

CURRICULUM VITAE

Name : MHD IKHWANUDDIN @ POLITY BIN ABDULLAH
Department : INSTITUTE OF AQUACULTURE TROPICA
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ACADEMIC QUALIFICATION

(Institute),(Qualification),(Discipline),(Year)

UNIMAS, Ph.D., Marine Biology, 2008

UNIMAS, M.Sc., Aquatic Science, 2002

UPM, B.Sc., Fisheries Science, 1991

UPM, Dip., Fisheries, 1988

PROFESSIONAL QUALIFICATIONS

(Qualification),(Discipline),(Awarding Institute),(Year Awarded).

PREVIOUS APPOINTMENT

(Post),(Organisation),(From)-(Until)

Fisheries Officer, Fisheries Division, Department of Agriculture, Sarawak, March 1993-
February 2008

ADMINISTRATIVE DUTIES

(Role),(From)-(Until),(Level), (Organisation)

Panel Penilaian Permohonan Geran UMT, January 2013, Present, U, UMT

Timbalan Pengarah, Institut Akuakultur Tropika (AKUATROP), September 2011,
Present, U, UMT

Ketua Program, MSc. Akuakultur (Kerja kursus), September 2010, August 2011, U,
UMT

Ahli Jawatankuasa Keselamatan dan Kesihatan AKUATROP, June 2012, Present, F,
AKUATROP, UMT

Ahli Jawatankuasa Jawatankuasa Akademik Pengajian Siswazah, September 2011,
August 2014, U, UMT

Ahli Jawatankuasa Jawatankuasa Operasi Penyelidikan, September 2011, August

2014, U, UMT

Ahli Jawatankuasa Bertindak-Saranan Naib Canselor, October 2012, Present, U, UMT

Ahli Jawatankuasa Induk, November 2009, Present, I, Persidangan Antarabangsa Tahunan 2009 UMT

Ahli Jawatankuasa Teknikal AKUATROP, January 2009, Present, F, AKUATROP, UMT

Ahli Jawatankuasa Siswazah AKUATROP, March 2008, Present, F, AKUATROP, UMT

AJK Seminar Tahunan AKUATROP dan, lain seminar / bengkel AKUATROP, March 2008, Present, F, AKUATROP, UMT

Fisheries Officer In-charge, March 1993, February 2007, D, Sematan Fisheries Centre, Department of Agricultur

AREAS OF EXPERTISE

(Main),(Sub),(Area),(Keywords)

Agricultural Sciences, Aquaculture, Fish reproduction, (Seed production technology)

Agricultural Sciences, Aquaculture, Farming system and technology of aquatic organisms, (Crustacean growout culture)

Agricultural Sciences, Fisheries Sciences, Marine fisheries, (Portunid crab biology fisheries)

RESEARCH

(Project title),(Role in project),(From)-(Until),(Source),(Level).

Aquaculture Development of Mud Spiny Lobster, *Panulirus polyphagus* in Malaysia., June 2012 - In Progress, Unit Pengurusan Prestasi dan Pelaksanaan (Jabatan Perdana Menteri), IRIS Marine Sdn. Bhd. and Universiti Malaysia Terengganu., National

Study on Artificial Insemination, Putative Hormone and Larvae Feeding Regimes of Mud Spiny Lobster, *Panulirus polyphagus*, August 2011 - In Progress, ERGS (JPT), National

The Role of Postaglandins in Breeding Capacity of *Macrobrachium rosenbergii* Females in Captivity, May 2010 - In Progress, FRGS (JPT), National

A Fundamental Study on Digestive System Development in Grouper, Fundamental Research Grant Schema, September 2010 - In Progress, FRGS (JPT), National

Fundamental Process in The Reproductive Biology of Mud Crab, *Scylla Olivacea*, April 2010 - In Progress, FRGS (JPT), National

The Development of breeding technology for the production of banana shrimp (*Penaeus merguensis*) monosex postlarvae (PL), October 2009 - October 2011, Science Fund (MOA/MOSTI), National

Optimization of Survival in Artificial Production of Juvenile Crab of Blue Swimming Crab (*Portunus Pelagius*), July 2009 - October 2011, Science Fund (MOA/MOSTI),

National

Impacts of Methyl farnesoate on Reproduction of Intact and Eye Ablated Broodstock of *Scylla* sp., October 2009 - September 2011, Science Fund (MOA/MOSTI - Institute Biotechnology Melaka, National

Endocrine manipulations using gonad-stimulating hormone, Methyl farnesoate (MF) to induced maturation and spawning in banana shrimp (*Penaeus merguensis*) and its effect on the offspring quality., January 2009 - August 2011, Science Fund (MOA/MOSTI) - Department of Fisheries, National

Optimization of survival in artificial production of juvenile crab of blue swimming crab (*Portunus pelagicus*), July 2008 - June 2009, AKUATROP, UMT, National

Reproductive biology and fishery catch information of blue swimming crab (*Portunus pelagicus*)., July 2008 - June 2009, AKUATROP, UMT, National

Reproductive biology and fishery catch information of mud crab (*Scylla* spp.)., July 2008 - June 2009, AKUATROP, UMT, National

The development of technologies for the sustainable commercial culture of mangrove crab, with special reference to mass propagation of juvenile crabs, feed formulation and grow-out system, October 2000 - September 2004, MOSTI, National

Development of blue swimming crab (*Portunus pelagicus*) seed production technologies, July 2002 - June 2005, MOSTI, National

Portunid species natural reproduction technology in mangrove forest enclosures, October 2002 - September 2005, MOSTI, National

The refinement of mangrove crab seed production technology, January 1996 - December 1998, MOSTI, National

The biology and fishery of mangrove crab in East Malaysia, July 1998 - June 2000, MOSTI, National

