Room	Time	Session Code	Lecture Title	Speakers	Country		
(D. 0)				•			
[Day 2] April 29 (Monday)							
Plenary Lec	ture		[PL 1] Plenary 1				
Tamna A	Chairperson		(FL 1) Fieldary 1				
(5F)	08:30-09:30	PL-1	Beautiful and Familiar Seaweeds in Jeju Islands; Diversity and Distribution	Sung Min BOO	Korea		
Mini Sympo	<u> </u>	12.2	Secretary and a service of a separate of the service of the servic	Sung IIIII SOO			
			[MS 01] Algal taxonomy – an update after 25 years of molecular phylogenetics				
	Chairperson	: Olivier De Cl	lerck (Belgium), Hwan Su Yoon (Korea)				
202	09:45-10:05	MS01-1	Red Algal Tree of Life and its Recent Update	Hwan Su Yoon	Korea		
303 (3F)	10:05-10:25	MS01-2	Systematics of green seaweeds (Ulvophyceae), recent progress and challenges	Olivier De Clerck	Belgium		
	10:25-10:45	MS01-3	Evolutionary Relationships Of Heterokont Algae Based Upon Gene And Genome Phylogenies.	Robert Andersen	United States		
	10:45-11:05	MS01-4	Phylogenetic studies in brown algae with special reference to the early evolution of Laminariales and taxonomic revision of Ectocarpales	Hiroshi Kawai	Japan		
			[MS 02] Seaweed-to-biofuel: Overview of different biotechnological approaches				
	Chairperson	: Bert GROEN	ENDAAL (Belgium), Jaap van Hal (The Netherlands)				
Halla A	09:45-10:05	MS02-1	Biochemical Conversions of Seaweed for Combined Ethanol and Feed Ingredients Production	Trine Sofie Bladt	Denmark		
(3F)	10:05-10:25	MS02-2	Economics and environmental sustainability of biological seaweed-to-fuel/energy conversion	Jay LIU	Korea		
	10:25-10:45	MS02-3	Offshore Green Algae Seagriculture in Israel For Biorefinery and Bioeconomy	Alexander GOLBERG	Israel		
	10:45-11:05	MS02-4	Replacing the fossil C-molecule	Justus Wouters	The Netherlands		
			[MS 03] Seaweed cultivation and breeding for the future				
	-	: Eun Kyoung	HWANG (Korea), Shaojun PANG (China)				
Halla B (3F)	09:45-10:05	MS03-1	Seaweed Cultivation and Breeding Programs to Adapt Environmental Changes in Korea	Eun Kyoung HWANG	Korea		
(31)	10:05-10:25	MS03-2	Current Status and Assignments of Seaweed Cultivation and Breeding in Japan	Norishige YOTSUKURA	Japan		
	10:25-10:45	MS03-3	Seaweed farming in China has benefited from application of cultivars	Shaojun PANG	China		
	10:45-11:05	MS03-4	Micropropagation of Selected Kappaphycus Strains For the Purpose of Boosting the Supply of Much Needed, New Cultivars for Commercial Farming	Anicia HURTADO	Philippines		
			[MS 04] Mechanisms responding to metabolic stressors in microalgae.				
		: Jae-Hyeok L	Signaling pathways Regulating Photosynthesis in Response to Nutrient Starvation and Trophic Regimes.				
Samda A (3F)	09:45-10:05	MS04-1		Jae-Hyeok Lee	Canada		
	10:05-10:25	MS04-2	The bZIP1 Transcription Factor Regulates Lipid Remodeling and Contributes to ER Stress Management in Chlamydomonas reinhardtii	Yasuyo Yamaoka	Korea		
	10:25-10:45	MS04-3 MS04-4	Gene silencing in microalgae	Eun-Jeong Kim	Korea Canada		
	10.45-11.05	191304-4	Algae-Microbe Interaction – A New Twist To Biological Nitrogen Fixation  [MS 05] Macroalgal blooms on the rise around the world	Sowmyalakshmi Subramanian	Canada		
	Chairperson : Peimin He (China), Jang Kim (Korea)						
	09:45-10:05	MS05-1	Annual periodic formation process for the world's largest Ulva blooms in the Yellow Sea	Peimin He	China		
Samda B (3F)	10:05-10:25	MS05-2	Golden Tide Seaweeds in Korean Waters: Genetic and Genomic Comparisons between Floating and Benthic Populations	Hyuk Je Lee	Korea		
	10:25-10:45	MS05-3	Challenges and opportunities in relation to Sargassum blooms along the coast of the Mexican Caribbean	Daniel Robledo	Mexico		
	10:45-11:05	MS05-4	Speciation and Identification of Species in Green Tide Forming Ulva Species Complex	Masanori Hiraoka	Japan		
Oral Session	n						
			[OR 01] Open water seaweed aquaculture <1>				
	Chairperson	:					
	14:00-14:15	OR01-1	Manipulating Sporophyte Morphology Towards an Enhanced Productivity of Macrocystis Pyrifera (Ochrophyta)	Alejandro Buschmann	Chile		
Halla A	14:15-14:30	OR01-2	The Development of Seaweed Farming in Europe - Environmental Impacts and Prioritizing Key Knowledge Gaps	Adrian Macleod	United Kingdom		
(3F)	14:30-14:45	OR01-3	Latitudinal and Seasonal Variations of Growth and Chemical Content of the Sugar Kelp Saccharina Latissima Along the Norwegian Coast	Silje Forbord	Norway		
	14:45-15:00	OR01-4	Challenges in scaling up to massive self-sustaining seaweed farms	Sri Sailaja Nori	India		
	15:00-15:15	OR01-5	Biamass Allocation of the Brown Alga Sargassum fusiforme and Its Relationship With Modules	Jingyu Li	China		
	15:15-15:30	OR01-6	Effect Of Vector And Direct Seeding On Growth Of Sugar Kelp Saccharina latissima At Sea	Jorunn Skjermo	Norway		
			[OR 02] Algal natural products, functional foods and pharmacology <1>				
	Chairperson						
	14:00-14:15	OR02-1	Biofertilizing Effecy of the Cyanobateria Fischerella Sp. Ecncapsulated in Alginate-Chitosane in the Growth of Radish	Gustavo Hernández	Mexico		
Halla B (3F)	14:15-14:30	OR02-2	TPG Clade Crytomonads as a New Microalgal Group to Enrich Zooplankters For Marine Larviculture	Wonho Yih	Korea		
,	14:30-14:45	OR02-3	Marine Algae in French Polynesia: From Traditions to Innovation	Mayalen Zubia	France		
	14:45-15:00	OR02-4	Development of Koji on Nori Pyropia Yezoensis and Application to Nori Sauce Manufacture	Motoharu Uchida	Japan		
	15:00-15:15	OR02-5	Anti-Parkinson's Effects and Mechanism of Oligosaccharides Derived From Pyropia Yezoensis  Description of the Engage of Entradion and Characteristics Jonath of the Engage of Entradion	Quanbin Zhang	China		
	15:15-15:30	OR02-6	R-Phycoerythrin : New Advances on Extraction and Characterization. Impact of the Enzymatic Assisted Extraction  [OR 03] Algal blooming <1>	Justine Dumay	France		
	Chairperson		far ast uran monimili as				
	14:00-14:15	OR03-1	Monitoring and Management of the Drifting Sargassum Horneri Golden Tide in Korea	Sangil Kim	Korea		
e	14:15-14:30	OR03-2	Golden Tides in the Yellow Sea and East China Sea: Formation and Managment	Jianheng Zhang	China		
Samda A (3F)	14:30-14:45	OR03-3	The development of bioactives from blooming seaweeds in Normandy, France: the ENTEROMORPHE and SNOTRA projects	Benoit Queguineur	France		
	14:45-15:00	OR03-4	Seasonal Population Dynamics of the 'golden Tides' Seaweed, Sargassum Horneri on the Southern Coast of Korea: the Extent and Formation of Golden	SANG RUL PARK	Korea		
	15:00-15:15	OR03-5	Tides Fast and Accurate Quantification of <i>Alexandrium Catenella</i> in Very Small Abundance Using DdPCR	Hyemi Kim	Korea		
	15:15-15:30	OR03-6	Enrichment processes for the production of high-protein feed from the green seaweed <i>Ulva ohnoi</i>	Marie Magnusson	New Zealand		
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	[OR 04] Taxonomy and diversity <1>							
	Chairperson:							
Samda B	14:00-14:15	OR04-1	твс	твс	TBC			
	14:15-14:30	OR04-2	TBC	твс	ТВС			
(3F)	14:30-14:45	OR04-3	REVISITING SOME RECORDS OF MARINE RED ALGAE BELONGING to the DELESSERIACEAE (RHODOPHYTA) WITHIN the SOUTH CHINA SEA BASIN	Lawrence Liao	Japan			
	14:45-15:00	OR04-4	STATUS and DIVERSITY OF EUCHEUMOID In WESTERN INDIAN OCEAN (WIO) REGION: TOWARDS SUSTAINABLE FARMING IN TANZANIA	Gloria Kavia Yona	United Republic of Tanzania			
	15:00-15:15	OR04-5	Phylogenomics of the Ceramiales: How Many Families Should We Recognize?	Pilar Díaz-Tapia	Spain			
	15:15-15:30	OR04-6	Corallina berteroi (Corallinales, Rhodophyta) an Earlier Name For the Cosmopolitan Corallina caespitosa	Paul Gabrielson	United States			
			[OR 05] Ecology <1>	1				
	Chairperson	:						
	14:00-14:15	OR05-1	Reduced Biomass of the Kelp, Saccharina Japonica, Affects Gonad Production of Sea Urchins For Following Years Off Northeastern Japan	Kosuke Yatsuya	Japan			
303	14:15-14:30	OR05-2	Photosynthetic Characteristics and Chloroplast Position of <i>Ulva Conglobata</i> (Ulvophyceae) under Continuous Light and Dark Conditions	Jayvee Saco	The Philippines			
(3F)	14:30-14:45	OR05-3	Arctic Kelp Ecophysiology in a Warming Winter Scenario	Kai Bischof	Germany			
	14:45-15:00	OR05-4	Habitat Mapping to Inform Customary Protection of Key Fisheries Habitats	Matthew Desmond	New Zealand			
	15:00-15:15	OR05-5	Thallus Architecture and Phenology as Tools For Understanding Ecological Impacts of Harvesting the Economically Important Seaweed Ascophyllum	David Garbary	Canada			
	15:15-15:30	OR05-6	Nodosum (Phaeophyceae) The Feasibility and First Steps of Restoring Australia's Disappearing Giant Kelp (Macrocystis Pyrifera) Forests	Cavne Lavton	Australia			
			[OR 06] Open water seaweed aquaculture <2>	cayine zayton				
	Chairperson	:	D 1941					
