

10.0 Publication

10.1 Total number of publication in citation-indexed journals including refereed proceedings

Mimi A. M.T., Shaharom-Harrison, F.M, 2007. Acanthocephalans (Thorny – Headed Worm) as Indicator of Heavy Metal Pollution at Marang River, Kuala Terengganu in. Presented at UMT 6th Annual Seminar on Sustainability Science and Management, 2 – 4 May 2007, Awana Kijal, Golf, Beach & Spa Resort, Kemaman, Terengganu, Malaysia.

Lam, S.S., Ambak, M.A., Jusoh, A. and A.T.Law . , 2007. Waste excretion of marble goby *Oxyeleotris marmorata* Bleeker fed with different diets. Aquaculture, 2007, doi: 10.1016/j.aquaculture;274:49-56

Ambak, M.A., T.D.Dinh, A. Hassan and N.T. Phuong, 2007. Waste ecretion of marble goby *Pseudapocryptes lanceolatus* in the coastal mudflat areas of the Mekong Delta.Journal Of Sustainability Science and Management 2(2) ; 21-30

Dinh, T.D., M.A.Ambak, A.Hassan and N.T. Phuang Biology and Population Dynamics of *Pseudapocryptes elongatus* (Cuvier,1816) in coastal mudflats of the Mekong Delta, Vietnam. Pakistan Journal of Biological Sciences , 10(19):3284-3294

Dinh, T.D., M.A.Ambak, A.Hassan and N.T. Phuang. , 2007. Population Biology of the Goby *Pseudapocryptes elongates* (Cuvier, 1816) in coastal mudflats of the Mekong Delta. Asian Fisheries Science 20 (2007) ; 165-179

Sukree Hajisamae and Sakri Ibrahim, 2007. Seasonal and spatial variations of fish trophic guilds in a shallow, semi-enclosed tropical estuarine bay. Environ. Biol. Fish., Springer Science + Business Media, B.V. 2007 (UK). EBF1744R1

Abol-Munafi, A.B., M.A. Ambak, P. Ismail and B.M. Tam, 2007. Molecular Data From Cytochrome b for the Phylogeny of Channidae (*Channa* sp.) in Malaysia. Biotechnology 6 (1): 22-27.

Najiah Musa, Ruhil Hayati Hamdan, Lee Kok Leong, Lee Seong Wei and AhmadShamsuddin Ahmad 2007, Antibiotogram and plasmid profiling of *Vibrio alginolyticus* Isolated from Oyster, *Crassostrea irredalei* in Sungai Merchang, Marang,Terengganu, Proceeding 9th Symposium of The Malaysian Society of Applied Biology, 30/05/2007, 31/05/2007, City Bayview Hotel, Georgetown, Penang,Malaysia : 260-262

Najiah Musa, Ruhil Hayati Hamdan, Lee Kok Leong, Lee Seong Wei and AhmadShamsuddin Ahmad, 2007, Molecular Characterization of *Vibrio alginolyticus* Isolated from Oyster, *Crassostrea irredalei* in Sungai Merchang, Marang,Terengganu, Proceeding 9th Symposium of The Malaysian Society of Applied Biology, 30/05/2007, 31/05/2007, City Bayview Hotel, Georgetown, Penang, Malaysia :257-259

Lee Seong Wei, Najiah Musa, Wendy Wee, Nadirah Musa, and Lee Kok Leong, 2007, Antibiogram of *Edwardsiella tarda* and MIC values of antibiotic against it., Malaysian Science and Technology Congress 2007, 4-6 September 2007, Holiday Villa Subang, Selangor, Malaysia : 250-253.

Wendy Wee, Najiah Musa, Lee Seong Wei, Nadirah Musa, and Lee Kok Leong, 2007, Antibiogram of *Aeromonas hydrophila* isolated from farmed red tilapia (*Oreochromis* spp.) fish., Malaysian Science and Technology Congress 2007, 4-6 September 2007, Holiday Villa Subang, Selangor, Malaysia : 246-249.

