

A CURRENT AWARENESS BIBLIOGRAPHY

FOR

IDRC-SUPPORTED FISHERIES PROJECTS



Volume 4, Number 2
June 1980

Compiled by
Deborah Turnbull

TABLE OF CONTENTS

	<u>page</u>
Preparation of this Bibliography	i
Préparation de cette Bibliographie	ii
Preparación de esta Bibliografía	iii
Publications of Interest	iv
Publications d'intérêt	v
Publicaciones de Interés	vi
Bibliography	1
Taxonomic Index	17
Subject Index	18
Publications Order Form	23
La Formule de Commande	24
Orden de Pedido de Publicaciones	25

Preparation of this Bibliography

This indexed bibliography was compiled to assist leaders and staff of IDRC-supported projects in retrieving information relevant to their particular interests. The titles are listed in alphabetical order by authors' names. Taxonomic and subject indexes are provided to ease the retrieval process.

The articles included were obtained as a result of: manual searching of journals, *Aquatic Sciences and Fisheries Abstracts*, *Agrindex* and *Agriasia*, books, and current awareness computer profiles; retrospective searches on specific subjects; and requests of researchers on particular topics.

This bibliography has also been sent to researchers who are associated with IDRC-supported Fisheries projects and to institutions and organizations which are either associated with the IDRC-supported projects or with whom IDRC has a reciprocal publication exchange.

Préparation de Cette Bibliographie

Cette bibliographie classifiée a été établie dans le but d'aider les dirigeants et le personnel des projets subventionnés par le CRDI à retrouver de la documentation ayant rapport avec leurs intérêts particuliers. Les titres sont donnés dans l'ordre alphabétique du nom de l'auteur. Des tables taxonomiques et thématiques sont fournies pour faciliter le processus de recherche.

Les articles qui y figurent ont été obtenus par la suite de recherches manuelles de journaux, de livres, et de profiles d'ordinateur sur la conscience courante; et de demandes de chercheurs sur des thèmes particuliers.

Cette bibliographie a été envoyée également à des chercheurs qui sont associés aux projets des Pêcheries subventionnés par le CRDI et à des institutions et des organisations qui sont ou bien associés aux projets subventionnés par le CRDI ou bien qui maintiennent un échange réciproque de publications avec le CRDI.

Preparación de esta Bibliografía

Esta bibliografía clasificada fue compilada para ayudarles a los líderes y al personal de los proyectos apoyados por C.I.I.D. a recuperar información referente a sus intereses específicos. Se dan los títulos en orden alfabético por apellido del autor. Se proveen índices taxonómicos y de tema para facilitar el proceso de recuperación.

Los artículos incluidos fueron obtenidos como un resultado de: la búsqueda manual de revistas, libros y perfiles de computador de conocimiento actual; y las peticiones de investigadores sobre tópicos específicos.

Esta bibliografía también ha sido mandada a investigadores que son asociados con Proyectos de Pesquería apoyados por C.I.I.D. y a instituciones y organizaciones que son asociadas con los proyectos apoyados por C.I.I.D. o con los cuales C.I.I.D. tiene un cambio de publicaciones recíproco.

Publications of Interest*

The IDRC Fisheries Library does not have all the publications listed in this bibliography. Therefore, please try to obtain relevant papers from local libraries and institutions. If this is not possible, use the form attached at the end of this list to order publications. Please request only those publications which are of immediate interest to your research. The Fisheries Information Science Specialist will be happy to send you the appropriate article(s) or advise you as to where they may be obtained.

Please return the publication order form to:

Deborah Turnbull
Fisheries Information Science Specialist
International Development Research Centre,
5990 Iona Drive, UBC,
Vancouver, B.C. V6T 1L4
Canada

Please send any relevant additions (including national reports, local journal articles, personal publications), questions, and comments to Deborah Turnbull at the address given above.

*Only publication requests from leaders and staff of IDRC-supported fisheries projects will be filled.

Please note: If you are unable to obtain a relevant publication locally, you may be able to obtain it from the author. Their addresses (where available) have been included with each citation.

Publications d'intérêt

La Bibliothèque des Pêcheries du C.R.D.I. ne possède pas toutes les publications énumérées dans cette bibliographie. Veuillez essayer de procurer des documents pertinentes de bibliothèques et d'institutions locales. Si cela n'est pas possible, veuillez vous servir de la formule ci-jointe pour commander des publications. Vous êtes priés de ne commander que des publications qui aient un intérêt immédiat à vos recherches. Le spécialiste scientifique des Renseignements sur les Pêcheries sera content de vous envoyer l'(les) article(s) convenable(s) ou de vous informer de l'endroit où vous pourriez le trouver.

Veuillez rendre la formule de commande à:

Deborah Turnbull
Spécialiste scientifique des Renseignements
sur les Pêcheries,
C.R.D.I.,
5990 Iona Drive, UBC,
Vancouver, B.C. V6T 1L4
Canada

Veuillez envoyer toute additon pertinente (rapports nationaux, articles de journaux locaux, publications personnelles y compris) ainsi que vos questions et commentaries à Deborah Turnbull, à l'adresse donnée ci-dessus.

Publicaciones de Interés

La Biblioteca de Pesqueria CIID no tiene todas las publicaciones dadas en esta bibliografia. Por eso, favor de tratar de obtener los articulos referentes de bibliotecas e instituciones locales. Si esto no es posible, usese el formulario adjuntado al fin de esta lista para solicitar publicaciones. Tenga la amabilidad de solicitar solamente esas publicaciones que sean de interés inmediato para sus investigaciones. La Especialista de Ciencia de Informacion Pesqueria se alegrara de enviarle a usted los articulos apropiados.

Favor de remitir el orden de pedido de publicaciones a:

Deborah Turnbull
Fisheries Information Science Specialist,
CIID,
5990 Iona Drive, UBC,
Vancouver, B.C. V6T 1L4
Canada

Haga el favor de enviar toda adición relacionada (incluso informes nacionales, articulos de revistas locales, publicaciones personales), preguntas y comentarios a Deborah Turnbull usando la susodicha direccion.