	15:50-16:05	OR06-1	Development of Scalable Coastal and Offshore Macroalgal Farming in New England and Alaska	Michael Stekoll	United States			
	16:05-16:20	OR06-2	Different cultivation practices, to increase the yield of Sugar kelp (S. latissima), in an estuarine environment	Teis Boderskov	Denmark			
Halla A	16:20-16:35	OR06-3	Biosecurity policy and practice in the global seaweed industry - improving existing frameworks to limit the spread of pests and disease.	Iona Campbell	United Kingdom			
(3F)	16:35-16:50	OR06-4	Ecosystem Impact of Large-scale Macroalgae Cultivation	Annette Bruhn	Denmark			
	16:50-17:05	OR06-5	Intelligent Management System for Integrated Multi-Trophic Aquaculture (IMPAQT)	Kati Michalek	United Kingdom			
	17:05-17:20	OR06-6	The eastropod mollusc Lacuna vincta as threat to macroaleal aquaculture in NW Europe	Phil Kerrison	United Kingdom			
	17:20-17:35	OR06-7	Aquaculture Act and Cultivation of Seaweed and Harvesting of Kelp in Norway	Frode Hovland	Norway			
	17:35-17:50	OR06-8	Undaria pinnatifida is a commercially important brown alga. As a sea vegetable of high value consumed in East Asia, the blade surface feature	Tifeng Shan	China			
			[smooth or wrinkled] determines its commercial value on the market. Smooth blade is more favored. However, how the blade surface feature of U.  [OR 07] Algal natural products, functional foods and pharmacology <2>					
	Chairperson:							
	15:50-16:05	OR07-1	Microencapsulation of Chlorophyll From Caulerpa Racemosa (Sea Grape) Using Fish Gelatine and Arabic Gum as Coating Materialr	Eko Nurcahya Dewi	Indonesia			
	16:05-16:20	OR07-2	Green Extraction of Sulphated Polysaccharides and Alginate From the South African Kelp Ecklonia Maxima, by Subcritical Water Hydrolysis	Neill Goosen	South Africa			
	16:20-16:35	OR07-3	Nutrient Composition, Antioxidant Activity and Blood Pressure Lowering Effect of Brown Seaweed, Sargassum Polycystum Enriched Bread in	Patricia Matanjun	Malaysia			
Halla B (3F)	16:35-16:50	OR07-4	Prehypertensive Subjects  By-Products From Seaweed Industry as Source of Anti-Obesity Bio-Actives: a Preliminary in Vitro Study to Compare Extracts From Three Seaweed	Benoit Queguineur	United Kingdom			
	16:50-17:05	OR07-5	Species  R-Phycoerythrin of Selected Red Algal Species From the Baltic Sea	Mihkel Saluri	Estonia			
	17:05-17:20	OR07-6	Preparation, Characterization and Anti-Helicobacter Pylori Activity of Algin-based Bismuth Polyuronate	Xiancui LI	China			
	17:20-17:35	OR07-7	Red seaweed derived natural products for crop protection	Girish TR	India			
	17:35-17:50	OR07-8	TBC	TBC	TBC			
	27.55		[OR 08] Pathogen and disease					
	Chairperson	:	()					
	15:50-16:05	OR08-1	1-Octen-3-ol, a Self-stimulating Oxylipin Messenger, Can Prime and Induce Defense of Marine Algae	Haimin Chen	China			
	16:05-16:20	OR08-2	Prophylactic Activation of Self-defence: a Suitable Crop Protection Concept For Kelp Aquaculture?	Florian Weinberger	Germany			
	16:20-16:35	OR08-3	Exploring the Molecular Bases of Biotic Interactions Between Saccharina Latissima and an Algal Endophyte	Catherine Leblanc	France			
Samda A (3F)	16:35-16:50	OR08-4	Designing a Study to Investigate Observed Anomalies on Cultivated Seaweed (Eucheuma)	Ivv Matoiu	United Republic of Tanzania			
	16:50-17:05	OR08-5	Disease and pest assessment on farmed carrageenophytes in Central and Southern Philippines	Joseph P. Faisan Jr.	The Philippines			
	17:05-17:20	OR08-6	Transcriptomic analysis of innate immunity-related genes in response to necrotrophic pathogen Pythium porphyrae in the red alga Pyropia yezoensis	LEI TANG	China			
	17:20-17:35	OR08-7	Transcriptomic analysis or innate immunity-related genes in response to necrotrophic pathogen <i>Pythium porphytrae</i> in the red alga <i>Pytropia yezoenss</i> Pathogens of New Zealand Banelales	Giuseppe Zuccarello	New Zealand			
	17:35-17:50	OR08-8	Patnogens of New Zealand Bangiaies  Defense Responses Triggered by the 22 Amino Acid Peptide (flg22V63) Deduced From the N-terminus Domain of Pathogenic Bacterium Flagellin in		New Zealand China			
	17.55-17:50	UnU8-8	Saccharina Japonica	Gaoge Wang	Cnina			

	[OR 09] Taxonomy and diversity <2>						
	Chairperson:						
	15:50-16:05	OR09-1	Preliminary Assessment of the Diversity of Farmed Eucheumatoids in Central and Southern Philippines	Rema C. Sibonga	The Philippines		
	16:05-16:20	OR09-2	Organellar Genome Variation Architecture and Population Genetic Analysis of Chinese Pyropia yezoensis Assessed by Whole-Genome Resequencing	Kuipeng Xu	China		
Samda B	16:20-16:35	OR09-3	Molecular Investigations Of The Globally Distributed Agar-producing Genus Pterocladiella (Gelidiales, Rhodophyta): How Much Species Diversity? Where Did It Originate? How Did It Disperse?	GaHun Boo	Korea		
(3F)	16:35-16:50	OR09-4	Gracilariaceae Phylogenomics: Congruence of Organellar and Nuclear Trees	Mariana C. Oliveira	Brazil		
	16:50-17:05	OR09-5	Exploring the genetic resources of a marine crop – Eucheuma and Kappaphycus in the spotlight	Janina Brakel	United Kingdom		
	17:05-17:20	OR09-6	Reinstatement of the family Grateloupiaceae (Halymeniales, Rhodophyta) based on the reproductive structures	HYUNG WOO LEE	Korea		
	17:20-17:35	OR09-7	Taxonomic Investigation Of Ralfsia-Like (Ralfsiales, Phaeophyceae) Taxa In The North Atlantic Ocean Based On Molecular And Morphological Data, With Descriptions Of One Novel Family And Two Novel Genera And Species	Manuela I. Parente	Portugal		
	17:35-17:50	OR09-8	TBC	твс	TBC		
	[OR 10] Ecology <2>						
	Chairperson :						
	15:50-16:05	OR10-1	Effects of Light Quality and Temperature on the Photosynthesis and Pigment Content of an Edible Red Alga Meristotheca Papulosa (Solieriaceae, Gigartinales) From Kagoshima, Southern Japan	Iris Ann Borlongan	Japan		
	16:05-16:20	OR10-2	Sargassum plagiophyllum population structure in Southern Thailand	Anchana Prathep	Thailand		
303	16:20-16:35	OR10-3	The importance of Habitats Dominated by Macroalgae in the Shallow Tropical Seascape of East Africa	Christina Halling	Sweden		
(3F)	16:35-16:50	OR10-4	TRAVELING IN ICE COLD WATER: FLOATING ALGAE IN ANTARCTIC PENINSULA	Erasmo Macaya	Chile		
	16:50-17:05	OR10-5	Nitrogen and phosphorus ecophysiology of coralline algae	Hang Nguyen	Vietnam		
	17:05-17:20	OR10-6	Reduction and core bed protection of macroalgae on the coasts of Ojika Island, off Western Kyushu, Japan	Daisuke Fujita	Japan		
	17:20-17:35	OR10-7	Effects on Cover, Abundance and Development of Early Stages of Brown Seaweed Lessonia Spicata Exposed to Contaminated Coastal Waters of Central Chile	Carolina Oyarzo	Chile		
	17:35-17:50	OR10-8	Photosynthetic Responses in Two Population of the Red Seaweed, Gracilaria salicornia, from Japan and Thailand	Jantana Praiboon	Thailand		
Lobby (5F)	18:00-19:30		Poster Session				

[Day 3] Apr	ril 30 (Tue	ecday)						
Plenary Lec		esuay)						
rienary Lec	Luie		[PL 2] Plenary 2					
Tamna A	Chairperson		p z z j redwy z					
(5F)	08:30-09:20	PL-2	Microalgae as sustainable photosynthetic green cell factories in biotechnology	Olaf Kruse	Germany			
	08.30-03.20	PL-Z	PL 3] Plenary 3	Olai Kiuse	Germany			
Tamna A	Chairperson		ti con menary o					
(5F)	09:20-10:10	PL-3	The aquaculture and aliens paradox: Could the reliance of the seaweed aquaculture industry on non-native species lead to its' downfail?	Elizabeth J Cottier-Cook	United Kingdom			
Mini Cumne		PL-3	The aquaculture and allens paradox: Could the reliance of the seaweed aquaculture industry on non-native species lead to its downrall?	Elizabeth J Cottler-Cook	United Kingdom			
Mini Sympo	JSIUIII		[MS 06] The envisioned bumpy road towards an industrial scaled seaweed aquaculture around the	glabo				
	Chairnerson	· Alexander FF	BBING (The Netherlands)	giobe				
				Alarra dan ERRING	The Mesher deside			
Tamna A (5F)	10:35-10:55	MS06-1	The Necessity Of Cheap And Reliable Gametophyte Propagation As A Bedrock For A Thriving Global Kelp Aquaculture.	Alexander EBBING	The Netherlands			
	10:55-11:15	MS06-2	Mechanized Seaweed Farming	Bert GROENENDAAL	Belgium			
	11:15-11:35	MS06-3	Offshore seaweed cultivation – proven and scalable methods	Olavur GREGERSEN	Faroe Islands			
	11:35-11:55	MS06-4	Process and Economics of Large Scale Seaweed Bio-Refineries	Jaap Willem Van Hal	The Netherlands			
			[MS 07] Microalgae; from test tube to market					
	-		(Korea), Michael Borowitzka (Australia)					
Halla A (3F)	10:35-10:55	MS07-1	Metabolic engineering of microalgae via genome editing method to enhance the production of antioxidant rich algae-oil.	EonSeon Jin	Korea			
(5F)	10:55-11:15	MS07-2		Qiang Hu	China			
	11:15-11:35	MS07-3	Cultivation strategy for Ettlia sp. YC001 depending on the target materials	Hee-Mock Oh	Korea			
