Diatom 12: 7-26 (英文)

小村精一：珪藻被殻の蓋殻の接着状態

Seiichi Komura : An attachment mode of opposite valves in some diatom frustules

Abstract

Attachment of thecal components, valves opposed and girdle bands intercalated if present, is examined by SEM within individual frustules of four species, all of which are new as well in genera. In the first two discoidal species devoid of girdle the opposite valves are thickened at the edges to an annular flange to which they firmly adhere : *Trochosirella restricta* with auricular flaps occluding rimoportulae on the mantle of arcuate, petridish-formed valves ; *Lomonycus rotatus* furnished with stalked tubes for the marginal fultoportulae on the loculate valves. At brimmed edges in the third species the valves and bands are successively overlain by the adjacent component ; *Nephrodiscus sawamurae* (= *Coscinodiscus sawamurae* Akiba), which carries a reniform cave on each valve. In the last taxon, *Paleopandorus pergracilis* superficially similar to species of *Diploneis* Ehr., the valve squeezes its terminal edge into a shallow groove parallel to the valve surfaces and cut into both ends of a single broad band without any overlapping of edges on the frustule.

This unusual fashion of valve in attachment is discussed with regard to the Macdonald-Pfitzer rule.

Key index words

Miocene diatoms, Nabuto Formation, new genera, valve attachment.