BIBLIOGRAPHY

- 1093 Ackefors, H., and C.G. Rosen. (Dept. Zool., Univ. Stockholm, Box 6801, S-113 86 Stockholm, Sweden) 1979. Farming aquatic animals. Ambio 8(4): 132-143. (English)
- 1094 Agarwal, S.S., and D.N. Saksena. (Sch. Stud. Zool., Jiwaji Univ., Gwalior 474002, Madhya Pradesh, India) Length weight relationship in *Catla catla*. Geobios (Jodhpur) 6(3): 129-132. (English)
- 1095 Ahmad, I., and A.K. Jafri. (Dept. Zool., Aligarh Muslim Univ., Aligarh 202001, U.P., India) 1979. Glycolytic changes in the muscle of the freshwater catfish, *Heteropneustes fossilis* stored in ice. Indian J. Animal Res. 12(1): 41-43. (English)
- 1096 Ajana, A.M. (Nigerian Inst. Oceanogr. Mar. Res., P.M.B. 12729, Victoria Isl., Lagos, Nigeria) 1979. Preliminary investigation into some factors affecting the settlement of the larvae of the mangrove oyster, *Crassostrea gasar* in the Lagos Lagoon. Proceedings of the 6th European Malacological Congress 18(1-2): 271-276. (English)
- 1097 Alagaraja, K., and M. Vijaya Gupta. (Central Inl. Fish. Inst., Barrackpore, West Bengal, India) 1976. A note on clipping experiments to estimate fish production in culture operations. J. Inland Fish. Soc. India 8: 157-159. (English)
- 1098 Anand, S.P., P. Shirodkar, and C.V.G. Reddy. (Natl. Inst. Oceanog. Dona Paula 403004 Goa Daman and Diu, India) 1979. Use of wood charcoal powder in quick drying of fish by heat radiation. Solar Energy for Rural Development 1979: 229-303. (English)
- 1099 Anon. 1979. Fish raised to be helpful in sewage treatment. Water Wastes Eng. 16(5): 44-45. (English)
- 1100 Anon. 1979. USDA farmers home administration loan programs involving aquaculture. Salmonid 2(6): 10-11, 18. (English)
- 1101 Antunes, S.A., and A.F. Novak. (Univ. Sao Paulo, Inst. Oceanogr. 05508 Sao Paulo, SP, Brazil) 1978. A plan for mollusc production in Venezuela. Rev. Biol. Trop. 26(Suppl. 1): 53-63. (Spanish, summary in English)
- 1102 Armas, G. (Univ. Nacl. Trujillo, Programa Biol. Pesquera, Dept. Recursos Acuaticos Trujillo, Peru) 1979. Observations on diseases and parasites of mullet alevins, *Mugil cephalus* L. from the Rio Moche coastal lagoon of Peru. J. of Fish Diseases 2(6): 543-547. (English)
- 1103 Assem, H., and W. Hanke. (Dept. Zool., Univ. Karlsruhe, D-7500 Karlsruhe, GBR) 1979. Concentrations of carbohydrates during osmotic adjustment of the euryhaline teleost, *Tilapia mossambica*. Comp. Biochem. Physiol. 64A(1): 5-16. (English)

- 1104 Assem, H., and W. Hanke. (Dept. Zool. Univ. Karlsruhe, D-7500 Karlsruhe, GFR) 1979. Volume regulation of muscle cells in the euryhaline teleost, *Tilapia mossambica*. Comp. Biochem. Physiol. 64A(1): 17-23. (English)
- 1105 Aubert, M., and A. Fruchart. (CERBOM, Parc de la Cote, 1, avenue Jean Lorrain, 06300 Nice, France) 1978. Sanitary provisions in fish and crustacean culture. INSERM/CNEXO/CERBOM 78-4106. (French)
- 1106 Bakos, J., Z. Krasnai, and T. Marian. (Fish. Res. Inst., H-5541, Szarvas, P.O. Box 47, Hungary) 1978. Cross-breeding experiments with carp, tench and Asian phytophagous cyprinids. Aquaculture Hung. 1: 51-57. (English, Summaries in Hungarian, Russian)
- 1107 Balakrishnan, M.S., and V.R. Gunale. (Dept. Bot., Univ. Poona, Poona 411007, Maharashtra, India) 1979. Water Pollution 3: Cultivation of water hyacinth, *Eichhornia crassipes* in sewage effluent to remove nutrients. Maharashtra Vidnyan Mandir Patrika 14(1): 6-9. (English)
- 1108 Banerji, S.R., and K.K. Panday. (Fish. Res. Stn., Gov. Bihar, Mithapur, Patna, Bihar, India) 1979. Carp seed stocking in an oxbow lake of Champaran Bihar, India through rearing enclosure. J. Int. Fish. Soc. India. 10: 131-134. (English)
- 1109 Bejerano, Y., S.Sarig, M.T. Horne, and R.J. Roberts. (Stirling Univl, Unit of Aquatic Pathobiol., Stirling FK94LA, UK) 1979. Mass mortalities in silver carp, *Hypophthalmichthys molitrix* (Valenciennes) associated with bacterial infection following handling. J. Fish. Dis. 2(1): 49-56. (English)
- 1110 Berger, J.A., and L.R. Berger. (Dept. Microbiol., Univ. Hawaii, Honolulu, HI 96822, USA) 1979. Studies to develop a colorimetric Elisa test to assay ciguatoxin in fish tissue. Rev. Int. Oceanogr. Med. (53-54): 23-32. (English, Summary in French)
- 1111 Bhowmick, R.M., G.V. Kowtal, R.K. Jana, and S.D. Gupta. (Cent. Int. Fish. Res. Substn., Cuttack, Orissa, India) 1979. Large scale production of the seed of *Catla catla* by hypophysation. J. Int. Fish. Soc. India 10: 52-55. (English)
- 1112 Bishara, N.F. (Inst. Oceanogr. Fish., Alexandria, Egypt) 1979. Fertilizing fish ponds. 3. Growth of *Mugil capito* in Egypt by pond fertilization and feeding. Aquaculture 16(1): 47-55. (English)
- 1113 Blogoslawski, W.J., and D.W. Alleman. (Natl. Marine Fisheries Serv., NE Fisheries Ctr Milford CT 06460, USA) 1979. Ozone-UV water treatment system for shellfish quarantine. Ozone-Science and Engineering 1(1): 55-60. (English)

- 1114 Brandt, F.D.W., and H.J. Schoonbee. (Lowveld Fisheries Res. Stn. Private Bag X620 Marble Hall 0450, South Africa) 1980. Further observations on the induced spawning of phytophagous Chinese carp species, *Ctenopharyngodon idella* (Val) and *Hypophthalmichthys molitrix* (Val). Water Sa 6(1): 27-30. (English)
- 1115 Brown, E.R., T. Sinclair, L. Keith, P. Beamer, J.J. Hazdra, V. Nair, and O. Callaghan. (Dept. Microbiol., Chicago Med. Sch., Chicago, IL 60612, USA). Chemical pollutants in relation to diseases in fish. Ann. N.Y. Acad. Sci., 298: 535-546. (English)
- 1116 Brown, E.R., E. Koch, P.F. Sinclair, R. Spitzer, and O. Callaghan. (Dept. Microbiol., Univ. Health Sci., Chicago Med. Sch., Chicago, IL 60612, USA) 1979. Water pollution and diseases in fish (an epizootiologic survey. J. Environ. Pathol. Toxicol. 2(3): 917-925. (English)
- 1117 Bruton, M.N. (Rhodes Univ., JLB Smith Inst. Ichthyol, Grahamstown 6140, South Africa) 1979. Survival of habitat desiccation by air breathing clariid catfishes. Environmental Biol. of Fishes 4(3): 273-280. (English)
- 1118 Bucke, D. (Maff, Fish Dis. Lab., Weymouth, Dorsetshire, England) 1980. Fish farming and disease - behavioral aspects. Applied Animal Ethology 6(1): 89. (English)
- 1119 Chakrabarty, R.S., P.R. Sen, N.G.S. Rao, S. Jena, and Ram K. Janaki. (Central Int. Fish. Res. Substn., Cuttack, Orissa, India) 1976. Preliminary observations on the performance of *Mugil cephalus* (Linnaeus) in freshwater ponds under composite culture. J. Int. Fish. Soc. India 8: 125-128. (English)
- 1120 Chakraborty, D. 1977. Malaysia. Report on the Training Workshop on Fisheries Statistics. FAO/UNDP South China Sea Fisheries Development and Coordinating Programme, Manila, Philippines. SCS/GEN/77/10. 33p. (English)
- 1121 Chan, K.Y., Y.F. Ting, Y.M. Chiu, and P.K. Wong. (Dept. Biol., Chin. Univ. Hong Kong, Shatin, N.T., Hong Kong) 1979. Comparison of sewage effluent and sludge extract in cultivating *Ulva lactuca*. Chemosphere 8(4): 205-216. (English)
- 1122 Chandrashekar, T.C., and T.M. Rudrasetty. (Univ. of Agric. Sci., Coll. of Fisheries, Mangalore 575001, India) 1978. Utilization of trash fish for human consumption. III. Studies on the development of fish pickle from *Nemipterus japonicus*. Fishery Technology 15(2): 125-128. (English)
- 1123 Clay, D. (Univ. Rhodesia, Dept. Agr. Salisbury, Rhodesia) 1979. Population biology, growth and feeding a African catfish, *Clarias gariepinus* with special reference to juveniles and their importance in fish culture. Archiv. Fur. Hydrobiologie 87(4): 453-482. (English)