	11:35-11:55	MS07-4	Dunaliella salina beta-carotene: from the lab to commercialisation	Michael Borowitzka	Australia			
			[MS 08] Hologenomics and evolution of algal symbiosis					
	Chairperson	: Cheong Xin	CHAN (Australia)					
Halla B	10:35-10:55	MS08-1	Endosymbiosis and environmental adaptation lead to foreign gene acquisition in algal lineages	Debashish BHATTACHARYA	United States			
(3F)	10:55-11:15	MS08-2	Genomic Insights Into the Virulence Mechanisms Used by Bacterial Pathogens of Seaweeds	Suhelen EGAN	Australia			
	11:15-11:35	MS08-3	Interrogating Evolution for Solutions to Algal Diseases	Claire Gachon	United Kingdom			
	11:35-11:55	MS08-4	Understanding coral-dinoflagellate symbiosis using genomics and hologenomics	Cheong Xin CHAN	Australia			
			[MS 09] Special session for women in algae science					
	Chairperson	:						
	10:35-10:50	MS09-1	Korean Initiatives Working Towards Gender Equality in STEM	Heisook Lee	Korea			
Samda A (3F)	10:50-11:05	MS09-2	Women in Science- in Seaweed and Denmark	Susan Løvstad Holdt				
	11:05-11:20	MS09-3	Women in Algae Science: Korean Prospective	Jin Ae Lee	Korea			
	11:20-11:35	MS09-4	Surviving and Thriving: Wisdom from the Past and Inspiration for the Future (or How I Have Survived as a Female Phycologist)	Juliet Brodie				
	11:35-11:55	MS09-5	Algae Science and the Gendered Roles Based on the 4th Industrial Revolution	Mi-Kyung Kim	Korea			
	[MS 10] Seaweed and climate change							
	Chairperson	Chairperson : Ik Kyo CHUNG (Korea), Hiroshi KAWAI (Japan)						
Samda B	10:35-10:55	MS10-1	Carbon Budget in the Seaweed Farm, A Life Cycle Analysis	Put O. ANG, Jr.	Hong kong			
(3F)	10:55-11:15	MS10-2	Vulnerability and Mitigation Potential of Temperate Australian Seaweeds in a Changing Climate	Alecia BELLGROVE	Australia			
	11:15-11:35	MS10-3	Regeneration Of Ocean Forests: The Importance Of Seaweed	Pål Bakken	Portugal			
	11:35-11:55	MS10-4	Integrated Multi-Trophic Aquaculture (IMTA): A Critical Analysis Towards The Use Of Seaweed for N and C Mitigation	Alejandro H. BUSCHMANN	Chile			
			[MS 11] Innovative approaches to controlling pests and diseases in seaweed aquaculture					
	Chairperson : Elizabeth COTTIER-COOK (United Kingdom), Juliet BRODIE (United Kingdom)							
	13:05-13:25	MS11-1	Diversified Aquaculture Production and Markets- Seaweeds and Sustainable Development Goals	Nidhi NAGABHATLA	Canada			
	13:25-13:45	MS11-2	Marine Biosecurity Frameworks For Aquaculture	Chad HEWITT	New Zealand			
Halla A	13:45-14:05	MS11-3	Challenges for the sustainabe Pyropia farming: newly arising diseases and changing environment	Gwang Hoon KIM	Korea			
(3F)	14:05-14:25	MS11-4	Microbiome Shifts In The Agarophyte Gracilaria Under High Temperature And Grazing Events: Understanding Potential Disease Caus-		Malaysia			
	14:45-15:05	MS11-5	Epiphytes Susceptibility and Sustainability of Algae Farms, the Host Point of View: Population Genetics of Gracilaria Chilensis Assesse		Chile			
	15:05-15:25	MS11-6	SEAWEED INDUSTRY TRENDS IN TANZANIA: SUCCESS AND CONSTRAINTS.	Amelia BURIYO	Tanzania			
	15:25-15:45	MS11-7	The Host and the Holobiome: A Study of The Carrageenophyte Chondrus crispus	Georgia WARD	United Kingdom			
	15:45-16:05	MS11-8	Host and pathogen autophagy are central to the inducible resistance of brown algae against intracellular parasitic water moulds	Pedro Murua ANDRADE	United Kingdom			
			[MS 12] Seaweed derived bioactives compounds					
	Chairperson	: Charles S. VA	AIRAPPAN (Malaysia), Damien N. STRINGER (Australia)					
	13:05-13:25	MS12-1	Structural Diversity and Bioactive Potential of Halogenated Secondary Metabolites From Four Major Species of Red Algae Genus Lau	Charles S. VAIRAPPAN	Malaysia			
	13:25-13:45	MS12-2	The effects of marine algal natural products on skeletal muscle growth and inflammatory myopathy	You Jin JEON	Korea			
p.n	13:45-14:05	MS12-3	Fucoidan as an Integrative Therapy	Damien N. STRINGER	Australia			
Halla B (3F)	14:45-15:05	MS12-4	Potential Antioxidant and Antiobesity Effect of Bioactive Components From Sargassum Thunbergii Extract	Hyo Geun Lee	Korea			
	15:05-15:25	MS12-5	Isolation of secondary metabolites from marine cyanobacteria and their biosurfactant activity	Jakia Jarin Mehjabin	Japan			
	15:25-15:45	MS12-6	Proteomic insights on fucoxanthin biosynthesis regulation in microalgae Phaeodactylum tricornutum under light limitation.	Manoj Kumar	Australia			
	15:25-15:45	MS12-6	Proteomic insignts on rucoxantnin piosynthesis regulation in microalgae Phaeodactylum tricornutum under light limitation.  Squalene-derived polyethers, inhibiting Adult T-cell Leukemia cell, isolated from the red alga, Chondria armata	Toshiyuki Hamada	Japan			
	15:25-15:45	MS12-7 MS12-8	Squalene-derived polyetners, inhibiting Adult 1-cell Leuxemia cell, isolated from the red alga, Chondna armata  Brown Algal Extracts For Gut Health Applications	Ah Young Park	Japan			
	10.05	**1314*0	oroni ragai extacto for dat ricatat Applications	roung rain	Mustralid			

Oral Session							
			[OR 11] Biostimulants				
	Chairperson	:					
	13:00-13:15	OR11-1	Brown Algal Extracts (AMPEP, Kelpak®) Influence Growth and Thermal Resistance in Saccharina Spp.	Schery Umanzor	United States		
Samda A	13:15-13:30	OR11-2	GROWTH AND EPIPHYTIC RESPONSES OF GRACILARIA FISHERI TO THE SEAWEED EXTRACT AMPEP UNDER CONTROLLED-CULTURE CONDITIONS	Anong Chirapart	Thailand		
(3F)	13:30-13:45	OR11-3	OPTIMIZATION AND GROWTH PERFORMANCE OF TISSUE CULTURE USING MICROPROPAGATION TECHNIQUE FOR SELECTED COMERCIAL	MAJID KHAN	Malaysia		
	13:45-14:00	OR11-4	KAPPAPHYCUS, IN THE LABORATORY UNTIL OUTPLANTING IN THE FIELD (NURSERY STUDIES)  Red Seaweed Derived Bioformulation, AgroGain, Improves Crop Yields by Enhancing Photosynthesis, Metabolism and Nutrient Uptake	Sri Sailaja Nori	India		
	14:00-14:15	OR11-5	Seaweed Extracts For Plant Growth & Nutrition	Cécile LE GUILLARD	France		
	14:15-14:30	OR11-6	Tropical seaweed based agricultural bio-stimulant (SAGARIKA of IFFCO) for the improvement of crop production and plant health	Shanmugam Munisamy	India		
			[OR 12] Climate change and ocean acidification <1>	,			
	Chairperson	:					
	13:00-13:15	OR12-1	Global Climate Change and Macrocystis Pyrifera (Ochrophyta): Does Environmental History Affect the Ability to Acclimate to Future Oceanic	Pamela Fernandez	Chile		
Samda B	13:15-13:30	OR12-2	Conditions? TBC		TBC		
(3F)	13:30-13:45	OR12-3	TBC		TBC		
	13:45-14:00	OR12-4	Diploneis serrate (Bacillariophyceae), A New Diatom Species From Kenting, Taiwan, And The Structural Mechanistic Analysis Of The Striae Pattern Of	John Perez	Taiwan		
	14:00-14:15	OR12-5	Its Frustrule Under Shear, Normal And Uniform Loading Historical Climate-Driven Range Shifts Shape Latitudinal Diversity Gradients Of The Marine Brown Alga Sargassum Thunbergii in The Northwest Pacific	Zi-Min Hu	China		
	14:15-14:30	OR12-6	Physiological and Transcriptomic Responses of Saccharina Latissima From the Arctic to Dark Exposure Simulating a Warming Winter	Huiru Li	China		
			[OR 13] Algal biomass and biofuel <1>		-		
	Chairperson						
	13:00-13:15	OR13-1	Effect of Inorganic Micronutrients on Growth of Arthrospira (Spirulina) Maxima	Won-Kyu Lee	Korea		
	13:15-13:30	OR13-2	Light and Balanced Growth in Ulva pertusa	Rigoberto Sanchez-Medina	New Zealand		
303 (3F)	13:30-13:45	OR13-3	Scaling-Up Bio-Fuel Production In The H2020 Project MacroFuels.	Jaap Van Hal	The Netherlands		
	13:45-14:00	OR13-4	Seaweed Biorefinery: Co-extraction of hydrocolloids, plant bioactive compounds and bioplastics	Benoit Queguineur	France		
	14:00-14:15	OR13-5	Agrobacterium-MEDIATED GENETIC TRANSFORMATION of SEAWEED Kappaphycus Alvarezii USING Gα GENE and CALLUS CULTURES	Erina Sulistiani	Indonesia		
	14:15-14:30	OR13-6	Effects of light quantity, quality and duration on the growth rate, pigment composition and photosynthesis of Spirulina maxima Geitler	JIHAE PARK	Korea		
	[OR 14] Seaweed industry and governance <1>						
	Chairperson:						
	14:40-14:55	OR14-1	Development of a Swedish Kelp Industry - the Seafarm Project	Fredrik Gröndahl	Sweden		
Country A	14:55-15:10	OR14-2	Who Gets What From Whom? Support Mechanisms in the Philippine Seaweed Industry	Jee Grace B. Suyo	The Philippines		
Samda A (3F)	15:10-15:25	OR14-3	East African Seaweed Farming; Huge Potential but Vast Challenges	Christina Halling	Sweden		
	15:25-15:40	OR14-4	Establishing an Aquaculture-Based Large-Scale Seaweed Industry in Norway: Strategic, Environmental and Economic Considerations	Celine Rebours	Norway		
	15:40-15:55	OR14-5	Flow Cytometer Cell Sorting as an Alternative Method for Kelp Meiospore Isolation	Michael Marty-Rivera	United States		
