

Diatom 17: 3-19 (英文)

Horst Lange-Bertalot and Marcus Werum : *Diadlesmis fukushimae* sp. nov. and some other new or rarely observed taxa of the subgenus *Paradiadlesmis* Lange-Bertalot & Le Coahu

Abstract

Recently *Paradiadlesmis* proves as a moderately species-rich subgenus whereas the nominate subgenus of *Diadlesmis* contains, so far known, very few taxa, all similar to the type species, *Diadlesmis confervacea*. *Diadlesmis fukushimae*, *Diadlesmis tahitiensis*, *Diadlesmis virginiana* and *Diadlesmis paracontenta* ssp. *magisconcava* are proposed as new taxa. Two other probably new taxa, both from French Polynesia, are discussed and shown by SEM or LM and SEM microphotographs respectively. *Diadlesmis biscutella*, known up to now only from New Caledonia (Melanesian Islands), is identified also in two Polynesian islands. The frustules display heterovalvy here facultatively. *Diadlesmis irata* and *D. brekkaensis*, two commonly misidentified taxa, are shown as distinctly independent species. The holotype of the latter is photographed for the first time and compared with conspecific populations from Central Europe and Central America. Seven other established, but in parts rarely recorded *Diadlesmis* taxa are shown by SEM-photographs for comparison and better identification.

Key index words

Diadlesmis fukushimae sp. nov., *Diadlesmis paracontenta* ssp. *magisconcava* ssp. nov., *Diadlesmis tahitiensis* sp. nov., *Diadlesmis virginiana* sp. nov., *Diadlesmis biscutella*-heterovalvy, *Paradiadlesmis*