Wendy Wee, Najiah Musa, Lee Seong Wei, Nadirah Musa, and Lee Kok Leong, 2007, RAPD fingerprinting of *Aeromonas hydrophila* isolated from farmed red tilapia (*Oreochromis* spp.) fish., Malaysian Science and Technology Congress 2007, 4-6 September 2007, Holiday Villa Subang, Selangor, Malaysia : 242-245.

Murugan Kaliomutho, Aziz Ahmad and Zaleha Kassim., 2007. Isolation, Characterization and Identification of Bacteria associated with mucus of *Acropora cervicornis* coral from Bidong Island, Terengganu, Malaysia. Malaysian Journal of Science, 26(2) : 27-39.

Kamaruzzaman, B.Y., Zaleha,K., Ong, M.C. and Willison, K.Y.S., 2007. Copper and Zinc in three dominant brackish water fish species from Paka Estuary, Terengganu, Malaysia. Malaysian Journal of Science, 26 (2): 65-70

Zaleha, K. and Bibi Shaheeda A.S., 2007. The Influence of Salinity and Monsoon to Zooplankton Biodiversity of a Coastal Wetland: An Important Parameter in Wetland Management. Proceeding in Kobayashi, K. and Maisarah Ali (eds) International Seminar on Wetlands and Sustainability 2007: 421-430.

Zaleha, K. and Nazia, A. K. , 2007. Checklist of Harpacticoid Species (Crustacea:Copepoda) from Rock Pool Seaweeds of Pulau Besar Melaka. Conference on Marine Ecosystems of Malaysia (COMEM 2007), 29-30 May Port Dickson, Negeri Sembilan, Malaysia

Zaleha K., Zulkifli T., Nazmeer N.,Rosdi M.N., 2007. Fish Larvae of Terengganu Coast, South China Sea. 6th UMT Annual Seminar on Sustainability Science and Management 2-5 May 2007: 72

Khoda Bakhsh, H., Christianus, A., Alimon, A.R., Khanif, M.Y., Aizam, Z. A., and Rashid Shariff. 2007. Recovery of nutrient in an artificial integrated culture system based on freshwater prawns *macrobrachium rosenbergii*, plants and fertilizers. J. ISSAAS Vol. 13(2): 63-76 Dr.Hamid

Zaleha, K. and Suguna, A. , 2007. Meiobenthos in the South China Sea during the pre- and post-monsoon. 6th UMT Annual Seminar on Sustainability Science and Management 2-5 May 2007

Hii, Y. S., A. T. Law, M. K. Abdul-Rashid and N. A. M. Shazili. 2007. Biodegradation of Tapis Blended Crude Oil by Using a Symbiotic Bacterial Consortium. Paper presented in Malaysian Science and Technology Congress 2007 (MSTC 2007) 4-6 September 2007 at Holiday Villa Subang, Kuala Lumpur.

Hii, Y. S., Lee, M. Y. and T. S. Chuah., 2007. Acute toxicity of organochlorine insecticide endosulfan and its effect on behaviour and some hematological parameters of Asian swamp eel (*Monopterus albus*, Zuiew). Pesticide Biochemistry and Physiology. Vol 89 (2007): 46-53.

10.2 Total number of books authored

AKUATROP. 2006 Aquaculture Research Directory 2006/2007. KUSTEM

Najiah M, Wendy W, Ruhil H.H, Lee SW, Lee KL and Noorasikin H., (2007), Bakteria dan Ikan, First Edition, UMT, Kuala Terengganu

Aquaculture Research Directory 2007/2008. AKUATROP – UMT

Nandana Gunawickrama. 2007. Fish Cytochrome P4501A : A Biomarker for aquatic environmental health. UMT

Nandana Gunawickrama. 2007. Controlled Laboratory Experiments : Design and Data Analysis an Aquatic Toxicology Perspective. UMT

Annual Report Institute of Tropical Aquaculture. 2007. AKUATROP 2006

10.3 Other Publications that have created an impact to government/ society/ policy (abstracts, etc-not including unpublished reports)

Sandra C. Z., Shaharom-Harrison, F.M, Berland B., 2007, The Study of Some Aspects of Nematode Parasites in Commercialized Marine Fishes in the Market : 7th International Symposium on Fish Parasites, 24 – 28 September 2007, Viterbo, Italy

Seman N.A., Shaharom-Harrison, F.M, 2007, Reservoir Infection of the Blood Trematode *Sanguinicola Armata* on the Bighead Carp *Aristichtys Nobilis* : 7th International Symposium on Fish Parasites, 24 – 28 September 2007, Viterbo, Italy.