	15:55-16:10	OR14-6	The Emergence of Seaweed Aquaculture in the United States: A Case Study of Institutional Dynamics and Industry Structuration	Holly Cronin	Canada		
			[OR 15] Climate change and ocean acidification <2>				
	[OK 15] Climate change and ocean acidincation <2> Chairperson:						
	14:40-14:55	OR15-1	Exploring Solar Radiation Relations of Seaweeds Floating at Sea: a Tool to Counteract Ocean Warming?	Ricardo Radulovich	Costa Rica		
Camda D	14:55-15:10	OR15-2	A Model to Assess the Relative Impacts of Multiple Climate Stressors on Macroalgal Productivity	Janet Kübler	United States		
Samda B (3F)	15:10-15:25	OR15-3	Globally Driven Changes in Carbon Chemistry Change Threatens a Rare Seaweed Community and Associated Industry in the Baltic Sea	Liina Pajusalu	Estonia		
	15:25-15:40	OR15-4	Better Local Management of Kelp Forests Supports Ecosystem Resilience in a Changing Ocean	Christopher Hepburn	New Zealand		
	15:40-15:55	OR15-5	Investigating The Potential Impact Of Ocean Warming Events On The Productivity Of Two South African Kelp Species; The Ecologically Dominant Ecklonia Maxima And The Rare Macrocystis Pyrifera.	Mark Rothman	South Africa		
	15:55-16:10	OR15-6	TBC	твс	ТВС		
	<u> </u>		[OR 16] Algal biomass and biofuel <2>	·			
	Chairperson						
	14:40-14:55	OR16-1	OVEREXPRESSION of Ga GENE INCREASES GROWTH and HYPOSALINE TOLERANCE in Kappaphycus Alvarezii TRANSGENIC PLANTLETS	Erina Sulistiani	Indonesia		
303	14:55-15:10	OR16-2	Application of Seaweed Constituents in Chemicals, Materials and Fuels	Paulien Harmsen	The Netherlands		
(3F)	15:10-15:25	OR16-3	Achieving high lipid productivity with high biomass productivity in Ettlia sp. under optimized nitrogen concentration and UV-A exposure	Seong-Hyun Seo	Korea		
	15:25-15:40	OR16-4	Hydrothermal liquefaction technology for the conversion of red seaweeds to bio crude	Sri Sailaja Nori	India		
	15:40-15:55	OR16-5	IMPACTS OF ASCOPHYLLUM MARINE PLANT EXTRACT POWDER (AMPEP) ON THE CARRAGEENAN QUALITY SUCH AS CARRAGENAN YIELD, VISCOSITY	MAJID KHAN	Malaysia		
	15:55-16:10	OR16-6	AND GEL STRENGTH OF TISSUE CULTURE OUTPLANTED SEAWEED IN FIELD TRIAL Applications of Bloactive Seaweed Substances In Functional Food Products	Yimin Qin	China		
<u> </u>	2.22 20.20	2200	- Application of the second of		Guilla		

Student Co	mpetition	(Oral Ses	sion)					
	[ST 01] Student Competition 1							
	Chairperson	:						
	16:30-16:45	ST01-1	Environmental effects on potentially valuable components of Ulva Intestinalis along the Swedish coast	Joakim Olsson	Sweden			
	16:45-17:00	ST01-2	Production of bio-hydrogen from macroalgae following hydrothermal treatment	Aaron Brown	United Kingdom			
Halla A	17:00-17:15	ST01-3	Opportunities for energy and resource recovery from macroalgae using sequential hydrothermal conversion	Iram Razaq	United Kingdom			
(3F)	17:15-17:30	ST01-3	TBC	твс	TBC			
	17:30-17:45	ST01-5	Protective effect of sulfated polysaccharides from Hizikia fusiforme against ultraviolet B-induced skin photoaging	Lei Wang	Korea			
	17:45-18:00	ST01-6	Key factors to test before formulating a cosmetic emulsion using active phenolic compounds from a brown macroalga: seasonal variability and stability of compounds	Leslie Gager	France			
	18:00-18:15	ST01-7	Vortex-assisted Solid-liquid Microextraction Methodology For Rapid HPLC/PDA Determination of Fucoxanthin in Seaweed Biomass	Nuno Nunes	Portugal			
	18:15-18:30	ST01-8	Antioxidant Activity of Sulfated Polysaccharide Extract From Green Seaweed (Caulerpa Lentillifera) Makassar, Indonesia	Ilmi Fadhilah Rizki	Indonesia			
			[ST 02] Student Competition 2	<b>!</b>				
	Chairperson	:						
	16:30-16:45	ST02-1	Variability in the composition of mycosporine-like amino acids (MAAs) in red macroalgae from Brittany (France)	Fanny Lalegerie	France			
	16:45-17:00	ST02-2	Semi-Dry Storage as a Maturation Process to Develop the Sensory Characteristics of the Red Seaweed Dulse (Palmaria Palmata)	Pierrick Stévant	Norway			
Halla B	17:00-17:15	ST02-3	3-Hydroxy-5,6-epoxy-β-ionone Isolated From Sargassum Horneri Protect MH-S Mouse Lung Cells Against Fine Dust Induced Inflammation and Oxidative Stress	KK Asanka Sanjeewa	SriLanka			
(3F)	17:15-17:30	ST02-4	The Identification of Pigment Extract of Green Seaweed (Ulva lactuca L) From Gunung Kidul, Yogyakarta Using UHPLC-High Resolution Mass Spectra	Windu Merdekawati	Indonesia			
	17:30-17:45	ST02-5	Cellulase-assisted Ecklonia cava extract prevents against diet-induced obesity in mice	Xining Li	Korea			
	17:45-18:00	ST02-6	Oral administration of Sargassum horneri ethanol extract ameliorates atopic dermatitis in house dust mite/DNCB-stimulated NC/Nga mice model	Eui Jeong Han	Korea			
	18:00-18:15	ST02-7	Composition and Seasonal Variation of the Metabolic Profile of Osmundea Pinnatifida	Cecilia Biancacci	United Kingdom			
	18:15-18:30	ST02-8	Fucoidan from Brown Algae Reduces Cell Migration in Human Bladder Cancer T24 Cells	Chun-Ju Sung	Taiwan			
			[ST 03] Student Competition 3					
	Chairperson	:	<u> </u>					
	16:30-16:45	ST03-1	Exploring ecological network structure, dynamics, and function of Microcystis genotypes and microbes	Seong-Jun Chun	Korea			
	16:45-17:00	ST03-2	Responses of seaweeds that use CO2 as their inorganic carbon source to ocean acidification: Differential effects of fluctuating pH but little benefit of	Damon Britton	Australia			
	17:00-17:15	ST03-3	CO2 enrichment The effect of elevated CO2 on production and respiration of Sargassum Thunbergii communities	Peeraporn Punchai	Japan			
Samda A (3F)	17:15-17:30	ST03-4	Transgenerational temperature effects in the kelp Laminaria digitata	Daniel Liesner	Germany			
	17:30-17:45	ST03-5	Biotic and abiotic controls of Saccharina latissima gametogenesis	Alexander Ebbing	Netherlands			
	17:45-18:00	ST03-6	Effect of hydrodynamics on the horizontal structuring of macroalgal communities	Thomas Burel	France			
	18:00-18:15	ST03-7	The effects of velocity and canopy deformation on the photosynthesis of a seaweed bed in a recirculating flow chamber.	Yukio Inoue	Japan			
	18:15-18:30	ST03-8	Recovery of kelp forest: two case studies in Korea	Kwonmo Yang	Korea			
			[ST 04] Student Competition 4	National Confession Co				
	Chairperson :							
	16:30-16:45	ST04-1	Towards an understanding of the biodiversity and taxonomy of the genus Ulva (Ulvaceae, Chlorophyta)	Thi Lan Anh Tran	Vietnam			
	16:45-17:00	ST04-2	SoEM: A novel PCR-free biodiversity assessment method based on small-organelles enriched metagenomics	Jihoon Jo	Korea			
	17:00-17:15	ST04-3	Diversity and spatial pattern of marine macroalgae in Itu Aba Island (Taiping Island, Taiwan), South China Sea: an updated inventory with	Pin-Chen Chen	Taiwan			
Samda B (3F)	17:15-17:30	ST04-4	comprehensive molecular references  Revisions of Ralfsia and Endoplura (Ralfsiales, Phaeophyceae) from Korea including new candidate species	Antony Oteng'o	Korea			
	17:30-17:45	ST04-5	Taxonomic revision of the order Bangiales (Rhodophyta) from Korea hased on morphology and molecular analysis	Young Ho Koh	Korea			
	17:45-18:00	ST04-6	Measuring Both Oxygenic and Anoxygenic Photosynthetic Organisms Using Pulse Amplitude Modulation (PAM) Fluorometry in Wastewater Ponds.	Piamsook	Thailand			
	18:00-18:15	ST04-7	measuring Both Oxygenic and Anoxygenic Photosynthetic Organisms Using Pulse Amplitude Modulation (PAM) Fluorometry in Wastewater Ponds.  Title: propagating a cellular stress into the environment: revealing hydrogen peroxide as an external stressor in coastal ecosystems.	CHANDARAVITHOON Isla Twigg	New Zealand			
	18:15-18:30	ST04-8	True: propagating a centural scress into the environment, revealing hydrogen peroxide as an external scressor in coastal ecosystems.  Chemical defence by allelopathic active metabolites on the surface of cultivated Mexican Rhodophyta Halymenia floresii against biofouling	Shareen A ABDUL MALIK	France			
Oral Session		31040	Chemical detence by aneropatine, active incropolities on the surface of cultivated mexical minocophyta halymenia notesin against protouning	Shareen A ADDOL MALIK	Trance			
-Tui 3633101			[OR 17] Phycocolloids and bioactive compounds					
	Chairperson	:	,,					
	16:30-16:45	OR17-1	Farming of Kappaphycus Alvarezii in Sri Lanka: Current Status and Opportunity Develop Carrageenan Industry	Sivaram Kulendran	SriLanka			
	16:45-17:00	OR17-1	Indonesian Seaweed Hydrocolloids: Challenges and Perspective for Future Development in Global Value Chain	Maya Puspita	Indonesia			
	17:00-17:15	OR17-2	Age Growth, Pigments and Carageenan Content of the Brown and the Green Varieties of Marine Algae Eucheuma	Yenny Risjani	Indonesia			
