

〔短報〕

Pseudeuphausia sinica (Euphausiacea, Crustacea) : a New Record from the Korean Waters

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It has been reported that there are 10 species of euphausiid crustacean in the Korean waters (Hong, 1969) : *Euphausia mutica*, *E. nana*, *E. pacifica*, *E. recurva*, *E. similis*, *E. tenera*, *Pseudeuphausia latifrons*, *Thysanoessa longipes*, *Stylocheiron affine*, and *S. carinatum*. In the last two decades, no species was newly recorded in euphausiid fauna. *Pseudeuphausia latifrons*, therefore, has been known as the sole representative of the genus in Korean waters. Wang and Chen (1963), in revision of *Pseudeuphausia* species, distinguished *P. sinica* from *P. latifrons* and described *P. sinica* as a new species from the coastal waters of East China Sea and of the southern Yellow Sea. The larval development of *P. sinica* was also determined by Wang (1965).

During the ecological study of zooplankton in the coastal waters of the southwestern Korea, *P. sinica* was found, and the species is reported new to the Korean fauna.

Pseudeuphausia sinica Wang and Chen, 1963

Pseudeuphausia sinica Wang and Chen

1963 ; p.359, pl.1, figs. 1~7.

Material examined : 13 females and 7 males were taken from the coastal waters off Yongkwang, Chonnam Province (35°20'N, 126°25'E) on 17 November 1989. The samples were collected during the day with a Bongo net (0.6m diameter ; 0.33mm mesh) towed horizontally between 0 and 2m depth.

Description : Total length (measured from anterior margin of carapace to posterior margin of telson) : female, 6.6~9.0mm (mean=7.4mm, n=13) ; male, 7.0~8.5mm (mean=7.9mm, n=7).

Carapace (Fig. 1A) without prominent median keel, having a lateral denticle on posterior margin. Frontal plate truncate in dorsal view, in lateral view concaved longitudinally ; distance between anteriolateral corners 0.26~0.35mm ; frontal plate 0.35~0.48 times as wide as the width of carapace (Fig. 1B). Antennular spine on inner margin of basal segment absent (Fig. 1B).

Maxillule with pseudoexopod bearing three plumose setae (Fig. 1C). Mandible without palp (Fig. 1D). Telson with five pairs of spines on the posterolateral margin (Fig. 1E).

Remarks : There are two species in the genus *Pseudeuphausia* : *P. latifrons* and *P. sinica* (Mauchline and Fisher, 1969 ; Mauchline, 1980). The latter can be distinguished from the former by four points, (1) the presence of pseudoexopod of maxillule, (2) the absence of the prominent median keel on carapace, (3) the absence of the antennular spine on inner margin of basal segment, and (4) the absence of mandibular palp (Wang and Chen, 1963). The absence of the mandibular palp has been found only in *P. sinica* within the order Euphausiacea. As shown in Fig. 1B, I have measured the ratio of the width of frontal plate to that of carapace ($WFP \times 100 / WC$), and obtained the following results in perce-

ntage : 35~48(mean=40, $n=19$) in *P. sinica* collected in the present study, 22~36(mean=27, $n=5$) in *P. latifrons*(author's unpublished data). These indicate that, in *P. sinica*, it is apparently different from *P. latifrons* in the ratio.

It has been reported that *Pseudeuphausia sinica* is distributed mainly in the coastal waters of East China Sea and the southern Yellow Sea. In winter, its distribution extends as far as South China Sea (Wang and Chen, 1963). The occurrence of *P. sinica* from the coastal waters of the southwestern Korea may suggest and extension of the northern limit of this species.

