

**A101** Relationships within the genus *Halocynthia* (Ascidians)  
based on amylase isozyme

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The genus *Halocynthia* from Korean coasts was classified into five species (subspecies), such as *Halocynthia hilgendorfi igaboja*, *H. h. ritteri*, *H. cactus*, *H. aurantium* and *H. roretzi*, by the morphological criteria of the gonad, the branchial sac, and atrial spines. Three of them (*H. h. igaboja*, *H. h. ritteri*, and *H. cactus*) are reduced by synonymy to one species which classified as *H. hispida* by Kott (1968). Amylase allozyme divergence may provide appropriate information for analysis of intra or interspecies relationships in the genus *Halocynthia hilgendorfi*. Total 105 *Halocynthia* such as 28 *H. hilgendorfi ritteri*, 18 *H. hilgendorfi igaboja* and 59 *H. roretzi* were sampled from five localities in Korea by SCUBA divers. Amylase extracts from each tunicate stomach, esophagus, digestive gland and intestine were analyzed by PAGE. There were high degree of polymorphisms in both *Halocynthia hilgendorfi* and *H. roretzi*. The amylase of *Halocynthia hilgendorfi* and *H. roretzi* was shown to have single locus enzyme system and a monomeric polypeptide chain. The amylase allozymes revealed codominantly 5 and 3 alleles in *H. hilgendorfi* and *H. roretzi*, respectively. These data suggests the *H. hilgendorfi igaboja* and *H. hilgendorfi ritteri* shared same amylase allozymes. On the other hand, distinct differences were observed in mobility patterns of amylase allozyme between *Halocynthia hilgendorfi* and *H. roretzi*. According to polymorphic taxon and amylase allozyme data, the two subspecies (*Halocynthia hilgendorfi igaboja* and *H. h. ritteri*) are confirmed as subspecies or genetic types.

**A102** A New Record of the Family Scatophagidae (Perciformes) from Korea

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A spotted butterflyfish, *Scatophagus argus*, of the family Scatophagidae was collected for the first time from coast of Chollabuk-do, Korea is very similar to *S. tetracanthus*. *S. argus* largely differs from *S. tetracanthus* in having round or oval black spots on body surface (six broad vertical brown bands in *S. tetracanthus*). A new Korean name "Napjakdom" is proposed for the *S. argus*.