

Bibliography on Indo-Pacific Red Tides

**J.L. Maclean
and
Rosalinda M. Temprosa**

1989

**INTERNATIONAL CENTER FOR LIVING AQUATIC RESOURCES MANAGEMENT
Manila, Philippines**

Bibliography on Indo-Pacific Red Tides

**J.L. MACLEAN
and
ROSALINDA M. TEMPROSA**

**Published by the International Center for Living
Aquatic Resources Management, MC P.O. Box 1501,
Makati, Metro Manila 1299, Philippines**

**This work was carried out with the aid of a grant
from the International Development Research Centre,
Ottawa, Canada**

1989

Printed in Manila, Philippines

**J.L. Maclean and R.M. Temprosa. 1989. Bibliography on
Indo-Pacific red tides. ICLARM Bibliographies 8, 23 p.
International Center for Living Aquatic Resources
Management, Manila, Philippines.**

**ISSN 0115-5997
ISBN 971-1022-59-1**

ICLARM Contribution No. 527.

CONTENTS

Preface	iv
Document Listing	1
Indexes : Author	18
Geographic	20
Subject	21
Taxonomic	22

PREFACE

Red tides, especially of the dinoflagellate *Pyrodinium bahamense* var. *compressa*, have been increasing in frequency and have been spreading around the central Indo-Pacific region. This special bibliography was prepared in response to the information needs of scientists and researchers working on red tides in this region. It was also intended as an ICLARM contribution to the Management and Training Workshop on *Pyrodinium* Red Tides in Brunei Darussalam, 23-30 May 1989.

Entries in this bibliography are arranged by their computerized Master File Number (MFN). Indexes (author, geographic, subject and taxonomic) are also provided to facilitate easy access to the list.

The reference materials used in compiling this bibliography are: *Aquatic Sciences and Fisheries Thesaurus*: descriptors used in FAO's Aquatic Sciences and Fisheries Information System; *Aquaculture Thesaurus*: descriptors used in the USA National Aquaculture Information System; and the *Library of Congress Subject Headings*.

Photocopies of items in this bibliography are available at US\$0.10 per page including postage from the ICLARM library. Payment in cash, UNESCO coupon or check from a US-based bank is acceptable made payable to ICLARM.

Users of this bibliography are encouraged to send additional material or references for incorporation in the red tide database, held in the ICLARM library.

The bibliography was produced using the micro CDS/ISIS system software package developed by UNESCO. Copies of the database are available on diskette on request. Price is US\$10 for an airmailed diskette. Send international money order, bank draft or check from a USA branch of your bank.

J.L. Maclean and R.M. Temprosa
Information Program, ICLARM
14 April 1989

DOCUMENT LISTING

- 001 - **Distribution of some dinoflagellates along the northern coast of Java.** Adnan, Q. 1985. In Proceedings of the red tide workshop held at Cronulla Marine Laboratories, N.S.W., Australia, June 18-20, 1984. Hobart, Tasmania, Australia, CSIRO Marine Laboratories. p.14. [Abstract only]
- 002 - **Report on red tide.** Anon. 1980. Sabah, Malaysia, Fisheries Dept. 2 p.
- 003 - **A red tide in Brunel's coastal waters.** Beales, R.W. 1976. Brunei Mus. J. 3(4):167-182.
- 004 - **Update report on the green mussel culture project in Western Samoa.** Bell, L.A.J.; Albert, E.J.; Schuster, J. 1983. SPC Fish. Newsl. (26):24-28.
- 005 - **A report on an outbreak of mussel poisoning in coastal Tamil Nadu, India.** Bhat, R.V. 1981. Hyderabad, India, National Institute of Nutrition, Indian Council of Medical Research. 9 p.
- 006 - **Phytoplankton in the east coast of the Gulf of Thailand.** Bhovichitra, M.; Manowejphan, A. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 64.
- 007 - **Preliminary study of discolouration of sea water in the Gulf of Thailand.** Chareophol, S.R.T.N. 1957. Bangkok, Thailand, Hydrographic Dept., Royal Thai Navy. 8 p.
- 008 - **Water pollution surveys at the Ta-Chin and the Mae Klong estuaries.** Chernbamroong, S.; Tharnbupha, C. 1981. Marine Fisheries Laboratory Report, no. 24/1. Bangkok, Thailand, Dept. of Fisheries, Marine Fisheries Division. 23 p.
- 009 - **Certain roles of *Noctiluca milliaris* in the red tide phenomena.** Chunthraruangthong, S.; Wisessang, S. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 108.
- 010 - **Succession of organisms following *Trichodesmium* phenomenon.** Devassy, V.P.; Bhattathiri, P.M.A.; Qasim, S.Z. 1979. Indian J. Mar. Sci. 8(2):89-93.
- 011 - **Environmental aspects of Pranburi River, Thailand. Dept. of Health.** Environmental Health Division. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 16.
- 012 - **Dinoflagellate blooms (red tide) in Maqueda Bay of western Samar.** Estudillo, R.A. 1984. Tech. Pap. Ser. Bur. Fish. Aquat. Resour. (Philipp.) 7(1):8 p.

- 013 - A preliminary Investigation Into the fisheries development of Tuvalu, vol. II. Fisheries Development Limited. 1976. London, Fisheries Development Ltd.
- 014 - The occurrence of a *Noctiluca scintillans* (Macartney) Induced red tide In Hong Kong. Fung, Y.C.; Trott, L.B. 1973. Limnol. Oceanogr. 18(3):472-476.
- 015 - Structures of two paralytic shellfish toxins, gonyautoxins V and VI, Isolated from a tropical dinoflagellate, *Pyrodinium bahamense* var. *compressa*. Harada, T.; Oshima, Y.; Yasumoto, T. 1982. Agric. Biol. Chem. 46(7):1861-1864.
- 016 - Confirmation of paralytic shellfish toxins In the dinoflagellate *Pyrodinium bahamense* var. *compressa* and bivalves In Palau. Harada, T.; Oshima, Y.; Kamiya, H.; Yasumoto, T. 1982. Bull. Jap. Soc. Sci. Fish. 48(6):821-825.
- 017 - Natural occurrence of decarbamoylsaxitoxin In tropical dinoflagellate and bivalves. Harada, T.; Oshima, Y.; Yasumoto, T. 1983. Agric. Biol. Chem. 47(1):191-193.
- 018 - Marine toxins and other bioactive marine metabolites. Hashimoto, Y. 1979. Tokyo, Japan Scientific Societies Press. 369 p.
- 019 - Red tide, biological aspects of the Philippine case. Hermes, R. 1983. Paper presented at the Scientific Session, Fish Conservation Week, Quezon City, Philippines, 19 October 1983. 24 p.
- 020 - Red tide In the Philippines. Hermes, R. 1983. Fish Tech. News (6):7.
- 021 - A recent bloom of the toxic dinoflagellate *Pyrodinium bahamense* var. *compressa* in central Philippine waters. Hermes, R.; Villoso, E.P. 1983. Fish. Res. J. Philipp. 8(2):1-8.
- 022 - Spatial distribution of *Pyrodinium bahamense* var. *compressa* in Samar sea and associated oceanographic parameters. Hermes, R.; Jamir, T.V.C.; Villoso, E.P. 1985. Univ. Philipp. Fish. J. 1(1):1-12.
- 023 - Observations on the peculiar diurnal migration of a red tide dinophyceae In tropical shallow waters. Horstmann, U. 1980. J. Phycol. 16:481-485.
- 024 - Occurrence of saxitoxin and related toxins In Palauan bivalves. Kamiya, H.; Hashimoto, Y. 1978. Toxicon 16:303-306.
- 025 - Outbreak of paralytic shellfish poisoning In Mangalore, west coast of India. Karunasagar, I.; Gowda, H.S.V.; Subburaj, M.; Venugopal, M.N.; Karunasagar, I. 1984. Curr. Sci. 53(5):247-249.
- 026 - Identification of a calcareous red alga as the primary source of paralytic shellfish toxins In coral reef crabs and gastropods. Kotaki, Y.; Tajiri, M.; Oshima, Y.; Yasumoto, T. 1983. Bull. Jap. Soc. Sci. Fish. 49(2):283-286.
- 027 - Occurrence of red tide In Tolo Harbour. Lam, C. 1982. Paper presented at the Research Seminar "Ecology of the Tolo Harbour Estuary", Hong Kong, 20 February 1982. 8 p.

