



Date

The conference will be held the 06 December and continue the 07 December 2022 but will be dedicated to wrap-up and brainstorming around seaweed biodiversity and exploitation.

Place

Sub-Regional Fisheries Commission (SRFC), inter-governmental organisation based in Dakar, Senegal.

Conference Topics

- Seaweed and Biodiversity.
- Seaweed Valorisation.

Hybrid conference :

- **Online** using [Zoom](#) a link will be sent to all registered participants.
- **In person** at [Sub Regional Fisheries Commission \(SRFC\)](#), 116 allées Khalifa Babacar Sy, Dakar, Sénégal.

Participants

The conference invites selected keynote speakers and welcomes a number of technical and opinion communications. The target audience includes scientist, representative from the private and public sector from marine economy and environment, NGO, decision makers, universities research institutions, and international organisations.

Key dates / Deadlines

- 28 August 2022 : Abstract submission open
- 30 October 2022 : Abstract submission closing
- 05 November 2022 : information about communication selection for authors
- 2 December 2022 : Registration deadline

Language

The conference will be held in French, English can be welcome but we encourage translating the slideshow in French.

Scientific committee

- Flower MSUYA (University of Dar es Salaam, Tanzania)
- Birgit QUACK (GEOMAR, Germany)
- Philippe POTIN (CNRS, France)
- Waly NDIAYE (ISRA/CRODT, Senegal)
- Florian WEINBERGER (GEOMAR, Germany)
- Mame Samba MBAYE (UCAD/FST, Senegal)
- Valérie STIGER-POUVREAU (Univ Brest, France)
- Saliou FALL (ISRA/LNRPV, Senegal)
- Anna FRICKE (IGZ, Germany)
- Cheikhou KANE (UCAD/ESP, Senegal)
- Mohamed VADEL (UA, Mauritania)
- Mariama FAYE (ANA, Senegal)
- Patrice BREHMER (IRD, France)

Local Organising committee

- Patrice BREHMER (IRD)
- Waly NDIAYE (ISRA)

Funding partners



Supported by



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Les algues marines et économie bleue : biodiversité et services écosystémiques au Sénégal et en Afrique de l'Ouest

Terme de référence / Term of reference

La conférence s’articule autour des résultats du projet CLIMALG-SN qui souhaite contribuer de manière substantielle à la transition des côtes du Sénégal et de la sous-région vers le développement durable. Le thème de la conférence se concentre sur les habitats des algues marines et sur l’étude de leur potentiel pour favoriser la croissance bleue, pour ne plus les omettre dans services écosystémiques au Sénégal et dans la sous-région à l’instar des herbiers marins. La conférence encourage les présentations qui permettront d’aboutir à l’élaboration d’une feuille de route pour les décideurs politiques afin d’encourager à la fois la culture des algues et la préservation des habitats naturels des algues. Leur intérêt en tant qu’outil de gestion des pêches et de nurserie pour les poissons exploités reste peu ou pas considéré (vs AMP). La conférence vise à combler un déficit d’information sur les algues, leur inventaire, leur exploitation et leur influence sur la biodiversité. Les points de situation sur leurs exploitations en Afrique de l’ouest sont encouragés, l’identification taxonomique, la génomique et la métagénomique en tant que nouvelles méthodologies, pertinentes pour l’identification des algues marines et de la biodiversité des espèces associées dans la région, sont particulièrement bienvenu. Une journée sera consacré aux échanges au travers de deux table rondes. Enfin toute contribution qui visent directement la gestion durable et la protection des écosystèmes marins et côtiers par l’accroissement des connaissances scientifiques et des capacités de recherche sont encouragée dans une idée de développement soutenable. La conférence souhaite ainsi contribuer directement au SDG 14 « La vie sous l’eau » et soutient fortement les autres objectifs de développement durable (SDG) en renforçant la recherche pour le développement.