Zanzabir, M.S., Shaharom-Harrison, F.M, Ihwan M. Z., 2007, Ectoparasites of Red Drum (*Sciaenops ocellatus*) in Pen Culture System at Setiu Lagoon. Presented at Seminar the Current State of Knowledge of the Setiu Wetlands, 2 December 2007, University Malaysia Terengganu.

T.D. Dinh, M.A.Ambak , A. Hassan and N.T.Phuong. , 2007. Preliminary study on burrows of the goby, *Pseudapocryptes elongates*, in coastal mudflat areas of Mekong Delta. 6th International Workshop on the Oceanography and Fisheries Science of the East China Sea, 3-5 November 2007, Nagasaki University, Nagasaki, Japan.

Gary Petol Felix and Sakri Ibrahim, 2007. Non-return device in trap fishery – A model test. In Proceeding National Research and Innovation Competition. 20-25 May, 2007. Universiti Sains Malaysia, Penang, MALAYSIA.

Fauziah Hasan and Sakri Ibrahim 2007. Colour vision of fish in captivity. . In Proceeding National Research and Innovation Competition. 20-25 May, 2007. Universiti Sains Malaysia, Penang, MALAYSIA.

Norazmi-Lokman, N. H., Abol-Munafi, A. B. and Asma, N. A. 2007. Study on the gonad structure of protandrous Anemonefish (*Amphiprion ocellaris*). 12th BIOLOGICAL GRADUATE CONGRESS 2007. Universiti Malaya, Kuala Lumpur, Malaysia. December 17-19 2007.

Van, M. V., Abol-Munafi, A. B., Ambak, M. A., Effendy, A. W. M. and Awang Soh, M., 2007. Histochemical developement of digestive enzymes in marble goby (*Oxyeleotris marmoratus*) larvae. ASIAN PASIFIC AQUACULTURE 2007. Melia Hotel and Convention Centre, Hanoi, Vietnam. August 5-8, 2007.

Abol-Munafi, A. B., Liem, P. T., Ambak, M. A. and Siraj, S. S., 2007. Some aspects on the reproductive biology of hybrid catfish, (*Clarias macrocephalus* and *C. gariepinus*). ASIAN PASIFIC AQUACULTURE 2007. Melia Hotel and Convention Centre, Hanoi, Vietnam. August 5-8, 2007.

Liem, P. T., Abol-Munafi, A. B., Ambak, M. A., Siraj, S. S. and Phuong, D. N., 2007. Responses of interspecific hybrid catfish (Clariidae) to *Aeromonas hydrophila* infection. ASIAN PASIFIC AQUACULTURE 2007. Melia Hotel and Convention Centre, Hanoi, Vietnam. August 5-8, 2007.

Norazmi-Lokman, N. H. and Abol-Munafi, A. B. Study on the effects of different feeding on the production of marine copepod, *Acartia* sp. ASIAN PASIFIC AQUACULTURE 2007. Melia Hotel and Convention Centre, Hanoi, Vietnam. August 5-8, 2007.

Taufik, H., Pitagsalee, C. and Abol-Munafi, A. B., 2007 The study of different feeds used for spotted babylone (*Babylonia areolata*) (Link, 1807) nursery. ASIAN PASIFIC AQUACULTURE 2007. Melia Hotel and Convention Centre, Hanoi, Vietnam. August 5-8, 2007.

Phuong, D. N., Effendy, A. W. M. and Abol-Munafi, A. B. Non-specific immune responses towards ascorbic acid supplementation in *Clarias* hybrid catfish (*Clarias gariepinus* x *Clarias macrocephalus*). ASIAN PASIFIC AQUACULTURE 2007. Melia Hotel and Convention Centre, Hanoi, Vietnam. August 5-8, 2007.