028 - Anoxic effect of red tides on fish kills In Hong Kong. Lam, C. 1985. In Proceedings of the red tide workshop held at the CSIRO Marine Laboratories, Cronulla, N.S.W., Australia, June 18-20, 1984. Hobart, Tasmania, Australia, CSIRO Marine Laboratories. p. 21. [Abstract only]

029 - Red tide occurrence In Hong Kong. Lam, C. 1985. Proceedings of the red tide workshop held at the CSIRO Marine Laboratories, Cronulla, N.S.W., Australia, June 18-20, 1984. Hobart, Tasmania, Australia, CSIRO Marine Laboratories. p. 12. [Abstract only]

030 - A study on the phytoplankton and red-tide in Deukryang Bay. Lee, J.H.; Huh, H.T. 1983. Bull. Korea Ocean Res. Dev. Inst. 5(1): 21-26.

031 - A survey of mussels on a portion of the Australian coast. Le Messurier, D.H. 1935. Med. J. Aust. 1:490-492.

032 - Red tide and paralytic shellfish poisoning In Papua New Guinea. Maclean, J.L. 1973. Papua New Guinea Agric. J. 24(4):131-138.

033 - Shellfish poisoning In the South Pacific. Maclean, J.L. 1974. SPC Inf. Circ. (54):7 p.

034 - Paralytic shellfish poison in various bivalves, Port Moresby, 1973. Maclean, J.L. 1975. Pac. Sci. 29(4):349-352.

035 - Red tide In the Morobe District of Papua New Guinea. Maclean, J.L. 1975. Pac. Sci. 29(1):7-13.

036 - Red tide and shellfish poisoning. Maclean, J.L. 1976. Harvest 3(4):129-131.

037 - Observations on *Pyrodinium bahamense* Plate, a toxic dinoflagellate In Papua New Guinea. Maclean, J.L. 1977. Limnol. Oceanogr. 22(2):234-254.

038 - Indo-Pacific red tides. Maclean, J.L. 1979. In Taylor, D.L.; Seliger, H.H. (eds.). Toxic dinoflagellate blooms. New York, Elsevier Science Publishing. p. 173-178.

039 - The role of bacteria In dinoflagellate toxicity. Maclean, J.L. 1984. Paper presented at the Red Tide Workshop, CSIRO Marine Laboratories, Cronulla, Australia, 18-20 June 1984. 6 p.

040 - Red tides In Papua New Guinea waters. Maclean, J.L. 1985. Paper presented at the Red Tide Workshop, CSIRO Marine Laboratories, Cronulla, Australia, 18-20 June 18-20, 1984. 13 p.

041 - Discoloration of harbour waters, a reason why. McNeill, F.A.; Livingstone, A. 1926. Aust. Mus. Mag. 2(11):375-376.

042 - The occurrence and toxicity of a red tide caused by *Noctiluca scintillans* (Macartney) Ehrenb., In the coastal waters of Hong Kong. Morton, B.; Twentyman, P.R. 1971. Environ. Res. 4(6):544-557.

043 - When the sea turned red. Nabong-Cabardo, C. 1983. Philipp. Panorama 12(37):12, 14-17.

- 044 - Abstracts. National Research Council of Thailand. Srinakharinwirot University Bangsaen.** 1984. [Abstracts of papers presented at the] Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. 114 p.
- 045 - Study on species composition of phytoplanktons of the Pranburi estuary.** Panichyakarn, V.; Rasmidatta, A.; Wisessang, S.; Tamiyavanich, S. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 26.
- 046 - Case of the paralytic shellfish poisoning at Pran Buri, peoples reaction and understanding of the problem.** Piyakarnchana, T. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 12.
- 047 - Increase in red water phenomena in the upper portion in the Gulf of Thailand.** Piyakarnchana, T.; Ramiyavanich, S. 1979. J. Aquat. Anim. Dis. 2(4):207-215.
- 048 - Development of environmental and socio-economic management plan for the inner sector of the Gulf of Thailand.** Piyakarnchana, T.; Suwannodom, S.; Grandstaff, S.W.; Tamiyavanich, S.; Paphavasit, N.; Horayangkura, P. 1984. Bangkok, Thailand, Southeast Asian Project on Ocean Law, Policy and Management (SEAPOL), Chulalongkorn University. 119 p.
- 049 - Investigation of mollusc poisoning Walai village.** Popei, K.; Mills, C.G.; Rhodes, F.A. 1972. S.S.C.9/72; Doc. Ref. 120/9/72. Papua New Guinea Public Health Dept. 10 p.
- 050 - *Noctiluca millaris* SuriRAY in Jakarta Bay.** Praseno, D.P.; Adnan, Q. 1978. Oseanol. Indones. (11):1-25.
- 051 - Ecology of causative agents in marine food poisoning in Fiji.** Raj, U.; Haq, H.; Yasumoto, T. 1982. Fiji, Institute of Marine Resources, University of the South Pacific.
- 052 - The occurrence of paralytic shellfish toxins in two species of xanthid crab from Suva barrier reef, Fiji Islands.** Raj, U.; Haq, H.; Oshima, Y.; Yasumoto, T. 1983. Toxicon 21(4):547-551.
- 053 - Red tide outbreak of paralytic shellfish poisoning in Sabah.** Roy, R.N. 1977. Med. J. Malays. 31(3):247-251.
- 054 - The effect of pH and temperature to the toxicity of crude extract paralytic shellfish poison.** Saitanu, K. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 20.
- 055 - The toxicity of paralytic shellfish poison to chick and duck.** Saitanu, K. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai

Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 22.

056 - **Paralytic shellfish poison In Prachuap Khiri Khan province and west coast of the upper Gulf of Thailand.** Saitanu, K.; Tamiyavanich, S. 1984. *In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council.* p. 18.

057 - ***Peridinium* (Editorial).** Smith, A.M. 1908. *Philipp. J. Sci. Ser. A* 3(3):187-188.

058 - **Final report on paralytic shellfish poisoning In Sabah, toxicology of seafoods.** Snell, P.J.I. 1977. Sabah, Malaysia, Fisheries Dept. 19 p.

059 - **A redescription of *Pyrodinium bahamense* var. *compressa* (Bohm) stat. nov. from Pacific red tides.** Steidinger, K.A.; Tester, L.S.; Taylor, F.J.R. 1980. *Phycologia* 19(4):329-334.

060 - **Red tide and paralytic shellfish poisoning phenomena in Thailand.** Sudara, S. 1985. *In Proceedings of the red tide workshop held at the CSIRO Marine Laboratories, Cronulla, N.S.W., Australia, June 18-20, 1984. Hobart, Tasmania, Australia, CSIRO Marine Laboratories.* p. 13. [Abstract only]

061 - **Environmental condition and settlement pattern of Pak-Nam Pran communities.** Suwannodom, S. 1984. *In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council.* p. 14.

062 - **What is the so-called "red tide".** Tamesis, P.T. 1977. *Tech. Pap. Ser. Bur. Fish. Aquat. Resour. (Philipp.)* 1(5):9 p.

063 - **Changes In phytoplankton composition and the case of paralytic shellfish poisoning at Pranburi.** Tamiyavanich, S. 1984. *In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council.* p. 24.

064 - **Red coloration In bivalves due to the red tide phenomena.** Tamiyavanich, S. 1984. *In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council.* p. 48.

065 - **The causes and Impacts of the red tide phenomena occurring In the upper Gulf of Thailand.** Tamiyavanich, S. 1984. *In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council.* p. 46.

066 - **Research methodology and analysis on environmental quality along the eastern coastline In the upper Gulf of Thailand.** Tamiyavanich, S. 1984. *In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar*

on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 54.

067 - Environmental impacts on the growth and survival of green mussels.

Tamiyavanich, S.; Rojanavipart, R. 1984. In National Research Council of Thailand.

Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 80.

068 - Dinoflagellates from the International Indian Ocean Expedition. Taylor, F.J.R. 1976. Bibl. Bot. (132):234 p. + 46 plates.

069 - Red tides. White, A.W. 1983. Underwater world factsheets. Fs 41-33/1-1983 E. Ottawa, Ont., Communications Directorate, Dept. of Fisheries and Oceans. 6 p.

070 - Red tide in Taiwan. Tseng, W.Y.; Cheng, T.S. 1976. Bull. Taiwan Fish. Res. Inst. (27):109-117.

