

A New Species of the Genus *Gitanopsis* (Amphipoda, Amphilochidae) from Korea

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한국산 *Gitanopsis*속 (단각 목, Amphilochidae과)의 1신종

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적 요

강구와 울릉도 사동에서 채집된 *Gitanopsis*속의 1신종, *Gitanopsis koreana*를 기재한다. 이 신종은 근연종인 *Gitanopsis robustodentes*와 유사하나 제2악지 제2마디의 팽창부가 짧고 꼬리마디가 짧은 것이 *G. robustodentes*와의 차이점이다.

Key words: Amphipoda, Amphilochidae, *Gitanopsis*, new species, Korea.

The genus *Gitanopsis* comprises 25 species, of which five species are found in the east Asia from shallow water (Barnard and Karaman, 1991). Nagata (1965) recorded *Gitanopsis vilordes* Barnard, 1962 from Seto Inland Sea, Japan. Hirayama (1983) originally reported four species from west Kyushu, Japan: *Gitanopsis brevicula*, *G. japonica*, *G. longa*, and *G. robustodentes*. The present study reports on a new species of the genus *Gitanopsis* collected from two localities in the East Sea (Sea of Japan).

The specimens treated herein are deposited at the Department of Molecular Biology, Seoul National University.

DESCRIPTION

Family Amphilochidae Boeck, 1871

Genus *Gitanopsis* Sars, 1895

Gitanopsis koreana, new species

(Figs. 1, 2)

HOLOTYPE: female (body length: 5.1mm), Kanggu (36° 21'N, 129° 24'E), Korea, among algae, 13 August 1982, collector: H. S. Kim. **PARATYPES:** 2 females, Sadong (37° 28'N, 130° 34'E), Ullungdo Island, Korea, among algae, 4 August 1988, collector: C. B. Kim.

Description of holotype female: Head (Fig. 1A) with lateral cephalic lobe broadly rounded; eye large, with core of black pigment surrounded by unpigmented ommatidia. Antenna 1 slightly overreaching peduncle of antenna 2.

Incisor of left mandible (Fig. 1B) armed with 10 teeth; spine row composed of 15 spines; molar strongly triturate, cushion-shaped; palp with 3 articles and same level with molar. Inner lobes of lower lip (Fig. 1C) small, coalesced each other; distal part divided by deep cleft, with apex sharply pointed inwardly; inner margin densely setose, with 3 blunt teeth and deep concavity; mandibular process small. Inner plate of maxilla 1 (Fig. 1D) medium in size, with a plumose seta on apex; outer plate with 8 simple spines and several setae on oblique apex; palp 2-articulate, article 2 with 5 simple spines and 2 setae on truncate apex. Plates of maxilla 2 (Fig. 1E) coalesced proximally; inner plate broader than outer one, with several thick and thin setae on oblique apex; outer plate with 4 thick setae on apical and subapical margins. Palp of maxilliped (Fig. 1F) stout.

Coxa of gnathopod 1 (Fig. 2A) small, anteroventral corner produced; article 2 with several setae along inner and outer margins of dorsal surface; article 5 with a stout lobe on ventrodiscal part and this lobe reaching to about proximal 43% along ventral margin of article 6; article 6 dilatant toward distal part, as broad as coxa at broadest part; palm of article 6 nearly straight, finely serrate, and with 9 small spines, defined by a pair of spines; dactyl fitting palm, and grasping margin with an accessory tooth near distal part, proximal part finely serrate.

Coxa of gnathopod 2 (Fig. 2B) with an notched part on anteroventral corner; article 2 with a sharply falcate extension ventrodistally and this extension reaching to proximal 1/5 along ventral margin of article 3; article 5 with a slender lobe ventrodistally and this lobe reaching to terminal part of ventral margin of article 6; article 6 dilatant toward distal part, as broad as coxa at broadest part; palm transversely convex, finely serrate, with several small setae, defined by a pair of spines; dactyl fitting palm, and grasping margin with an accessory tooth near distal part, proximal part finely serrate.

Pereopods 3-7 (Figs. 2C-G) slender, with simple dactyls.

Each of pleonal epimera 1-3 (Fig. 1G) with a small tooth on posteroventral corner.

Outer ramus of uropod 2 (Fig. 1G) about 2/3 times as long as peduncle. Telson (Fig. 1G; 2H) with round apex, reaching to about middle part of peduncle of uropod 3.

