

Cadmium함유수 처리시 Microcosm내의 개체군 동태변화

위인선, 이종빈, 위성욱, 나명석, 조 경*, 稻森悠平**

전남대학교 자연과학대학 생물학과, 서강전문대학*,

일본 환경청 국립환경연구소**

This study was conducted to provide environmental assessment method to the effect of a chemical substance using aquatic model ecosystem. Microcosm is one of the culture system containing three species bioorganism, *Chlorella vulgaris* as a producer, *Cyclidium glaucoma* as a consumer, *Pseudomonas putida* as a decomposer. This system is very simple, stable small-size ecosystem and shows high reproductivity and reflectivity to the natural ecosystem. It is purposed for evaluating 1) analysis method of population fluctuation, 2) culture condition, based on characteristics of individual species that selected from natural water. In order to investigate what variation bring out in the system after addition of cadmium in the culture system, population fluctuation was analyzed. When each species cultured in microcosm containig cadmium, it began to be affected by Cd 50mg/l *Chlorella vulgaris*, 0.5mg/l *Cyclidium glaucoma*, 5.0mg/l *Pseudomonas putida* in early time of culture.