Isolation and characterization of mastigoneme proteins of Ochromonas sp.

Shuhei YAMADA, Mikihiko ARIKAWA and Toshinobu SUZAKI

(¹Dep. Biol., Fac. Sci., Kobe Univ., ²Dep. Biol. Fac. Sci., Nara Women's Univ.)

The phytoflagellate, *Ochromonas* sp., has two flagella of different lengths projecting from the anterior end of the cell. The fine, threadlike projections, called tubular mastigonemes, are connected to the surface of the longer flagellum, which is considered to control the direction of flagellar swimming. In this study, to understand the molecular architecture of the tubular mastigonemes and their role in flagellar motility, we isolated mastigonemes from *Ochromonas* sp. and characterized constituent proteins. SDS–PAGE analysis of the mastigonemes showed four major protein bands, and one of these bound specifically to concanavalin A.