

RIUNIONE SCIENTIFICA 2020
GRUPPO DI ALGOLOGIA
Società Botanica Italiana

Tenuta in forma telematica
20 novembre 2020

PROGRAMMA E RIASSUNTI

A cura di:

Fabio Rindi

Comitato scientifico:

Stefano Accoroni, Giuseppina Alongi, Simona Armeli Minicante,
Roberta Congestri, Anna Maria Mannino e Fabio Rindi

Organizzazione telematica della riunione:

Giuseppina Alongi

PROGRAMMA

VENERDÌ 20 NOVEMBRE

- 9:15 **Introduzione ai lavori – Rossella Pistocchi e Direttivo del Gruppo di Algologia**
- 9:30 S. Armeli Minicante
Il patrimonio algale degli Erbari italiani: primi risultati del censimento
- 9:45 S. Casabianca, S. Capellacci, M.G. Giacobbe, C. Dell’Aversano, L. Tartaglione, F. Varriale, R. Narizzano, F. Risso, P. Moretto, A. Dagnino, R. Bertolotto, E. Barbone, N. Ungaro, A. Penna
Plastic-associated harmful phytoplankton assemblages in marine environment
- 10:00 S. Heesch, M.D. Guiry, W.A. Nelson, F. Rindi
The brown algal genus *Cladostephus* (Sphacelariales): a taxonomic reassessment based on a polyphasic approach clarifies species circumscription and nomenclature
- 10:15 F. Misurale, V. Giussani, L. Pezzolesi, R. Pistocchi, F. Colonna, R.M. Bertolotto, A. Novellino, A. Pagano, S. Alloisio
A multidisciplinary approach for a fast HAB monitoring and a comprehensive evaluation of the risks on human and environment health
- 10:30 V. Malavasi, K. Sciuto, M.A. Wolf, S. Soru, M. Secci, P. Addis, A. Sfriso
First assessment of algal diversity in Santa Gilla lagoon (Sardinia, Italy) in the framework of the aquaculture industry
- 10:45 N. Caputo, F. Guerrini, S. Vanucci, L. Pezzolesi, R. Pistocchi
Reddish-brown bloom of the dinoflagellate *Prorocentrum cordatum* in the brackish lake “Lago delle Nazioni” (Comacchio, FE)
- 11:00 ***Pausa***
- 11:30 F. Cipolletta, F. Vidussi, M.C. Buia, L. Longobardi, B. Mostajir, D. Sarno
Effects of a simulated heat wave on the phytoplankton assemblage of the Thau Lagoon (France)

- 11:45 D. Lenzo, L. Pezsolesi, A. Pasteris, M. Colangelo, F. Rindi, R. Pistocchi
Ecological implication of allelopathic aldehydes produced by marine algae
- 12:00 L. Longobardi, D. Sarno, L. Dubroca, A. Zingone
Clocks in the ocean: phytoplankton periodicity in a highly variable environment
- 12:15 S. Farrotti, S. Savio, A. Amati, K. Krasojevic, N. Perini, F. Costa, L. Migliore, R. Congestri
A microbial consortium as biofilter to upcycle dishwasher wastewater
- 12:30 G. Vaccarisi, S. Falsini, L. Lazzara, C. Nuccio, E. Corti, G. Paoletti, A. Papini
Recupero della forma spiralata da quella lineare da parte di *Arthrospira platensis* Gomont dopo il reintegro dei nutrienti
- 12:45 D. Serio, G. Furnari, R. Sanfilippo, J. Neiva
"*Cystoseira*" *hyblaea* Giaccone (Ochrophyta, Fucales), a little known but probably widely distributed species in the Mediterranean Sea
- 13:00 ***Pausa***
- 14:30 S. Fasiello, C. Garrido Perez
Growth rate of *Tetraselmis chuii* cultured in different concentration of nitrate and phosphate: effects on the biomass productivity and compounds
- 14:45 D. Spagnuolo, A. Manghisi, M. Morabito, R.M. Byeng, G. Genovese
Potential uses of *Asparagopsis* species for methane reduction in intensive farming
- 15:00 S. Giulietti, M. Ubaldi, T. Romagnoli, S. Accoroni, C. Totti
Morphology and phylogeny of a new pennate planktonic diatom species from the northwestern Adriatic Sea: *Nitzschia gobbii* sp. nov.
- 15:15 A. Guzzon, E. Bellini, L. Rugnini, L. Bruno
Effect of abiotic factors on photosynthetic performance of two strains of Cyanobacteria

- 15:30 A. Pelusi, A. Godhe, M.I. Ferrante, M. Ribera d'Alcalà, K. Thamatrakoln, K. Bidle, M. Montresor
High cell density and viral infection trigger formation of resting stages in the marine diatom *Chaetoceros socialis*
- 15:45 M.R. Vadrucci, L. Roselli, A. Pastorelli
PhytoNumb3rs: An easy-to-use computer toolkit for counting microalgae by the Utermöhl method
- 16:00 ***Pausa***
- 16:30 L.G. Costanzo, G. Marletta, G. Alongi
Preliminary observations on the coralligenous macrophytobenthos in the Marine Protected Area Isole Ciclopi (eastern coast of Sicily)
- 16:45 C. Gerotto, D. Pousa Kurpan Nogueira, A. Norici, M. Giordano
Diversity of Sulfur metabolism in marine microalgae
- 17:00 M. Palmieri, M.R. Di Cicco, C. Lubritto, C. Ciniglia
Use of *Galdieria sulphuraria* (Cyanidiophytina, Rhodophyta) in recovering rare-earth elements from fluorescent lamps (FL).
- 17:15 A. Petrocelli, G. Alabiso, G. Portacci, P. Ricci, R. Carlucci, E. Cecere
Effectiveness of long-term observations for the behavior assessment of a potentially invasive non-indigenous species (NIS) in the Mar Piccolo of Taranto (northern Ionian Sea, Mediterranean Sea)
- 17:30 S. Savio, L. Lvova, R. Paolesse, G. Persichetti, G. Testa, R. Bernini, R. Congestri
'Sensorial' systems and microalgae affairs
- 17:45 G. Furnari
Amenità algologiche e non solo.....
- 18:00 **Comunicazioni al Gruppo e saluti – Rossella Pistocchi**

