

B503 Analysis of Diversity Indices in Benthic Macroinvertebrate Community in an Urban Polluted Stream in Korea

전태수, 박영석*, 劉廣純, 신중호
부산대학교 자연과학대학 생물학과

Diversity indices in benthic macroinvertebrates, mainly collected from the polluted Yang Jae stream of the Han river, were analyzed in this study. The samples were collected monthly by using the Surber net from March, 1996 to April, 1997. Generally the Shannon diversity indices appeared to be around 1, representing the polluted state of the stream. In some monthly samples, however, the indices increased exceptionally to high levels around 2, although water quality did not appear to be correspondingly improved. Two components of diversity indices, species richness and evenness, were observed in this study to explain this irregular increase in the indices, and it was demonstrated that a caution is required in interpreting diversity indices, regarding to estimating water quality and ecological status of the stream.

B504 An Ecological Study on the Vegetation in Saryang-Islet

In Taek Kim*, Yang Gi Baeg, Min Shup Song,
Ji Hoon Lee and Jong Ho Lee
Department of Biology, Changwon University

The vegetation of Saryang-Islet was investigated several times from June 30, 1995 to November 30, 1996. In order to analyze the vegetation of this islet, its floristic composition table, forest profile diagrams, actual vegetation map, DGN(Degree of Green Naturality) etc. were prepared. The vascular plant of this islet consists of 5 forma, 96 varieties, 2 subspecies, 686 species, 454 genera, 131 families and 43 orders. There also observed are 13 species of evergreen needle-leaf tree, 48 species of evergreen broad-leaf tree, 33 species of pteridophyta and 48 species(Park, 1995, 1996), 27 species(Yim and Jean, 1980) of naturalized plants. The predominant species of the whole islet is *pinus thunbergii* and divided into the following stand units. I. *Pinus densiflora*, II. *Pinus thunbergii*, III. *Quercus variabilis*, IV. *Quercus serrata*, V. *Platycarya strobilacea*, VI. *Carpinus coreana*, VII. *Alnus japonica*, VIII. *Castanopsis cuspidata* var. *sieboldii*, IX. *Camellia japonica*, X. *Selaginella tamariscina* communities.