Wendy Wee, Najiah Musa, Lee Seong Wei and Nadirah Musa, 2007, Molecular characterization of *Edwardsiella tarda* isolated from farmed red tilapia (*Oreochromis* spp.) fingerlings by RAPD-PCR., SEAFDEC International Workshop on Emerging Fish Diseases in Asia, 06/12/2007, 07/12/2007, Bangkok, Thailand

Najiah Musa, Wendy Wee, Lee Seong Wei and Nadirah Musa, 2007, Antibioticsusceptibility of Gram-negative Edwarsiella tarda isolated from farmed red tilapia(*Oreochromis* spp.) fingerlings., SEAFDEC International Workshop on EmergingFish Diseases in Asia, 06/12/2007, 07/12/2007, Bangkok, Thailand : 60

Lee Seong Wei, Najiah Musa, Wendy Wee and Nadirah Musa, 2007, Surveillance of bacteria species in diseased freshwater ornamental fish from aquarium shop., SEAFDEC International Workshop on Emerging Fish Diseases in Asia, 06/12/2007, 07/12/2007, Bangkok, Thailand : 52

Lee Seong Wei, Najiah Musa 2007, Outbreak of Vibriosis in Mantis Shrimp(*Squilla* sp.), SEAFDEC International Workshop on Emerging Fish Diseases inAsia., 06/12/2007, 07/12/2007, Bangkok, Thailand : 51

Najiah Musa, Wendy Wee, Nur Asma Ariffin and Lee Kok Leong 2007, A study on RAPD fingerprinting of *Citrobacter freundii* isolated from farmed red tilapia(*Oreochromis* sp.) using universal M13 primer., 9th Symposium of the MalaysianSociety of Applied Biology: Exploring the Science of Life as Catalyst for Technological Advancement, 30/05/2007, 31/05/2007, Bayview Georgetown Hotel, Penang : 30

Najiah Musa, Wendy Wee, Nur Asma Ariffin and Lee Kok Leong, 2007, A preliminary study on enzymatic properties of *Edwardsiella tarda* isolated fromfarmed red tilapia (*Oreochromis* sp.), 9th Symposium of the Malaysian Society ofApplied Biology: Exploring the Science of Life as Catalyst for Technological Advancement, 30/05/2007, 31/05/2007, Bayview Georgetown Hotel, Penang : 28

Lee Seong Wei, Wendy Wee, Ruhil Hayati Hamdan, Najiah Musa, Nadirah Musa, Lee Kok Leong, Chuah Tse Seng, Noor Azhar Shazili 2007, The potential of methanol extract of *Pandanus amaryllifolius* Roxb as natural remedy of cholera,Workshop on the "Isolated Tissue preparations and HPLC Training". The Malaysian Society of Pharmacology and Physiology (MSPP), 03/06/2007,04/06/2007, Kulliyyah of Pharmacy, IIUM, Indera Mahkota Campus, Kuantan,Pahang

Lee Seong Wei, Wendy Wee, Ruhil Hayati Hamdan, Najiah Musa, Nadirah Musa, Lee Kok Leong, Chuah Tse Seng, Noor Azhar Shazili 2007, Incidence of antibiotic resistant of fish pathogenic bacteria., Workshop on the, "Isolated Tissue preparations and HPLC Training". The Malaysian Society of Pharmacology and Physiology (MSPP), 03/06/2007, 04/06/2007, Kulliyyah of Pharmacy, IIUM, Indera Mahkota Campus, Kuantan, Pahang

Lee Seong Wei, Wendy Wee, Ruhil Hayati Hamdan, Najiah Musa, Nadirah Musa, Lee Kok Leong, Chuah Tse Seng, Noor Azhar Shazili,2007, Do methanol and aqueous extract of *Zingiber officinale* (Roscoe) can alternative to commercial antibiotic for aquaculture use?, Workshop on the, Isolated Tissue preparations and HPLC Training." The Malaysian Society of Pharmacology and Physiology (MSPP), 03/06/2007, 04/06/2007, Kulliyyah of Pharmacy, IIUM, Indera Mahkota Campus, Kuantan, Pahang