RIASSUNTI

“*Cystoseira*” *hyblaea* Giaccone (Ochrophyta, Fucales), a little known but probably widely distributed species in the Mediterranean Sea

D. Serio, G. Furnari, R. Sanfilippo, J. Neiva

“*Cystoseira*” *hyblaea* was described by Giaccone (1986) based on specimens collected from infralittoral rocky substrates at Punta D’Aliga (Ragusa), along the southeastern coast of Sicily. As remarked by Cormaci *et al.* (2012), this species was no longer recorded after its description. Nevertheless, “*C.*” *hyblaea* has recently been found in the Tunisian coasts by Bouafif *et al.* (2016), who collected some specimens in 2014 at Kelibia, at the depth of 0.2-1.5 m on semi-exposed rocky shores. During a recent study of species of the “*Cystoseira* complex” from the Sicily coasts, a “*C.*” *hyblaea* community associated with biogenic crusts of the reef-building worm *Sabellaria alveolata* (Linnaeus, 1767) (Polychaeta: Sabellariidae) was found on shallow infralittoral bottoms of the southeastern coast near “Isola delle Correnti” (Syracuse). The thalli of “*C.*” *hyblaea* show the same characters as those from Tunisia reported by Bouafif *et al.* (2016), while they only partially correspond to Giaccone’s (1986) description. Therefore, a comparative study between our thalli and Giaccone’s Herbarium specimens held in the Herbarium of the Department of Biological, Geological and Environmental Sciences of the University of Catania (CAT, ex “Herbarium Giaccone”) was made, in order to better characterize the species. Taking into account the paper by Orellana *et al.* (2019), molecular studies were also undertaken in order to establish to which genus of the *Cystoseira* complex such a rare species should be referred to. Our plants are caespitose, attached to the substrate by a robust and compact basal disc, 3-5 cm in diameter. Cauloids (4-20) are erect, up to 30 cm high and 3-5 mm in diameter. The apex of cauloids is smooth and slightly protruding, never surrounded by spiniform appendages, sometimes surrounded by short cylindrical non-spiny young primary branches. Primary branches are cylindrical, bearing cylindrical branches of superior order with a subequal development that gives the thallus a cupressoid habit. Tophules and aerocysts are absent. Receptacles are terminal, cylindrical-ovoid to clavate, 0.5-1 cm long and 1 mm wide, with deciduous spinous appendages; conceptacles are subspherical and located at the base of spinous deciduous appendages. Thalli show the maximum vegetative and reproductive development in winter. The above characters, including the slightly prominent and smooth apex of cauloids, were observed in Giaccone’s Herbarium specimens. Therefore, a discrepancy does exist between original material and what stated by Giaccone in his diagnosis of the species: “*apice densis spinulis ornato haud satis saliente...*”. Since according to Giaccone’s (1986) diagnosis, *C. hyblaea* is similar to *C. crinita* [= *Carpodesmia crinita* (Duby) Orellana & Sansón] in habit but “*ab ipsa apicibus...praecipue differens*”, we checked Herbarium specimens of *Carpodesmia crinita* (labelled as *Cystoseira crinita*) held in CAT and in particular those collected by Pizzuto during the study of the “*C. crinita*” community from “Isola delle Correnti” (Pizzuto, 1999). This study showed that Pizzuto’s specimens should be referred to “*C.*” *hyblaea*. The occurrence of “*C.*” *hyblaea* in Sicily outside its type locality is confirmed. The “*C.*” *hyblaea* community was found in association with a bioconstruction of *Sabellaria alveolata*. It should be noted that, “*C.*” *hyblaea* as well as *S. alveolata* represent first reports from the study area.

Letteratura citata

- Bouafif C., Verlaque M., Langar H. (2016). New contribution to the knowledge of the genus *Cystoseira* C. Agardh in the Mediterranean Sea, with the reinstatement of species rank for *C. schiffneri* Hamel. *Cryptogamie Algologie*, 37: 133-154.
- Cormaci M., Furnari G., Catra M., Alongi G., Giaccone G. (2012). Flora marina bentonica del Mediterraneo: Phaeophyceae. *Bollettino dell’Accademia Gioenia di Scienze Naturali di Catania*, 45: 1-508.
- Giaccone G. (1986). Una nuova specie mediterranea del genere *Cystoseira* C. Agardh (Phaeophyta, Fucales): *C. hyblaea* G. Giaccone, con osservazioni critiche su alcune entità tassonomiche poco note o imperfettamente descritte. *Bollettino dell’Accademia Gioenia di Scienze Naturali di Catania*, 18: 429-442.
- Orellana S., Hernández M., Sansón M. (2019). Diversity of *Cystoseira sensu lato* (Fucales, Phaeophyceae) in the eastern Atlantic and Mediterranean based on morphological and DNA evidence, including *Carpodesmia* gen. emend. and *Treptacantha* gen. emend. *European Journal of Phycology*, 54: 447-465.
- Pizzuto F. (1999). On the structure, typology and periodism of a *Cystoseira brachycarpa* J. Agardh emend. Giaccone community and of a *Cystoseira crinita* Duby community from the eastern coast of Sicily (Mediterranean Sea). *Plant Biosystems*, 133: 15-35.

AUTORI

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