071 - On the recent discolouration of the waters of Port Jackson. Whitelegge, T. 1890-91. Rec. Aust. Mus. (1):179-192.

072 - Distribution and abundances of phytoplankton along the eastern coastline in the Gulf of Thailand. Wisessang, S. 1984. In National Research Council of Thailand. Srinakharinwirot University Bangsaen. Abstracts. Seminar on the Water Quality and the Quality of Living Resources in Thai Waters, 3rd, Bangsaen, Thailand, 26-28 March 1984. [Bangkok], Thailand, The Council. p. 66.

073 - Devastation of coral reefs by red tide and their subsequent recovery. Wood, E. n.d. [Unpublished] 22 p.

074 - Report of Working Group on public health aspects of marine food fish poisoning, Suva, Fiji, 23-25 February 1981. World Health Organization. Regional Office for the Western Pacific. 1981. (WP)/PDV/ICP/FSP/002-A. Manila, Regional Office for the Western Pacific, World Health Organization. 69 p.

075 - Report on the training course on fish poisoning, Suva, Fiji, 11-25 January 1983. (WP)/PDV/ICP/FSP/002. Manila, Regional Office for the Western Pacific, World Health Organization. ii, 104 p.

076 - Paralytic shellfish poisoning in Papua New Guinea, 1972. Worth, G.K.; Maclean, J.L.; Price, M.J. 1975. Pac. Sci. 29(1):1-5.

077 - Seafood poisonings in tropical regions. Yasumoto, T.; Raj, U.; Bagnis, R. 1984. Japan, Laboratory of Food Hygiene, Faculty of Agriculture, Tohoku University. 74 p.

078 - Stimulable and spontaneous bioluminescence in the marine dinoflagellates, *Pyrodinium bahamense*, *Gonyaulax polyedra* and *Pyrocystis lunula*. Biggley, W.H.; Swift, E.; Buchanan, R.J.; Seliger, H.H. 1969. J. Gen. Physiol. 54(1):96-122.

079 - Studies at Oyster Bay in Jamaica, West Indies. IV. Observations on the morphology and asexual cycle of *Pyrodinium bahamense* Plate. Buchanan, R.J. 1968. J. Phycol. 4:272-277.

080 - Studies at Oyster Bay in Jamaica, West Indies. V. Qualitative observations on the planktonic algae and protozoa. Buchanan, R.J. 1971. Bull. Mar. Sci. 21(4):914-937.

081 - Studies at Oyster Bay in Jamaica, West Indies. II. Effects of flow patterns and exchange on bioluminescent distributions. Carpenter, J.H.; Seliger, H.H. 1968. J. Mar. Res. 26(3):256-272.

082 - The dinoflagellate red tide in Golfo de Nicoya, Costa Rica. Hargraves, P.E.; Viques, R. 1981. Rev. Biol. Trop. 29(1):31-38.

083 - *In vitro* culture of *Pyrodinium*. McLaughlin, J.J.A.; Zahl, P.A. 1961. Science 134:1878.

084 - Studies at Oyster Bay in Jamaica, West Indies. I. Intensity patterns of bioluminescence in a natural environment. Seliger, H.H.; McElroy, W.D. 1968. J. Mar. Res. 26:244-255.

085 - Mechanisms for the accumulation of high concentrations of dinoflagellates in a bioluminescent bay. Seliger, H.H.; Carpenter, J.H.; Loftus, M.; McElroy, W.D. 1970. Limnol. Oceanogr. 15:234-245.

086 - Bioluminescence and phytoplankton successions in Bahia Fosforescente, Puerto Rico. Seliger, H.H.; Carpenter, J.H.; Loftus, M.; Biggley, W.H.; McElroy, W.D. 1971. Limnol. Oceanogr. 16(4):608-622.

087 - Biological and physical observations on a phosphorescent bay in Falmouth Harbor, Jamaica. W.I. Taylor, W.R.; Seliger, H.H.; Fastie, W.G.; McElroy, W.D. 1966. J. Mar. Res. 24:28-43.

088 - The "hystrichospaerid" resting spore of the dinoflagellate *Pyrodinium bahamense*, Plate, 1906. Wall, D.; Dale, B. 1969. J. Phycol. 5:140-149.

089 - *Pyrodinium phoneus*, n.sp., agent de la toxicite des moules du canal maritime de Bruges a Zeebrugge. Woloszynska, J.; Conrad, W. 1939. Bull. Mus. R. Hist. Nat. Belg. 15(46):1-5.

090 - Distribution of dinoflagellates at Jakarta Bay, Taman Jaya, Banten and Benoa Bay, Bali: a report of an incident of fish poisoning at Eastern Nusa Tenggara. Adnan, Q. 1984. In White, A.W.; Anraku, M.; Hooi, K.K. (eds.). Toxic red tides and shellfish toxicity in Southeast Asia. Proceedings of a Consultative Meeting on Toxic Red Tides and Shellfish Toxicity in Southeast Asia, Singapore, 11-14 September 1984. Singapore, Southeast Asian Fisheries Development Center. p. 25-27.

091 - Red tides due to *Noctiluca scintillans* (Macartney) Ehrenb. and mass mortality of fish in Jakarta Bay. Adnan, Q. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of the International Symposium on Red Tides Biology, Environmental Science and Toxicology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 51-54.

092 - Red tide in Samar? Anon. 1987. Philippine Daily Inquirer. June 7, 1987:6.

093 - Red tide downs 56, spreading. Anon. 1987. Manila Journal. June 30, 1987:7.

- 094 - 'Red tide' now under control. Anon. 1987. Manila Standard. July 18, 1987:11.
- 095 - Manilians 'red tide' fears allayed. Anon. 1987. Expat, Manila. August 15, 1987:1.
- 096 - New evidence on the crown of thorns starfish. Anon. 1988. Reflections (21):4-5.
- 097 - Lethal effects of paralytic shellfish poison (PSP) from *Perna viridis*. Arafiles, L.M.; Morales, J.B.T. 1985. Fish. Res. J. Philipp. 10:16-26.
- 098 - A revision of *Pyrodinium bahamense* Plate (Dinoflagellata). Balech, E. 1985. Rev. Palaeobot. Palynol. 45:17-34.
- 099 - ASEAN/US Cooperative program on marine sciences, Coastal Resources Management Project research, training and information programs and activities 1986-1989. Chua, T.-E.; Agulto, M.A.A. 1987. ASEAN/US CRMP WP 87/13. Manila, ASEAN-US Coastal Resources Management Project, ICLARM. 86 p.
- 100 - The coastal environmental profile of Brunei Darussalam: resource assessment and management issues. Chua, T.-E.; Chou, L.M.; Sadorra, M.M. (eds.). 1987. ICLARM Tech. Pap. (18):193 p.
- 101 - The problems of toxic dinoflagellate blooms in aquaculture. Dale, B.; Baden, D.G.; Bary, B.M.; Edler, L.; Fraga, S.; Jenkinson, I.R.; Hallegraeff, G.M.; Okaichi, T.; Tangen, K.; Taylor, F.J.R.; White, A.W.; Yentsch, C.M.; Yentsch, C.S. 1987. Proceedings of the International Conference and Workshop on the Problems of Toxic Dinoflagellate Blooms in Aquaculture, Sherkin Island, Ireland, 8-13 June 1987. Sherkin Island, Ireland, Sherkin Island Marine Station. 61 p.
- 102 - Suspected causative dinoflagellates of paralytic shellfish poisoning in the Gulf of Thailand. Fukuyo, Y.; Yoshida, K.; Ogata, T.; Ishimaru, T.; Kodama, M.; Pholpunthin, P.; Wisessang, S.; Phanichyakarn, V.; Piyakarnchana, T. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Toxicology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 401-404.
- 103 - Effects of coconut milk and brown sugar on toxins from mussels exposed to *Pyrodinium bahamense* var. *compressa*. Gacutan, R.Q. 1986. In Maclean, J.L.; Dizon, L.B.; Hosillos, L.V. (eds.). The First Asian Fisheries Forum. Proceedings of the First Asian Fisheries Forum, Manila, Philippines, 26-31 May 1986. Manila, Asian Fisheries Society. p. 311-313.
- 104 - Paralytic shellfish poisoning due to *Pyrodinium bahamense* var. *compressa* in Mati, Davao Oriental, Philippines. Gacutan, R.Q.; Tabbu, M.Y.; Aujero, G.J.; Icatlo, F., Jr. 1985. Mar. Biol. 87:223-227.
- 105 - Red tide, the Philippine experience. Gonzales, C.L.; Ordoñez, J.A.; Maala, A.M. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of the International Symposium on Red Tides Biology, Environmental Science and Toxicology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p.43-46.
- 106 - Red tides in the Australasian region. Hallegraeff, G.M. 1987. Rep. CSIRO Mar. Lab. (187):14 p.

