In this issue

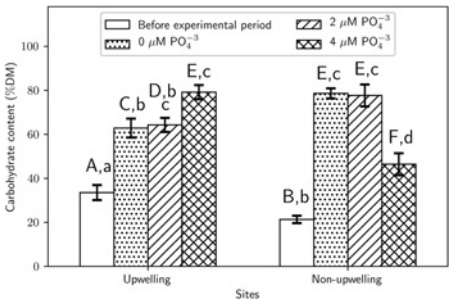
Tiphane Andrade Figueira, Nuno Tavares Martins, Lígia Ayres-Ostrock, Estela M. Plastino, Alex Enrich-Prast and Vinícius Peruzzi de Oliveira

The effects of phosphate on physiological responses and carbohydrate production in *Ulva fasciata* (Chlorophyta) from upwelling and non-upwelling sites

https://doi.org/10.1515/bot-2020-0051
Botanica Marina 2021; 64(1): 1–11

Research article: To determine the effects of phosphorus on physiological parameters of *Ulva fasciata*, individuals from distinct sites (upwelling and non-upwelling sites) were cultivated at different phosphate concentrations. Our results indicate that site of origin and phosphate concentration influenced macroalgal carbohydrate contents.

Keywords: carbohydrate production; macroalgal cultivation; phosphorus uptake; *Ulva fasciata*; upwelling.



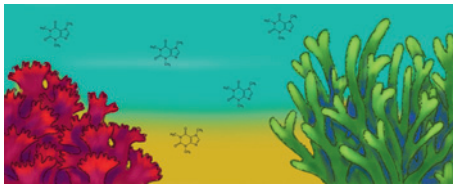
Ira Gray, Lindsay A. Green-Gavrielidis and Carol Thornber

Effect of caffeine on the growth and photosynthetic efficiency of marine macroalgae

https://doi.org/10.1515/bot-2020-0055
Botanica Marina 2021; 64(1): 13–18

Short communication: The growth and photosynthetic efficiency of two ecologically important macroalgae, *Chondrus crispus* and *Codium fragile* subsp. *fragile*, were not significantly affected by two weeks of exposure to caffeine concentrations common in coastal ecosystems worldwide (10–100 ng L^{-1} caffeine). Figure: original artwork by © Ira Gray.

Keywords: *Chondrus crispus*; *Codium fragile* subsp. *fragile*; emerging contaminant; environmental pollution; pharmaceuticals.



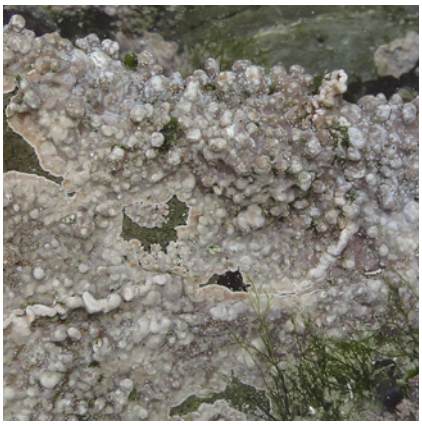
Courtney A. Puckree-Padua, Paul W. Gabrielson and Gavin W. Maneveldt

DNA sequencing reveals three new species of *Chamberlainium* (Corallinales, Rhodophyta) from South Africa, all formerly passing under *Spongites yendoi*

https://doi.org/10.1515/bot-2020-0074
Botanica Marina 2021; 64(1): 19–40

Research article: DNA sequences from *psb*A and *rbc*L markers, supported by morpho-anatomical characters, placed three new non-geniculate coralline algal species from South Africa, previously passing under the misapplied name, *Spongites yendoi*, in the genus *Chamberlainium*.

Keywords: biogeography; Chamberlainoideae; cryptic diversity; morpho-anatomy; non-geniculate coralline algae.



Mohamed Ramdani, Moulay Brahim Oufekkir, Ouahid El Asri, Najat El Khiati, Mohammed Ramdani, Françoise Denis and Roger J. Flower

First report of *Cystoseira aurantia* Kützing from the Mediterranean coast of Morocco

https://doi.org/10.1515/bot-2020-0061
Botanica Marina 2021; 64(1): 41–47

Research article: *Cystoseira aurantia* Kützing is reported for the first time from the Mediterranean coast of Morocco and its occurrence in the Nador Lagoon is investigated.

Keywords: brown alga; *Cystoseira aurantia*; Morocco; Nador Lagoon.

Roberta Skukan, José M. Rico and Yaisel J. Borrell

DNA barcoding-based assessment of the invasive and native non-crustose *Codium* species in the central Cantabrian Sea, southern Bay of Biscay

https://doi.org/10.1515/bot-2020-0060
Botanica Marina 2021; 64(1): 49–54

Short communication: DNA barcoding was used to confirm the presence of non-crustose invasive (*Codium fragile* subsp. *fragile*) and native (*C. tomentosum* and *C. vermilara*) *Codium* spp. in the central Cantabrian Sea and to identify *Codium* spp. in fresh and herbarium material.

Keywords: Cantabrian Sea; DNA barcoding; herbarium samples; non-crustose *Codium* species.

Shr-Hau Hung, Yung-Hsiu Lu, Chih-Ching Chung, Chi-Yu Shih, Gwo-Ching Gong and Jeng Chang

Sequence comparison and expression analysis of an inferred Na^+/Pi cotransporter gene in the marine diatom *Skeletonema tropicum*

https://doi.org/10.1515/bot-2020-0037
Botanica Marina 2021; 64(1): 71–80

Research article: A high-affinity phosphate transporter gene, *StPHO*, was studied in the marine diatom *Skeletonema tropicum* and phosphorus deficiency was shown to greatly increase the mRNA expression of *StPHO*.

Keywords: phosphate deficiency; phosphate transporter; *Skeletonema tropicum*; SLC20 family; *StPHO*.