The conference invites selected keynote speakers and welcomes a number of technical and opinion communications. The target audience includes scientists, representatives from the private and public sectors, from marine economy and environment, NGO’s decision makers, universities and research institutions and international organisations. The conference is based on the results of the CLIMALG-SN project, which aims to make a substantial contribution to the transition of the coasts of Senegal and the sub-region towards sustainable development. The theme of the conference focuses on seaweed habitats and the study of their potential to foster blue growth, so that they are no longer omitted from ecosystem services in Senegal and the sub-region, as are seagrass beds. The conference encourages presentations that will lead to the development of a roadmap for policy makers to encourage both the cultivation of algae and the preservation of natural algae habitats. Their value as a fisheries management tool and as a nursery for exploited fish remains little or not considered (vs. MPAs). The conference aims to fill an information gap on seaweeds, their inventory, their exploitation and their influence on biodiversity. Status updates on their exploitation in West Africa are encouraged, taxonomic identification, genomics and metagenomics as new methodologies, relevant for the identification of marine algae and associated species biodiversity in the region, are particularly welcome. The second day will be devoted to exchanges through two round tables. Finally, any contribution that directly aims at the sustainable management and protection of marine and coastal ecosystems through the increase of scientific knowledge and research capacities is encouraged in a sustainable development perspective. The conference thus wishes to contribute directly to SDG 14 "Life under water" and strongly supports the other Sustainable Development Goals (SDGs) by strengthening research for development.






International Conference
Seaweed for blue economies, biodiversity and ecosystem services
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6-7 December 2022, Sub Regional Fisheries Commission (SRFC), Dakar, Senegal








Conference Agenda

Hour	Program Day 1
08 ^h 30 – 09 ^h 00	Welcoming of participants/ Registration
09 ^h 00 - 09 ^h 05	Welcome speech : Mouhamadou SECK acting Permanent Secretary sub Regional fisheries Commission
09 ^h 05 - 09 ^h 10	Opening speech : Theodor PROFFE : Deputy Head of Mission, Embassy of the Federal Republic of Germany in Dakar
09 ^h 10 - 09 ^h 20	Official opening speech : Sellé MBENGUE : Senegalese Ministry of Fisheries and maritime economy, Head DGEFM (Direction de la Gestion et de l'exploitation des fonds marins)
09 ^h 20 - 09 ^h 30	Opening conference : Patrice BREHMER (IRD - SRFC)
09 ^h 30 - 09 ^h 45	Coffee break / Group photo
Policy session	
09 ^h 45 - 10 ^h 00	Philippe POTIN (CNRS, France) "Seaweed valorisation across the world"
10 ^h 00 - 10 ^h 15	Florian WEINBERGER (GEOMAR, Germany) "Ecological potential of seaweed in coastal waters"
10 ^h 15 - 10 ^h 30	Waly NDIAYE, Abdourahmane TAMBA, and Birgit QUACK "Seaweed for climate change resilient blue economies, biodiversity and ecosystem services in Senegal and West Africa (CLIMALG-SN project)"
10 ^h 30 - 10 ^h 45	Adama MBAYE, Codou DIOP, Waly N. NDIAYE, and Patrice BREHMER "Senegalese coastal communities and macroalgae: between nuisance and ignorance"
10 ^h 45 - 11 ^h 00	Mamie Souadou DIOP, Ndeye Coumba BOUSSO, Fulgence DIEDHIOU, Waly N. NDIAYE, Patrice BREHMER, Florian WEINBERGER, Anna FRICKE, Birgit QUACK, Giorgio BOLCHI, Mame Samba MBAYE, Ibrahima NDIAYE "The sampling efforts on seaweed data collection over the Senegalese coastline within the Climalg-SN project"
11 ^h 00 - 11 ^h 15	Ndeye C BOUSSO, Patrice BREHMER, Cheikhou KANE, and Hamet Diaw DIADHIOU, Massata NDAO, Fulgence DIEDHIOU, and Waly NDIAYE "Update on the research and exploitation of macroalgae in Senegal: needs to improve their exploitation"
11 ^h 15 - 11 ^h 40	Waly NDIAYE, Birgit QUACK, Florian WEINBERGER, Mamie S DIOP, and Patrice BREHMER "Interest of seaweed for the SRFC sub region"
11 ^h 40 - 12 ^h 00	Poster exhibition
12 ^h 00 - 14 ^h 00	Lunch Break / Press briefing