107 - Toxic plankton blooms affect shellfish farms. Hallegraeff, G.; Sumner, C. 1986. Aust. Fish. 45(12):15-18.

108 - *Gymnodinium catenatum* blooms and shellfish toxicity in southern Tasmania, Australia. Hallegraeff, G.M.; Stanley, S.O.; Bolch, C.J.; Blackburn, S.I. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Toxicology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 75-78.

109 - Ballast water a danger to aquaculture. Hallegraeff, G.; Bolch, C.; Koerbin, B.; Bryan, J. 1988. Aust. Fish. 47(7):32-34.

110 - Three estuarine Australian dinoflagellates that can produce paralytic shellfish toxins. Hallegraeff, G.M.; Steffensen, D.A.; Wetherbee, R. 1988. J. Plankton Res. 10(3):533-541.

111 - Status of shellfish toxicity and related problems in Malaysia. Jothy, A.A. 1984. In White, A.W.; Anraku, M.; Hooi, K.K. (eds.). Toxic red tides and shellfish toxicity in Southeast Asia. Proceedings of a Consultative Meeting on Toxic Red Tides and Shellfish Toxicity in Southeast Asia, Singapore, 11-14 September 1984. Singapore, Southeast Asian Fisheries Development Center. p. 33-34.

112 - Studies on paralytic shellfish poisoning occurred in the coastal water of Thailand, and its causative dinoflagellate. Kodama, M. (ed.). 1987. Iwate, Japan, School of Fisheries Science, Kitasato University. 96 p.

113 - Occurrences of "red tide" along Johore Straits, Malaysia, resulted in heavy mortality of shrimp. Khoo, E.-W. 1985. World Maricult. Soc. News. 16(1):4.

114 - "Red tide" menace endangers fisheries. Lee, S.J. 1988. Jakarta Post. April 23, 1988.

115 - Remember the "red tide". Loyola, V.C. 1987. Food World 1(6):38, 40.

116 - Indo-Pacific red tide occurrences, 1972-1984. Maclean, J.L. 1984. In White, A.W.; Anraku, M.; Hooi, K.K. (eds.). Toxic red tides and shellfish toxicity in Southeast Asia. Proceedings of a Consultative Meeting on Toxic Red Tides and Shellfish Toxicity in Southeast Asia, Singapore, 11-14 September 1984. Singapore, Southeast Asian Fisheries Development Center. p. 92-98.

117 - A bibliography on toxic red tides and shellfish poisoning related to the Indo-Pacific region. Maclean, J.L.; Temprosa, R.M. (comps.). 1984. In White, A.W.; Anraku, M.; Hooi, K.K. (eds.). Toxic red tides and shellfish toxicity in Southeast Asia. Proceedings of a Consultative Meeting on Toxic Red Tides and Shellfish Toxicity in Southeast Asia. Singapore, Southeast Asian Fisheries Development Center. p. 99-102.

118 - Toxic dinoflagellate blooms in Asia, a growing concern. Maclean, J.L.; White, A.W. 1985. In Anderson, D.M.; White, A.W.; Baden, D.G. (eds.). Toxic dinoflagellates. Proceedings of the Third International Conference on Toxic Dinoflagellates, Brunswick, Canada, 8-12 June 1985. New York, Elsevier Science Publishing. p. 517-520.

119 - A compendium of the responses of bivalve molluscs to toxic dinoflagellates. Gainey, L.F., Jr.; Shumway, S.E. 1988. J. Shellfish Res. 7(4):623-628.

- 120 - **Dinoflagellate *Gymnodinium catenatum* as the source of paralytic shellfish toxins In Tasmanian shellfish.** Oshima, Y.; Hasegawa, M.; Yasumoto, T.; Hallegraeff, G.; Blackburn, S. 1987. *Toxicon* 25(10):1105-1111.
- 121 - **Paralytic shellfish toxins and causative organisms In the tropical Pacific and Tasmanian waters.** Oshima, Y.; Yasumoto, T.; Hallegraeff, G.; Blackburn, S. 1987. In Gopalakrishnakone, P.; Tan, C.K. (eds.). *Progress in venom and toxin research. Proceedings of the First Asia-Pacific Congress on Animal, Plant and Microbial Toxins*, Kent Ridge, Singapore, 24-27 June 1987. Singapore, Faculty of Medicine, National University of Singapore. p. 423-428.
- 122 - **11 reported dead as red tide hits Samar anew.** Rous, A. 1987. *Manila Journal*. June 11, 1987:7.
- 123 - **Samar 'tahong' banned.** Rous, A. 1987. *Manila Journal*. June 24, 1987:14.
- 124 - **Dinoflagellate toxins in shellfishes along the coast of Karnataka.** Segar, K.; Karunasagar, I.; Karunasagar, I. 1988. In Mohan Joseph, M. (ed.). *The First Indian fisheries forum. Indian Fisheries Forum*, 1st, Mangalore, Karnataka, India, 4-8 December 1987. Karnataka, India, Asian Fisheries Society, Indian Branch. p. 389-390.
- 125 - **Zonal wind anomalies over the near-equatorial eastern Indian and western Pacific Oceans during the early stages of the 1986-87 ENSO warm event.** Stern, I.; Gutzler, D.S. 1988. *Trop. Atmosphere Newsl.* (44):1-4.
- 126 - **On the life history and ecology of *Hornellia marina* gen. et. sp. nov., (Chloromonadineae), causing green discoloration of the sea, and mortality among marine organisms off the Malabar Coast.** Subrahmanyam, R. 1954. *Indian J. Fish.* 1:182-203.
- 127 - **The occurrence of paralytic shellfish poisoning In Thailand.** Tamiyavanich, S.; Kodama, M.; Fukuyo, Y. 1985. In Anderson, D.M.; White, A.W.; Baden, D.G. (eds.). *Toxic dinoflagellates. Proceedings of the Third International Conference on Toxic Dinoflagellates*, New Brunswick, Canada, 8-12 June 1985. New York, Elsevier Science Publishing. p. 521-524.
- 128 - **Paralytic shellfish poisoning In Singapore.** Tan, C.T.T.; Lee, E.J.D. 1987. In Gopalakrishnakone, P.; Tan, C.K. (eds.). *Progress in venom and toxin research. Proceedings of the First Asia-Pacific Congress on Animal, Plant and Microbial Toxins*, Kent Ridge, Singapore, 24-27 June 1987. Singapore, Faculty of Medicine, National University of Medicine. p. 429-432.
- 129 - ***Pyrodinium bahamense* var. *compressa* blooms In a tropical lagoon.** Tollervey, A.G. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). *Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Toxicology*, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing.
- 130 - **Dinoflagellates In the Australian region. III. Further collections.** Wood, E.J.F. 1963. *Tech. Pap. CSIRO Aust. Div. Fish. Oceanogr.* (17):20 p.
- 131 - **Red tide returns to Bataan.** Rous, A. 1988. *Journal, Manila*. September 24, 1988:1, 6.

132 - Red tide bulletin from Health officials. Anon. 1988. Expat, Manila. 3(46):10.

133 - No new deaths from red tide. Lacson, L.; Micaller, C. 1988. Philippine Star. September 27, 1988:1.

134 - Red tide, ignorance takes its toll. Robles, A.C. 1988. Manila Chronicle. September 25, 1988:9.

135 - Concern aired over 'red tide'. Cagahastian, D. 1988. Manila Bulletin. September 25, 1988:1.

136 - Red tide down in Manila, up in Bataan. Melencio, H. 1988. Philippine Daily Globe. September 24, 1988:1.

137 - The red tide. Villavicencio, V. 1988. Manila Bulletin. September 23, 1988:60.

138 - Red tide scare perils shrimp, prawn exports. Felix, R. 1988. Manila Chronicle. September 23, 1988:17.

139 - Red tide subsiding but alert still on. Floresca, R. 1988. Philippine Star. September 22, 1988:2.

