OP 002

Ecological Characteristics of the Benthic Macroinvertebrates Community of Chungryang Creek

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This study was conducted to investigate the community structure of benthic macroinvertebrates in Chungryang Creek located at the upper basin of the Nakdong River from April 1998 to September 1998.

The benthic macroinvertebrates collected from the surveyed station were composed of 89 species, 40 families, 14 orders, 7 classes and 5 phyla. Among these phyla, aquatic insects in Arthropoda were 82 species, 34 families, and 8 order. Abundance of aquatic insects at each sites were Ephemeroptera (43.2%), Trichoptera (29.6%), Plecoptera (11.1%), Odonata (2.47%), Megaloptera (1.23%).

Dominance indices showed most highly at St. 2 (0.88), and most lowly at St. 4 (0.16). *Chironomus* sp. at the all surveyed station was dominant species and *Hydatophylax nigrovittatus* was second dominant. The species diversity indices showed the highest at St. 3 (2.999) and the lowest at St. 5 (1.602). The dendrogram drawn by dissimilarity values among St. 4 indicates that the macrobenthic communities were divided into 2 groups: St. 1, 2, 3 and 4; St. 5 and 6. The water quality estimated by species diversity index and Group Pollution Index were β -mesosaphrobic at all surveyed stations.