A727 Compositions of Amino Acids in Grus vipio (Gruidae; Gruififormes)

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The compositions of amino acids in the thoracic muscle and the liver in *Grus vipio* were studied, which were died from eating the insecticides at the riversides of Nakdong river at Gumi in 1998. Totally 18 kinds of amino acids were found. In thoracic muscle, the amino acid were Glu, Lys, Leu, Gly, Asp, Ala, Val, Amm, Ile, Arg, Thr, Ser, Phe, Tyr, Ilis, Met, Cys and Pro in the order of high contents. But, the composition of the amino acids in the liver showed the difference from that in the thoracic muscle. They were Glu, Gly, Leu, Ala, Asp, Asp, Val, Lys, Amm, Arg, Ser, Thr, Phe, Ile, Tyr, Met, His, Cys and Pro in the order of high contents. The essential amino acids ratio was showed difference between muscle and liver too. But, the essential amino acids in the muscle was similar to that of *Adrea alba*.

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Systematic Relationships within *Dendronephthya* (Nephtheidae; Alcyonacea; Octocorallia) using the Molecular Characters

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The Dendronephthya is a soft coral which is mainly found at Cheju Island and the southern sea of Korea. Although, they look morphologically quite variable, just a few characters can be clearly distinguishable. The aim of this study is to establish the systematic relationship within six species of the Dendronephthya (D. putteri, D. suensoni, D. gigantea, D. spinifera, D. castanea, D. aurea) using molecular techniques. These species have been devided into 12 types according to polyp's features and color patterns. For this study, we used two methods, the analysis of the Internal Transcribed Spacer (ITS) sequence and Random Amplified Polymorphic DNA (RAPD). Our results show that six species of Dendronephthya are actually grouped in two clades. Also, the interspecies relationship is clear, but not among the types.