303 (3F)	17:15-17:30	OR17-3	Age Growth, Pigments and Carageenan Content of the Brown and the Green Vaneties of Marine Algae Eucheuma  The growth and carrageenan quality of vegetative sporophyte and gametophyte phases of the commercially important red seaweed Kappaphycus	Maria Rovilla J Luhan				
			alvarezii		The Philippines			
	17:30-17:45	OR17-5 OR17-6	Biomolecular composition and revenue explained by interactions between extrinsic factors and endogenous rhythms of Saccharina latissima	Xueqian Zhang	Denmark			
	17:45-18:00		Structural and Functional Characterisation of High-Value Bioactive Compounds from Alaria esculenta Cultivated on Long-Lines in Bantry Bay, Ireland	Silvia Blanco Gonzalez	Ireland			
	18:00-18:15	OR17-7	Bioactive Compound Production And Stability In Long term Cultures of Asparagopsis Armata (Bonnemaisoniales, Rhodophyta)	Marianela Zanolla	Ireland			
	18:15-18:30	OR17-8	Macrocystis pyrifera source for the production of bloactive compounds	Allison Leyton	Chile			

[Day 5] Ma	y 2 (Thur	sday)						
Plenary Led								
			[PL 4] Plenary 4					
Tamna A (5F)	Chairperson	:						
(31)	08:30-09:30	PL-4	Genomic and genetic approaches to explore brown algal biology and support seaweed aquaculture	J Mark COCK	France			
Mini Symp	osium							
			[MS 13] Genomic selection in economically important kelp of the Eastern Pacific and North Atl	antic				
	Chairperson	: Scott LINDE	ELL (United States), Carolina Camus (Chile)					
Tamna A	09:55-10:15	MS13-1	Genetic Diversity Exploitation of Saccharina latissima For Innovative Macro-Algal Biorefinery in Europe.	Phillipe POTIN	France			
(5F)	10:15-10:35	MS13-2	Kelp Seed Banks and Sterilization Procedures	Sergey Nuzhdin	United States			
	10:35-10:55	MS13-3	Fine scale population genetics of sugar kelp in the North Atlantic for a selective breeding program	Simona AUGYTE	United States			
	10:55-11:15	MS13-4	Breeding Macrocystis pyrifera: What Have We Learned?	Carolina CAMUS	Chile			
			[MS 14] Microalgal biotechnology and industries: construction of a whole value chain from labs, pond	ls to tables.				
	Chairperson	: Song Qin (0	China)					
Halla A	09:55-10:15	MS14-1	The Freshwater Algae Culture Collection (FACHB-Collection): algal resources for fundamental and applied research in China	Lirong Song	China			
(3F)	10:15-10:35	MS14-2	Industrial Development of Microalgal Cultures and Seaweeds' Filamentous Tissue Cultures for Pharmaceutical and Nutraceutical Source Material	Hongnong Chou	China			
	10:35-10:55	MS14-3	A new thin-film microfluidic platform for continuous flow biodiesel production from wet microalgae	Wei Zhang	Australia			
	10:55-11:15	MS14-4	Microalgal biotechnology and industries in China: construction of both new innovation mode and driving force	Song Qin	China			
			[MS 15] Seaweed4Health, bioactives from seaweed in health applications taking into account standards	and legislation				
	Chairperson	: Stefan KRA	AN (Ireland), Susan HOLDT (Denmark)	T				
Halla B (3F)	09:55-10:15	MS15-1	Microalgal biotechnology and industries in China: construction of both new innovation mode and driving force	Stefan KRAAN	Ireland			
(51)	10:15-10:35	MS15-2	Seaweed legislation and standards in Europe	Susan HOLDT	Denmark			
	10:35-10:55	MS15-3	The Case For Whole Dietary Seaweeds	Jane TEAS	United States			
	10:55-11:15	MS15-4	DIETARY SARGASSUM FUSIFORME IMPROVES MEMORY and REDUCES AMYLOID PLAQUE LOAD in an ALZHEIMER'S DISEASE MOUSE MODEL	Monique MULDER	The Netherlands			
			[MS 16] Coralline algae, global marine ecosystem engineers: their systematics, physiology and ecosystem engineers and ecosystem engineers.	ology.				
	-		brielson (United States), So Young Jeong (Korea)					
Samda A (3F)	09:55-10:15	MS16-1	The Ecology of Non-geniculate Coralline Red Algae  Effects of Water Temperature, Light and Nitrate on the Growth of Sporelings of the Nongeniculate Coralline Alga Lithophyllum Okamurae	Gavin W. Maneveldt	South Africa			
	10:15-10:35	MS16-2	(Corallinales, Rhodophyceae)	Aki Kato	Japan 			
	10:35-10:55	MS16-3 MS16-4	Corallinapetrales: a new order of coralline algae including a new family with Corallinapetra gabrieli comb. nov.	So Young Jeong	Korea Guam			
	10:55-11:15	MS16-4	The Role of Crustose Calcifying Red Algae in Phase Transitions on Tropical Pacific Reefs  [MS 17] Algal culture collection	Tom Schils	Guam			
	Chairperson : Thomas Friedl (Germany), Jee-Hwan Kim (Korea)							
	09:55-10:15	MS17-1	The SAG Culture Collection of Microalgae: A Traditional Bioresource Serves Modern Science	Thomas Friedl	Germany			
Samda B (3F)	10:15-10:35	MS17-2	An Australian Perspective on Managing a Biodiversity Collection For Research Impact.	lan Jameson	Australia			
	10:35-10:55	MS17-3	Diversity, Conservation and Utilization of Freshwater Bioresources	Jee-Hwan Kim	Korea			
	10:55-11:15	MS17-4	The Korean marine microalgae biobank: in the formation process	Ji-won Hong	Korea			
			[SS 1] Special Session : Seaweed aquaculture: past, present and future					
	Chairperson:							
Tamna A (5F)	11:30-11:50	SS1-1	Kelp Aquaculture in Northeast America: Opportunities, Challenges and Future Directions	Charles Yarish	United States of America			
(4-7)	11:50-12:10	SS1-2	Growing Ulva (Chlorophyta) In Commercial Integrated Systems With Abalone In South Africa For Feed And Bioremediation: An Update.	John Bolton	South Africa			
	12:10-12:30	SS1-3	A day in the life of afuture tropical seaweed farmer	lain Neish	Indonesia			
Oral Sessio	n							
			[OR 18] Algae-microbe interaction					
	Chairperson	:						
Halla A	11:30-11:45	OR18-1	Endophytic and Epiphytic Core Microbiota Associated with an Invasive Seaweed Across the Northern Hemisphere	Florian Weinberger	Germany			
(3F)	11:45-12:00	OR18-2	Selective utilization of fatty acids of two copepods with five algae	Min-Chul Lee	Korea			
	12:00-12:15	OR18-3	Microbiota Interactions with Laminariales Gametophytes, Impact on Phytochemistry	Erwan Le Gélébart	France			
	12:15-12:30	OR18-4	Do Microbes Play a Role in Facilitating the Range Expansion of Tropical Fish Into Temperate Systems?	Adriana Verges	Australia			
			[OR 19] Algal natural products, functional foods and pharmacology <3>					
	Chairperson		Optimization of the Production of Single Cell Protein and Hadronhabites from					
Halla B (3F)	11:30-11:45	OR19-1	Optimization of the Production of Single Cell Protein and Hydrophobins from Marine Fungi Fed Using Seaweed and Seaweed Waste Seaweeds (Marine macro algae) are a large and diverse group of marine organisms are an excellent source of biologically active secondary	Catalina LANDETA SALGADO	Chile			
	11:45-12:00	OR19-2	seaweets (warnie macro algae) are a large and owerse group or marine organisms are an excellent source or biologically active sectionary metabolities. They have been shown to exhibit a wide range of therapeutic properties, including anti-cancer, anti-oxidant, anti-inflammatory and anti-Some species of seaweed are well-known accumulators	Mangaiyarkarasi Ravirajan	India			
	12:00-12:15	OR19-3	of the metalloid arsenic (As). Arsenic toxicity to humans is well established and is considered a class 1 human carcinogen. As mankind's appetite for Protein extraction by Enzyme-assisted Extraction (EAE) followed by alkaline extraction from red seaweed eucheuma denticulatum (Spinosum) used in	Michéal Mac Monagail	Ireland			
Student Co	12:15-12:30 mpetition	OR19-4	Carrageenan production	Susan Holt	Denmark			
Jaudent Co	peardon	(Oral Ses	[ST 05] Student Competition 5					
	Chairperson	:						
Samda A	11:30-11:45	ST05-1	Can RNA Transcriptomes Accurately Resolve a Phylogenetic Tree?	Seongmin Cheon	Korea			
(3F)	11:45-12:00	ST05-2	Effect of antioxidant addition during extraction of protein from Ulva sp.  Toxicity and unitarion of 6 antifolding blocking managing three on abbrevial fluorescence of gametophytes of the brown macroalist Lindais pipositific	Louise Juul Pedersen	Denmark			
	12:00-12:15	ST05-3	Toxicity evaluation of 6 antifouling biocides measured based on chlorophyll fluorescence of gametophytes of the brown macroalga Undaria pinnatlfid (Harvev) Suringar	Hojun Lee	Korea			
	12:15-12:30	ST05-4	Deformity of benthic diatom as biomarkers of marine environment	Soyeon Choi	Korea			

Oral Sessio	n						
Oral Sessio	<u>"</u>		[OR 20] Phylogeography				
	Chairperson:						
	11:30-11:45	OR20-1	Phylogeographic Diversification and Postglacial Range Dynamics Shed Light on the Conservation of the Kelp Saccharina Japonica	Jie Zhang	China		
Samda B (3F)	11:45-12:00	OR20-2	Phylogeographic pattern of the marine red alga Gracilaria salicornia (Gracilariales) in Thailand: evidence for an east-west genetic break around the	Narongrit Muangmai	Thailand		
	12:00-12:15	OR20-3	Thai-Malay peninsula  Developing Novel Biomarkers Targeting Stage-specific Transcripts For Monitoring Harmful Marine Organisms	Juhee Min	Korea		
