

In this issue

Anton Kuech, Ursula Witte and Inka Bartsch
Labelling kelps with ^{13}C and ^{15}N for isotope tracing or enrichment experiments

<https://doi.org/10.1515/bot-2025-0029>
 Botanica Marina 2025; 68(5): 417–425

Research Article: This article describes a method for isotopically enriching juvenile sporophytes of two North Atlantic kelp species using controlled ^{13}C and ^{15}N additions under airtight conditions, providing the basis for experiments that enable precise tracing of organic material flow through ecosystems.

Keywords: macroalgae; kelp; cultivation; isotopic enrichment; isotope tracing experiments

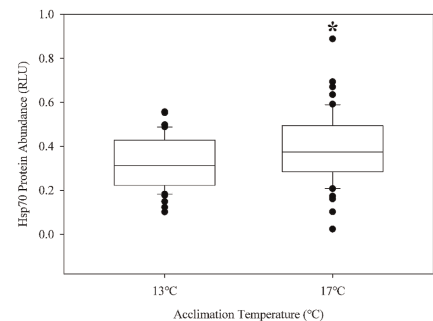


Shelby J. Hotz, Rachael H. Karm, Brent B. Hughes and Mackenzie L. Zippay
Effects of thermal history on the heat shock response of bull kelp (*Nereocystis luetkeana*)

<https://doi.org/10.1515/bot-2025-0033>
 Botanica Marina 2025; 68(5): 427–437

Research Article: Understanding the thermal history of bull kelp (*Nereocystis luetkeana*) is an important factor in determining whether it can mount a heat shock response and can provide awareness about its ability to tolerate future marine heatwaves.

Keywords: bull kelp; Hsp70; marine heatwaves; protein abundance; thermal stress

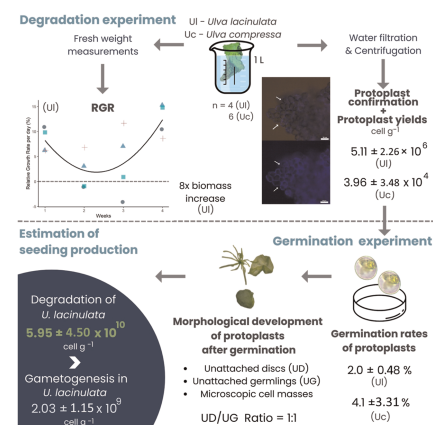


Isabel Cardoso, Inka Bartsch, Klaus-Ulrich Valentin, Sophie Steinhagen, Bela H. Buck and Laurie C. Hofmann
Naturally occurring protoplasts in two *Ulva* spp. reveal a previously underestimated proliferation process

<https://doi.org/10.1515/bot-2025-0017>
 Botanica Marina 2025; 68(5): 439–462

Research Article: Naturally occurring protoplasts were produced by degrading *Ulva lacinulata* and fertile *Ulva compressa*. *Ulva lacinulata* regrew while producing protoplasts that germinated into various morphologies (some of which became fertile). We concluded that degradation may yield more seeding than gametogenesis.

Keywords: degradation; gametogenesis; protoplasts; reproduction; *Ulva*

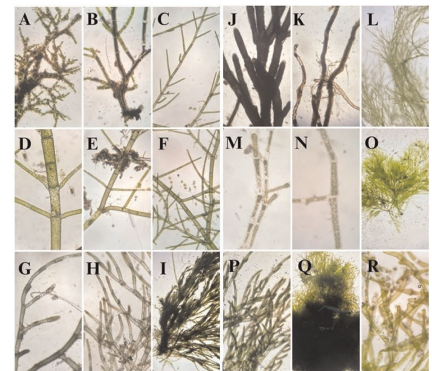


Öznur Yazılan, Sofie D'hondt,
Olivier De Clerck, Ergün Taşkın and
Frederik Leliaert
**Unveiling *Cladophora* (Cladophorales,
Chlorophyta) diversity in Turkey through
DNA barcoding**

<https://doi.org/10.1515/bot-2025-0016>
Botanica Marina 2025; 68(5): 463–473

Research Article: Morphological
and DNA barcoding analyses
enhance our understanding of
Cladophora and *Cladophoropsis*
species diversity along the coasts of
Turkey and Greece.

Keywords: Cladophorales;
Cladophora; Mediterranean Sea;
Aegean Sea; LSU rDNA

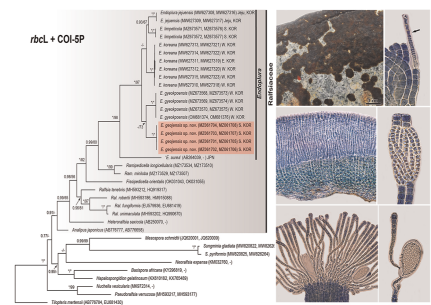


Antony Otinga Oteng'o, Boo Yeon Won and
Tae Oh Cho
**A new crustose brown alga, *Endoplura
geojensis* sp. nov. (Ralfsiales,
Phaeophyceae) from Korea based on
molecular and morphological analyses**

<https://doi.org/10.1515/bot-2025-0004>
Botanica Marina 2025; 68(5): 475–483

Research Article: *Endoplura
geojensis* is a new crustose brown
alga from Korea. It is resolved as
the sister clade of *Endoplura
gyeokpoensis* and characterized by
tufts of hairs, plurangia with 2–5
separate parallel filaments, and
unangia associated with
paraphyses and soral-like
filaments.