- 1124 Clepper, H. (ed.) Predator-Prey Systems in Fisheries Management. Sport Fishing Inst., 608 13th N.W., Suite 801, Washington, DC 20005, USA. (1979) 504p. (English)
- 1125 Colin, P.L. 1978. Caribbean Reef Invertebrates and Plants: a Field Guide to the Invertebrates and Plants Occurring on Coral Reefs of the Caribbean, the Bahamas and Florida. T.F.H., Reigate, UK. ISBN 0-87666-460-5. 512p. (English)
- 1126 Corrie, J. 1979. Fish Farming in Europe. European Conservative Group, London, UK. 70p. (English)
- 1127 Courtenay, W.R., Jr., and D.A. Hensley. (Dept. Biol. Sci., Florida Atlantic Univ., Boca Raton, FL 33431, USA) 1979. Range expansion in southern Florida of the introduced spotted tilapia, with comments on its environmental impress. Environ. Conserv. 6(2): 149-151. (English)
- 1128 Cowey, C.B., and J.P. Stevenson. 1979. Advances in fish nutrition. Span 22(2): 84-87. (English)
- 1129 Craib, K.B., and W.R. Ketler (eds.) 1978. Fisheries and Aquaculture Collaborative Research in the Developing Countries. A Priority Planning Approach. Agency for International Development, Washington, D.C., USA. 266p. Contract No. AID/afr-C-1135-12. (English)
- 1130 Creache, Y. 1976. The importance of nitrogen requirements in fish. Ann. Inst. Michel Pacha No. 9: 91-92. (French)
- 1131 Csengeri, I., T. Farkas, F. Majoros, J. Olah, and M. Ragyanszke. (Fish. Res. Inst., H-5541 Szarvas, POB 47, Hungary) 1978. Fatty acid composition of liver and muscle tissues of silver carp (*Hypophthalmichthys molitrix* V.) and big head (*H. nobilis*, R.) in relation to diet. Aquaculture Hung. 1: 35-43. (English)
- 1132 Csengeri, I., T. Farkas, F. Majoros, J. Olah, and M. Szalay. (Fish. Res. Inst., H-5541 Szarvas, P.O. Box 47, Hungary) 1978. Effect of feeds on the fatty acid composition of carp (*Cyprinus carpio*). Aquaculture Hung. 1:24-34. (English)
- 1133 Davidovich, L.A., C.L. Soule, and H.M. Lupin. (Univ. Nacl. Mar. Plata, Fac. Ingn., Dept. Ingn. Auim Mar Plata, 7600 Argentina) 1980. J. of the Am. Oil Chemists Soc. 57(1): 43-47. (English) Kinetics of Fish meal oxidation.
- 1134 Demaeseneer, J. (Univ. Etat Gand, Fac. Sci. Agron., Zootech. Lab., B-9000 Gand, Belgium) 1979. Tapeworms as fish parasites. Revue de l'Agriculture 32(4): 1053-1057. (French)

- 1135 De Mello, J.T.C., R. Alzuguir, and S.A.T. Filho. (Dept. Biol., Inst. Bioscience, Univ. Sao Paulo, Sao Paulo, Brazil) 1979. Trial pisciculture of *Tilapia rendalli* - quantitative analysis. Rev. Bras. Biol. 39(2): 377-382. (Portuguese)
- 1136 Deng, J.C., K.V. Chau, and C.B. Baird. (Univ. Florida, Dept. Food Sci. & Human Nutr., Gainesville, FL 32611) 1979. Drying seafood products with solar energy. In: Changing Energy Use Futures, Vol. 4. (R.A. Fazzolare, ed.) Pergamon Press Ltd., Headington Hill Hall, Oxford. pp. 1884-1892. (English)
- 1137 Desai, K., G. Hirani, and D. Nimavat. (Dept. Biosci., South Gujarat Univ., Surat 395007, India) 1979. Studies on the pearl oyster *Pinctada fucata* (Gould) seasonal biochemical changes. Indian J. Mar. Sci. 8(1): 49-50. (English)
- 1138 Dewbrandt, F., K.H. Eins, and H.J. Schoonbee. (Lowveld Fisheries Res. Stn., Private Bag X620, Marble Hall 0450, South Africa) 1979. Investigations into the effects of volume of water flow, quality of feed and type of feeding on the production of the Aischgrund common carp, *Cyprinus carpio* in circular concrete ponds. Water Sa 5(4): 171-177. (English)
- 1139 Dey, R.K., P.V. Reddy, and S.B. Singh. (CIFR Substation, 19 Cantonment Rd., Cuttack 1, Orissa, India) 1978. A note on the spawning reflex during hypophysation in female grass carp and silver carp (for stripping them in time). Sci. Cult. 44(11): 509-510. (English)
- 1140 Dodd, J.C. 1979. Algae production and harvesting from animal wastewaters. Agricultural Wastes 1(1): 23-37. (English)
- 1141 Doroshov, S.I., F.S. Conte, and W.H. Clark. (Univ. Calif. Davis, Program Aquaculture, Davis CA 95616, USA) 1979. Aquaculture of animal species. In: Biosaline Concept. (A. Hollaender, ed.) Plenum Press, N.Y. pp. 261-283. (English)
- 1142 Doroshev, S.I. and J.W. Cornacchia. (Dept. Animal Sci., Univ. Calif., Davis, CA, USA) 1979. Initial swim bladder inflation in the larvae of *Tilapia mossambica* (Peters) and *Morone saxatilis* (Walbaum). Aquaculture 16(1): 57-66. (English)
- 1143 Dutt, S. (Andhra Univ., Dept. Marine Sci., Visakhapatnam 530003, India) 1979. Studies on population dynamics of tropical fishes. Investigacion Pesquera 43(1): 41-42. (English)