140 - Big fishers hurt by red tide, too. Felix, R. 1988. Manila Chronicle. September 22, 1988:15.

141 - Fisherman's losses from 'red tide' up. Alunan, M.M. 1988. Manila Bulletin. September 22, 1988:31.

142 - Officials eat fish to prove they're safe. Seafood prices plummet in markets due to red tide scare. Melencio, H.; Garcia, A. 1988. Philippine Daily Globe. September 22, 1988:6.

143 - Fishers moan over red tide. Pango, B.A. 1988. Philippine Daily Inquirer. September 22, 1988:8.

144 - News reports blamed for fish scare, prices down. De la Cruz, B. 1988. Philippine Star. September 21, 1988:2.

145 - Fears of sea foods eaters are allayed. Anon. 1988. Manila Bulletin. September 21, 1988:41.

146 - Manila Bay condition dynamic. Batnag, D.; Mendoza, D. 1988. Manila Chronicle. September 20, 1988:8.

147 - Red tide being monitored in Zambales. Nozuelo, R.M. 1988. Manila Times. September 19, 1988:2.

148 - Red tide worsens with red tape. Giron, T.V. 1988. Manila Chronicle. September 19, 1988:11.

149 - What you should know about the Red Tide. Philippine Council for Aquatic and Marine Research and Development. 1988. Journal, Manila. September 18, 1988:14.

- 150 - **Red tide, traders ask more tests.** Ordoñez, L. 1988. Manila Standard. September 17, 1988:1.
- 151 - **Total ban on shellfish proposed.** Galapate, D. 1988. Manila Times. September 17, 1988:1.
- 152 - **Red tide poisons 7 more in Las Piñas.** Macabuhay, M. 1988. Philippine Star. September 17, 1988:1.
- 153 - **Combatting red tide.** Anon. 1988. Manila Times. September 17, 1988:3.
- 154 - **Police action on red tide menace deferred.** Crisostomo, M. 1988. Philippine Daily Globe. September 17, 1988:5.
- 155 - **Red tide toll mounts.** Castro, E. 1988. Manila Bulletin. September 17, 1988:7.
- 156 - **Red tide not destroyed by cooking.** Anon. 1988. Journal, Manila. September 16, 1988:1.
- 157 - **Manila Bay fishermen seeking aid.** Anon. 1988. Philippine Daily Inquirer. September 16, 1988:8.
- 158 - **'Tahong' vendors comply with health dep't. order.** Sison, J. 1988. Philippine Daily Globe. September 16, 1988:7.
- 159 - **Red tide areas in Metro listed.** Anon. 1988. Manila Chronicle. September 16, 1988:7.
- 160 - **Red tide situation worsens in 5 areas.** Ordoñez, L.G. 1988. Manila Standard. September 16, 1988:7.
- 161 - **Red tide kills 2 more, affected areas studied.** Macabuhay, M.; Yao, M.; Aglay, D. 1988. Philippine Star. September 15, 1988:1.
- 162 - **The red scare is upon us once again.** Fernandez, R.A. 1988. Manila Times. September 15, 1988:15.
- 163 - **Metro shellfish sellers face arrest, even one heavily contaminated shellfish can be fatal-DOH.** Crisostomo, M. 1988. Philippine Daily Globe. September 15, 1988:2.
- 164 - **Red tide menace in Manila Bay to last 8-9 months?** Anon. 1988. Manila Chronicle. September 15, 1988:8.
- 165 - **Manila Bay Infected by red tides, tests show: seafood from area dangerous.** Crisostomo, M. 1988. Philippine Daily Globe. September 14, 1988:6.
- 166 - **Red tide alert sends prices of fish plunging.** Batnag, D.; Mendoza, D. 1988. Manila Chronicle. September 14, 1988:6.
- 167 - **Red tide now over entire Manila Bay.** Ordoñez, L.G.; Dizon, R. 1988. Manila Standard. September 14, 1988:1.
- 168 - **Public warned against shellfish.** Castro, E. 1988. Manila Bulletin. September 14, 1988:1.

- 169 - Beware of those 'tahong' from Cavite. Ordoñez, L. 1988. Manila Standard. September 13, 1988:5.
- 170 - Red tide may cause P60M bay area loss. Anon. 1988. Business World, Manila. September 13, 1988:3.
- 171 - Red tide alert in Metro, 5 deaths reported, more than 100 taken ill. Batnag, D.; Mendoza, D. 1988. Manila Chronicle. September 13, 1988:1.
- 172 - Red tide kills 3, hospitalizes 72, Manila Bay affected, 'tahong' contaminated. Jaleco, R.; Formento, B.; Coles, B.; Camposano, G. 1988. Evening Star, Manila. September 12, 1988:1-2.
- 173 - Red tide kills boy, downs 7. Anon. 1988. Manila Times. September 12, 1988:1.
- 174 - "Red tide" victims get RC aid. Anon. 1988. Manila Bulletin. September 9, 1988:5.
- 175 - Bataan residents told, refrain from eating shells. Supnud, M.T. 1988. Sunday Times, Manila. September 4, 1988:2.
- 176 - 'Red tide' behind Bataan poisoning. Castro, E. 1988. Manila Bulletin. August 30, 1988:8.
- 177 - 1 dies, 14 down in 'tahong' poisoning. Anon. 1988. Philippine Daily Globe. August 30, 1988:3.
- 178 - Seafood kills 3, downs 31. Retraccion, G. 1988. Manila Chronicle. August 24, 1988:3.
- 179 - Red tide kills fish 'worth \$14M'. Ngai, P.; Leung, G.; Cheu, G. 1987. Hong Kong Standard. July 30, 1987.
- 180 - Fish farmers get blame for losses. Anon. 1987. Hong Kong Standard. July 31, 1987:4.
- 181 - Progress In venom and toxin research. Gopalakrishnakone, P.; Tan, C.K. (eds.). 1987. Proceedings of the First Asia-Pacific Congress on Animal, Plant and Microbial Toxins, Singapore, 24-27 June 1987. Singapore, Faculty of Medicine, National University of Singapore. xii, 747 p.
- 182 - Are red tides correlated to spring-neap tidal mixing? Use of a historical record to test mechanisms responsible for dinoflagellate blooms. Balch, W.M. 1986. In Bowman, J.; Yentsch, M.; Peterson, W.T. (eds.). Tidal mixing and plankton dynamics. Lecture notes on coastal and estuarine studies, v.17. Heidelberg, Germany, Springer-Verlag. p.193-223.
- 183 - Occurrence of paralytic shellfish poison in shellfishes in Karnataka. Final report (1984-1986). Karunasagar, I.; Karunasagar, I.; Venugopal, M.N.; Segar, K. [198?]. Mangalore, India, Dept. of Fishery Microbiology, University of Agricultural Sciences, College of Fisheries. 29 p.
- 184 - Paralytic shellfish toxins in tropical waters. Oshima, Y.; Kotaki, Y.; Harada, T.; Yasumoto, T. 1984. In Ragelis, E.P. (ed.). Seafood toxins. ACS symposium series, 262. Washington, D.C., American Chemical Society. p. 161-170.

- 185 - **Mga dapat malaman tungkol sa "Red tide".** Philippine Council for Aquatic and Marine Research and Development. 1988. PCAMRD Balitang Mangingisda. Oktubre 1988:8 p.
- 186 - **Blooms and gloom.** Beckmann, R. 1988. Ecos 57:19-23.
- 187 - **Paralytic shellfish toxicity in shellfish in Hong Kong.** Lam, C.W.Y.; Kodama, M.; Chan, D.K.O.; Ogata, T.; Sato, S.; Ho, K.C. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 12-14 November 1987. New York, Elsevier Science Publishing. p. 453-458.
- 188 - **Occurrence of *Pyrodinium bahamense* in Venezuela coastal waters.** Reyes-Vasquez, G.; Ferraz-Reyes, E. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing.
- 189 - **Incidence of PSP and DSP in shellfish along the coast of Karnataka State (India).** Karunasagar, I.; Segar, K.; Karunasagar, I. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 59-62.
- 190 - **Potentially toxic dinoflagellates in shellfish harvesting areas along the coast of Karnataka State (India).** Karunasagar, I.; Segar, K.; Karunasagar, I. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 63-66.
- 191 - **Paralytic shellfish poisoning, an outbreak in Guatemala.** Hall, S. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing.
- 192 - **Periodic blooms of the silicoflagellate, *Dictyocha perlaevis* in a subtropical Inlet, Kaneohe Bay, Hawaii, USA.** Taguchi, S.; Laws, E.A. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 67-70.
- 193 - **Red tide discoloration and its impact on fisheries.** Devassy, V.P. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 55-58.
- 194 - **Red tides in Tolo Harbour, Hong Kong.** Lam, C.W.Y.; Ho, K.C. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and

toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 47-50.