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Agenda Day 1 afternoon

	<i>Science session</i>	<i>Science session</i>
14 ^h 00 - 14 ^h 30	Philippe POTIN (CNRS, France) <i>Keynote speech: "Seaweed cultivation what are the main locks in developing countries"</i>	
14 ^h 30 - 15 ^h 00	Florian WEINBERGER (GEOMAR, Germany) <i>Keynote speech: "Metabarcoding, a tool to accelerate marine biodiversity assessments"</i>	
15 ^h 00 - 15 ^h 15	Flower MSUYA (University of Dar es Salaam, Tanzania) <i>Keynote speech: « Seaweed Aquaculture Africa, what are potentials for a unified and scaled out industry »</i>	
15 ^h 15 - 15 ^h 45	Ndeye C BOUSSO, Patrice BREHMER, Cheikhou KANE, Hanane AROUI, Mamadou FAYE and Waly NDIAYE <i>Oral communication : "Nutritional chemical composition and heavy metal content of Senegalese seaweeds"</i>	
15 ^h 45 - 16 ^h 00	<i>Coffee break</i>	
16 ^h 00 - 16 ^h 15	<i>Poster exhibition II</i> Authors stay aside their poster	
16 ^h 15 - 16 ^h 30	Anna FRICKE, Monika SCHREINER, Ndeye C BOUSSO and Susanne BALDERMANN <i>Oral communication : "Toward sea vegetable for diversification of human diet, the European experiences, interest for Africa"</i>	
16 ^h 30 - 16 ^h 45	Patrice BREHMER, Waly NDIAYE, Philip HESS, Kenneth MATERNS, Nicolas CHOMERA, Adama MBAYE, Anna FRICKE, Fulgence DIEDHIOU, Amidou SONKO, et al. <i>Side communication : "Toxic and harmful algal bloom in Senegal : the case of <i>Ostreopsis ovata</i>, <i>Notiluca scientillans</i> and <i>Vulcanodinium rugosum</i>"</i>	
16 ^h 45 - 17 ^h 00	Waly NDIAYE <i>Oral communication : "What methods to promote seaweed farming in Senegal and interest at sub-regional level?"</i>	




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Day 1 and Day 2, Poster Exhibition I & II

Poster ID	Poster Session
ID-Climalg01	<p>Anna FRICKE, Ndeye C BOUSSO, Monika SCHREINER, Waly NDIAYE, Patrice BREHMER Mamie S DIOP and Susanne BALDERMANN</p> <p><i>Poster</i> : “First insights - carotenoid diversity in seaweeds from Senegalese coastline”</p>
ID-Climalg02	<p>Ndeye C BOUSSO, Patrice BREHMER, Cheikhou KANE, Aroui Boukbida HANANE, Waly NDIAYE, Mamadou FAYE, Amidou SONKO, Fulgence DIEDHIOU, and Birgit QUACK</p> <p><i>Poster</i> : “Toward seaweed habitat characterisation in Senegal: seaweed farming, bioremediation and bioindicator of marine pollution”</p>
ID-Climalg03	<p>Ndeye C BOUSSO, Patrice BREHMER, Waly NDIAYE, Cheikhou KANE, Mamadou FAYE, Aroui Boukbida HANANE, Fulgence DIEDHIOU, Hamet Diaw DIADHIOU and Birgit QUACK</p> <p><i>Poster</i>: “Safety considerations of seaweed in Senegal : Toxic Heavy Metals Hazards”</p>
ID-Climalg04	<p>Sidi BOUNE; Mohamed Ahmed SIDI CHEIKH; H��l��ne LAUNAY, Fr��d��ric CARRIERE, Bah ABDELLAHI and Mohamed Vadel DEIDA</p> <p><i>Poster</i>: “Extraction, characterization and digestibility test of galactolipids from macroalgae at the base of the food chain of the Banc d'Arguin fauna”</p>
ID-Climalg05	<p>Birgit QUACK, Hela MEHRTENS, and Jonas DRESCHER</p> <p><i>Poster</i> : « CLIMALG-SN database of Senegalese seaweeds from GEOMAR, ISRA and IRD»</p>
ID-Climalg06	<p>Birgit QUACK, Waly NDIAYE, Lewin SCHMIDT, Claas FABER, Carsten SCHIRNICK, Mamie DIOP, Patrice BREHMER, Giorgi BOLCHI, Ndeye BOUSSO, and Florian WEINBERGER</p> <p><i>Poster</i> : «Exploring videos and photos of CLIMALG-SN: ELEMENTS and ARCGISonline - a legacy for future teaching and research »</p>