Lee Seong Wei, Wendy Wee, Ruhil Hayati Hamdan, Najiah Musa, Nadirah Musa, Lee Kok Leong, Chuah Tse Seng, Noor Azhar Shazili, 2007, Antimicrobial property of methanol and aqueous extract of *Morinda citrifolia* Linn., Workshop on the "Isolated Tissue preparations and HPLC Training". The Malaysian Society of Pharmacology and Physiology (MSPP), 03/06/2007, 04/06/2007, Kulliyyah of Pharmacy, IIUM, Indera Mahkota Campus, Kuantan, Pahang

Lee Seong Wei, Wendy Wee, Ruhil Hayati Hamdan, Najiah Musa, Nadirah Musa, Lee Kok Leong, Chuah Tse Seng, Noor Azhar Shazili, 2007, Does *Centella asiatica* possess anti-vibrios property?, Workshop on the, ?Isolated Tissue preparations and HPLC Training". The Malaysian Society of Pharmacology and Physiology (MSPP), 03/06/2007, 04/06/2007, Kulliyyah of Pharmacy, IIUM, Indera Mahkota Campus, Kuantan, Pahang

Lee Seong Wei, Wendy Wee, Ruhil Hayati Hamdan, Najiah Musa, Nadirah Musa, Lee Kok Leong, Chuah Tse Seng, Noor Azhar Shazili, 2007, Potential antimicrobials from plants against *Aeromonas hydrophila*, *Citrobacter freundii*, *Edwardsiella tarda* and *Escherichia coli* isolated from freshwater fishes., Workshop on the "Isolated Tissue preparations and HPLC Training". The Malaysian Society of Pharmacology and Physiology (MSPP), 03/06/2007, 04/06/2007, Kulliyyah of Pharmacy, IIUM, Indera Mahkota Campus, Kuantan, Pahang

Lee Seong Wei, Najiah Musa, Nadirah Musa, Lee Kok Leong, Wendy Wee, Chuah Tse Seng and Noor Azhar Mohd Shazili, 2007, The potential of *Allium sativum* L. (Alliaceae) as an antimicrobial remedy for aquaculture use., International Symposium on Natural Products and Medicinal Chemistry (NPMC) 2007, 23/08/2007, 25/08/2007, Putra World Trade Centre, Kuala Lumpur

Lee Seong Wei, Najiah Musa, Nadirah Musa, Lee Kok Leong, Wendy Wee, Chuah Tse Seng and Noor Azhar Mohd Shazili, 2007, Screening of *Allium sativum* L. (Alliaceae) as an antimicrobial agent for fish culture., International Symposium on Natural Products and Medicinal Chemistry (NPMC) 2007, 23/08/2007, 25/08/2007, Putra World Trade Centre, Kuala Lumpur

Lee Seong Wei, Najiah Musa, Wendy Wee, Nadirah Musa and Lee Kok Leong, 2007, Efficacy of *Colocasia esculenta* (L) Shott leaves extract against vibriosis in marine culture., International Symposium on Natural Products and Medicinal Chemistry (NPMC) 2007, 23/08/2007, 25/08/2007, Putra World Trade Centre, Kuala Lumpur

Lee Seong Wei, Najiah Musa, Wendy Wee, Nadirah Musa and Lee Kok Leong (2007), *Syzygium aromaticum* as an antimicrobial source to combat fish systemic bacterial disease., International Symposium on Natural Products and Medicinal Chemistry (NPMC) 2007, 23/08/2007, 25/08/2007, Putra World Trade Centre, Kuala Lumpur

Zaleha, K. and Farah Diyana., 2007. Meiobenthic community in Seagrass Beds of Sg. Pulai Johor. JSPS-LIPI Joint Seminar on Coastal Marine Science, 2-6 August 2007, Jogyakarta.

Hii, Y. S., 2007. A Waste-To-Product Module For Marine Recirculation System. World Innovation Forum, KLCC., Kuala Lumpur 11th – 12th August, 2007.

10.4 Total number of publication in non-citation-indexed Journals

Hamid Khoda Bakhsh and Rashid Shariff. 2007 Nutrient Optimization and Computerized Decision Support Program in Recirculating Integrated Aquaculture System. The International Journal of Environmental, Cultural, Economic and Social Sustainability 3(5): 25-34