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Population dynamics of *Peridinium* spp. cysts and vegetative cells in Juam Reservoir, Korea

Choi Ji-Young¹, Myung-Hwan Park², Soo-Yeon Cho¹, Bo-Ra Kim¹, Chun-Ju Ko³,
Baik-Ho Kim¹ and Myung-Soo Han^{1,2}

¹Department of Life Science, Hanyang University

²Department of Environmental Science, Hanyang University

³JuamDan Office 212-1 Yonggye-ri Sangsa-myeon Suncheon-si Jeollanna-do Seoul
540-860 KOREA

Seasonal occurrence of vegetative cells and cysts of the dinoflagellate *Peridinium bipes*. was investigated in three sites of Juam Reservoir, Korea from August 2003 to March 2004. Vegetative cells of *Peridinium* spp. appeared in Juam all through an eight-month period, and the surface water temperature changed from 6 to 28°C. During this survey, total chlorophyll *a* ranged from 1.2 to 173.2 µg/l, the highest value was observed in January, and the abundance of major dominant species based on the frequency of phytoplankton were *Peridinium bipes*. (54.7%) and *Asterionella gracillima* (37%), respectively. To measure germination ratios of cysts, cysts were isolated from natural sediment samples and incubated in the laboratory. Cyst abundance of maximum was detected in the sediment samples of site 3 in December 2003. Germination success was measured by the incubation of cysts under laboratory conditions and compared in different water temperatures and light by 20 µmol photons m⁻²s⁻¹. The highest germination rate was recorded at 20°C. Light affected the excystment.