

In this issue

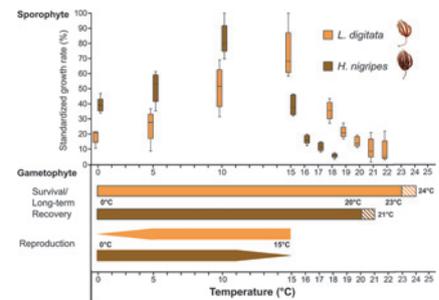
Kiara Franke, Daniel Liesner, Svenja Heesch and Inka Bartsch

Looks can be deceiving: contrasting temperature characteristics of two morphologically similar kelp species co-occurring in the Arctic

<https://doi.org/10.1515/bot-2021-0014>
Botanica Marina 2021; 64(3): 163–175

Research article: In the Arctic (western Spitsbergen), the two co-occurring and morphologically similar kelp species *Laminaria digitata* and *Hedophyllum nigripes* strongly differ in their temperature responses across life cycle stages, with *H. nigripes* being negatively impacted by climate warming.

Keywords: C:N-ratio; gametogenesis; growth rate; PAM fluorometry; sporophyte.



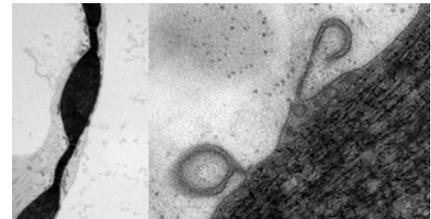
Christos Katsaros, Sophie Le Panse, Gillian Milne, Carl J. Carrano and Frithjof Christian Kupper

New insights on *Laminaria digitata* ultrastructure through combined conventional chemical fixation and cryofixation

<https://doi.org/10.1515/bot-2021-0005>
Botanica Marina 2021; 64(3): 177–187

Research article: Cryofixation enables preparing tissues of *Laminaria digitata* with unprecedented fidelity compared to other methods, enabling new insights in brown algal cell biology, like flat cisternae and fine membranous structures associated with the plasmalemma.

Keywords: flat cisternae; *Laminaria*; Ochrophyta; Phaeophyceae; TEM.



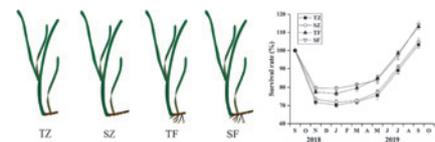
Xin Hou, Ran Cheng, Jia Song, Chongfeng Zhong, Pei-Dong Zhang, Bin Kang and Wen-Tao Li

Effects of rhizome and root trimming on the growth and survival of *Phyllospadix iwatensis* transplants: a case study in Shandong Peninsula, China

<https://doi.org/10.1515/bot-2020-0068>
Botanica Marina 2021; 64(3): 189–200

Research article: The effects of rhizome and root trimming on transplant survival and growth were assessed and the results showed that the transplants with roots on both short and long rhizomes had a significantly higher survival rate than those without roots.

Keywords: rhizome and root trimming; rocky substrate; sea-grass transplantation; surfgrass *Phyllospadix iwatensis*; transplant survival.

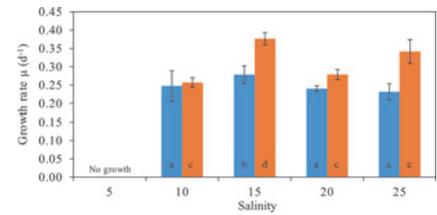


Manuel Sala-Pérez, Anne E. Lockyer, Alexandre Anesio and Suzanne A. G. Leroy
Effect of temperature and salinity on the growth and cell size of the first cultures of *Gymnodinium aureolum* from the Black Sea

<https://doi.org/10.1515/bot-2020-0076>
 Botanica Marina 2021; 64(3): 201–210

Research article: The first cultures of *Gymnodinium aureolum* from the Black Sea were confirmed by morphological and molecular analyses. In addition, growth experiment results suggest the adaptation of this species to the current Black Sea temperature and salinity conditions.

Keywords: algal bloom; dinoflagellate culture; growth rate; phylogeny.

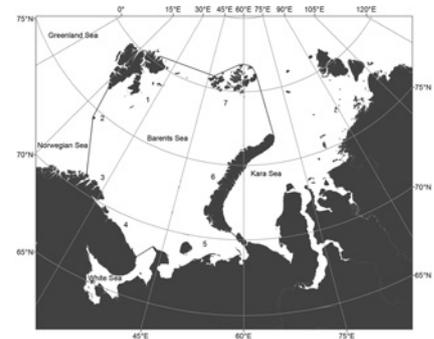


Tatiana A. Mikhaylova
A comprehensive bibliography, updated checklist, and distribution patterns of Rhodophyta from the Barents Sea (the Arctic Ocean)

<https://doi.org/10.1515/bot-2021-0011>
 Botanica Marina 2021; 64(3): 211–220

Review: A revised checklist of the Rhodophyta of the Barents Sea is presented with critical analysis based on comprehensive bibliographic searches and inspection of specimens; the local floras of the red algae were compared among different regions of the Barents Sea.

Keywords: Barents Sea flora; bibliography; red algae; revised checklist; Sørensen similarity index.

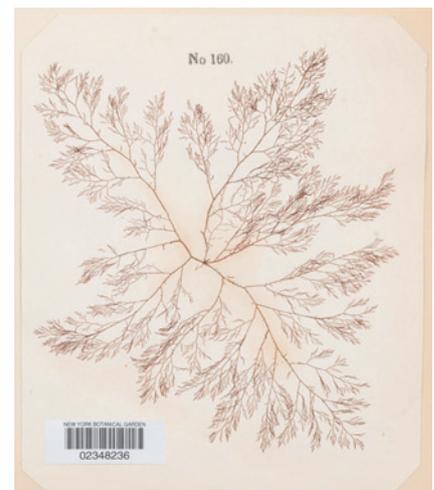


Craig W. Schneider, Michael J. Wynne and Gary W. Saunders
On the nomenclatural reinstatement and lectotypification of *Spyridia americana* Durant (1850)

<https://doi.org/10.1515/bot-2021-0004>
 Botanica Marina 2021; 64(3): 221–225

Short communication: *Spyridia americana* Durant is reinstated for specimens collected from the northeastern United States known as *Spyridia filamentosa*. Isolates were sequenced for the COI-5P and *rbcL* genes and determined to be distinct from Mediterranean (type locality) specimens of *S. filamentosa*.

Keywords: New England; New York; Rhodophyta; *Spyridia americana*; *Spyridia filamentosa*.



Sivakumar Kannan, P. Ragavan,
K. Gopalakrishnan, Maryam Salah and
K. Balasubramani

Mangrove floristics, forest structure and mapping of Neil Island (Andaman and Nicobar Islands, India) with emphasis on the diversity of *Rhizophora* species and the significance of small island mangroves

<https://doi.org/10.1515/bot-2020-0075>
Botanica Marina 2021; 64(3): 227–241

Research article: Mangroves of Neil Island consist of 17 true mangrove species. Co-existence of all the three Indo-West Pacific (IWP) mangrove species of the genus *Rhizophora* and their hybrids shows this island as a unique place for studying the hybridization and speciation of *Rhizophora*.

Keywords: Andaman Islands; biomass; mangroves; mapping; Neil Island; *Rhizophora*.