195 - Occurrences of red tide in the Gulf of Thailand. Suvapepun, S. 1989. In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987. New York, Elsevier Science Publishing. p. 39-42.

196 - Red tide by *Alexandrium minutum* in South Australia. Hallegraeff, G.M.; Bolch, C.J.; Blackburn, I.S.; Steffensen, D.A.; Stanley, S.O. 1988. Red Tide Newsl. 1(1):3.

197 - Red tides in Hong Kong, problems and management strategy with special reference to the mariculture industry. Wong, P.S.; Wu, R.S.S. 1987. J. Shoreline Manage. 3(1):1-21.

198 - Fishermen see red ... but no cause for alarm. Anon. 1987. Hong Kong Standard. January 22, 1987:2.

199 - Family faces end of an era. Anon. 1987. Hong Kong Standard. August 3, 1987:16.

200 - Region blamed for fish losses. Anon. 1987. Hong Kong Standard. August 3, 1987:16.

201 - Farmers fight for red tide pay-out. Ngai, P.; Cheung, G. 1987. Hong Kong Standard. August 3, 1987:16.

202 - On the occurrence of 'green tide' in the Arabian Sea off Mangalore. Katti, R.J.; Gupta, T.R.C.; Shetty, H.P.C. 1988. Curr. Sci. 57(7):380-381.

203 - Manila Bay shellfish unsafe. Anon. 1988. Journal, Manila. November 11, 1988:3.

204 - Two measures up to lick Bataan red tide menace. Crisostomo, M. 1988. Philippine Daily Globe. November 9, 1988:2.

205 - Red tide alert still up - DOH. Acosta, O.M. 1988. Philippine Daily Inquirer. November 7, 1988:1.

206 - Health dep't. lifts shellfish ban. Galapate, D. 1988. Sunday Times, Manila. November 6, 1988:1.

207 - Most shellfish now free from red tide. Galapate, D. 1988. Manila Times. November 3, 1988:1.

208 - Red tide ebbs but shellfish still unsafe. Anon. 1988. Philippine Daily Inquirer. October 28, 1988:1.

209 - Agriculture dep't. bans 'tahong' from E. Visayas. Lazaro, D. 1988. Manila Standard. October 16, 1988:9.

210 - Health official minimizes threat from red tide. Owen, T. 1988. Journal, Manila. October 14, 1988:3.

- 211 - **The status of red tide research, with particular reference to South East Asian waters.** Taylor, F.J.R. 1987? *In Proceedings of ASEAN-Canada Workshop on Pollution and Other Ecological Factors in Relation to Living Marine Resources, Phuket, Thailand, 23-26 June 1987.* Thailand, Office of the National Environment Board. p.581-592.
- 212 - **'Green water phenomenon' In the Arabia Sea off Mangalore.** Shetty, H.P.C.; Gupta, T.R.C.; Katti, R.J. 1988. *In Mohan Joseph, M. (ed.). The first Indian Fisheries Forum, proceedings. Indian Fisheries Forum, 1st, Mangalore, India, 4-8 December 1987. Karnataka, India, Asian Fisheries Society, Indian Branch.* p. 339-346.
- 213 - **Toxic dinoflagellate, implication in shellfish poisoning.** Fukuyo, Y. (ed.). 1985. 125 p.
- 214 - **Deep sea fishing industry suffers, after 'red tide'.** Anon. 1988. Manila Bulletin. December 7, 1988:25.
- 215 - **Report of red tide in Visayas doubted.** Anon. 1988. Philippine Star. December 17, 1988:2.
- 216 - **Manila Bay now free of red tide.** Batnag, D. 1988. Manila Chronicle. December 6, 1988:6.
- 217 - **BFAR, red tide menace may recur.** Crisostomo, M. 1988. Philippine Daily Globe. December 7, 1988:5.
- 218 - **Shellfish now safe but ban not yet lifted.** Crisostomo, M. 1988. Philippine Daily Globe. December 6, 1988:6.
- 219 - **Ban on shellfish from Manila lifted.** Anon. 1988. Philippine Daily Inquirer. December 7, 1988:4.
- 220 - **Red tide spreads to Leyte waters.** Ferriols, D. 1989. Philippine Star. January 26, 1989:3.
- 221 - **Fishermen pay red tide calamity loans.** Anon. 1989. Philippine Star. January 26, 1989:10.
- 222 - **Methods for modern dinoflagellate cyst studies.** Matsuoka, K.; Fukuyo, Y.; Anderson, D.M. 1989. *In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tide Biology, Environmental Science and Toxicology, Takamatsu, Japan, 10-14 November 1987.* New York, Elsevier Science Publishing. p. 461-479.
- 223 - **A new discovery of cysts of *Pyrodinium bahamense* var. *compressum* from the Samar Sea, Philippines.** Matsuoka, K.; Fukuyo, Y.; Gonzales, C.L. 1989. *In Okaichi, T.; Anderson, D.M.; Nemoto, T. (eds.). Red tides: biology, environmental science and toxicology. Proceedings of International Symposium on Red Tides Biology, Environmental Science and Technology, Takamatsu, Japan, 10-14 November 1987.* New York, Elsevier Science Publishing. p. 301-304.
- 224 - ***Protogonyaulax cohorticula*, a toxic dinoflagellate found in the Gulf of Thailand.** Kodama, M.; Ogata, T.; Fukuyo, Y.; Ishimaru, T.; Wisessang, S.; Saitanu, K.; Panichyakarn, V.; Piyakarnchana, T. 1988. Toxicon 26(8):707-712.

- 225 - **Protogonyaulax (Dinophyceae) In the Gulf of Thailand.** Fukuyo, Y.; Pholpunthin, P.; Yoshida, K. 1988. Bull. Plankton Soc. Japan 35(1):9-20.
- 226 - **Local gov'ts urged to help in campaign vs. 'red tide'.** Peña, E.R. 1989. Manila Bulletin. January 20, 1989:14.
- 227 - **BFAR experts find 'red tide' organism in Capiz sea water.** Anon. 1989. Journal, Manila. January 18, 1989:3.
- 228 - **Fishermen in Iloilo decry red tide scare.** Anon. 1989. Philippine Daily Globe. January 13, 1989:7.
- 229 - **Leyte bay 'dead' due to red tide.** Abrematea, N. 1989. Philippine Star. January 11, 1989:3.
- 230 - **Red tide scare in Negros prevails.** Anon. 1989. Sunday Times, Manila. January 1, 1989:3.
- 231 - **Big fishers not affected.** Tupaz, R. 1988. Manila Times. December 29, 1988:5.
- 232 - **Red tide in Leyte kills 7, downs 18.** Abrematea, N. 1988. Philippine Star. December 28, 1988:3.
- 233 - **Red tide scare, vendors on the red despite safe fishes.** Jabasa, E. 1988. Kapawa News, Manila. December 17-23, 1988:1.
- 234 - **Shellfish ban stays in Leyte, Negros.** Crisostomo, M. 1989. Philippine Daily Globe. January 26, 1989:7.
- 235 - **Red tide in Jakarta Bay in mid-September 1979.** Dahril, T. 1982. Terubuk 8(23):12-21.
- 236 - **Toxic dinoflagellates.** Anderson, D.M.; White, A.W.; Baden, D.G. (eds.). 1985. Proceedings of the Third International Conference on Toxic Dinoflagellates, New Brunswick, Canada, 8-12 June 1985. New York, Elsevier Science Publishing. xv, 561 p.
- 237 - **Proceedings of the red tide workshop held at the CSIRO Marine Laboratories, Cronulla, N.S.W., Australia, June 18-20 1984.** 1985. Hobart, Tasmania, Australia, CSIRO Marine Laboratories. [38p.].
- 238 - **'Red tide' ban on shellfish is still in effect.** Principe, L. 1989. Manila Bulletin. March 14, 1989:8.
- 239 - **Red tide "poisons" Cavite fisherfolk.** Alvior, M.S. 1988. Manila Bulletin. November 25, 1988:45.
- 240 - **Red tide tales not wild at all.** Anon. 1989. News Express, Manila. January 18-24, 1989:4.
- 241 - **Ecologist bares "red tide" areas.** Pendon, L.C. 1989. Journal, Manila. February 2, 1989:3.
- 242 - **Red tide threatens other bodies of water in Asia.** Crisostomo, M. 1989. Philippine Daily Globe. February 7, 1989:7.