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ID-Climalg07	Ibrahima NDIAYE, Youssouph DIATTA, Ismaïla NDOUR, Waly N. NDIAYE, Mamie Souadou DIOP, Ndeye Coumba BOUSSO, Fulgence DIEDHIOU, and Patrice BREHMER <i>Poster</i> : « Biodiversity of macrozooplanktonic fauna associated with seaweed in Senegal »
ID-Climalg08	Patrice BREHMER, Adama MBAYE, Waly N. NDIAYE, Birgit QUACK, Mamie DIOP, Ndeye BOUSSO, Fulgence DIEDHIOU, and Florian WEINBERGER <i>Poster</i> : “Interest and limits of an unstructured, so-called free, participatory approach: the case of a coastal observation projects”
ID-Climalg09	Mohamed BOURWEISS, Ahmedou M. Vadel SALIHI, and Ester SERRAO <i>Poster</i> : “Study of macro-algae habitats: distribution and biodiversity associated with PNBA, Mauritania”
ID-Climalg10	Ivanice MONTEIRO, Pericles SILVA, Mamie S DIOP, Elizandro RODRIGUEZ, Patrice BREHMER <i>Poster</i> : « High abundance and beach stranding of <i>Ulva</i> sp., in Mindelo harbour (Sao Vicente, Cabo Verde): an indicator of marine pollution?»
ID-Climalg11	Momodou S JALLOW, Momodou SIDIBEH, and Patrice BREHMER <i>Poster</i> : “Participative contribution to seaweed inventory in the Gambia: the first step”
ID-Climalg12	Ndeye C BOUSSO, Cheikhou KANE, Patrice BREHMER, Waly N. NDIAYE <i>Poster</i> : “How to optimize artisanal valorisation and potential industrial development for Senegal and the sub region”
ID-Climalg13	Ndeye C BOUSSOU, Patrice BREHMER, Mamie Souadou DIOP, Waly N. NDIAYE, Saliou FAYE, Bocar Sabaly BALDE, Cheikhou KANE, Amidou SONKO, Birgit QUACK and Florian WEINBERGER <i>Poster</i> : “The unusual massive beaching of Sargasso around Dakar Peninsula in autumn 2022: opportunity or threat”




