

CONTENTS

Introduction	ix
Acknowledgements	xi
List of Participants	xiii
Previous Conference Proceedings	xxi
Conference Programme	xxi

SYMPOSIUM I: Taxonomy and Biological Diversity of the South China Sea

Plenary Keynote Papers

Species of Hong Kong <i>Sargassum</i> and their biogeography <i>C.K. Tseng</i>	3
The hermatypic Scleractinia of South Vietnam <i>Vo Si Tuan</i>	11

Symposium Papers

The anatomy of <i>Cassidula</i> Férussac, 1821 and a case for the revival of the Cassidulinae Odhner, 1925 <i>A.M.F. Martins</i>	25
Zoogeographic affinities of Hong Kong Opisthobranchia (Mollusca: Gastropoda) <i>Kathe R. Jensen</i>	43
Biodiversity of subtidal benthic polychaetes in Hong Kong coastal waters <i>Paul K.S. Shin</i>	57
The echinoderm fauna of Hainan Island <i>Liao Yulin</i>	75
Comparison of hypocotyl morphology and seedling growth between normal and albino propagules of <i>Kandelia candel</i> (L.) Druce: a re-evaluation of the roles of vivipary in mangroves <i>Chen Xiao-yong and Lin Peng</i>	83

Zoogeographic trends in some Hong Kong arthropods <i>Roger N. Bamber</i>	91
The species composition of coral reef fishes in the Spratly Islands, central South China Sea <i>Nguyen Huu Phung</i>	113
Sipunculans from the South China Sea <i>Zhou Hong and Li Fenglu</i>	129
The occurrence and distribution of butterflyfishes (Pisces: Chaetodontidae) in the coastal waters of Vietnam <i>Nguyen Van Long</i>	143
The distribution of hermatypic scleractinian corals at Cape d'Aguilar, Hong Kong <i>Tracy Clark</i>	151
Acid sulphate soil in China: its distribution and classification <i>Gong Zitong, Zhang Xiaopu and Hu Xuefeng</i>	165
Formation and evolution of soils in the South China Sea islands <i>Gong Zitong, Zhang Ganlin, Zhou Ruirong and Liu Liangwu</i>	175
 Symposium II: Biology and Ecology of the South China Sea	
Plenary Keynote Paper	
Understanding biodiversity: adaptive radiations of predatory marine gastropods <i>John D. Taylor</i>	187
Symposium Papers	
The expression of foreign genes in <i>Laminaria japonica</i> (Laminariales: Phaeophyta) <i>Qin Song, Wu Jianqiu, Wang Xihua, Li Xinping, Jiang Peng and Tseng Cheng Kui</i>	209
The fisheries potential of the Kalayaan Island Group, South China Sea <i>P.M. Aliño, C.L. Nañola Jr., D.G. Ochavillo and M.C. Rañola</i>	219
Foraging behaviour of the tropical herbivorous crab, <i>Grapsus albolineatus</i> : time minimiser or nutrient maximiser? <i>Robin Kennish</i>	227
Haemolymph pH and oxygen levels in a naturally stressed tropical limpet, <i>Cellana grata</i> <i>Gray A. Williams and B.R. McMahon</i>	239

Seasonal cycle of growth and reproduction in the seagrass <i>Zostera japonica</i> in Hong Kong <i>T.C.W. Fong, S.Y. Lee and R.S.S. Wu</i>	247
Patterns of reproduction in marine fishes of Hong Kong and adjacent waters <i>Yvonne Sadovy</i>	261
Photophysiological studies of the soft coral <i>Sinularia</i> in the turbid waters of Singapore <i>Karenne P.P. Tun, L.M. Chou and A.C. Cheshire</i>	275
A review of finless porpoises (<i>Neophocaena phocaenoides</i>) from the South China Sea <i>E.C.M. Parsons and J.Y. Wang</i>	287
Feeding behaviour and food of seahorses in Vietnam <i>Do Huu Hoang, Truong Si Ky and Ho Thi Hoa</i>	307
The development of <i>Nassarius festivus</i> (Powys, 1835) (Gastropoda: Nassariidae) in Hong Kong <i>K. Chan</i>	321
Holocene foraminiferal distribution in the Pearl River Estuary and vicinity <i>Huang Guangqing and Wyss W.S. Yim</i>	333
Symposium III: Coastal Zone Management and Conservation of the Biological Resources of the South China Sea	
Plenary Keynote Papers	
Coastal zone management and conservation in the South China Sea <i>Edgardo D. Gomez</i>	345
Singapore coral reefs: balancing development and conservation <i>L.M. Chou and Beverly P.L. Goh</i>	355
A Geographic Information System for the study of Hong Kong's marine ecology <i>Winnie S.M. Tang, John W. Bradford and Brian Morton</i>	369
Symposium Papers	
The soil microbial function of a <i>Kandelia candel</i> mangrove: degradation of diesel oil <i>Zhuang Tie-cheng and Lin Peng</i>	389
Heavy metal concentrations in barnacles (<i>Tetraclita squamosa</i>) in Hong Kong: a revisit <i>Graham Blackmore and Laurie H.M. Chan</i>	397

