

Diatom 21: 91-105 (英文)

寺阪 隆<sup>1</sup>・南雲 保<sup>2</sup>・田中次郎<sup>1</sup>：海産羽状目珪藻 *Licmophora* の本邦産汎布種 4 種の分布と形態

<sup>1</sup>〒108-8477 東京都港区港南 4-5-7 東京海洋大学

<sup>2</sup>〒102-8159 東京都千代田区富士見 1-9-20 日本歯科大学生物学教室

Takashi Terasaka<sup>1</sup>, Tamotsu Nagumo<sup>2</sup> and Jiro Tanaka<sup>1</sup> : Distribution and morphology of four common species of the marine pennate diatom genus *Licmophora* C.Agardh in Japan

<sup>1</sup>*Tokyo University of Marine Science and Technology, 4-5-7, Konan, Minato-ku, Tokyo 108-8477, Japan*

<sup>2</sup>*Department of Biology, The Nippon Dental University, 1-9-20, Fujimi, Chiyoda-ku, Tokyo 102-8159, Japan*

#### Abstract

We observed the morphology of the marine pennate diatom genus *Licmophora* in Japan using light and scanning electron microscopy, and identified the following four common species : *L. californica* Grunow, *L. communis* (Heib.) Grunow, *L. flabellate* (Grev.) C.Agardh, and *L. paradoxa* (Lyngb.) C.Agardh. They were distinguished from each other by 1) colony structure, 2) chloroplast shape, 3) shape of valves and frustules, 4) winding degree of central rib of valvocopula, 5) depth of septum, 6) areola shape, 7) velum structure, 8) number and arrangement of rimoportulae, 9) fine structure of head rimoportula, 10) number of apical slits and 11) presence of spines. Especially colony structure, areola shape, velum structure and fine structure of the head rimoportula were the most definitive characteristics among the species studied. The fine structure of the head rimoportula is a new distinguishing character revealed in the present study.

Key index words:distribution, fine structure, *Licmophora*, marine diatom, morphology, pennate diatom