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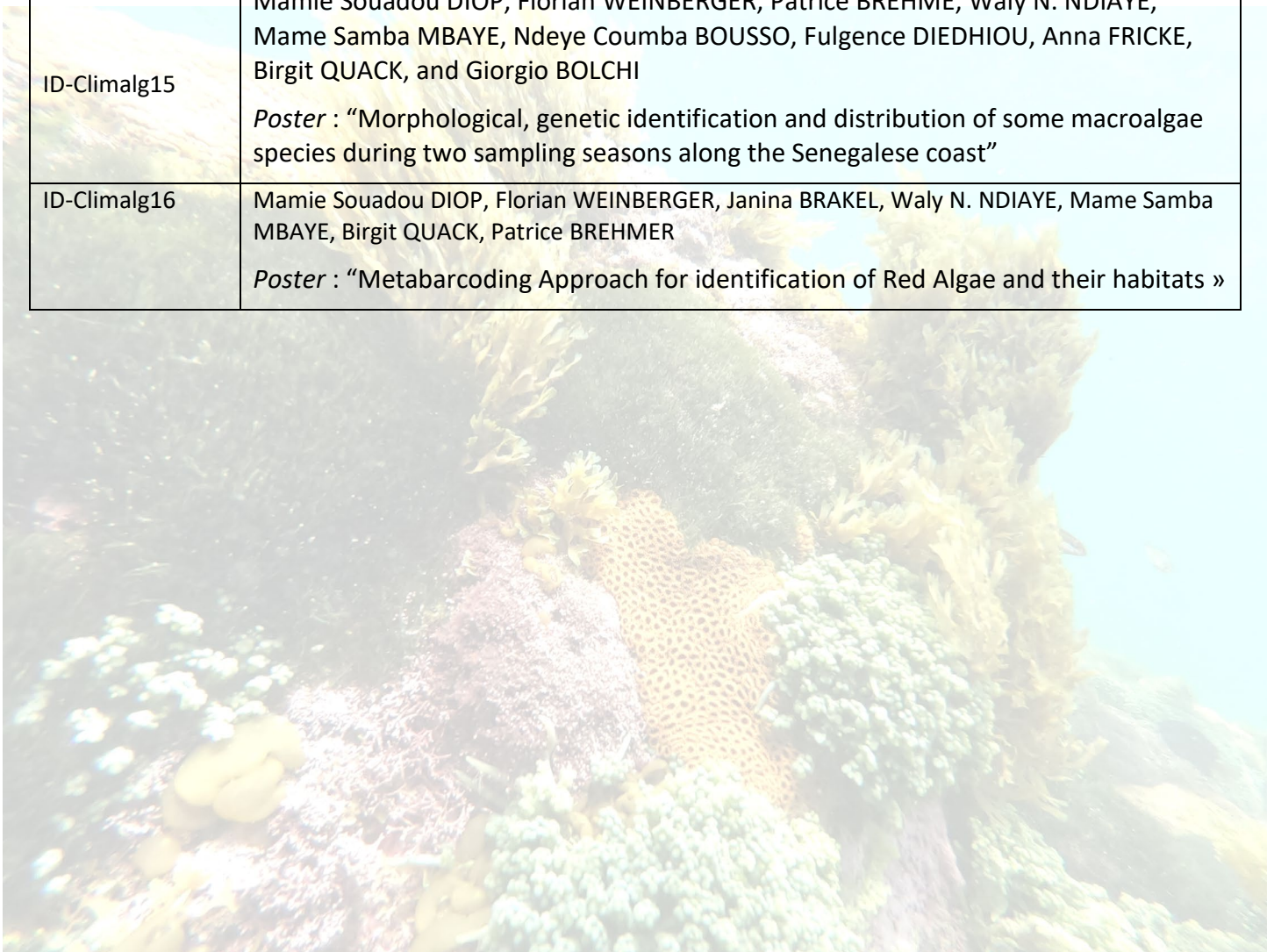
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ID-Climalg14	<p>Fulgence DIEDHIOU, Waly N. NDIAYE, Patrice BREHMER, Giorgio BOLCHI, Mamie S DIOP, Ndeye C BOUSSOU, Naffly SADIO, Birgit QUACK, and Florian WEINBERGER</p> <p><i>Poster</i> : “The CLIMALG-SN field mission on seaweed inventory : practice and lesson learned”</p>
ID-Climalg15	<p>Mamie Souadou DIOP, Florian WEINBERGER, Patrice BREHME, Waly N. NDIAYE, Mame Samba MBAYE, Ndeye Coumba BOUSSOU, Fulgence DIEDHIOU, Anna FRICKE, Birgit QUACK, and Giorgio BOLCHI</p> <p><i>Poster</i> : “Morphological, genetic identification and distribution of some macroalgae species during two sampling seasons along the Senegalese coast”</p>
ID-Climalg16	<p>Mamie Souadou DIOP, Florian WEINBERGER, Janina BRAKEL, Waly N. NDIAYE, Mame Samba MBAYE, Birgit QUACK, Patrice BREHMER</p> <p><i>Poster</i> : “Metabarcoding Approach for identification of Red Algae and their habitats »</p>






