Observations on the morphological diversity and distribution of two siliceous nannoplankton genera, Hyalolithus and Petasaria - DTU Orbit (30/09/2019)

Observations on the morphological diversity and distribution of two siliceous nannoplankton genera, Hyalolithus and Petasaria

Scale-bearing siliceous nannoplankton are occasionally encountered in surface seawater samples, but are rarely identified or illustrated. In this study, the morphological diversity of the haptophyte Hyalolithus neolepis and the enigmatic Petasaria heterolepis are investigated in scanning and transmission electron microscopes using materials from around the world. Results show that H. neolepis scales exhibit variation in the width of the marginal hyaline area, but intermediate specimens make separation of the two morphologies difficult. Petasaria heterolepis scales also show differences, in the presence of tubercle rows in the hyaline area and degree of hyaline areal coverage, but separation into discrete varieties is difficult at present. However, specimens with scales bearing a protuberance are considered to be distinct enough to warrant the erection of a new species, Petasaria protuberans Jordan, Malinverno, Šupraha, Thomsen et Young sp. nov.

General information
Publication status: Published
Organisations: National Institute of Aquatic Resources, Institute Management, University of Tasmania, University of Bremen, Kochi University, Universidad Nacional Autonoma de Mexico, University of Milan - Bicocca, Nara University of Education, National Centre for Polar and Ocean Research, Uppsala University, University of Athens, University College London, Florida State University, University of Bergen, Yamagata University
Pages: 439-455
Publication date: 2016
Peer-reviewed: Yes

Publication information
Journal: Micropaleontology
Volume: 61
Issue number: 6
ISSN (Print): 0026-2803
Ratings:
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 0.76 SJR 0.368 SNIP 0.742
Web of Science (2016): Impact factor 0.464
Web of Science (2016): Indexed yes
Original language: English
Electronic versions:
Publisher's version
URLs:
http://www.micropress.org/microaccess/micropaleontology
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review