	12:15-12:30	OR20-4	Award 3-5 (10,12,14)	Ji Won Choi	Korea		
			[OR 21] Genomics <1>				
	Chairperson	:					
303 (3F)	11:30-11:45	OR21-1	Comparative Characterization of Putative Chitin Deacetylases From Phaeodactylum Tricornutum and Thalassiosira Pseudonana Highlights Potential For Distinct Chitin-based Metabolic Processes in Diatom	Zhanru Shao	China		
	11:45-12:00	OR21-2	Genomic Analysis of Thermoacidophilic Environmental Adaptation of Cyanidiophyceae (Rhodophyta)	Seung In Park	Korea		
	12:00-12:15	OR21-3	Genomic Analyses of Unique Carbohydrate and Phytohormone Metabolism in the Macroalga Gracilariopsis lemaneiformis (Rhodophyta)	Nianjun Xu	China		
	12:15-12:30	OR21-4	Identification of Candidate SNPs Regions Related to Red Mutation in <i>Pyropia yezoensis</i> by QTL-seq	XINZI YU	China		
Mini Sympo	osium						
			[MS 18] FIRA (Special Session)				
	Chairperson						
Halla A (3F)	13:35-13:55	MS 18-1	Marine forest reforestation project of Korea Fisheries Resources Agency (FIRA)	Jin Woo Kang	Korea		
, ,	13:55-14:15	MS 18-2	Restoration of Artificial Eelgrass Seabed using Industrial Byproducts  Enhanced CO2 uptake by Planted Sea forest counteracts	Kyunghoi Kim	Korea		
	14:15-14:35	MS 18-3	Ocean Acidification in Coastal Environments	Kitack Lee	Korea		
Oral Cassia	14:35-14:55	MS 18-4	New construction technique of marine forest using artificial floating structures	Han Gil Choi	Korea		
Oral Sessio			[OR 22] Seaweed industry and governance <3>				
	Chairperson		[OK 22] seaweeu muustiy anu governance 537				
	13:30-13:45	OR22-1	Certification of Environmental Sustainable and Social Responsible Seaweed Production	Patricia Bianchi	The Netherlands		
	13:45-14:00	OR22-1		Amado Blanco	The Philippines		
Halla B (3F)	14:00-14:15	OR22-2	Net-Works(TM): Making seaweed farming positive for the ocean and people  Feminisation of Seaweed Industry?	Josephine Tsui			
	14:00-14:15	OR22-3			United Kingdom		
	14:30-14:45	OR22-4	A Systematic Analysis of National Biosecurity Framework of Seaweed Aquaculture in Indonesia  TBC	Cicilia Selviane Kambey TBC	Korea TBC		
	14:45-15:00	OR22-6	Changing the traditional Ascophyllum nodosum harvesting method in Ireland: advantages and challenges under a non-regulated harvest situation		Canada		
Student Co				Raul Ugarte	Canada		
otaucii co	- Pour on	(0.0.00	[ST 06] Student Competition 6				
	Chairperson	:	<u> </u>				
	13:30-13:45	ST06-1		Saifullah Saifullah	Norway		
Camda A							
Samda A	13:45-14:00	ST06-2	Emersion effect on growth, pigments and biochemical responses in Pyropia yezoensis	Soiin Jang			
(3F)	13:45-14:00	ST06-2 ST06-3	Emersion effect on growth, pigments and biochemical responses in Pyropia yezoensis  Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds	Sojin Jang Stephanie Revilla-Lovano	Korea Mexico		
(3F)			Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds	Stephanie Revilla-Lovano	Korea		
(3F)	14:00-14:15	ST06-3	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes	Stephanie Revilla-Lovano Jose Avila Peltroche	Korea Mexico		
(3F)	14:00-14:15	ST06-3 ST06-4	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds	Stephanie Revilla-Lovano	Korea Mexico Korea		
(3F) Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00	ST06-3 ST06-4 ST06-5	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond	Korea  Mexico  Korea  United States		
	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00	ST06-3 ST06-4 ST06-5	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond	Korea  Mexico  Korea  United States		
	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00	\$T06-3 \$T06-4 \$T06-5 \$T06-6	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond	Korea  Mexico  Korea  United States		
	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00	\$T06-3 \$T06-4 \$T06-5 \$T06-6	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond	Korea  Mexico  Korea  United States		
	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 Chairperson	ST06-3 ST06-4 ST06-5 ST06-6	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>	Stephanie Revilla-Lovano Jose Avila Pettroche Ann Raymond TBC	Korea Mexico Korea United States TBC		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 Chairperson 13:30-13:45	ST06-3 ST06-4 ST06-5 ST06-6	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA	Korea Mexico Korea United States TBC		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00	ST06-3 ST06-4 ST06-5 ST06-6 : OR23-1 OR23-2	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Natchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen	Korea Mexico Korea United States TBC		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15	ST06-3 ST06-4 ST06-5 ST06-6 : OR23-1 OR23-2 OR23-3	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Natchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador	Korea Mexico Korea United States TBC  India China The Philippines		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30	\$106-3 \$106-4 \$106-5 \$106-6 \$1 \$108-2	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur	Korea Mexico Korea United States TBC  India China The Philippines France		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45	\$106-3 \$106-4 \$106-5 \$106-5 \$106-6 \$108-23-1 \$108-23-2 \$108-23-3 \$	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45	\$106-3 \$106-4 \$106-5 \$106-6 \$1	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$1	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson	\$106-3 \$106-4 \$106-5 \$106-6 \$106-6 \$108-3-1 \$108	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application  [OR 24] Genomics <2>	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45 13:45-15:00  Chairperson 13:30-13:45	\$106-3 \$106-4 \$106-5 \$106-6 \$106-6 \$107-2 \$108-2 \$1	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark		
Oral Sessio	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:45-15:00  Chairperson 13:30-13:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$1 \$0823-1 \$0823-2 \$0823-3 \$0823-4 \$0823-5 \$0823-6 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and Its Phylogenetic Analyses	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China		
Oral Sessio  Halla B (3F)	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:45-15:00  Chairperson 13:30-13:45 14:45-15:00  Chairperson 13:30-13:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$1 \$108-23-1 \$108-23-2 \$108-23-3 \$108-23-4 \$108-23-5 \$108-23-6 \$108-	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and Its Phylogenetic Analyses  Transcriptome of Paulinella micropora under high light stress condition	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG Duckhyun Lhee	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China Korea		
Oral Sessio  Halla B (3F)	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 1  Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:45-15:00  Chairperson 13:30-13:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$1 \$108-23-1 \$108-23-2 \$108-23-3 \$108-23-3 \$108-23-5 \$108-23-6 \$108-23-6 \$108-23-1 \$108-	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and its Phylogenetic Analyses  Transcriptome of Paulinelia micropora under high light stress condition  Mitogenome Characteristics of Crucial Saccharina Cultivars in China	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG Duckhyun Lhee Yahui Yu	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China Korea China		
Oral Sessio  Halla B (3F)	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 11 Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45 13:45-15:00 Chairperson 13:30-13:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$107-25 \$106-6 \$107-25 \$108-23-1 \$108-23-2 \$108-23-3 \$108-	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed- source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and Its Phylogenetic Analyses  Transcriptome of Paulinella micropora under high light stress condition  Mitogenome Characteristics of Crucial Saccharina Cultivars in China  Progress in QTL Mapping For Blade Length and Width of Saccharina Japonica	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG Duckhyun Lhee Yahui Yu Xiuliang Wang	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China Korea China China		
Oral Sessio  Halla B (3F)	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 11 Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45 13:45-15:00 Chairperson 13:30-13:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$107-25 \$106-6 \$107-25 \$108-23-1 \$108-23-2 \$108-23-3 \$108-	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed- source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and Its Phylogenetic Analyses  Transcriptome of Paulinella micropora under high light stress condition  Mitogenome Characteristics of Crucial Saccharina Cultivars in China  Progress in QTL Mapping For Blade Length and Width of Saccharina Japonica	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG Duckhyun Lhee Yahui Yu Xiuliang Wang	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China Korea China China		
