

Diatom 14: 1-23 (英文)

小村精一 : *Coscinodiscus lewisianus* Grev.を含む二、三の中心型珪藻の特異な形態型

Seiichi Komura : A perplexing morphotype of some centric diatoms inclusive of *Coscinodiscus lewisianus* Grev. and its allies

Abstract

Associated with the ordinary type of frustule, the girdleless frustules, prevalent in the material from the marine sediments of the Miocene Nabuto Formation distributed in the Boso Peninsula, represent another morphotype in which one valve is identical with that of the ordinary type while the other differs by having internal depressions at the valve margin. This type of frustule is most perplexing in that there is no space inside them, other than the region around the valve mantle where the depressions lie, due to the tight adhesion of valve to valve. It is concluded that the morphotype must be involved in some process to surmount the dormant condition of the organism that had probably lived within the ordinary frustule.

Two new genera, both of which concern this unique morphotype, are introduced from operative evidence they share and are delineated by the foamy-walled valves, the uniformly produced rimoportules on the valve mantle and the lack of a pseudonodulus. They are *Spumorbis*, which includes three new species and has discoidal valves with areolae radiating in fascicular patterns, and *Araniscus*, which is further separated from *Spumorbis* by an intimate linkage of the elliptic-contoured valve to the cobwebby array of areolae.

Within *Araniscus* three are described as new and one known *Coscinodiscus lewisianus* is newly combined. Both the genera are close to *Actinocyclus*.

Key index words

centric diatom, Miocene, morphology, morphotype, Nabuto Formation, new genera