243 - Toxic algal blooms, hazards to shellfish and Industry. Shumway, S.E. (ed.).
 1988. Proceedings of a special symposium held during the annual meeting of the
 National Shellfisheries Association, Halifax, Nova Scotia, Canada, June 1987. J. Shellfish
 Res. 7(4):705 p.

AUTHOR INDEX

- Abrematea, N. 229, 232
- Acosta, O.M. 205
- Adnan, Q. 001, 050, 090, 091
- Aglay, D. 161
- Agulto, M.A.A. 099
- Albert, E.J. 004
- Alunan, M.M. 141
- Alvior, M.S. 239
- Anderson, D.M. 222, 236
- Anon. 002, 092, 093, 094, 095, 096,
 132, 145, 153, 156, 157, 159, 164,
 170, 173, 174, 177, 180, 198, 199,
 200, 203, 208, 214, 215, 219, 221,
 227, 228, 230, 240
- Arafiles, L.M. 097
- Aujero, G.J. 104
- Baden, D.G. 101, 236
- Bagnis, R. 077
- Balch, W.M. 182
- Balech, E. 098
- Bary, B.M. 101
- Batnag, D. 146, 166, 171, 216
- Beales, R.W. 003
- Beckmann, R. 186
- Bell, L.A.J. 004
- Bhat, R.V. 005
- Bhattathiri, P.M.A. 010
- Bhovichitra, M. 006
- Biggley, W.H. 078, 086
- Blackburn, S.I. 108, 120, 121, 196
- Bolch, C.J. 108, 109, 196
- Bryan, J. 109
- Buchanan, R.J. 078, 079, 080
- Cagahastian, D. 135
- Camposano, G. 172
- Carpenter, J.H. 081, 085, 086
- Castro, E. 155, 168, 176
- Chan, D.K.O. 187
- Chareophol, S.R.T.N. 007
- Cheng, T.S. 070
- Chernbamroong, S. 008
- Cheu, G. 179
- Cheung, G. 201
- Chou, L.M. 100
- Chua, T.-E. 099, 100
- Chunthraruangthong, S. 009
- Coles, B. 172
- Conrad, W. 089
- Crisostomo, M. 154, 163, 165, 204,
 217, 218, 234, 242
- Dahril, T. 235
- Dale, B. 088, 101
- De la Cruz, B. 144
- Devassy, V.P. 010, 193
- Dizon, R. 167
- Edler, L. 101
- Estudillo, R.A. 012
- Fastie, W.G. 087
- Felix, R. 138, 140
- Fernandez, R.A. 162
- Ferraz-Reyes, E. 188
- Ferriols, D. 220
- Fisheries Development Limited 013
- Floresca, R. 139
- Formento, B. 172
- Fraga, S. 101
- Fukuyo, Y. 102, 127, 213, 222, 223,
 224, 225
- Fung, Y.C. 014
- Gacutan, R.Q. 103, 104
- Gainey, L.F., Jr. 119
- Galapate, D. 151, 206, 207
- Garcia, A. 142
- Giron, T.V. 148
- Gonzales, C.L. 105, 223
- Gopalakrishnakone, P. 181
- Gowda, H.S.V. 025
- Grandstaff, S.W. 048

- Gupta, T.R.C. 202, 212
 Gutzler, D.S. 125
- Hall, S. 191
 Hallegraeff, G.M. 101, 106, 107, 108, 109, 110, 120, 121, 196
 Haq, H. 051, 052
 Harada, T. 015, 016, 017, 184
 Hargraves, P.E. 082
 Hasegawa, M. 120
 Hashimoto, Y. 018, 024
 Hermes, R. 019, 020, 021, 022
 Ho, K.C. 187, 194
 Horayangkura, P. 048
 Horstmann, U. 023
 Huh, H.T. 030
- Icatlo, F., Jr. 104
 Ishimaru, T. 102, 224
- Jabasa, E. 233
 Jaleco, R. 172
 Jamir, T.V.C. 022
 Jenkinson, I.R. 101
 Jothy, A.A. 111
- Kamiya, H. 016, 024
 Karunasagar, I. 025, 124, 183, 189, 190
 Katti, R.J. 202, 212
 Khoo, E.-W. 113
 Kodama, M. 102, 112, 127, 187, 224
 Koerbin, B. 109
 Kotaki, Y. 026, 184
- Lacson, L. 133
 Lam, C. 027, 028, 029, 187, 194
 Laws, E.A. 192
 Lazaro, D. 209
 Le Messurier, D.H. 031
 Lee, E.J.D. 128
 Lee, J.H. 030
 Lee, S.J. 114
 Leung, G. 179
 Livingstone, A. 041
 Loftus, M. 085, 086
 Loyola, V.C. 115
- Maala, A.M. 105
 Macabuhay, M. 152, 161
 Maclean, J.L. 032, 033, 034, 035, 036, 037, 038, 039, 040, 076, 116, 117, 118
- Manowejghan, A. 006
 Matsuoka, K. 222, 223
 McElroy, W.D. 084, 085, 086, 087
 McLaughlin, J.J.A. 083
 McNeill, F.A. 041
 Melencio, H. 136, 142
 Mendoza, D. 146, 166, 171
 Micaller, C. 133
 Mills, C.G. 049
 Morales, J.B.T. 097
 Morton, B. 042
- Nabong-Cabardo, C. 043
 National Research Council of Thailand 044
 Ngai, P. 179, 201
 Nozuelo, R.M. 147
- Ogata, T. 102, 187, 224
 Okalchi, T. 101
 Ordóñez, J.A. 105
 Ordóñez, L.G. 150, 160, 167, 169
 Oshima, Y. 015, 016, 017, 026, 052, 120, 121, 184
 Owen, T. 210
- Pango, B.A. 143
 Panichyakarn, V. 045, 224
 Paphavasit, N. 048
 Peña, E.R. 226
 Pendon, L.C. 241
 Phanichyakarn, V. 102
 Philippine Council for Aquatic and Marine Research and Development 149, 185
 Pholpunthin, P. 102, 225
 Piyakarnchana, T. 046, 047, 048, 102, 224
 Popei, K. 049
 Praseno, D.P. 050
 Price, M.J. 076
 Principe, L. 238
- Qasim, S.Z. 010
- Raj, U. 051, 052, 077
 Ramiyavanich, S. 047
 Rasmidatta, A. 045
 Retraccion, G. 178
 Reyes-Vasquez, G. 188
 Rhodes, F.A. 049
 Robles, A.C. 134
 Rojanavipart, R. 067

- Rous, A. 122, 123, 131
 Roy, R.N. 053
 Sadorra, M.M. 100
 Saitanu, K. 054, 055, 056, 224
 Sato, S. 187
 Schuster, J. 004
 Segar, K. 124, 183, 189, 190
 Seliger, H.H. 078, 081, 084, 085, 086,
 087
 Shumway, S.E. 119, 243
 Shetty, H.P.C. 202, 212
 Sison, J. 158
 Smith, A.M. 057
 Snell, P.J.I. 058
 Srinakharinwirot University Bangsaen
 044
 Stanley, S.O. 108, 196
 Steffensen, D.A. 110, 196
 Steidinger, K.A. 059
 Stern, I. 125
 Subburaj, M. 025
 Subrahmanyam, R. 126
 Sudara, S. 060
 Sumner, C. 107
 Supnad, M.T. 175
 Suvapepun, S. 195
 Suwannodom, S. 048, 061
 Swift, E. 078

 Tabbu, M.Y. 104
 Taguchi, S. 192
 Tajiri, M. 026
 Tamesis, P.T. 062
 Tamiyavanich, S. 045, 048, 056, 063,
 064, 065, 066, 067, 127
 Tan, C.K. 181
 Tan, C.T.T. 128
 Tangen, K. 101
 Taylor, F.J.R. 059, 068, 101, 211
 Taylor, W.R. 087
 Temprosa, R.M. 117

