

# **Community Variations in Benthic Macro-Invertebrates at Different Habitats in a Polluted Urban Stream**

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Benthic macroinvertebrate communities and environmental data were collected monthly within a 200m reach in an Urban Stream, the Yangjae Stream, the Han River from April 1999 to March 2000. The habitats were divided characteristically in different groups in a small scale. In group 1, water velocity, substrates diversity and roughness were high. Species were consequently diverse, and species less-tolerant to organic pollution were more frequently observed. In group 2, in contrast, most environmental factors appeared in opposite to those of group 1, and species diversity was correspondingly low while species tolerant to organic pollution were abundantly collected.

There was no significant difference among sample sites within the group, however a roughness was significantly different among sample sites. Water velocity, roughness, shear velocity, and viscous sublayer thickness were significantly different among groups, while there were no significant differences among sample sites within groups.

Through correspondence analysis groupings were observed in environments accordingly to topographic conditions, and communities correspondingly appeared at different habitats.