

A107 **The Zoeal Development of Three Pugettia Species
(Crustacea: Decapoda: Majidae), with a Key to the Known
Zoeae of the Subfamily Epialtinae**

Hyun Sook Ko
Department of Biology, Pusan Women's University

The zoeal developments of Pugettia marissinica Takeda & Miyake, 1972, P. quadridens (De Haan, 1850) and P. intermedia Sakai, 1938 were obtained by culture in the laboratory. Two zoeal stages of P. marissinica and P. intermedia, and one zoeal stage of P. quadridens are described and illustrated in detail. Within the subfamily Epialtinae, morphological characteristics were compared with those of other zoeae and a key was provided for the identification of zoeae. The zoeae of P. marissinica, P. intermedia, P. quadridens and P. similis quite resemble each other. But, they can be easily separated based on chromatophores on a dorsal carapace spine.

A108 **An Unique Reproductive Mode of Diploid-triploid Unisexual
Cobitid Fishes, *Cobitis sinensis-longicarpus* complex (Pisces,
Cobitidae)**

Ik-Soo Kim* and Eun-Hee Lee
Department of Biology, Chonbuk National University

The Cobitid hybrid complex of *Cobitis sinensis* and *C. longicarpus* lived commonly in the upper streams of the Nakdong River, Korea and occurred sympatrically with a bisexual species of *C. sinensis* or *C. longicarpus*. The specimens of hybrid complex having the unique colour pattern on the body sides are almost female and are composed of both diploid and triploid form in their karyotypes. In order to verify their reproductive mode, when the diploid females of *C. sinensis-longicarpus* were artificially crossed with diploid males of *C. sinensis* or *C. longicarpus* respectively, the progenies were all triploid form in the karyotype and appeared the paternal characters in the body colour patterns. And when the triploid females of *C. sinensis-longicarpus* complex were also crossed with diploid males of *C. sinensis* or *C. longicarpus* respectively, all individuals of the progeny were diploid form and had the paternal characters in the pigmentation.