Remarks: Except for *Gitanopsis robustodentes* Hirayama, 1983, *Gitanopsis koreana* is easily distinguished from other species by the presence of ventrodiscal extension of article 2 of gnathopod 2. *G. koreana* is closely related to *G. robustodentes*, reported from west Kyushu, Japan, in the presence of ventrodiscal extension of article 2 of gnathopod 2. But the present species differs from *G. robustodentes* in (1) Ven-

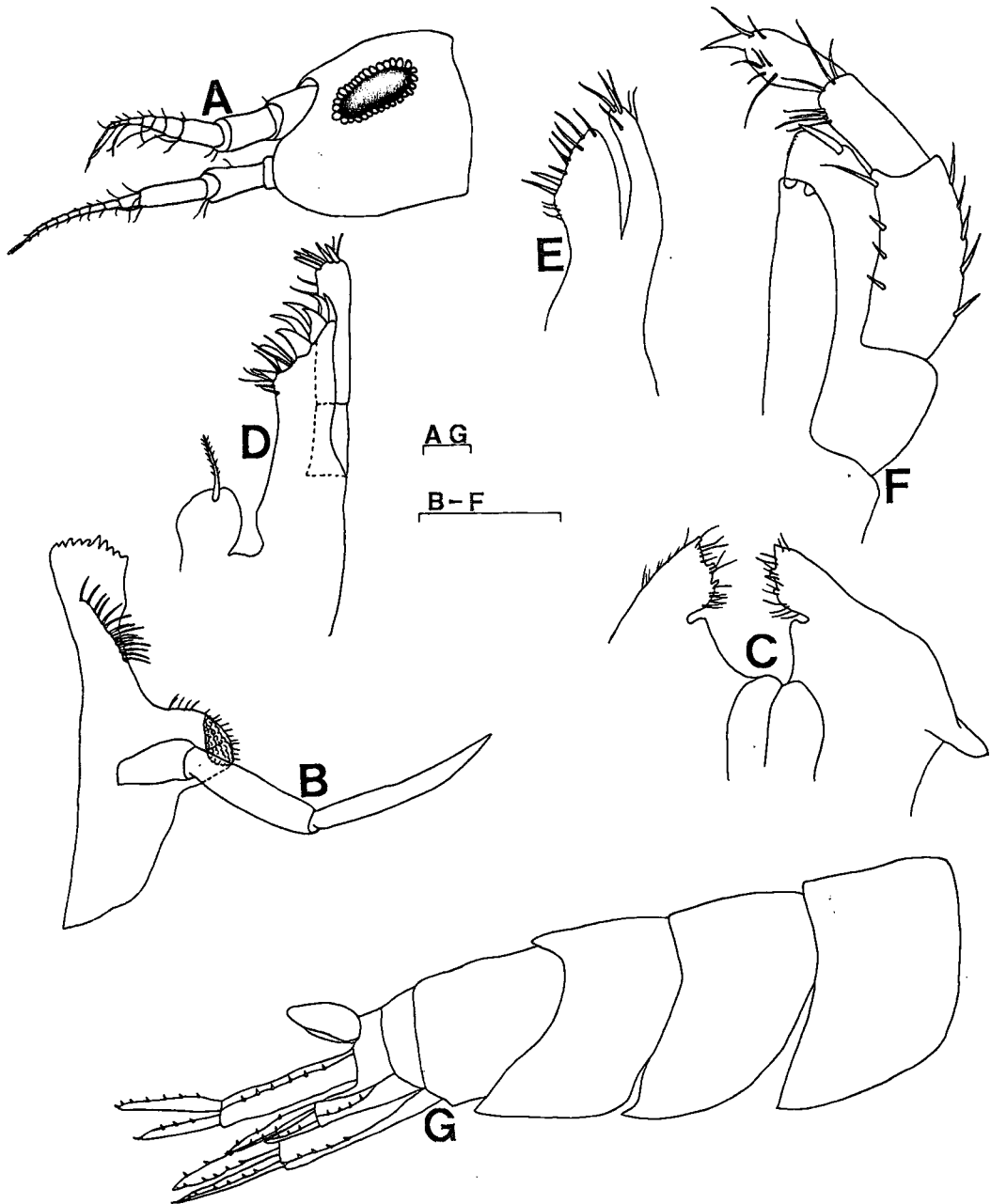


Fig. 1. *Gitanopsis koreana*, new species. Holotype female (body length: 5.1mm). A, left part of head and antenna.; B, left mandible; C, lower lip (left mandibular process was broken); D, right maxilla 1; E, right maxilla 2; F, right maxilliped; G, right pleonites, urosomites, uropods, and telson. Scale bars=0.1mm.

trodistal extension of article 2 of gnathopod 2 of the present species is 1/5 as long as article 3, while in *G. robustodentes* this extension is 1/2 as long as article 3; (2) Telson of the present species does not reach to the distal margin of peduncle of uropod 1, while in *G. robustodentes* telson far overreaches to the distal part of peduncle of uropod 1.