Keywords: COI-5P; phylogeny;
rbcL; taxonomy

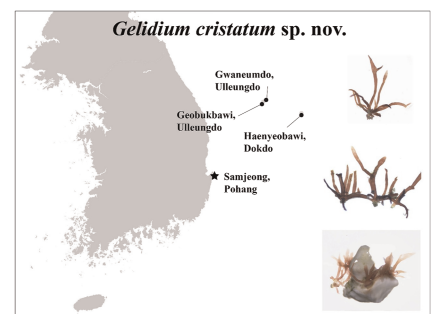


Seungyeop Han, Su Yeon Kim and
Chang Geun Choi
**Diversity of turf-forming *Gelidium* species
growing on subtidal crustose coralline
algae in the East Sea of Korea with a
description of *G. cristatum* sp. nov.**

<https://doi.org/10.1515/bot-2025-0008>
Botanica Marina 2025; 68(5): 485–493

Research Article: *Gelidium
cristatum* sp. nov., a turf-forming
red alga growing on the crustose
coralline algae, is described from
the East Sea of Korea based on
morphological observations and
molecular phylogenies.

Keywords: *Gelidium*; Gelidiales;
CCA bed; turf-forming algae



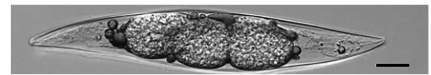
Bettina Scholz, Kleopatra Grammatiki,
Eleni Avramidi, Myrsini M. Lymperaki,
Vasilis Resaikos,
Magdalene Papatheodoulou and
Frithjof C. Küpper

**First record of the diatom pathogen
Diatomophthora perforans cf. subsp.
pleurosigmae (Oomycota) from the
Mediterranean microphytobenthos**

<https://doi.org/10.1515/bot-2025-0028>
Botanica Marina 2025; 68(5): 495–498

Short Communication: This paper reports the first record of the oomycete *Diatomophthora perforans* subsp. *pleurosigmae* infecting the Mediterranean microphytobenthic diatom *Pleurosigma* cf. *intermedium*, which was detected in the context of marine environmental surveys of the brine outfalls of two seawater desalination plants.

Keywords: Bacillariophyta; *Ectrogella*; microphytobenthos; Oomycota; *Pleurosigma intermedium*



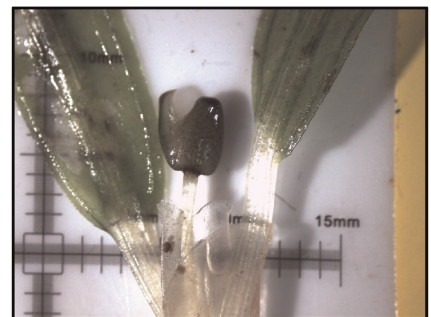
Justin E. Campbell, Allison Patranella,
Becca Hatchell, Bradley T. Furman and
Michael E. Wheeler

**Staminate flowers of the non-native
seagrass, *Halophila stipulacea*, observed
for the first time in Biscayne Bay, Florida,
USA**

<https://doi.org/10.1515/bot-2025-0037>
Botanica Marina 2025; 68(5): 499–502

Short Communication: Staminate flowers of the non-native seagrass, *Halophila stipulacea*, were documented for the first time in Biscayne Bay, FL, USA. Pistillate flowers were not observed. We highlight that future surveys should continue monitoring for floral presence.

Keywords: sexual reproduction; introduced species; non-native seagrass



Patricia Velez, Jaime Gasca-Pineda,
Abril Hernandez-Monroy, Mariana Martinez-
Hernandez, Alejandra Arista-Romero,
Marian A. López-Lobato, Manuel Rangel-
Grimaldo, Diana L. Salcedo and
Mario Figueroa

**Chemical and biological potential of fungi
from deep-sea hydrothermal vents and
an oxygen minimum zone**

<https://doi.org/10.1515/bot-2024-0106>
Botanica Marina 2025; 68(5): 503–515

Research Article: Culturable fungi isolated from deep-sea hydrothermal vents and an oxygen minimum zone in the Gulf of California revealed diverse Ascomycota members with antimicrobial activities, highlighting these extreme environments as promising sources of novel fungal resources.

Keywords: antimicrobial activity; culture conditions; hydrothermal vent sediments; marine fungi; metabolomic analysis