Trace metal concentrations in decapod crustaceans from North Lantau waters, Hong Kong <i>E.C.M. Parsons</i>	411
Organochlorines in Chinese white dolphins (<i>Sousa chinensis</i>) and Finless porpoises (<i>Neophocaena phocaenoides</i>) in Hong Kong <i>E.C.M. Parsons and L.H.M. Chan</i>	423
Demographics of the seahorse <i>Hippocampus comes</i> in the central Philippines <i>Nelson C. Perante, Amanda C.J. Vincent and Marivic G. Pajaro</i>	439
Biological parameters of two exploited seahorse species in a Vietnamese fishery <i>Nguyen Van Long and Do Huu Hoang</i>	449
Prospects for community-based seahorse aquaculture in Vietnam <i>Truong Si Ky</i>	465
Floating fish aggregating devices (FADs) around Cuatro Islas, Leyte, Philippines: their impacts on fisheries <i>Sabine Schoppe, Rommel A. Seronay and Paciencia P. Milan</i>	475
An investigation of benthic recolonization at a backfilled marine borrow pit in Hong Kong <i>Raymond Valente, Hui Yuk Hung, Stephen McChesney and Gregor Hodgson</i>	489
Establishment of marine protected areas in Hong Kong <i>Edward C.K. Wong</i>	509
Legal and management issues pertinent to the deployment of artificial reefs in Hong Kong <i>A.W.Y. Leung</i>	519
Artificial reef development: a marine protected area approach <i>Keith D.P. Wilson and David C. Cook</i>	529
Hong Kong's Marine Parks Ordinance and designation of the first marine parks and reserves: where next? <i>Brian Morton</i>	541
Cross-border pollution and sustainability in Hong Kong: the need for an integrated approach with China <i>J.H. Liu, Peter Hills and William Barron</i>	563

PARTICIPANTS

Australia

R.N. Cumming Department of Marine Biology, James Cook University
of North Queensland, Townsville, Queensland 4811,
Australia

F.E. Wells Western Australian Museum, Francis Street, Perth 6000,
Australia

Canada

L.H.M. Chan Faculty of Agricultural and Environmental Sciences,
McGill University, 21,111 Lakeshore Road, Ste. Anne
de Bellevue, Quebec, Canada H9X 3V9

China

Chen Xiaoyong Department of Biology, Xiamen University, Xiamen
361005, China

Dong Zhengzhi Institute of Oceanology, Academia Sinica, 7 Nanhai
Road, Qingdao 266071, China

Gong Zitong Institute of Soil Science, Academia Sinica, P.O. Box 821,
Nanjing 210008, China

Huang Weijian Institute of Hydrobiology, Jinan University, Guangzhou
510632, China

Jiang Tianjiu Institute of Hydrobiology, Jinan University, Guangzhou,
China

Liao Yulin Institute of Oceanology, Academia Sinica, 7 Nanhai
Road, Qingdao 266071, China

Li Fuxue Department of Oceanography, Xiamen University,
Xiamen, China

Qian Feng Institute of Hydrobiology, Jinan University, Guangzhou
510632, China

Qin Ning South China Sea Institute of Oceanology, Academia
Sinica, 164 West Xingang Road, Guangzhou, China

Qin Qiwei South China Sea Institute of Oceanology, Academia
Sinica, 164 West Xingang Road, Guangzhou, China

Qin Song Institute of Oceanology, Academia Sinica, 7 Nanhai
Road, Qingdao 266071, China

