

Feeding behavior of a heterotrophic dinoflagellate,  
*Polykrikos kofoidii*

조현진 · K. Matsuoka\* · 문창호  
부경대학교 · \*나가사키대학

Introduction

*Polykrikos kofoidii*, one of the predatory dinoflagellates, commonly breaks out at worldwide coastal areas. Few ecological behaviors, however, have been revealed yet. We observed and described the feeding behavior of *P. kofoidii*.

Materials and Methods

A seawater sample that contained some cells of *P. kofoidii* (predator), as well as many *Gymnodinium catenatum* (prey), was collected from Isahaya Bay, west Japan in November 1998. Feeding behavior of *P. kofoidii* was observed in culture condition of 12L:12D lighting and 20°C in temperature.

Result and Discussion

*Polykrikos kofoidii* used a nematocyst to pull the prey (*G. catenatum*) into its body through the posterior sulcus, and finally engulfed it whole. A causative species of red-tide, *G. catenatum* must be controlled by *P. kofoidii* predation in natural bloom conditions.