- 1144 Dwivedi, S.N., O.P. Bohra, and D.V. Reddy. (Cent. Inst. Fish. Educ., Bombay 400061, Maharashtra, India) 1979. Seasonal variation in the surface water temperature in ponds and main feeder channel of brackish water fish farm Kakinada Andhra Pradesh, India. Comp. Physiol. Ecol. 4(4): 271. (English)
- 1145 Eckstein, B., and R. Azoury. (Inst. Life Sci., Heb. Univ. Jerus., Jerusalem, Isr.) 1979. Enzymes of steroid hormone metabolism in ovarian tissue of teleosts. Comp Biochem. Physiol. B Comp. Biochem. 64(3): 309-312. (English)
- 1146 Edwards, P. (AIT Bangkok, Thailand) 1979. Seaweed Farms - integral part of rural development in Asia, with special reference to Thailand. In: Proceedings of the International Conference on rural development technology. (Singh, G. ed.) AIT, Bangkok. (English)
- 1147 FAO/UNDP. 1977. Assessment of problems and needs in marine small-scale fisheries. Andhra Pradesh, India. FAO/UNDP Project for Development of Small-scale Fisheries in Southwest Asia, Colombo. RAS/74/031-Work-Pap-No-14. 25p. (English)
- 1148 FAO, Rome. 1979. Freshwater fish farming: how to begin. Better Farming Ser. No. 27. 43p. ISBN 92-5-100606-7. 43p. (English)
- 1149 FAO/UNDP, Rome. 1979. Aquaculture development in Mexico. Report of a review mission, 1978. FAO/ADCP/MR/79/4. 44p. (English)
- 1150 Finucane, J.H., L.A. Collins, and L.E. Barger. (Panama City Lab., Southeast Fish. Cent., Natl. Mar. Fish. Serv., 3500 Delwood Beach) 1979. Spawning of the striped mullet, *Mugil cephalus* in the Northwestern Gulf of Mexico. Northeast Gulf Sci. 2(2): 148-150. (English)
- 1151 Fujita, Y., W. Miyazaki, and T. Kanayama. (Res. Lab., Food Dept., Ueno Fine Chem. Ind. Ltd., 1-127 Higashi Arioka, Itami, Hyogo 664, Japan) 1979. Microbial control at Kamaboko and fish sausage processing plants 1. The airborne microorganisms at the processing plants. Bull. Jpn. Soc. Sci. Fish. 45(7): 891-900. (Japanese)
- 1152 Gamble, J.C., and J.D. George. (eds.) 1979. Sea-urchin Survey. Prog. Underwater Sci. 4: 177-181. (English)
- 1153 Geffen, A. (Israel Oceanogr. Limnol. Res. Ltd., Maricult. Lab., P.O.B. 1212, Eilat, Israel) 1979. Rotating fish cages to prevent fouling. Aquaculture 16(1): 83-85. (English)

- 1154 Gensch, R. (Zweigst. FGD, VEB Binnenfischerei Frankfurt, GDR) 1979. Results and information on the rearing of fish brood in illuminated cage in the VEB Inland Fishery Frankfurt. Z. Binnenfisch. DDR 26(2): 38-41. (German)
- 1155 Gerking, S.D. (ed.) 1978. Ecology of Freshwater Fish Production. Blackwell Scientific Publications, Oxford. ISBN 0-632-00256-5. (English)
- 1156 Ghosh, A. (Fish Lab., Dept. Zool., Univ. of Kalyani, Kalyani, West Bengal, India) 1976. Digestive enzymes and their correlation with the food habits in the catfish, *Clarias batrachus* (Linn.) J. Inland Fish. Soc. India 8: 137-139. (English)
- 1157 Ghosh, A., L. Hanumantha Rao, and S.K. Saha. (Cent. Inl. Fish. Res. Inst., Barrackpore, West Bengal, India) 1976. Cultural possibilities of air-breathing catfish *Clarias batrachus* in domestic waste waters. J. Inland Fish. Soc. India 8: 151-152. (English)
- 1158 Girija, N., P. Jaheer Khan, and N. Chari. (Dept. Zool., Univ. Coll., Kakatiya Univ., Warangal 506009, India) Metabolic differentiation of cardiac, pectoral and caudal muscles of *Clarius batrachus* (Linn.). Comp. Physiol. Ecol. 4(4): 261-264. (English)
- 1159 Goleuke, C.G. (Univ. California, Richmond, CA, USA) 1979. Aquaculture in resource recovery. Compost Sci. 20(3): 16-23. (English)
- 1160 Govind, B.V., K.V. Rajagopal, and G.S. Singh. (Tank Fish. Res. Unit CIFRI, 3rd Floor, Multistoried Build., Vidhana Veedhi, Bangalore 560001, Karnataka State, India) 1978. Study on comparative efficiency of organic manures as fish food producers. J. Inland Fish. Soc. India 10: 101-106. (English)
- 1161 Goyal, S.M., C.P. Gerba, and M.L. Melnick. (Dept. Virol. and Epidemiol., Baylor Coll. Med., Houston, TX 77030 USA) 1979. Human enteroviruses in oysters and their overlying waters. Appl. Environ. Microbiol. 37(3): 572-581. (English)
- 1162 Grobbelaar, J.U. (Inst. Environ. Sci., Univ. Orange Free State, Bloemfontein 9300, S. Afr.) 1979. Observations on the mass culture of algae as a potential source of food. S. Afr. J. Sci. 75(3): 133-136. (English)
- 1163 Gulland, J.A. 1979. Dynamics of populations and fishery management. Investigacion Pesquera 43(1): 223-239. (English)
- 1164 Gupta, D.R., and K.S. Rao. (Environ. Biol. Unit, Vikram Univ. Ujjain, Madhya Pradesh, India) 1979. Experimental studies on tagging as an effective technique in aging and fish growth at Gandhisagar Reservoir, India. Bioresearch 2(1-2): 15-18. (English)

- 1165 Halevy, A. (Fish and Aquaculture Res. Stn., Dor, Israel) 1979. Observations on polyculture of fish under standard farm pond conditions at the fish and Aquaculture Research Station, Dor, during the years 1972-1977. Bamidgeh 31(4): 96-104. (English)
- 1166 Healey, R., and S.C. Turner (Portsmouth Polytech. Dept. Biol. Sci., Portsmouth PO1 2Dy, England) 1979. Culturing embryos and larvae of marine mollusks and protochordates. J. of Biological Education 13(3): 163-170. (English)
- 1167 Hedlund, E. 1979. Farming the pond for pleasure and profit. Farm Pond Harvest 13(2): 14-16, 24-25. (English)
- 1168 Heritage, G.D., and N. Bourne. (Fisheries and Oceans, Nanaimo, B.C., Canada) 1979. Pacific oyster breeding in British Columbia, 1977. Tech. Rep. Fish. Mar. Serv. Can. No. 882. 186p. (English)
- 1169 Horvath, L. (Warm-water Fish Hatch., H-2441 Szadzhalmobatta, P.O. Box 28, Hungary) 1978. Experience in propagation of the common carp (*Cyprinus carpio* L.) out of spawning season. Aquacult. Hung. 1: 66-72. (English)
- 1170 Hossler, F.E., J.R. Ruby, and T.D. McIlwain. (Dept. Anat., Louisiana State Univ. Med. Cent., New Orleans, LA 70119) 1979. The gill arch of the mullet, *Mugil cephalus* 2. Modification in surface ultrastructure and Na,K-ATPase content during adaptation to various salinities. J. Exp. Zool. 208(3): 399-405. (English)
- 1171 Hsu, Y.L., and J.L. Wu. (Inst. Zool. Acad. Sin., Taipei, Taiwan) 1979. The relationship between feeding habits and digestive proteases of some fresh water fishes. Bull. Inst. Zool. Acad. Sin. (Taipei) 18(1): 45-53. (English)
- 1172 Hubert, W.A., K.L. Grannemann, and J.M. Wyatt. 1978. Aquaculture. In: State of the art. Waste heat utilization of agriculture and aquaculture. Tennessee Valley Authority (USA). Bull. Natl. Fert. Dev. Cent. No. Y-132. pp. 1-133. (English)
- 1173 Imbert, J.C., A. Essaid El Feydi, and A. Kadiri. (Cent. Hosp. Univ. Avicenne, Rabat, Morocco) 1979. Paralytic shellfish poisoning. Sem. Hop. Paris 55(21-22): 1139-1142. (French)
- 1174 Itoh, K. (Natl. Pearl Res. Lab., Kashikojima, Ago, Shima, Mie, Jpn.) 1979. Ecological characteristics of cultured depth based on growth and metabolism of pearl oyster, *Pinctada fucata*. Bull. Natl. Pearl Res. Lab. 22: 2337-2362. (Japanese)