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Agenda Day 2

Hour	Round Table
08 ^h 30 - 09 ^h 00	Welcoming of participants
09 ^h 10 - 09 ^h 20	Welcoming from MeerWissen: Maya PFAFF Presentation of MeerWissen
09 ^h 10 - 09 ^h 20	Day opening Patrice BREHMER: Objective of the round tables
Round table : State of the art in the sub region on seaweed biodiversity	
09 ^h 20 - 10 ^h 00	Chair: Pr Mame Samba MBAYE Moderator: Waly NDIAYE Rapporteur: Mamie S DIOP
10 ^h 00 - 10 ^h 30	Exchange between participants
10 ^h 30 - 10 ^h 45	Coffee break
10 ^h 45 - 11 ^h 30	Exchange between participants
11 ^h 30 - 12 ^h 00	Wrap-up
12 ^h 00 - 13 ^h 00	Lunch Break
Round table : Review the sub regional initiatives on seaweed valorisation	
13 ^h 00 - 14 ^h 10	Chair: Dr Florian WEINBERGER Moderator: Patrice BREHMER Rapporteur: Ndeye Coumba BOUSSO
14 ^h 10 - 16 ^h 00	Exchange between participants
16 ^h 00 - 16 ^h 30	Wrap-up
Presentation of a new project from “Safe Seaweed Coalition”	
16 ^h 30 - 16 ^h 45	<i>Oral communication</i> ; Waly NDIAYE and Ndeye C BOUSSO Improved processing and cultivation of <i>Meristhotheca senegalensis</i> , a good source of iodine and carrageenan, in Senegal. <i>Short movie</i>
16 ^h 45 – 17 ^h 00	Permanent Secretary Malal SANE of the Sub Regional Fisheries Commission SFRC Closing speech

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Keynote speaker short biography

Dr. Flower MSUYA (University of Dar es Salaam, Tanzania)

Dr. Flower Msuya is a Freelance Senior Researcher and Consultant and Expert in seaweed aquaculture with over 30 years of experience. She has researched on various aspects of seaweed aquaculture including livelihood development, climate change and health issues. She is the Founder and Chairperson of the Zanzibar Seaweed Cluster Initiative in Tanzania where she links farmers and small-scale processors to research, government and private sector. Dr. Msuya produced the first seaweed value-added product in Tanzania in 2006. Dr. Msuya is also engaged in developing climate-smart farming technologies to farm seaweed in deep waters to curb the impact of climate change.



Dr Philippe POTIN (CNRS, France)

De Philippe Potin is Senior Scientist at CNRS in France. He holds a PhD in Marine Biology with specialty in the biochemistry of degrading enzymes of seaweed cell wall polysaccharides and biological properties of added-value derived oligosaccharides. For over 15 years, Philippe Potin has led the team “Oligosaccharide signaling and defence mechanisms” at the well-known Station Biologique de Roscoff. He has over 90 peer-reviewed articles and 8 patents including on the biological properties of algal oligosaccharides and novel enzymes from brown algae and marine bacteria. He is currently the scientific coordinator of IDEALG, a 10-year French integrative research project and of the EU H2020 SC2 Blue Growth Innovation Action GENIALG.



Dr Florian WEINBERGER (GEOMAR, Germany)

Dr. Florian Weinberger is a scientist at the GEOMAR Helmholtz Centre for Ocean Research at Kiel, Germany. As a trained botanist and microbiologist, he has been involved in projects on physiological, biochemical and molecular biological aspects of the ecology, aquaculture and utilization of algae and aquatic plants since 1990.

His research focuses on seaweed management ecology in natural habitats and aquaculture and covers seaweed biodiversity, the ecological interactions of seaweeds with pathogens, epibionts, consumers and competitors, the ecology of nuisance algae and the eco-evolutionary implications of algal invasions.





List of authors

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