Diatom 21:1-46 (英文)
Seiichi Komura: New marine diatoms from the Miocene Abuzuru Formation, the Miura Peninsula, central Japan

Shinsayama Haitsu 13-303, Aoyagi 63, Sayama, Saitama 350-1301, Japan

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 biddulphiioid 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