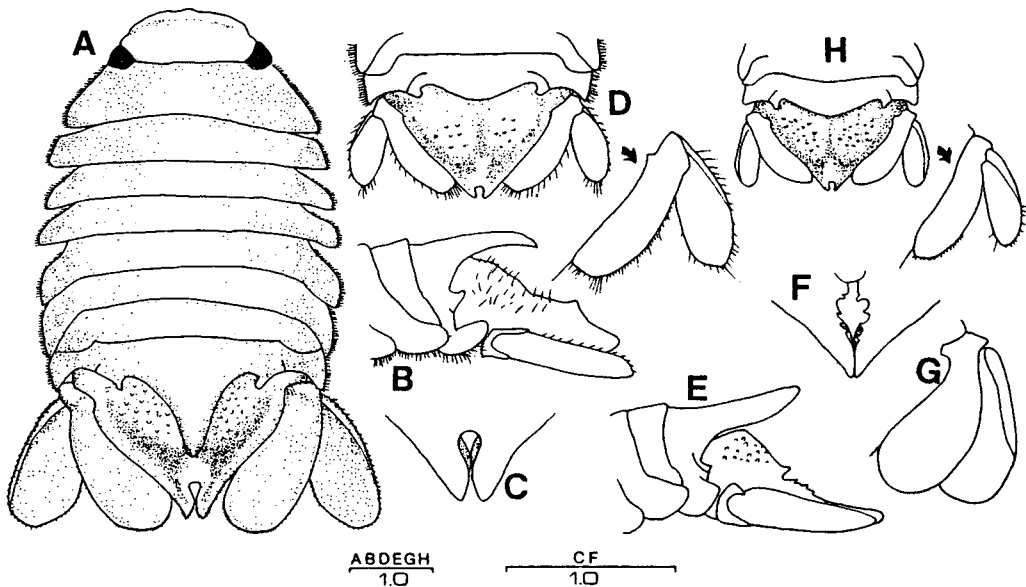


Fig. 1. A-D. *Dynoides spinipodus* n. sp.: A. holotype male, dorsal view; B. same, lateral view of pleon and pleotelson; C. same, pleotelsonic sinus; D. allotype female, dorsal view of pleon and pleotelson. E-H. *Dynoides dentisinus* Shen: E. male, lateral view of pleon and pleotelson; F. same, pleotelsonic 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

