

Conjugation and encystment of the planktonic choreotrich ciliate
Strombidium conicum

Yuko ENDO and Akira TANIGUCHI

(Laboratory of Aquatic Ecology, School of Agricultural Science, Tohoku University)

The planktonic choreotrich ciliate *Strombidium conicum* is known to be a cyst forming species. Its cysts were found in the sediment of Onagawa Bay and successfully excysted in laboratory. However, no attempt was made for encystment. In this study, we tried to induce its encystment in laboratory. Although environmental and physiological stresses usually induce the encystment in many species, stresses in temperature, light and feeding conditions did not induce encystment in this species when cultured in single clonal state. When cultured in mixed clonal state, many encystments were observed. During such mixed cultures, a pair of conjugating cells was observed after 36 days from original excystment. This suggests that *Strombidium conicum* encysts after conjugation, which occurs in matured populations.