- 1175 Itoh, K. 1979. Nutritional environment for pearl oyster, *Pinotada fucata* in pearl cultured ground, Ago Bay, Japan. Bull. Natl. Pearl Res. Lab. 22: 2363-2382. (Japanese)
- 1176 Itoh, K., and S. Mizumoto, S. (Natl. Pearl Res. Lab. Kashikojima, Ago, Shima, Mie, Jpn.) 1979. Mortality of the pearl oyster, *Pinotada fucata* in pearl culture ground, Ago Bay, Japan. Bull. Natl. Pearl Res. Lab. 22: 2383-2404. (Japanese)
- 1177 Jaehnichen, H. (Inst. Binnenfisch Berlin-Friedrichshagen, GDR) 1978. The status and perspectives of biological weed control using carp (*Ctenopharyngodon idella* (Val.) in the GDR. Z. Binnenfisch. DDR 25(12): 361-365. (German)
- 1178 Jones, D.H.T. 1979. Fish farming. Biologist 26(5): 203. (English)
- 1179 Joshi, S.N., and S.S. Khanna. (Dept. Zool., Gov. Postgrad. Coll., Pithoragarh, U.P., India) 1979. Induced breeding of *Labeo gonius* by pituitary hormone injections. Bioresearch (Ujjain) 2(1-2): 113-114. (English)
- 1180 Kalpana, S., and A.K. Jafri. (Dept. of Zool., Aligarh Muslim Univ., Aligarh 202001, India) 1978. Distribution pattern of some biochemical constituents in muscle of the common catfish, *Heteropneustes fossilis* (Bloch). Fishery Technology 15(2): 121-123. (English)
- 1181 Kanaujia, D.R. (Cent. Inalnd Fish. Res. Substation, Cuttack, India) 1978. Acceptance of artificial feed by cultivated carps in composite fish culture. J. Inland Fish. Soc. India 10: 162-164. (English)
- 1182 Kilambi, R.V., and W.R. Robison. (Univ. Arkansas, Dept. Zool., Fayetteville, AR 72701) 1979. Effects of temperature and stocking density on food consumption and growth of grass carp, *Ctenopharyngodon idella*, Val. J. of Fish Biology 15(3): 337-342. (English)
- 1183 Kils, U. (Univ. Kiel, Inst. Meereskunde D-2300 Kiel, GDR) 1979. Oxygen regime and artificial aeration of net-cages in mariculture. Meeresforschung 27(4): 236-243. (English)
- 1184 Krishnamoorthi, K.P., and M.K. Abdulappa. (Natl. Env. Engn. Res. Inst., Div. Life Sci., Nagpur, India) 1979. Economic returns of utilization of domestic wastewaters in rural and urban area - fish culture. In: Proceedings of the International Conference on Rural Development Technology. (G. Singh, ed.) AIT, Bangkok, Thailand. ISBN 0-85038-105-3. (English)

- 1185 Krishnamoorthi, K.P., and M.K. Abdulappa. (Natl. Environm. Engn. Res. Inst., Nagpur 44020, India) 1979. Domestic wastewater utilization through aquaculture - studies at Nagpur, India. Progress in Water Technology 11(4-5): 499-505. (English)
- 1186 Krzynowek, J., and K. Wiggin. 1979. Seasonal variation and frozen storage stability of blue mussels, *Mytilus edulis*. J. Food Sci. 44(6): 1644-1645. (English)
- 1187 Labat, R. 1976. Eco-physiological problems in fish culture. Ann. Int. Michel Pacha No. 9: 105-110. (French)
- 1188 Lim, C., S. Sukhawongs, and F.P. Pascual. (SEAFDEC, P.O. Box 256, Iloilo City, Philippines) 1979. A preliminary study on the protein requirements of *Chanos chanos* (Forsk.) fry in a controlled environment. Aquaculture 17(3): 195-201. (English)
- 1189 Lovell, T. (Auburn Univ., Auburn, AL, USA) 1979. Fish feed and nutrition. Commercial Fish Farmer Aquacult. News 5(4): 31-32. (English)
- 1190 Lovell, R.T. 1979. Fish culture in the United States. Science 206(N4425): 1368-1372. (English)
- 1191 Lucas, C.I. 1979. The cultivation of natural stocks. Mar. Pollut. Bull. 10(3): 69-73. (English)
- 1192 Luna, J. (Fish. Projects Sect., Inter-American Development Bank, Washington, DC, USA) 1979. Fishery progress in Latin America: the contribution of the Inter-American Development Bank. J. Mar. Technol. Soc. 13(2): 15-17. (English)
- 1193 Mai, J., and J.E. Kinsella. (Dept. Food Sci., Inst. Food Sci., Cornell Univ., Ithaca, N.Y. 14853, USA) 1979. Changes in lipid composition of cooked minced carp, *Cyprinus carpio* during frozen storage. J. Food Sci. 44(6): 1619-1624. (English)
- 1194 Mann, R. 1979. Exotic species in aquaculture. Oceanus 22(1): 29-35. (English)
- 1195 Marais, J.F.K., and G. Wm. Kissil. (Dept. Zool., Univ. of Port Elizabeth, P.O. Box 1600, Port Elizabeth, South Africa) 1979. The influence of energy level on the feed intake, growth, food conversion and body composition of *Sparus aurata*. Aquaculture 17(3): 203-219. (English)
- 1196 Marian, T., and Z. Krasznai. (Fish. Res. Inst., H-5541 Szarvas, Hungary) 1978. Karyological investigations on *Ctenopharyngodon idella* and *Hypophthalmichthys nobilis* and their cross-breeding. Aquacult. Hung. 1: 44-50. (English)