Oral Sessio  Halla B (3F)	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 11 Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-14:45 13:45-15:00 Chairperson 13:30-13:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$106-6 \$108-23-1 \$108-23-2 \$108-23-3 \$	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed- source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and Its Phylogenetic Analyses  Transcriptome of Paulinella micropora under high light stress condition  Mitogenome Characteristics of Crucial Saccharina Cultivars in China  Progress in QTL Mapping For Blade Length and Width of Saccharina Japonica  Synergistic Effects of MSE and LTR Elements from Hsp70 Gene Promoter of Ulva prolifera (Ulvaphyceae, Chlorophyta) upon Temperature Induction	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG Duckhyun Lhee Yahui Yu Xiuliang Wang	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China Korea China China		
Oral Sessio  Halla B (3F)  303 (3F)  Mini Sympo	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 1 Chairperson 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-13:45 13:45-14:00 14:00-14:15 14:15-14:00 14:00-14:15 14:15-15:00 Chairperson 13:30-13:45 14:45-15:00	\$106-3 \$106-4 \$106-5 \$106-6 \$106-6 \$108-23-1 \$108-23-2 \$108-23-3 \$	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and Its Phylogenetic Analyses  Transcriptome of Paulinella micropora under high light stress condition  Mitogenome Characteristics of Crucial Saccharina Cultivars in China  Progress in QTL Mapping For Blade Length and Width of Saccharina Japonica  Synergistic Effects of HSE and LTR Elements from Hsp70 Gene Promoter of Ulva prolifera (Ulvaphyceae, Chlorophyta) upon Temperature Induction	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG Duckhyun Lhee Yahui Yu Xiuliang Wang	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China Korea China China		
Oral Sessio  Halla B (3F)  303 (3F)	14:00-14:15 14:15-14:30 14:30-14:45 14:45-15:00 13:30-13:45 13:45-14:00 14:00-14:15 14:15-14:30 14:30-13:45 14:45-15:00 Chairperson 13:30-13:45 14:45-15:00 14:00-14:15 14:15-14:30 14:30-14:15 14:45-15:00 Chairperson Chairperson	\$106-3 \$106-4 \$106-5 \$106-6 \$1 \$0823-1 \$0823-2 \$0823-3 \$0823-4 \$0823-5 \$0823-6 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1	Physiological responses and growth of the seaweed Ulva sp. under changing cultivation conditions in pilot land-based ponds  Protoplast isolation from four brown algal species using a simple mixture of commercial enzymes  Hatchery Strategies For Long Term Storage of Saccharina Latissima Seed String in Alaska  TBC  [OR 23] Algal natural products, functional foods and pharmacology <4>  Development of functional fish sausage using seaweed dietary fibre  Metabolic engineering of Escherichia coli for efficient biosynthesis of fluorescent phycobiliprotein  Induction of Carrageenan Secretions in Protoplasts of Farmed Carrageenophytes  Innovative product development at ALGAIA: alginate-based mucoadhesive films  Review on Indonesian Sargassum species bioprospecting: Potential applications of bioactive compounds and challenge for sustainable development  Novel antioxidants from seaweed-source, extraction and application  [OR 24] Genomics <2>  Draft genome of the brown alga, Nemacystus Decipiens, Onna-1 strain: fusion genes related to sulfated fucan  Complete Plastid Genome of the Saccharina Cultivar "Rongfu" and Its Phylogenetic Analyses  Transcriptome of Paulinella micropora under high light stress condition  Mitogenome Characteristics of Crucial Saccharina Cultivars in China  Progress in QTL Mapping For Blade Length and Width of Saccharina Japonica  Synergistic Effects of HSE and LTR Elements from Hsp70 Gene Promoter of Ulva prolifera (Ulvaphyceae, Chlorophyta) upon Temperature Induction  [MS 19] JEJU (Special Session)	Stephanie Revilla-Lovano Jose Avila Peltroche Ann Raymond TBC  JESMI DEBBARMA Huaxin Chen Ronelie Salvador Benoit Queguineur Maya Puspita Susan Løvstad Holdt  Koki Nishitsuji JING ZHANG Duckhyun Lhee Yahui Yu Xiuliang Wang Chunhui Wu	Korea Mexico Korea United States TBC  India China The Philippines France Indonesia Denmark  Japan China Korea China China		
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Oral Session								
			[OR 25] Seaweed industry and governance <3>					
	Chairperson :							
	15:20-15:35	OR25-1	Prospects For Upgrading European Seaweeds; a Value Chain Perspective	Sander Van den Burg	The Netherlands			
Halla B	15:35-15:50	OR25-2	Seaweed Governance For Sustainability: a Case Study of Using the Triple Helix Approach in Malaysia	Adibi Nor	Malaysia			
(3F)	15:50-16:05	OR25-3	Tanzania Seaweed Value Chain Assessment.	Msafiri Andrew	United Republic of Tanzania			
	16:05-16:20	OR25-4	MODEL MANAGEMENT FOR SUSTAINABLE SEAWEED FARMING In PULAU SEMBILAN ISLAND, SINJAI DISTRICT, INDONESIA	Nurlita Pertiwi Arif Madjid	Indonesia			
	16:20-16:35	OR25-5	ENTREPRENEURIAL CAPACITY of the SEAWEED FARMERS in SOUTH SULAWESI, INDONESIA	Gufran Darma Dirawan	Indonesia			
	16:35-16:50	OR25-6	A Systematic Analysis of Policies Protecting the Seaweed Industry of the Philippines	Jonalyn P. Mateo	The Philippines			
Student Co	mpetition	(Oral Ses	sion)					
			[ST 07] Student Competition 7					
	Chairperson	:						
	15:20-15:35	ST07-1	Construction of a Genetic Linkage Map in Pyropia Yezoensis (Bangiales, Rhodophyta) and QTL Analysis of Several Economic Traits of Blades	Lin-bin Huang	China			
Samda A	15:35-15:50	ST07-2	Population and landscape genomics in the sugar kelp Saccharina latissima.	Alexander Thomson	United Kingdom			
(3F)	15:50-16:05	ST07-3	Gametophyte transcriptome reveals sex-biased gene expression in the kelp Saccharina Latissima	Catia Monteiro	Germany			
	16:05-16:20	ST07-4		Chung Hyun Cho	Korea			
	16:20-16:35	ST07-5	Genome sequencing and population genomic analyses provide insights into domestication and adaptation to new environments in the kelp Undaria pinnatifida	Louis Graf	Korea			
	16:35-16:50	ST07-6	Large-scale gene duplication events in the dinoflagellate lineage	Sung-Gwon Lee	Korea			
Oral Sessio	n							
	[OR 26] Algal natural products, functional foods and pharmacology <5>							
	Chairperson:							
	15:20-15:35	OR26-1	Application of various types of local seaweed extract to the growth and yield of shallot (Allium wakegi A.)	Ramal Yusuf	Indonesia			
Samda B	15:35-15:50	OR26-2	Targeted Enzymatic Modification Of Seaweed Hydrocolloids	Nanna Rhein-Knudsen	Denmark			
(3F)	15:50-16:05	OR26-3	Advances in Knowledge of Seaweed as a Natural Alternative to Sub-Therapeutic Antibiotics in Livestock Production	Augustine Owusu-Asiedu	United States			
	16:05-16:20	OR26-4	Individual and Combined Effects of Heavy Metals (HM) and Polycyclic Aromatic Hydrocarbons(PAH) Toward Spore Release, Settlement and Germination of Brown Kelps Lessonia Spicata and Macrocystis Pyrifera	Andrés Meynard	Chile			
	16:20-16:35	OR26-5	Antioxidant Responses and Phenolic Compounds of <i>Palisada Perforata</i> (Rhodomelaceae, Rhodophyta) Against Environmental Stressors From Different Microhabitats of a Tropical Reef	Juliane Bernardi	Brazil			
	16:35-16:50	OR26-6	Chemical analysis of iodine in fermented seaweed salad and human risk assessment in relation to total intake of iodine	Susan Løvstad Holdt	Denmark			
			[OR 27] Algal blooming <2>					
	Chairperson	:						
	15:20-15:35	OR27-1	Co-occurrence Patterns of Bacteria, Archaea, and Phytoplankton in Cochlodinium Polykrikoides Bloom in South Sea of Korea	Chi-Yong Ahn	Korea			
303	15:35-15:50	OR27-2	Harmful Algal Blooms in newly constructed Weir/Dam and their Management	Heesuk Lee	Korea			
(3F)	15:50-16:05	OR27-3	Green Tide Dynamics Revealed by Tracking the Floating Ecotype of Ulva prolifera in the Yellow Sea	Peng Jiang	China			
	16:05-16:20	OR27-4	Assessment of Salinity Tolerance Based on Physiological and Oxidative Stress Responses in <i>Ulva</i> and <i>Pyropia</i>	Palas Samanta	Korea			
	16:20-16:35	OR27-5	The development of bioactives from blooming seaweeds in Normandy, France: the ENTEROMORPHE and SNOTRA projects	Benoit Queguineur	France			
	16:35-16:50	OR27-6	Socioeconomic dimension of the Sargassum blooms: the Mexican experience during the last four years	Daniel Robledo	Mexico			
