B430

Ecological Studies on the Flora and Hygrophyte communities in the Kokum island according to the Environmental change

Kim Ha-Song*, Byung-sun Ihm[1] and Jeom-Sook Lee[2]
*Department of Environmental Preservation, Kumsung Environment College**
Department of Biology, Mokpo National University[1]
Department of Biology, Gunsan National University[2]

These studies had been performed on the ecological studies of the flora and distribution of hygrophyte communities in the Kokum island from August to October 1995 by Braun-Blanquet method(1964). Hygrophytes were composed of 95 species which are classified into 27 families, 65 genera, 83 species, 11vaietas and 1 forma. According to the vegetation table of community, the plant communities of the investigated sites were classified as follows : 1) Emergent Hydrophytes: *Phragmites communis* community, *Persicaria conspicua* community, *Persicaria thunbergii* community, *Typha orientalis* community, *Zygadenus sibiricus* community, 2) Floating-leaved Hydrophytes:*Trapa japonica* community 3) Free floating Hydrophytes:*Azolla imbricata* community 4) Submerged Hydrophytes :*Hydrilla verticillata* community.

B431

Comparative Analysis of Metal Elements Budgets of Small Watersheds in Yeocheon, Seoul and Kwangnung

You, Young Han, Joon-Ho Kim, Chang Seok Lee*
Dept. of Biology, Seoul National University
*Dept. of Biology, Seoul Women's University.

In order to characterize the metal element budgets in different ecosystems, we analysed the concentration of Al, Ca, Mg, Na, Cd, Cr, Cu, Mn, Fe, Mn, Si and Zn in bulk precipitation and stream flow, and estimated the input and output amounts from the ion concentration and hydrology data. The studied ecosystems are three small watersheds, which located in Yeocheon Industrail Complex (grassland), Seoul (Mt. Kwanaksan, growing coniferous forest) and Kangnung (climax forest). Cd was never detected in all the sample, Cr, Cu and Fe was detected or undetected with ecosystem, in precipitation. For the concentration of stream flow, Al, Ca, Cr, Mg, Mn and Na was highest in Yeocheon watershed. This result supported that metal cations are more leached in acidified ecosystem than in normal ecosystem. The annual budgets of Al, Ca, Mg, Na and Si were negative in all the ecosystems, but the others metal elements were positive or negative. The possilble causes for these results were discussed.