

Diatom 20: 33-46 (英文)

Eileen J. Cox : Pore occlusions in raphid diatoms - a reassessment of their structure and terminology, with particular reference to members of the Cymbellales

Abstract

The types of pore occlusions found in raphid diatoms were reviewed and their terminology was reassessed. In particular, the application of the term *vola* was questioned. Its usage within the raphid diatoms, and the Cymbellales in particular, is in conflict with its original designation. It was concluded that a new term should be adopted for flap-like occlusions with a broad attachment area, and the term *foricula* (window shutter) is proposed. Comparisons between different shapes of external opening in the Cymbellales suggest that these are formed similarly by the outgrowth of thin flanges of silica, but the final slit shape is dependent on the primary direction(s) of growth. A new form of pore occlusion was also recorded for the genus *Placoneis*. This comprises a roundish disc of silica, attached internally by a number of regularly arranged props. The term *tectulum* (little roof) is proposed. The importance of applying terminology consistently is discussed.

Key index words : character homology, cribrum, diatom systematics, hymens, rota, valve morphogenesis, *vola*