 Tester, L.S. 059
 Thailand. Dept. of Health. Environmental Health Division 011
 Thaïnbupha, C. 008
 Tollervey, A.G. 129
 Trott, L.B. 014
 Tseng, W.Y. 070
 Tupaz, R. 231
 Twentyman, P.R. 042

 Venugopal, M.N. 025, 183
 Villavicencio, V. 137
 Viloso, E.P. 021, 022
 Viques, R. 082

 Wall, D. 088
 Wetherbee, R. 110
 White, A.W. 069, 101, 118, 236
 Whitelegge, T. 071
 Wisessang, S. 009, 045, 072, 102,
 224
 Woloszynska, J. 089
 Wong, P.S. 197
 Wood, E. 073
 Wood, E.J.F. 130
 World Health Organization. Regional
 Office for the Western Pacific 074,
 075
 Worth, G.K. 076
 Wu, R.S.S. 197

 Yao, M. 161
 Yasumoto, T. 015, 016, 017, 026,
 051, 052, 077, 120, 121, 184
 Yentsch, C.M. 101
 Yentsch, C.S. 101
 Yoshida, K. 102, 225

 Zahl, P.A. 083

GEOGRAPHIC INDEX

- Arabian Sea 202, 212
 ASEAN 099
 Asia 118, 181, 242
 Australia 031, 041, 071, 106, 107,
 108, 109, 110, 120, 121, 130, 186,
 196, 237

 Brunei Darussalam 003, 100
 Costa Rica 082
 Fiji 051, 052

- Great Barrier Reef 096
 Guatemala 191
- Hong Kong 014, 027, 028, 029, 042,
 179, 180, 187, 194, 197, 198, 199,
 200, 201
- India 005, 025, 124, 183, 189, 190,
 193, 202, 212
- Indian Ocean 068
- Indo-Pacific 038, 116, 117
- Indonesia 001, 050, 090, 091, 235
- Jamaica 079, 080, 081, 084, 085, 087
- Korea, Rep. 030
- Mae-Klong 008
- Malaysia 002, 053, 058, 111, 113
- Oceania 106
- Pacific 059, 121
- Palau Islands 016, 024
- Papua New Guinea 032, 034, 035,
 037, 040, 049, 076
- Philippines 012, 019, 020, 021, 022,
 023, 043, 057, 092, 093, 094, 095,
 103, 104, 105, 115, 122, 123, 131,
 132, 133, 134, 135, 136, 137, 138,
- 139, 140, 141, 142, 143, 144, 145,
 146, 147, 148, 149, 150, 151, 152,
 153, 154, 155, 156, 157, 158, 159,
 160, 161, 162, 163, 164, 165, 166,
 167, 168, 169, 170, 171, 172, 173,
 174, 175, 176, 177, 178, 203, 204,
 205, 206, 207, 208, 209, 210, 215,
 216, 217, 218, 219, 220, 223, 226,
 227, 228, 229, 230, 232, 233, 234,
 238, 239, 240, 241, 242
- Puerto Rico 083, 086
- Sabah 053, 058, 129
- Singapore 128
- South Pacific 033
- Southeast Asia 211
- Taiwan 070
- Thailand 006, 007, 008, 009, 011,
 044, 045, 046, 047, 048, 054, 056,
 060, 061, 063, 064, 065, 066, 067,
 072, 102, 112, 127, 195, 224, 225
- Tuvalu 013
- USA 192
- Venezuela 188
- Western Samoa 004

SUBJECT INDEX

- Alga, red 026
- Anoxic conditions 028
- Aquaculture 101, 107, 109, 197
- Assistance in emergencies 157
- Bacteria 039
- Ballast water 109
- Behavior 119
- Bibliographies 117
- Biological poisons 015, 016, 017,
 018, 024, 026, 034, 039, 052,
 054, 055, 056, 097, 110, 119,
 121, 124, 127, 181, 183, 184,
 190, 222, 223, 224, 225, 227
- Bioluminescence 078, 081, 084,
 085, 086, 087
- Brown sugar 103
- Check lists 045, 080
- Ciguatera 074, 075
- Coastal zone management 099,
 100
- Coconut milk 103
- Conferences 044, 074, 101, 181,
 236, 237, 243
- Coral reefs 073, 096
- Cultures 083
- Currents 081, 087, 182
- Cysts 088, 223
- Detoxification 103
- Diarrhetic shellfish poisoning 189
- Discoloured water 007, 041, 071,
 126, 202, 212
- Diurnal variations 084

- Ecology** 044, 051
- Ecosystems** 096
- Environment profile** 100
- Environmental conditions** 061
- Environmental impact** 061, 067, 114, 193
- Environmental legislation** 048
- Environmental policy** 048
- Environmental protection** 109
- Environmental surveys** 061, 066
- Financing** 221
- Fish poisoning** 028, 031, 033, 049, 052, 057, 091, 108, 113, 183, 189
- Fish prices** 142, 143, 144, 166
- Fisheries** 114, 138, 140, 141, 193, 214, 231, 233
- Fishermen** 157
- Fishery development** 013, 100, 243
- Food poisoning** 051, 074, 077
- Government policy** 226
- Green tide** 202, 212
- Introduced species** 109
- Lethal effects** 097
- Life history** 079, 126
- Marine resources** 044
- Methodology** 066, 222
- Migrations** 023
- Mussels** 004, 031
- Organism morphology** 225
- Paralytic shellfish poisoning** 011, 024, 025, 026, 032, 033, 034, 036, 046, 049, 052, 053, 054, 055, 056, 058, 060, 063, 076, 090, 093, 097, 102, 103, 104, 107, 110, 111, 112, 115, 120, 122, 123, 124, 127, 128, 152, 155, 156, 163, 178, 183, 184, 187, 189, 190, 191, 213, 224, 236
- Phototaxis** 023
- Physiology** 119
- Phytoplankton** 006, 030, 045, 063, 072, 080, 086
- Pollution effects** 109
- Pollution surveys** 011
- Public health** 074, 132, 142, 148, 150, 151, 153, 154, 158, 163, 218, 219, 234, 238, 239
- Resource management** 048, 100
- Seasonal variations** 050
- Social conditions** 048
- Starfish outbreaks** 096
- Taxonomy** 059, 089, 098, 126
- Temperature effects** 054
- Tidal mixing** 182
- Tidal motion** 081
- Toxicity** 042, 054, 213
- Toxicity tests** 026, 031, 055
- Toxin structure** 015
- Toxins, detected** 015, 016, 017, 018, 024, 034, 058, 108, 120, 124, 183
- Training** 075
- Water exchange** 081
- Water pollution** 008, 011, 044
- Water quality** 044, 061, 066

TAXONOMIC INDEX

- Alexandrium catenella* 110
- Alexandrium minutum* 110, 196
- Atergatis floridus* 052
- Ceratium* 063
- Ceratium furca* 008, 030, 065, 195
- Chatostrea echinata* 034

- Dictyocha perlaevis* 192
- Dinophyceae* 225
- Dinophysis* 063, 124
- Dinophysis caudata* 064
- Dinophysis fortii* 064

- Gonyaulax catenella* 054
Gonyaulax polyedra 078
Gonyaulax tamarensis 054
Gymnodinium 063
Gymnodinium catenatum 108, 109,
 110, 120, 121, 186

Hemicystodinium zoharyi 088
Hornellia (= *Chato*) *marina* 126

Jania 026

Modiolus australis 031
Mytilus planulatus 031

Noctiluca 065, 067, 212
Noctiluca miliaris 008, 009, 050, 193,
 202
Noctiluca scintillans 014, 042, 091,
 195

Pedinomonas noctilucae 212
Peridinium 057, 063
Peridinium quinquecorne 023
Perna viridis 097

Pholas orientalis 064
Phyrrrophyta gonyaulax 241
Prorocentrum 124
Protogonyaulax 063, 102, 225
Protogonyaulax cohorticula 224
Pyrocystis lunula 078
Pyrodinium 068, 083, 116, 118
Pyrodinium bahamense 003, 033,
 035, 037, 076, 078, 079, 081, 084,
 085, 086, 087, 088, 098, 188
Pyrodinium bahamense compressa
 015, 016, 017, 021, 022, 059, 103,
 104, 121, 129, 185, 227
Pyrodinium bahamense compressum
 223
Pyrodinium phoneus 089

Skeletonema costatum 030
Spiraulax 068

Trichodesmium 010
Trichodesmium erythraeum 195

Zosimus aeneus 052