Qi Yuzao Institute of Hydrobiology, Jinan University, Guangzhou
510632, China

She Gangzhe Marine Biology Laboratory, Shantou University,
Shantou, China

- Shen Qi South China Sea Institute of Oceanology, Academia Sinica, 164 West Xingang Road, Guangzhou, China
- Tang Chong Ti Parasitology Research Laboratory, Xiamen University, Xiamen 361005, China
- Tseng Chenkui Institute of Oceanology, Academia Sinica, 7 Nanhai Road, Qingdao 266071, China
- Wang Huajie South China Sea Institute of Oceanology, Academia Sinica, 164 West Xingang Road, Guangzhou, China
- Wang Wei Marine Products Museum, 2 Lai Yang Road, Qingdao, China
- Wang Yun Zhong Marine Products Museum, 2 Lai Yang Road, Qingdao, China
- Yan Wenxia South China Sea Institute of Oceanology, Academia Sinica, 164 West Xingang Road, Guangzhou, China
- Zhang Ganlin Institute of Soil Science, Academia Sinica, P.O. Box 821, Nanjing 210008, China
- Zhang Xiaopu Institute of Soil Science, Academia Sinica, P.O. Box 821, Nanjing 210008, China
- Zheng Lei Institute of Hydrobiology, Jinan University, Guangzhou 510632, China
- Zhou Hong Marine Products Museum, 2 Lai Yang Road, Qingdao, China
- Zhuang Tiecheng Department of Biology, Xiamen University, Xiamen, China
- Denmark**
- K.R. Jensen Zoological Museum, Universitetsparken 15, DK-2100 Copenhagen, Denmark
- J. Knudsen Zoological Museum, Universitetsparken 15, DK-2100 Copenhagen, Denmark
- Hong Kong**
- Ang Put O Department of Biology, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong
- G.R. Blackmore The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- J.W. Bradford Department of Architecture, The University of Hong Kong, Pokfulam Road, Hong Kong
- Chan King The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- Chan Kwok Kan The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- Chan Yiu Keung Agriculture and Fisheries Department, Canton Road Government Offices, 393 Canton Road, Kowloon, Hong Kong
- R.H.Y. Cheung Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong

- S.G. Cheung Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- Chu Chun Wa Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- Chu Ka Hou Marine Science Laboratory, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong
- T.H. Clark The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- A.S. Cornish The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- M.D. Dickman Department of Ecology and Biodiversity, The University of Hong Kong, Pokfulam Road, Hong Kong
- Fang Zhan Qiang Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- T.C.W. Fong The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- T.L. Glenwright Department of Ecology and Biodiversity, The University of Hong Kong, Pokfulam Road, Hong Kong
- K.D. Harper The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- K.C. Ho Open Learning Institute of Hong Kong, 30 Good Shepherd Street, Homantin, Kowloon, Hong Kong
- I.J. Hodgkiss Department of Ecology and Biodiversity, The University of Hong Kong, Pokfulam Road, Hong Kong
- G. Hodgson Research Centre, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong
- Huang Guangqing Department of Earth Sciences, The University of Hong Kong, Pokfulam Road, Hong Kong
- Huang Qin The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- Richard Huang The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- N. Hutchinson The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- K.D. Hyde Department of Ecology and Biodiversity, The University of Hong Kong, Pokfulam Road, Hong Kong
- T.A. Jefferson Ocean Park Conservation Foundation, Ocean Park, Aberdeen, Hong Kong
- R. Kennish Environmental Resources Management Hong Kong, 6/F., Hecny Tower, 9 Chatham Road, Tsimshatsui, Kowloon, Hong Kong
- K.K.Y. Lam The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong

- P.F. Lau The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- Lau Shun Shun Department of Biology, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong
- E. Leano Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- C.N.W. Lee The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- S.Y. Lee The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- A.W.Y. Leung The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- Leung Kim Fung The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- S.F. Leung Agriculture and Fisheries Department, 100A Shek Pai Wan Road, Aberdeen, Hong Kong
- R.I. Lewis Department of Ecology and Biodiversity, The University of Hong Kong, Hong Kong
- Li Li The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- Li Mingshun The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- Liu Jianhua Centre of Urban Planning and Environmental Management, The University of Hong Kong, Pokfulam Road, Hong Kong
- Stephanie Ma Environmental Protection Department, Water Policy and Planning Group, 24/F., Southorn Centre, Wanchai, Hong Kong
- Y.M. Mak Department of Ecology and Biodiversity, The University of Hong Kong, Pokfulam Road, Hong Kong
- S. McChesney Binnie Consultants Ltd., 11/F., New Town Tower, Pak Hok Ting Street, Shatin, New Territories, Hong Kong
- D. McCorry The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- B. Morton The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- S. Nicholson The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- E.C.M. Parsons The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- L.J. Porter The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- J. Ruxton World Wide Fund for Nature Hong Kong, 1 Tramway Path, Central, Hong Kong
- Y.J. Sadovy Department of Ecology and Biodiversity, The University of Hong Kong, Pokfulam, Hong Kong