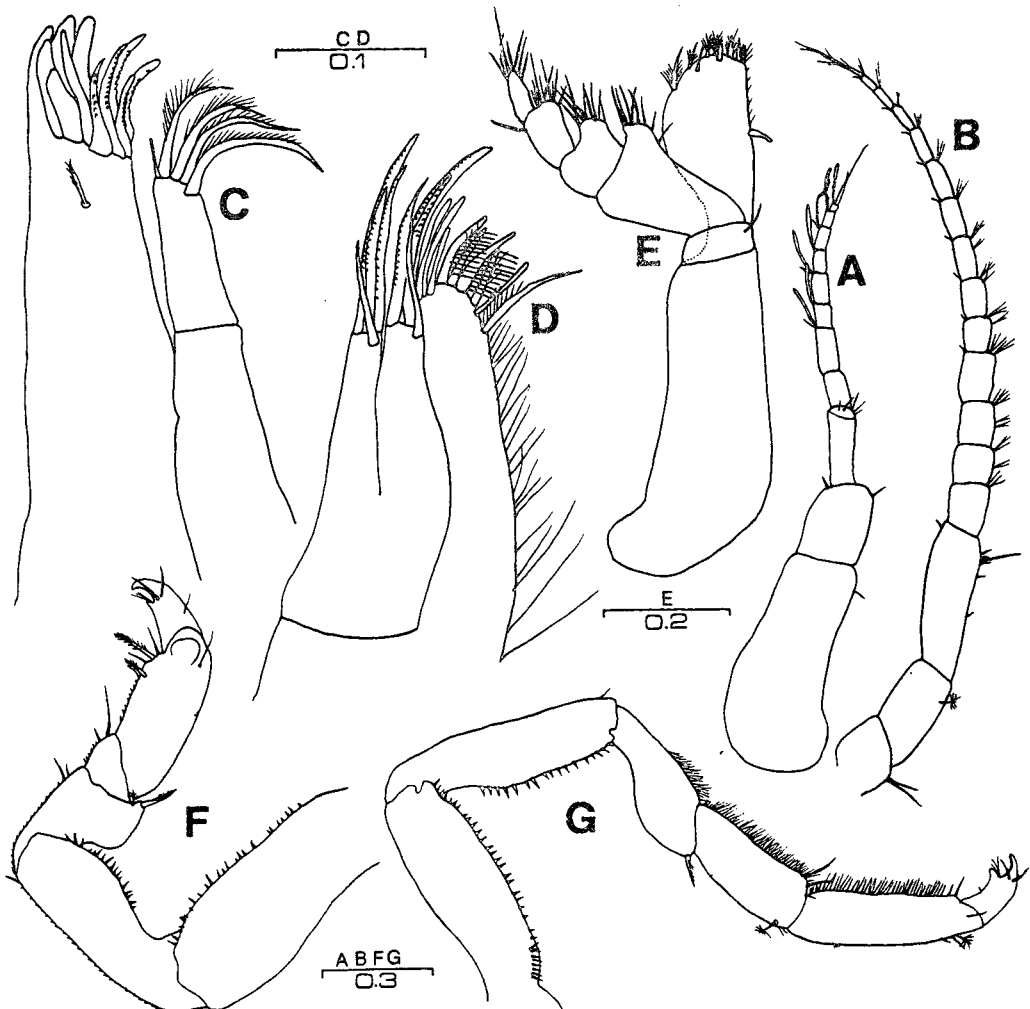


Fig. 2. *Dynoides spinipodus* n. sp., holotype male: A, first antenna; B, second antenna; C, first maxilla; D, second maxilla; E, maxilliped; F, pereopod I; G, pereopod VII. Scale bars in mm.

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

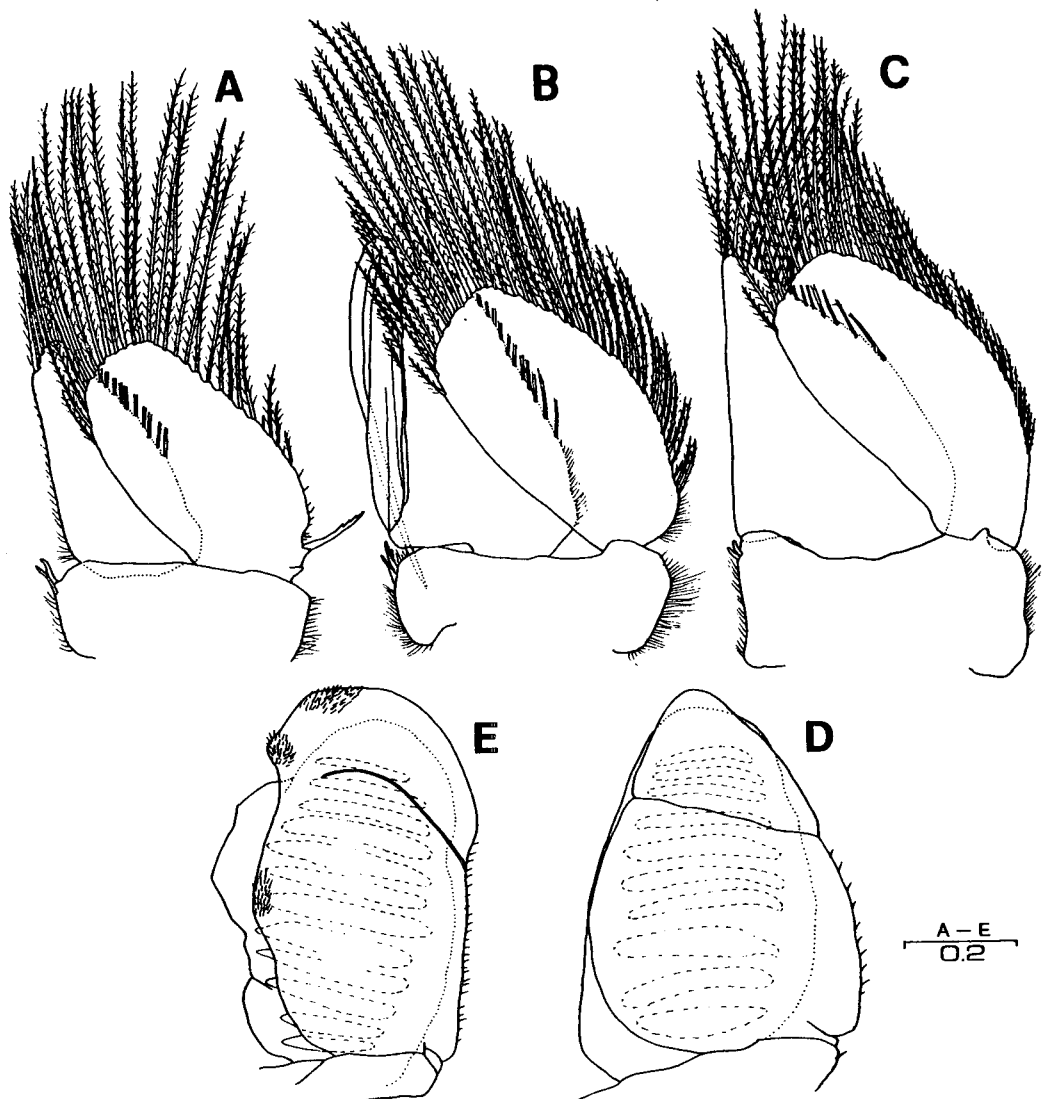


Fig. 3. *Dynoides spinipodus* n. sp., holotype male: A. pleopod 1; B. pleopod 2; C. pleopod 3; D. pleopod 4; E. pleopod 5. Scale bar in mm.

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 marginal teeth along its inner border.

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