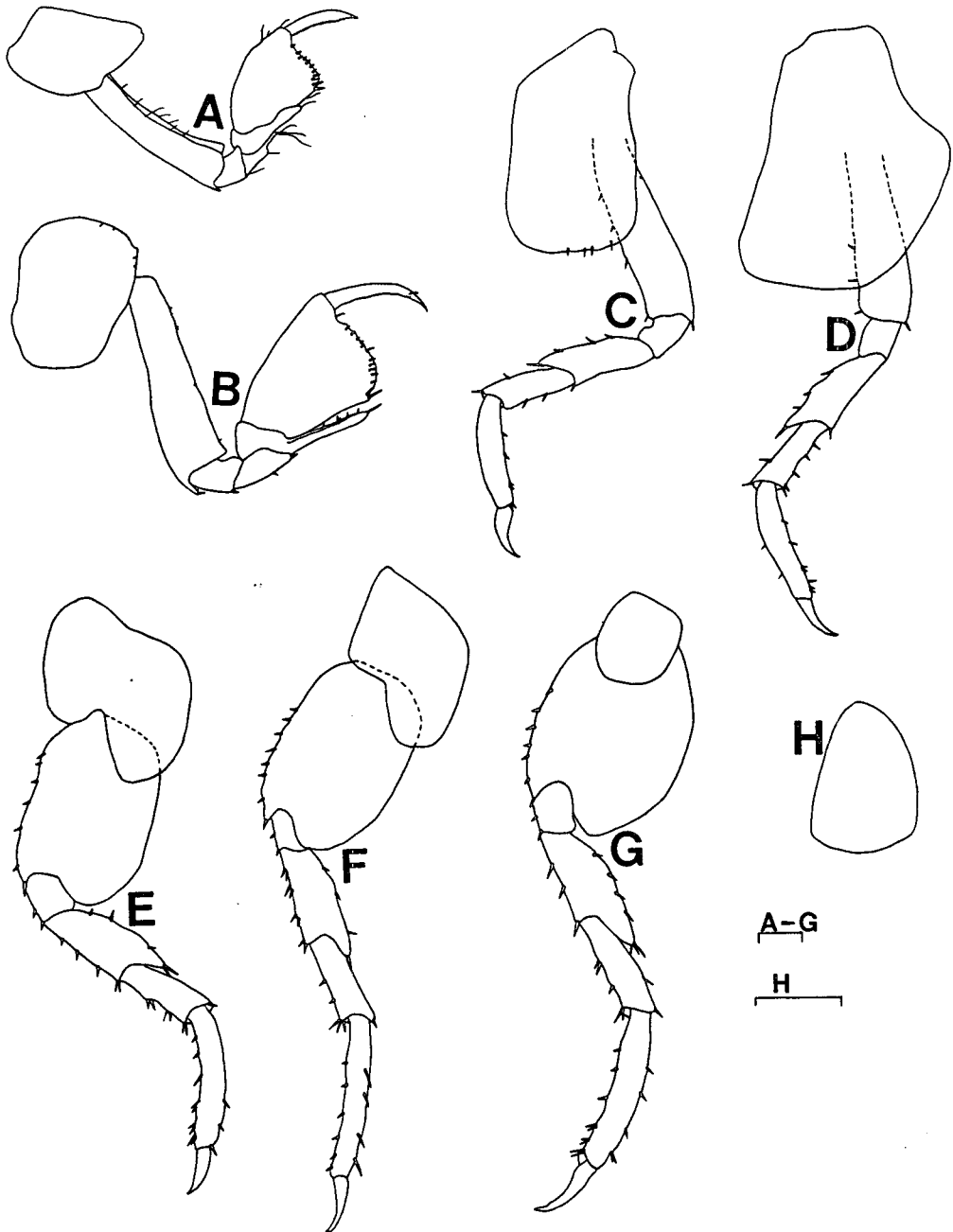


Fig. 2. *Gitanopsis koreana*, new species. Holotype female (body length: 5.1mm). A, right gnathopod 1; B, right gnathopod 2; C, left pereopod 3; D, left pereopod 4; E, left pereopod 5; F, left pereopod 6; G, left pereopod 7; H, dorsal view of telson. Scale bars = 0.1mm.

ABSTRACT

Gitanopsis koreana, new species collected at Ganggu and Sadong in Korea is described and illustrated. This species is very close to *G. robustodentes* Hirayama, 1983 from west Kyushu, Japan. But, this new species is distinguished from *G. robustodentes* by the shorter ventrodistal extension of article 2 of gnathopod 2 and the shorter telson.

REFERENCES

- Barnard, J. L. and G. S. Karaman, 1991. The families and genera of marine gammaridean Amphipoda (except marine gammaroids). Recs. Aust. Mus. Suppl., 13: 1-866.
- Hirayama, A., 1983. Taxonomic studies on the shallow water gammaridean Amphipoda of west Kyushu, Japan. I. Acanthonotozomatidae, Ampeliscidae, Ampithoidae, Amphilochidae, Anamixidae, Argissidae, Atylidae and Colomastigidae. Publ. Seto Mar. Biol. Lab., 28: 75-150.
- Nagata, K., 1965. Studies on marine gammaridean Amphipoda of the Seto Inland Sea. I. Publ. Seto Mar. Biol. Lab., 13: 131-170.

RECEIVED: 29 SEPTEMBER 1992

ACCEPTED: 14 NOVEMBER 1992