- P.K.S. Shin Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- K.Y. Siu Department of Zoology, The University of Hong Kong, Hong Kong
- N.F.Y. Tam Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- Tam Tze Wai Biology Department, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong
- W.S.M. Tang The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong
- L.L.P. Vrijmoed Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- G.A. Williams Department of Ecology and Biodiversity, The University of Hong Kong, Pokfulam, Hong Kong
- K.D. Wilson Agriculture and Fisheries Department, Canton Road Government Offices, 393 Canton Road, Kowloon, Hong Kong
- A.S.M. Wong Open Learning Institute of Hong Kong, 30 Good Shepherd Street, Homantin, Kowloon, Hong Kong
- Wong Cheuk Kee Agriculture and Fisheries Department, Canton Road Government Offices, 393 Canton Road, Kowloon, Hong Kong
- J.M.K. Wong Sports Diver Journal, 13/F, Park Haven Commercial Building, 18 Hillwood Road, Tsimshatsui, Kowloon, Hong Kong
- P.P.S. Wong Agriculture and Fisheries Department, Canton Road Government Offices, 393 Canton Road, Kowloon, Hong Kong
- R.S.S. Wu Department of Biology and Chemistry, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong
- Xing Jun Department of Biology, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong
- E.P.M. Yau Binnie Consultants Ltd., 11/F., New Town Tower, Pak Hok Ting Street, Shatin, New Territories, Hong Kong
- India**
- B. Bala Department of Zoology, University of Calcutta, Calcutta, India
- Philippines**
- P.M. Aliño Marine Science Institute, University of the Philippines, P O Box 1, Diliman, Quezon City 1101, Philippines
- R.B. Balena P.O. Box 249, Iloilo City 5000, Philippines
- S. Curran Tambuyog, Taytay, Palawan, Philippines

- T.U. Dacles Marine Biology Section, University of San Carlos,
Talamban, Cebu City, Philippines
- E.D. Gomez Marine Science Institute, University of the Philippines,
Diliman, Quezon City 1101, Philippines
- M.C. Maglasang Marine Biology Section, University of San Carlos,
Talamban, Cebu City, Philippines
- P.P. Milan Program on Applied Tropical Ecology, Visayas State
College of Agriculture, Baybay, Leyte 6521,
Philippines
- C.L. Nañola Marine Science Institute, University of the Philippines,
P.O. Box 1, Diliman, Quezon City 1101, Philippines
- M. Nightingale P.O. Box 2440, Q.C. Central Post Office, 1164, Quezon
City, Philippines
- M.G. Pajaro Haribon Foundation for the Conservation of Natural
Resources, 340 Villamor, San Juan, Metro Manila,
Philippines
- N.C. Perante Haribon Foundation for the Conservation of Natural
Resources, 340 Villamor, San Juan, Metro Manila,
Philippines
- J.H. Primavera SEAFDEC Aquaculture Department, Box 256, Iloilo City
5000, Philippines
- M.C.G. Rañola Marine Science Institute, University of the Philippines,
P.O. Box 1, Diliman, Quezon City 1101, Philippines
- R.B. Sadaba Division of Biological Science, University of Philippines
in the Visayas, Miag-AO, Iloilo, Philippines
- S. Schoppe Visca GTE Ecology Programme, Visca Baybay, Leyte
6521-A, Philippines
- R. Seronay Visca GTE Ecology Programme, Visca Baybay, Leyte
6521-A, Philippines
- Portugal**
- A.M.F. Martins Department of Biology, University of the Azores, PT-
9502 Ponta Delgada, Sao Miguel, Azores, Portugal
- Singapore**
- B.P.L. Goh School of Biological Sciences, The National University
of Singapore, 10 Kent Ridge Crescent, Singapore
119260
- K.P.P. Tun School of Biological Sciences, The National University
of Singapore, 10 Kent Ridge Crescent, Singapore
119260
- Taiwan**
- Mok Hin Kiu Institute of Marine Biology, National Sun Yat-Sen
University, Kaohsiung, Taiwan
- Thailand**
- S. Sudara Department of Marine Science, Chulalongkorn
University, Bangkok 10330, Thailand
- United Kingdom**
- R.N. Bamber Fawley Aquatic Research Laboratories, Marine and
Freshwater Biology Unit, Fawley, Southampton,
Hampshire SO45 1TW, U.K.

E. Glover	Department of Zoology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.
J.D. Taylor	Department of Zoology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.
U.S.A.	
A. Alcivar-Warren	Tufts University, School of Veterinary Medicine, Peabody Pavilion, 200 Westboro Road, North Grafton, MA 01536, U.S.A.
R.M. Anand	School of Agribusiness and Resource Management, Arizona State University, Tempe, U.S.A.
S. Maynard	Marine Option Programme, School of Ocean and Earth Sciences and Technology, University of Hawaii at Manoa, 1000 Pope Road, MSB 229, Honolulu, HI 96822, Hawaii, U.S.A.
Vietnam	
Nguyen Huu Phung	Department of Marine Living Resources, Institute of Oceanography, Nha Trang, Vietnam
Nguyen Van Long	Department of Marine Living Resources, Institute of Oceanography, Nha Trang, Vietnam
Truong Si Ky	Department of Marine Living Resources, Institute of Oceanography, Nha Trang, Vietnam
Vo Si Tuan	Department of Marine Living Resources, Institute of Oceanography, Nha Trang, Vietnam