Lobby (SF)	16:50-18:20	16:50-18:20 Poster Session						

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[Day 6] Ma		y)						
r lenary Lec	enary Lecture [PL 5] Plenary 5							
Tamna A	Chairperson	Chairperson:						
(5F)	08:30-09:30	PL-5	Using genetics to unravel the ecology and economic potential of the giant kelp Macrocystis	Filipe Alberto	United States			
Mini Sympo	osium		pyrifera					
			[MS 20] Climate-driven changes in seaweed species distributions:drivers and ecological impac	ts				
	Chairperson	: Adriana Ver	ges (Australia), Vianney Denis (Taiwan)					
Tamna A	09:55-10:15	MS20-1	Cryptic Loss of Genetic Diversity And Directional Selection In Marine Forests Following An Extreme Climatic Event	Melinda Coleman	Australia			
(SF)	10:15-10:35	MS20-2	Climate-driven declines in kelp forests and the global rise of turfs	Thomas Wernerg	Australia			
	10:35-10:55	MS20-3	Redistribution of macroalgae and herbivores by climate change in Japan	Daisuke FUJITA	Japan			
	10:55-11:15	MS20-4	Tropicalisation of Temperate Reefs: Implications For Ecosystem Functions and Management Actions	Adriana VERGES	Australia			
			[MS 21] The novel output and innovative processing of macroalgae using anaerobic digestion	n				
	Chairperson	: Jessica ADAI	MS (United Kingdom), Andrew ROSS (United Kingdom)					
Halla A	09:55-10:15	MS21-1	Assessing the methane yields of whole and residue Ulva spp. following anaerobic digestion of samples prepared from varied long-term storage arrange	Jessica ADAMS	United Kingdom			
(3F)	10:15-10:35	MS21-2	Opportunities for production of bioenergy from macroalgae by integration of hydrothermal carbonisation and anaerobic digestion	Andrew ROSS	United Kingdom			
	10:35-10:55	MS21-3	Towards Macro Algae Bioprocessing: Dark Fermentation of Algal Components to Biohydrogen and High-Value Chemicals	Sean SCULLY	Iceland			
	10:55-11:15	MS21-4	Outcomes of the three-year SEAGAS project: Advancing the anaerobic digestion of Saccharina latissima for biomethane	Phillip Kerrison	United Kingdom			
			[MS 22] "Chemicalecology" of algal-microbe interactions					
	Chairperson	: Catherine Le	blanc (France), Aschwin Hillebrand (Portugal)	1				
Halla A	09:55-10:15	MS22-1	Eavesdropping Seaweed - Bacteria Cross-talk	Mahasweta Saha	Germany			
(3F)	10:15-10:35	MS22-2	Bacteria in algal growth and stress response: a metabolic point of view	Simon DITTAMI	France			
	10:35-10:55	MS22-3	Chemical mediators in algae-bacteria interactions: Novel functions of thallusin as algal morphogenesis inducer for the green seaweed Ulva (Chlorophyt	Thomas WICHARD	Germany			
	10:55-11:15	MS22-4	Metatranscriptomic differentiation in microbiome composition and function across Ectocarpus siliculosus strains and cell types	Aschwin HILLEBRAND	Portugal			
Oral Sessio	Oral Session							
	[OR 28] Cultivar, nursery and harvest <1>							
	Chairperson 09:50-10:05	OR28-1	Et de carbo de de de carbo de carbo de la Visa de decarbo de Para de Historia de	Manlei Mana	China			
	10:05-10:20	OR28-2	Study on the Underlying Mechanism of the Thermotolerance Strains of Pyropia Haltanensis  Characterisation of the Improved Strain (I/II) Exp. (Purpole Meltanensis and Its Pillat Cultivation in Mediculture Form	Wenlei Wang Hong-chang Ding	China			
Samda A (3F)	10:20-10:35	OR28-3	Characterization of the Improved Strain (HR-S) of Pyropia Haitanensis and Its Pilot Cultivation in Mariculture Farm  Development of a New Cultivar with High Yield and High-temperature Tolerance by Crossbreeding of Undaria Pinnatifida (Laminariales, Phaeophyta)	Kyosuke Niwa	Japan			
	10:35-10:50	OR28-4						
	10:50-11:05	OR28-5	Heterosis Breeding For Upper Temperature Tolerance in <i>Laminaria</i> Building Chimeric Kelps (Lessonia Spp) to Restock Overharvested Populations Along Central Chile	Neusa Martins  Alejandra Gonzalez	Portugal Chile			
	11:05-11:20	OR28-6	Dollining Chillieric, Keips (Lessonia Spp) to Kestock Overhal Vesteo Populations Along Central Chile  TBC	TBC	TBC			
	11.05-11.20	5.120-0	[OR 29] Bioremediation	100	I BC			
	Chairperson	:	[on to] distinctures.					
	09:50-10:05	OR29-1	Bioremediation and Carbon Sink Effects of Large-scale Cultivation of Gracilaria Lemanelformis, a Case Study in Nanao, South China	Yufeng Yang	China			
Country D	10:05-10:20	OR29-2	Maximising the Productivity of <i>Ulva Tepida</i> by Effectively Using the Three-dimensional Culture Space	Andrew Cole	Australia			
Samda B (3F)	10:20-10:35	OR29-3	The Relationship Between Heavy Metals and the Seaweed Gracilaria Lemaneiformis	Hongtian Luo	China			
	10:35-10:50	OR29-4	Estimation of Production and Bioremediation of Seaweed Kappaphycus alvarezii in an IMTA System Using a STELLA Model	Cicilia Selviane Kambey	Korea			
	10:50-11:05	OR29-5	Cultivation potential and bioremediation efficiency of the brown seaweed Halopteris scoparia (Ochrophyta)	Rita F. Patarra	Portugal			
	11:05-11:20	OR29-6	Colonized Zooplankton Communities on Cultivated Seaweeds in a Typical Mariculture Zone, China	Qing Wang	China			
			[OR 30] Genomics <3>					
	Chairperson	:						
	11:30-11:45	OR30-1	Genetic Tools For the Development of Improved Cultivars of Saccharina Latissima	Zofia NEHR	France			
Tamna A (5F)	11:45-12:00	OR30-2	Analysis of Gene Expansion and Expression Profiles in the Siphonous Macroalga, Caulerpa Lentillifera	Asuka Arimoto	Japan			
	12:00-12:15	OR30-3	Identification and Characterization of the Centromere-associated Protein Nuf2 in the Kelp Saccharina Japonica (Phaeophyta)	Zhi-Gang ZHOU	China			
	12:15-12:30	OR30-4	Piloting Genome Editing of the Brown Algal Model Ectocarpus	Yacine Badis	United Kingdom			
	12:30-12:45	OR30-5	Non-coding RNAs involved with AUREOCHROME and Regulation of CRY-DASH in the Early Development and Growth of Saccharina Japonica	Delin Duan	China			
	1 1		[Laminariales, Phaeophyceae]		***************************************			

	[OR 31] Ecology							
	Chairperson	:						
	11:30-11:45	OR31-1	Newly restored kelp beds reveal rapid recovery of food web complexity	MOONJUNG KIM				
Halla A (3F)	11:45-12:00	OR31-2	30 years revisit survey for the long term changes in the Antarctic subtidal algal community	Dong Seok Lee	Korea			
	12:00-12:15	OR31-3	Characterize of a type III polyketide synthase (PKS1) response to light intensity in the brown alga Saccharina japonica	Jing Li	China			
	12:15-12:30	OR31-4	Calcium Carbonate Productivity by Halimeda Macroloba in the Tropical Intertidal Ecosystem; the Significant Contributor to Global Carbonate Budgets	Jaruwan Mayakun	Thailand			
	12:30-12:45	OR31-5	An Extremophile Terrestrial Chlorophyte Growing on Galvanised Iron Lamp Posts.	Raymond J. Ritchie	Thailand			
			[OR 32] Algal derived cosmetics					
	Chairperson	:						
	11:30-11:45	OR32-1	Evaluation of Bioactivities and Cream Mask Formulation From Vietnamese Seaweeds	DANG DIEM HONG	Vietnam			
Halla B (3F)	11:45-12:00	OR32-2	Inhibitory Effects of Tropical Seaweed on Tyrosinase Activity and Melanogenesis in B16F10 Melanoma Cells	Pradtana Choosuwan	Thailand			
	12:00-12:15	OR32-3	Phenolic Compounds From Sargassum Fusiforme and Their Application in Cosmetics	Xiaoting Fu	China			
	12:15-12:30	OR32-4	Whitening activity of fucoidans extracted from polar Ascophyllum nodosum and valorisation of process by-products in cosmetic applications	Jeremy Brebion	France			
	12:30-12:45	OR32-5	TBC	твс	TBC			
	[OR 33] Cultivar, nursery and harvest <2>							
	Chairperson:							
	11:30-11:45	OR33-1	Palmaria Palmata (dulse) Cultivation in Denmark – New Strategies For Hatchery Optimization	Mette Møller Nielsen	Denmark			
Samda A (3F)	11:45-12:00	OR33-2	Advancements in Canadian on-land seaweed cultivation.	Jeff Hafting	Canada			
	12:00-12:15	OR33-3	TBC	твс	TBC			
	12:15-12:30	OR33-4	THERMOPHYSICAL PROPERTIES and STICKINESS of SUGAR KELP INFLUENCE PROCESS PARAMETERS DURING DRYING	Balunkeswar Nayak	United States			
	12:30-12:45	OR33-5	Preliminary performance assessment of Kappaphycus alvarezii mechanical harvester prototype	Leila Hayashi	Brazil			
			[OR 34] Seaweed Usage					
	Chairperson	:						
	11:30-11:45	OR34-1	Probiotic Fortified Marine Silage as Supplement in Marine Fish Hatchery	Charles Santhanaraju Vairappan	Malaysia			
Samda B (3F)	11:45-12:00	OR34-2	How Suitable Are Seaweed as a Feed Ingredient For Salmon? - the Feed Industry's Experiences and Insights	Celine Rebours	Norway			
	12:00-12:15	OR34-3	Optimization of Algal Culture Medium Capable to Higher Blomass and Lipid Content in Diverse Types of Algae	Bhumi Nath Tripathi	India			
	12:15-12:30	OR34-4	Evaluation of Seaweed Gelidium Latifolium as Potential Medicinal Food	Eka Prasedya	Indonesia			
	12:30-12:45	OR34-5	Kappaphycus alvarezii hatchery: a micropropagation production system	Simon Davis	Malaysia			