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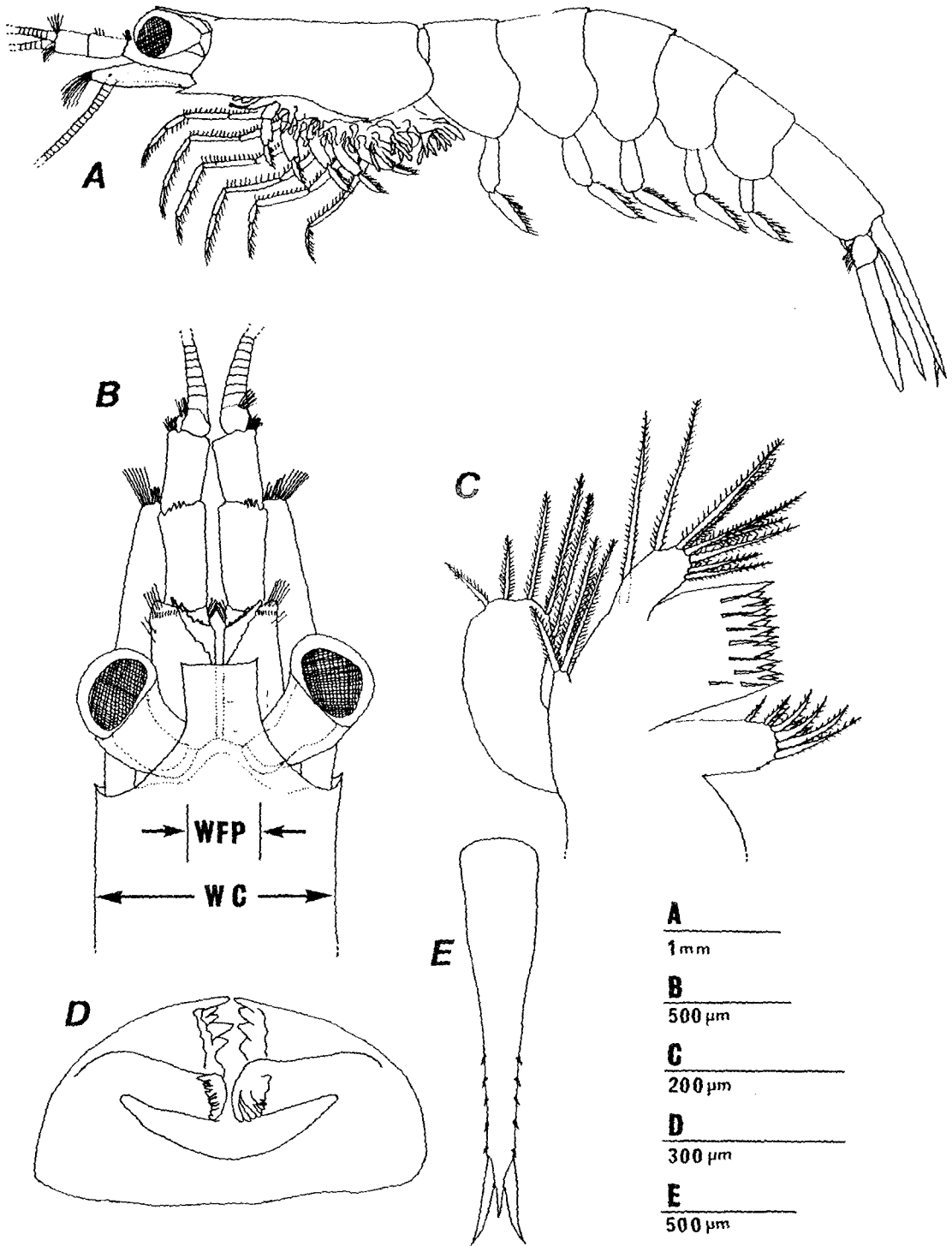


Fig. 1. *Pseudeuphausia sinica*. (A) Lateral view of male. (B) Dorsal view of the antenna and the frontal part of carapace. WC : width of carapace ; WFP : width of frontal plate. (C) Ventral view of maxillule. (D) Dorsal view of mandibles. (E) Dorsal view of telson.