

**Six species of the cumacea (Crustacea:  
Malacostraca)  
from the intertidal flats surrounding the Yellow  
Sea**

Jae-Sang Hong and Mi-Ra Park

Department of Oceanography, Inha University, Incheon 402-751, Republic of Korea

**Introduction**

The cumacean fauna currently contains more than 1200 species worldwide (Watling, 1997). Many of the habitats where cumaceans are likely to be found, such as estuaries, shallow embayments, beaches, tidal flats, and the inner continental shelf, have not yet had their cumacean fauna documented (Watling, 1997).

**Materials and methods**

Specimens examined in the present study were provided between July 1994 to July 1999 from the benthic samples collected in the tidal flats surrounding Incheon and the Yellow Sea, Korea. In the intertidal flats six replicate rectangular can corer (15 x 20 x 30 cm) samples were taken at each station. Samples were sieved through 1.0 mm mesh screen and fixed in 10 % formalin. After examination, specimens were presented in 70 % ethanol.

**Systematics**

Order Cumacea Kroyer, 1846

Family Diastylidae Bate, 1856

**Genus *Dimorphostylis* Zimmer, 1920**

**1. *Dimorphostylis brevicaudata* (Zimmer, 1903)**

Material examined. 1 ♀, 1 ♂, Taechong-do, Jun. 1998.

**Genus *Diastylis* Zimmer, 1920**

**2. *Diastylis paratricinta* Kang and Lee, 1996**

Material examined. 2 ♀♀, Kanghwa-do, Nov. 1997; 4 ♀♀, Changbong-do, Jul. 1999; 6 ♀♀, Ulwang, Jul. 1997; 11 ♀♀, Tokkyo, Jul. 1997; 15 ♀♀, Shinbul, Apr. 1996; 76 ♀♀, Chokchon, Jul. 1994; 5 ♀♀, Chokchon, Jul. 1997; 16 ♀♀, 5 ♂♂, Songdo, May 1995; 10 ♀♀, Taebu, Mar. 1998; 1 ♀, Yonghung-do, Jul. 1999.

**3. *Diastylis implicata* Park and Hong, 1999**

Material examined. 1 ♀, Taebu, Mar. 1998; 1 ♀, 2 ♂♂, Chokchon, Jul. 1994.

**Family Leuconidae Sars, 1878**

**Genus *Nippoleucon* Watling, 1991**

**4. *Nippoleucon hinumensis* (Gamo, 1967)**

Material examined. 4 ♀♀, Shinbul, Apr. 1996; 1 ♀, Songdo, May 1995.

**Family Bodotriidae Scott, 1901**

**Subfamily Bodotriinae Hale, 1944**

**Genus *Bodotria* Goodsir, 1843**

**5. *Bodotria ovalis* Gamo, 1965**

Material examined. 1 ♀, Taechong, Jun. 1998.

**6. *Bodotria* sp. new species**

Material examined. 26 ♀♀, 1 ♂, Taechong-do, Jun. 1998.

Remarks. *Bodotria* sp. nov. is perhaps nearest to *B. ozolinshi*, which it resembles in general form and in the shape of two longitudinal folds on the carapace. However, the new species may be distinguished by the following differences from *B. ozolinshi*: (1) the length of the pseudorostral lobes is about as long as the ocular lobe of the both sexes in *B. ozolinshi*. However, in the new species, the pseudorostral lobes are never prominent and meet in front of the ocular lobe; (2) the uropod endopods of *B. ozolinshi* lack the serrations on the inner margin, in while those of *Bodotria* sp. nov. are distinctly serrated; (3) the second longitudinal fold on the carapace does not reach at anterior of the carapace in both sexes of *B. ozolinshi*, but that fold of *Bodotria* sp. nov. is clearly expanded to anteriorly.

## References

- Gamo, S., 1965. Cumacea, New illustrated Encyclopedia of the Fauna of Japan, 2 (Tokyo: Hokuryukan), pp. 531-536 [in Japanese].
- Gamo, S., 1967. Studies on the Cumacea (Crustacea, Malacostraca) of Japan. part I. Publication of the Seto Marine Biological Laboratory XV (2), 133-274.
- Gamo, S., 1968. Studies on the Cumacea (Crustacea, Malacostraca) of Japan. part II. Publication of the Seto Marine Biological Laboratory, 16(3), 147-192.
- Hong, J. S., Park, M. R. and Choi, K. S., 1998. Four Species of the Family Diastylidae (Crustacea: Cumacea) from the Yellow Sea. Journal of the Korean Society of Oceanography. 33(3). 100-112.
- Kang, B. J. and Lee, L. S., 1996. New Records of Three Cumacean (Crustacea, Malacostraca, Cumacea) from Korea, The Korean Journal of Systematic Zoology, 12(3). 211-219.
- Lee, C. M. and Lee, K. S., 1999. Cumacean fauna (Crustacea, Cumacea) from Korean Water. The Korean Journal of Systematic Zoology, 14(2). 71-89.
- Liu, H. and Liu, R. 1990. Study on Cumacea (Crustacea Malacostraca) of the offshore waters on North China. Studia Marina Sinica, (31). 195-205. (In Chinese with English summary).
- Park, M. R. and Hong, J. S., 1999. Three species of the genus *Diastylis* (Crustacea: Cumacea) from the Yellow Sea. Journal of Natural History. 33. 979-998.
- Park, M. R., Hong, J. S. and Choi, K. S., 1998. The Bodotriid Cumacea (Crustacea: Malacostraca) from the Yellow Sea. Journal of Fisheries Science and Technology. 1(1). 94-112.
- Stebbing, T.R.R., 1913. Cumacea (Sympoda). Das Tierreich. Berlin, pp. 1-210.
- Watling, L., 1991. Revision of the cumacean family Leuconidae. Journal of Crustacean Biology, 11(4), 569-582.
- Watling, L., and McCann, L. D., 1997. Cumacea. In Taxonomic atlas of the benthic fauna of the Santa Maria Basin and western Santa Barbara Channel. Vol. II. The Crustacea. Part 2. The Isopoda, Cumacea and Tanaudacea (ed. J. A. Blake and P.H. Scott), pp. 121-180. Santa Barbara, California: Santa Barbara Museum of Natural History.
- Zimmer, C., 1903. Die Cumaceen des Museums für Naturkunde in Berlin. Zool. Jahrb. Syst., Bd., 17, 665-694.