- 1197 Martinez, M.R. (Univ. Philippines, Coll. Arts and Sci., Dept. Bot. Los Banos, Philippines) 1979. Algae in fishponds and fishpens of Laguna de Bay, Philippines. 1. Euglenophyta. Kalikasan - The Philippine J. of Biol. 7(3): 305-326. (English)
- 1198 Mathew, P.M., K.P.P. Nambiar, and B.K. Singh. (Coordinated Project on Composite Fish Cult. and Fish Seed Prod., Cent. Int. Fish. Res. Inst., Pune-411004, India) 1978. A note on the induced breeding of silver carp, *Hypophthalmichthys molitrix* (C. and V.) and grass carp, *Ctenopharyngodon idella* (C. and V.) at Hadapsar Fish Farm. J. Int. Fish. Soc. India 10: 110-112. (English)
- 1199 Matondkar, S.G.P. (Natl. Inst. Oceanogr., Dona Paula, Goa 403004, India) 1979. Some aspects of culture of mullet, *Mugil cephalus* and pearl spot, *Etroplus suratensis* in Siridaon Fish Farm, Goa, India. Indian J. Mar. Sci. 7(3): 199-201. (English)
- 1200 Metcalf, T.G. (Univ. New Hampshire, Coll. Liberal Arts, Durham, NH 03824, USA) 1979. Indication of viruses in shellfish growing waters. Am. J. of Public Health 69(11): 1093-1094. (English)
- 1201 Mitchell, D.S. (Div. Irrig. Res., CSIRO, Griffith, NSW 2680, Aust.) 1979. Assessment of aquatic weed problems. J. Aquat. Plant Manage. 17: 19-21. (English)
- 1202 Moon, R.E., and D.F. Martin. (Dept. Biol. Univ., South Florida, Tampa, FL 33620, USA) 1979. Potential management of red tide blooms. Treatment with concentrated, frozen *Gomphosphaeria aponina* cultures. J. Environ. Sci. Health, Part A: 14(3): 195-199. (English)
- 1203 Moura, S.J.C. 1979. Perspective of fisheries management in Brazil. FAO Fish. Circ. No. 718: 55-58. (English)
- 1204 Mottel, M.G. (Dep. Fish., Washington, DC, USA) 1979. A review of the fishery biology and culture of scallops. Wash. Dep. Fish. Tech. Rep. 39: 1- 100. (English)
- 1205 Murugesan, V.K. 1978. The growth potential of the murrels, *Channa marulius* (Hamilton) and *Channa striatus* (Bloch). J. Int. Fish. Soc. India 10: 169-170. (English)
- 1206 Nash, C.E. (Kramer, Chin and Mayo, Inc., 1917 First Ave., Seattle, WA 98101, USA) 1979. Structure of US Aquaculture. Developments in politics, organization and research. Food Policy 4(3): 4(3): 204-215. (English)

- 1207 Natarajan, G.M. (Dept. Biol., Coimbatore Med. Coll., Coimbatore 641014, India) 1979. Observations on the nitrogen excretion in three air-breathing teleosts. Comp. Physiol. Ecol. 4(3): 194-195. (English)
- 1208 Ogle, J., and A. Chestnut. (Oyster Biol. Sect., Gulf Coast Res. Lab., Ocean Springs, Miss. 39564, USA) 1979. Recycling freshly shucked oyster shells. Northeast Gulf Sci. 3(1): 49-51. (English)
- 1209 Opuszynski, K. (Inland Fish. Inst., Dept. Pond Management PL-05500, Piaseczno, Poland) 1979. Silver carp, *Hypophthalmichthys molitrix* (Val), in carp ponds. 3. Influence on ecosystem. Ekologia Polska - Polish J. of Ecology 27(1): 117-133. (English)
- 1210 Oron, G., G. Shelef, and A. Levi. (Inst. Desert Res. Ben-Gurion Univ. Negev., Sde Boker, Isr.) 1979. Growth of *Spirulina maxima* on cow manure wastes. Biotechnol. Bioeng. 21(12): 2169-2174. (English)
- 1211 Osborne, J.A., and N.M. Sassic (Dept. Biol. Sci., Univ. Cent. Fla., P.O. Box 25000, Orlando, Fla. 32816, USA) 1979. Biological control of *Hydrilla verticillata* with grass carp, *Ctenopharyngodon idella*. J. Aquat. Plant Manage. 17: 45-48. (English)
- 1212 Ovais, M. (Sch. Biol. Sci., Bhopal Univ., Bhopal, M.P., India) 1979. Observations on acetylcholine content of the gonads of *Clarias batrachus* (Linn.) in relation to spawning. Comp. Physiol. Ecol. 4(4): 221-223. (English)
- 1213 Padlan, P.G. 1979. Indonesia. Improvement of milkfish pond production in Jepara, Central Java. FAO FI-INS/72/003/5. 49p. (FAO, Rome) (English)
- 1214 Pal, R.N., H.P. Singh, and M. Choudhury. 1976. Oxygen consumption of the spawn of *Anabas testudineus* (Bloch). J. Inl. Fish. Soc. India 8: 140-142. (English)
- 1215 Pal, R.N., and S.D. Tripathi. 1978. Use of terramycin for fish diseases in carp and catfish culture in Indian waters. J. Inl. Fish. Soc. India 10: 166-168. (English)
- 1216 Pariser, E.R. 1979. Reducing postharvest losses of fish in the third world. Oceanus 22(1): 47-53. (English)
- 1217 Petter, A.J. (Mus. Natl. Hist. Vers, 43 rue Cuvier, 75231 Paris Cedex 05, France) 1978. Some Camallanidae parasitic nematodes from fishes in Malaysia. Bull. Mus. Natl. Hist. Nat. France 3e Ser Zool. No. 515: 319-330. (French)

- 1218 Phillips, D.J.H. 1979. The rock oyster, *Saccostrea glomerata* as an indicator of trace metals in Hong Kong. Mar. Biol. (Berl.) 53(4): 353-360. (English)
- 1219 Porath, S., B. Hephner, and A. Koton. 1979. Duckweed as an aquatic crop - evaluation of clones for aquaculture. Aquatic Botany 7(3): 273-278. (English)
- 1220 Price, K.S. (Lewes Mar. Stud. Complex, Delaware Univ. Lewes, DE, USA) 1978. Advances in closed (recirculated) system mariculture. Rev. Biol. Trop. 26(suppl. 1): 23-43. (English, summary in Spanish)
- 1221 Ramamurthy, S., M.H. Dhulked, and N.S. Radhakrishnan. 1978. Experiment on polyculture in a brackish water fish farm in Dakshina Kannada (Karnataka). Mar. Fish. Inf. Serv. Tech. Ext. Serv. No. 4: 9-10. (English)
- 1222 Rangaswamy, C.P. 1978. A note on the fry of *Liza vaigiensis* (Quoy and Gaimard). J. Int. Fish. Soc. India 10: 135-137. (English)
- 1223 Rao, K.M., and M.A. Khan. 1979. Mass breeding of Indian carps by partial hypophysectomy and economics of a dry bundh, Bankura, West Bengal. J. Int. Fish. Soc. India 10: 129-130. (English)
- 1224 Rawitscher, M., and J. Mayer. 1979. Energy requirements of mechanized aquaculture. Food Policy 4(3): 216-218. (English)
- 1225 Reineccius, G.A. 1979. Off flavors in meat and fish - a review. J. Food Sci. 44(1): 12-20. (English)
- 1226 Ringangaonkar, A.M. 1978. Use of synthetic cattle feed as artificial food for *Cyprinus carpio*. J. Int. Fish. Soc. India 10: 150-151. (English)
- 1227 Rouquette, A. 1978. New diseases of oysters. Bibliographic data. data. Ecole Nationale Veterinaire de Toulouse, Toulouse, France. ENVT-no-75. 76p. (French)
- 1228 Saha, G.N., D.K. Chatterjee, and C. Selvaray. (CIFR Substation, Cuttack, Orissa, India) 1978. A record of increased fish production in freshwater ponds by the use of fertilisers alone. Sci. Cult. 44(9): 423-424. (English)
- 1229 Saha, A.K., P. Ghosh, and P.R. Roy. 1978. Observations on the growth rate of *Lates calcarifer* (Bl.). J. Int. Fish. Soc. India 10: 113-119. (English)
- 1230 Santiago, C.M., G.A. Emralino, and M.B. Bigol. 1979. Culture and use of *Chaetoceros* sp. as natural feed for bangus (*Chanos chanos*). Kalikasan - The Philippine J. of Biology 7(3): 332. (English)

