Diatom 21: 1-46 (英文)

Seiichi Komura : New marine diatoms from the Miocene Abuzuru Formation, the Miura Peninsula, central Japan

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Abstract

Eight new genera, nine new species and one new combination are described from early Miocene marine sediments which outcrop along Nobi beach, of the Miura Peninsula, that faces Tokyo Bay : *Trisystema multicirculare* gen. et sp. nov., *Collumicylindrus annuliformis* gen. et sp. nov., *Omphalophortron giganteum* gen. et sp. nov., *Omphalophortron blysmum* (Barron) comb. nov., *Fusiformella tubifera* gen. et sp. nov., *Fovirhombus rugosus* gen. et sp. nov., *Plegmolobos polymorphus* gen. et sp. nov., *Heterangion acanthophorum* sp. nov., *Annularius foveatus* gen. et sp. nov., and *Callimastogloia eucalla* gen. et sp. nov. 1) *Trisystema* has a *Distephanosira*-like frustule with a trinary system valve linkage. 2) *Collumicylindrus* is similar to *Craspedodiscus* but distinguishable from the latter genus because of the former having a large pericentral collar. 3) *Omphalophortron* has a pit-like deep depression at the centre of the watchglass-shaped valve and each loculate areola is occluded by a composite cribrate velum. 4) *Fusiformella* resembles *Rossiella* in many aspects but differs from the latter by having loculate areolae through the lanceolate valve, occluded by the cupola-shaped cribra attached to the internal foramen at the edge and an elongate tube extending from the internal subapical rimoportula to the exterior. 5) *Fovirhombus rugosus* is an actinocyclid with pit-shaped depressions scattered over the wide imperforate field at the centre of the rhombic valve. 6) *Plegmolobos polymorphus* is proposed as having a trilobed pillbox-shaped frustule distorted about the pervalvar axis. 7) *Heterangion acanthophorum* is recorded as the second species in this biddulphioid genus and distinguished by opposed protrusions from the hyaline valvar margin beneath unequal-sized elevations each with a topmost ocellus. 8) *Annularius* differs from *Navicula* sensu stricto in having broad crescent-shaped pitted fields between the thick-silicified apical raphe-sternum (with an arcuate, not plicate, raphe) and the circumferential semicylindrical loop. 9) *Callimastogloia* is closely related to *Mastogloia* but differentiated from it in having a pair of completely closed partectal rings.

Key index words : Abuzuru Formation, marine diatoms, Miocene, new genera, taxonomy