

OP 004

Dynamics of Cladoceran Population in Kyeongan Stream

Nam, Hyun-Woo, Sang-Weon Bang and Myung-Soo Han

**National Research Laboratory for Water Environmental Ecology and
Restoration, Department of Life Science, Hanyang University**

Zooplankton community structure was monitored every week in Kyeongan Stream from July to October 2000 to investigate the effects of physico-chemical and biological factors on the changes of zooplankton community dynamics. Water temperature and pH fluctuated between 16.6~29.6°C and 7.03~8.90, respectively. Chlorophyll *a* concentration in the investigated area varied 63.7 to 405.6 $\mu\text{g l}^{-1}$. Total zooplankton density ranged 5,748 to 151,955 indiv. l^{-1} . The intensive decline of zooplankton density occurred during the heavy rain period and then gradually increased. Among zooplankton, cladocerans always dominated during the sampling period accompanying with copepods and rotifers. Two dominant cladoceran population peaks were clearly separated in time. *Daphnia* population dominated until September 8 and had an intensive decline during the raining period, after then, *Bosmina longirostris* population dominated until the end of sampling period. From these results, further research seems to be necessary to investigate the relationship between abiological and biological effects caused by rainfall in Kyeongan Stream.