- 1231 Sarig, S. 1979. Fisheries and fish culture in Israel in 1978. Bamidgeh 31(4): 83-95. (English)
- 1232 Schaerfe, J. 1979. Fishing technology for developing countries. Oceanus 22(1): 54-59. (English)
- 1233 Schoonbee, H.J., V.S. Nakani, and J. Prinsloo. (Rand Afrikans Univ., Res. Freshwater Biol. Johannesburg 2000, South Africa) 1979. Use of cattle manure and supplementary feeding in growth studies of the Chinese silver carp in Transkei. South African J. of Science 75(11): 489-495. (English)
- 1234 Scott, A.L., and J.M. Grizzle. 1979. Pathology of cyprinid fishes caused by *Bothriocephalus gowkongensis* Yea, 1955 (Cestoda: Pseudophyllidea). J. Fish Dis. 2(1): 69-73. (English)
- 1235 Sharan, S.S., and S.N. Ahsan. (Dept. Zool., Patna Univ., Patna 800005, Bihar, India) 1979. Changes in tissue hydration in female *Heteropneustes fossilis* with relation to breeding. Ann. Zool. (Agra) 14(2): 57-64. (English)
- 1236 Siddiqui, A.Q. (King Faisal Univ., Coll. Agr. Sci. and Foods, Al Hassa, Saudi Arabia) 1979. Reproductive biology of *Tilapia zillii* (Gervais) in Lake Naivasha, Kenya. Environmental Biology of Fishes 4(3): 257-262. (English)
- 1237 Simmons, M.S., and K. Sivaborvorn. 1979. Effects of chlorinated organics from wastewater treatment on algal growth. Bull. of Environmental Contamination and Toxicology 23(6): 766-773. (English)
- 1238 Sournia, A. (ed.) 1978. Phytoplankton Manual. UNESCO, Paris. Monogr. Oceanogr. Methodol. No. 6. 337p. ISBN 92-3-101572-9. (English)
- 1239 Spotte, S. 1979. Fish and Invertebrate Culture: Water Management in Closed Systems. Wiley, Chichester, UK. 179p. ISBN 0-471-02306-X. (English)
- 1240 Srinivasachar, H.R., S. Ravichandra Reddy, and K. Shakuntala. 1976. Food intake and conversion efficiency of *Heteropneustes fossilis* (Bloch) in relation to light and dark periods. J. Intl. Fish. Soc. India 8: 143-144. (English)
- 1241 Stearns, L.W. 1978. Sea Urchin Development: Cellular and Molecular Aspects. Dowden, Hutchinson and Ross, Stroudsburg, PA (USA). 339p. ISBN 0-12-787488-7.
- 1242 Strathmann, R.R., and E. Leise. 1979. Feeding mechanisms and clearance rates of molluscan veligers. Biol. Bull. 157(3): 524-535. (English)

- 1243 Tandon, R.S. 1978. Studies on ecophysiology of fish parasites: effect of trypanosome infection on the blood urea levels of freshwater teleosts. J. Intl. Fish. Soc. India 10: 156-158. (English)
- 1244 Thompson, F. 1979. Our under-utilized fish: carp, drum, buffalo. Farm Pond Harvest 13(2): 21-23, 26. (English)
- 1245 Took, I.F. 1979. Fishes of the Caribbean Reefs, the Bahamas and Bermuda. Macmillan, London, UK. 92p. ISBN 0-333-25874-6. (English)
- 1246 Tortell, P. 1979. Utilization of waste nutrients for aquaculture. Progress in Water Technology 11(4-5): 483-498. (English)
- 1247 United Kingdom, Chemical Society, Analytical Method's Committee, Fish Products Sub-committee. 1979. Recommended general methods for the examination of fish and fish products. Analyst 104(1238): 434-450. (English)
- 1248 Viola, S., and U. Rappaport. 1979. Extra caloric effect of oil in the nutrition of carp. Bamidgeh 31(3): 51-68. (English)
- 1249 Wallace, J.H. 1979. Shell planting for oyster cultch. Compl. Rep. Va. Mar. Resour. Comm. VMRC, Richmond, VA. VMRC-Proj-3-258-D. Virginia Marine Resources Commission, Richmond, VA, USA. 27p. (English)
- 1250 Watanabe, T., T. Arakawa, and C. Kitajima. 1978. Proximate and mineral compositions of living feeds used in seed production of fish. Bull. Jap. Soc. Sci. Fish. 44(9): 979-984. (Japanese, summary in English)
- 1251 Wohlfarth, G.W., and G.L. Schroeder. 1979. Use of manure in fish farming-a review. Agricultural Wastes 1(4): 279-299. (English)
- 1252 Wong, M.H., and K.K. Lau. 1979. Cultivation of *Ulva lactuca* in sewage. Chemosphere 8(4): 217-224. (English)
- 1253 Yannai, S., S. Mokady, and K. Sachs. 1978. The safety of several algae grown on waste water as a feedstuff for broilers. Ergeb. Limnol. 11: 139-149. (English)
- 1254 Yarish, C., K.W. Lee, and P. Edwards. 1979. An improved apparatus for the culture of algae under varying regimes of temperature and light intensity. Bot. Mar. 22(6): 395-397. (English)

- 1255 Yone, Y., and N. Toshima. 1979. The utilization of phosphorus in fish meal by carp, *Cyprinus carpio* and black sea bream, *Mylio macrocephalus*. Bull. Jpn. soc. Sci. Fish. 45(6): 753-756. (English)
- 1256 Young, R.H., E. Coria, and E. Cruz. 1979. Development and acceptability testing of a modified salt fish product prepared from shrimp by-catch. J. of Food Technology 14(5): 509-519. (English)

