

Notice on Plankton Seminar

#05018

09:30-11:30, 21 Oct. (Fri.), 2005. at #W-203

**Population Genetic Differentiation and Larval Developmental Patterns
of *Pseudeuphausia sinica* (Crustacea, Euphausiidae)**

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Pseudeuphausia sinica is considered as an endemic species in less saline waters of the southeastern coast of China, although it was reported in the southwestern to southern coastal waters of Korea in the fall. Its occurrence in Korean coastal waters therefore led to a controversial discussion of effects by the Changjiang diluted water. This study discusses the origin and the larval development of *P. sinica* from Korean coastal waters. A genetic approach was used to distinguish three populations from Korea and China. DNA sequence variation of a portion of the mitochondrial cytochrome oxidase I (mtCOI) confirmed the presence of the Korean endemic population and Chinese originated one seasonally being affected by Changjiang diluted water. The former was inferred to being diverged from the latter with rise and sank of sea levels since Pleistocene because the Yellow Sea and the East China Sea where they occur is an epicontinental region the water less depth 200 m.

The larval developmental pattern of *Pseudeuphausia sinica* was compared between Korean population caught on October and Chinese one. Their dominant pathways were very similar in both populations. However, in Korean population on October the individual numbers were dramatically reduced during the developmental process and juvenile stage was very rare. Egg-bearing adults also were not discovered. This suggests that the population seasonally originated from China can not retain its population until the next year.

次回 (10/28) 佐藤くんと山田さんをお願いしています。