Taxonomic Index

- Anabas scandens*
1207
- Anabas testudineus*
1214
- Catla catla*
1094, 1111, 1181, 1215
- Channa marulius*
1205
- Channa striatus*
1205
- Chanos chanos* (milkfish)
1144, 1188, 1213, 1230
- Chlorella vacuolata*
1162
- Clarias batrachus*
1156, 1157, 1158, 1212, 1215,
1243
- Clarias gariepinus*
1123
- Crassostrea gasar* (mangrove oyster)
1096
- Ctenopharyngodon idella* (grass carp)
1106, 1114, 1139, 1154, 1171,
1177, 1181, 1182, 1196, 1198,
1211, 1234
- Cyprinus carpio* (common carp)
1106, 1132, 1138, 1145, 1154,
1169, 1181, 1226, 1255
- Eichhornia crassipes* (water hyacinth)
1107
- Heteropneustes fossilis*
1095, 1180, 1235, 1240, 1243
- Hypophthalmichthys molitrix*
1106, 1109, 1114, 1131, 1139,
1181, 1198, 1209, 1215
- Hypophthalmichthys nobilis*
1106, 1131, 1196, 1233
- Labeo gonius*
1179
- Labeo rohita* (Indian carp)
1181, 1215
- Lates calcifer*
1229
- Liza macrolepis*
1221
- Liza vaigiensis*
1222
- Mugil capito*
1112
- Mugil cephalus*
1102, 1119, 1144, 1145, 1150,
1170, 1199
- Mytilus edulis*
1186
- Pinctada fucata*
1137, 1174, 1175, 1176
- Saccostrea glomerata* (rock oyster)
1218
- Sparus aurata*
1195
- Tilapia (Sarotherodon) mariae*
1127
- Tilapia (Sarotherodon) mossambicus*
1103, 1104, 1142
- Tilapia rendalli*
1135
- Tilapia zillii*
1236
- Tinca tinca* (tench)
1106
- Ulva lactuca*
1121

Subject Index (Index par sujets, Indice de temas)

Algae, Algues, Algae

Biological Control

1177, 1201, 1211

Caribbean

1125

Culture, Culture, Cultivo

1140, 1162, 1197, 1219, 1254

Aquaculture, Aquiculture, Acuocultura

Europe

1126

General

1093, 1097, 1100, 1105, 1118, 1129, 1141, 1148, 1159, 1165, 1167, 1172, 1178, 1187, 1191, 1194, 1221, 1224

Israel

1231

Mexico

1149

Pen-cage culture, Pisciculture en cage, Cultivo en jaula

1153, 1154, 1183

United States

1190, 1206

Carp, Carpes, Carpa

Bacteria, Bacterien, Bacteriano

1109

Culture, Culture, Cultivo

1154, 1181, 1209, 1244

Disease, Maladies, Enfermedad

1215, 1255

Feeds, Nourriture, Dieta

1131, 1132, 1138, 1171, 1177, 1181, 1182, 1211, 1226, 1233, 1248

Genetics, La genetique, Genetica

1196

Growth, Croissance, Crecimiento

1094, 1164

Parasites, Parasites, Parasitos

1234, 1243

Products, Produits, Productos

1193

Reproduction, Reproduction, Reproduccion

1106, 1114, 1139, 1145, 1169, 1179, 1198, 1223

Seed

1108, 1111

Catfish

Culture, Culture, Cultivo

1157

Desiccation

1117

Catfish (continued)

Diet, Nourriture, Dieta

1123, 1156, 1189, 1240

Diseases, Maladies, Enfermedad

1215

Growth, Croissance, Crecimiento

1095, 1123, 1158

Metabolism, Metabolisme, Metabolismo

1180, 1207, 1214

Parasites, Parasites, Parasitos

1243

Reproduction, Reproduction, Reproduccion

1212, 1235

Ciguatera

1110

Fish, Poisson, Pescado

Caribbean

1245

Diet, Nourriture, Dieta

1128, 1130, 1250

Disease, Maladies, Enfermedad

1115, 1116, 1118

Parasites, Parasites, Parasitos

1134

Population

1143, 1155, 1163

Processing

1098, 1151, 1216

Products, Produits, Productos

1122, 1133, 1136, 1193, 1247

Trash Fish

1122, 1256

Fisheries

Brazil

1203

Latin America

1192

Malaysia

1120

Management

1124, 1163

Research

1129

Small-scale

1147

Statistics

1120

Technology

1232

Hyacinth (water)

Culture, Culture, Cultivo
1107

Invertebrates, Invertebres, Invertebrados

Caribbean
1125

Milkfish, Sabalo

Culture, Culture, Cultivo
1213
Diet, Nourriture, Dieta
1188, 1230
Growth, Croissance, Crecimiento
1144

Mollusca, Mollusques, Molusco

Culture, Culture, Cultivo
1113, 1166, 1220
Feed- Veligers
1242
Virus
1200
Venezuela
1101

Mullet, Mulet, Lisa

Culture, Culture, Cultivo
1119, 1199
Diseases, Maladies, Enfermedad
1102
Fry
1222
Growth, Croissance, Crecimiento
1112, 1144
Reproduction, Reproduction, Reproduccion
1145, 1150
Salinity
1170

Murrel

Growth, Croissance, Crecimiento
1205

Mussels, Moules, Mejillones

Products, Produits, Productos
1186

Oyster, Huitres, Ostra

Biochemistry

1137

Culture, Culture, Cultivo

1174, 1175, 1176

Diseases, Maladies, Enfermedad

1227

Reproduction, Reproduction, Reproduccion

1168

Settlement

1096, 1208, 1249

Virus

1161

Paralytic Shellfish Poisoning

1173, 1202

Parasites, Parasites, Parasitos

Fish, Poisson, Pescado

1217, 1243

Plankton

1238

Scallop, Coquille, Pecten

1204

Seaweed

Culture, Culture, Cultivo

1146

Sea Urchin

Culture, Culture, Cultivo

1152

Development

1241

Tilapia

Culture, Culture, Cultivo

1135

Osmoregulation

1103, 1104

Reproduction, Reproduction, Reproduccion

1236

Stocking

1127

Swim Bladder

1142

Wastewater Aquaculture, Methodes d'aquiculture en eaux usees, Sistemas de Acuocultura con Agua de Desecho

1099, 1107, 1121, 1140, 1157, 1160, 1184, 1185, 1210, 1228, 1233, 1237, 1246, 1251, 1252, 1253

Water reconditioning/re-use systems, recyclage/methodes d'elevage en eaux recyclees, sistemas recirculatorios de acuocultura

1239

PUBLICATIONS ORDER FORM

Current Awareness Bibliography Volume 4, Number 2

LIST IN ASCENDING ORDER:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Additional subjects you would like to have included in subsequent current awareness bibliographies:

Return Address:

MAIL REQUEST TO: Deborah Turnbull
Fisheries Information Science Specialist
IDRC
5990 Iona Drive, UBC,
Vancouver, B.C. V6T 1L4
Canada

CUT HERE

LA FORMULE DE COMMANDE

Current Awareness Bibliography Volume 4 , Number 2

Enumérer dans l'ord ascendant

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Subjets supplémentaires que vous aimeriez voir indlus dans de porchaines bibliographies de la conscience courante:

Adresse de l'expéditeur:

Rendre à: Deborah Turnbull
C.R.D.I.,
5990 Iona Drive,
UBC,
Vancouver, B.C. V6T 1L4
Canada

ORDEN DE PEDIDO DE PUBLICACIONES

Bibliografía de Conocimiento Actual tomo 4 , número 2

LISTA EN ORDEN ASCENDENTE:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Temas adicionales que le gustaría a usted ver en subsiguientes bibliografías de conocimiento actual:

Remite: _____

Mánadense las solicitudes a: Deborah Turnbull
Fisheries Information Science Specialist
I.D.R.C.,
5990 Iona Drive, UBC,
Vancouver, B.C. V6T 1L4
Canada