Development of blue swimming crab (*Portunus pelagicus*) and mangrove crab (*Scylla olivacea*) seeds production technologies for commercial hatchery, January 2005 - December 2007, State Government of Sarawak, National

The mangrove crab larviculture research, January 1994 - December 1998, State Government of Sarawak, National

Development of mangrove crab soft-shell culture technologies, January 2002 - December 2005, State Government of Sarawak, National

Development of tiger grouper seed production technologies, January 2005 - December 2007, State Government of Sarawak, National

Danish / SE- Asian Tropical Coastal Ecosystem Research and Training Project, October 1997 - September 1999, DANCED, International

The preliminary estimates of the annual fishing efforts / production and stock assessments of mangrove crab in Sarawak, January 1994 - December 1988, State

Govtment of Sarawak, National

PROFESSIONAL AFFILIATIONS

(Client),(Role),(From)-(Until).

Department of Environment, Expert Panel Member for Kajian Pembentukan Indeks, September 2011 - August 2012

Asian Fisheries Society, Registered member, January 2011 - Present

SIRIM, Develop Malaysia Standard (MS) for aquaculture, July 2008 - Present

Universiti Malaysia Terengganu/IRIS Marine Sdn. Bhd., Lead Researcher for lobster seed production, January 2012 - December 2014

Kumpulan Muhandis Sdn. Bhd., Research Manager, October 2000 - September 2004

Sarawak Land Development Board, Technical Committee Member, November 2008 - Present

MHK Aquaculture, Lead Researcher for Soft Shell Production, January 2010 - Present

Department of Fisheries, Technical Member for Aquaculture Project Developme, January 2008 - Present

HP Aquaculture Sdn. Bhd., Technical Member of Grouper Seed Production, October 2008 - Present

Kembang Subur Sdn. Bhd., Technical Member for Pampano seed production, April 2008 - Present

EXPERT TECHNICAL/CONTRIBUTION

(Activity),(Client),(Role),(From)-(Until),(Level).

Curriculum Development of Diploma in Aquaculture Technology, Department of Poly-technique Education, January 2010 - December 2011, International

Lobster Seed Production in Malaysia, Blue Archipelago Berhad, January 2010 - Present, International

Kajian Pembentukan Indeks Kualiti Air Masin Malaysia, Department of Environment, Malaysia, September 2011 - August 2012, International

Lobster seed production in Malaysia, IRIS Marine Sdn. Bhd., Project Leader, August 2011 - December 2014, International

Udang Galah Warisan Negara, Department of Fisheries, Malaysia, November 2010 - Present, International

Soft-shell production under Economic Planned Unit (EPU), Malaysia, MHK Aquaculture, Project Leader, October 2010 - Present, International

Grouper seed production technology, HP Aquaculture Sdn. Bhd., Co-Researcher,

October 2008 - Present, International

Pampano seed production technology, Kembang Subuh Sdn. Bhd., Co-Researcher,
April 2008 - Present, International

Develop Standard Malaysia (MS) related to fisheries and aquaculture sector, Fisheries
and aquaculture industries, July 2008 - Present, International

Aquaculture project development in Terengganu, Farmers and fishermen, October
2008 - Present, International

Aquaculture project development in Sarawak, Local coastal fishermen, Advisor, January
2006 - Present, International

R&D and aquaculture development in Agro-base Industry with special reference to
Portunid crab (Mangrove crab, Scylla spp. and Blue swimming crab, Portunus spp.),
Coastal fishermen, Manager, October 2000 - September 2004, International

Sustain the Mangrove Ecosystem Biodiversity in Providing Livelihood for Local
Communities in Sematan, Sarawak, Coastal local communities, Manager, January
2003 - August 2007, International

AWARD AND RECOGNITIONS

(Awards),(Awarding Institute),(Year),(Level).

Article Publication (Indexed)Award, Universiti Malaysia Terengganu, 2012, University

Excellent-in-Service Award, Universiti Malaysia Terengganu, 2012, University

Article Publication (Indexed)Award, Universiti Malaysia Terengganu, 2011, University

Excellent-in-Service Award, Universiti Malaysia Terengganu, 2011, University

Article Publication (Indexed)Award, Universiti Malaysia Terengganu, 2010, University

Excellent-in-Service Award, Universiti Malaysia Terengganu, 2010, University

Article Publication (Indexed)Award, Universiti Malaysia Terengganu, 2009, University

Excellent-in-Service Award, Universiti Malaysia Terengganu, 2009, University

Vocational Service Recognition Award, Rotary Club of Kuching South, 2004, National

Anugerah Perkhidmatan Cemerlang, State Government of Sarawak, 2006, National

Anugerah Perkhidmatan Cemerlang, State Government of Sarawak, 1997, National

KEYNOTE ADDRESS / INVITED SPEAKER

(Title),(Event),(Venue),(Organizer),(Date),(Level).

Mud crab growout culture, Bengkel Akuakultur LKIM, Tawau, LKIM, 18/12/2012, National

The development of breeding technology for the production of banana shrimp,

Fenneropenaeus merguensis monosex postlarvae (PL), Biotech-Talk Series 10/2012, Auditorium INOS, Institut Bioteknologi Marin, 16/10/2012, National

Mud crab aquaculture in Malaysia, Seminar Kebangsaan LKIM, Kota Bharu, LKIM, 12/07/2012, National

Human Resource Development for the Development of Potential and Sustainable Aquaculture Projects in Malaysia (Co-writer with Prof. Dr. Faizal Shaharom), National Fisheries Symposium 2008, Kuala Terengganu, Department of Fisheries, Malaysia, State Government of Terengganu & UMT, 16/07/2008, National

Culture of mud crab within the mangrove forest, Business plan workshop for Petra-UNDP mangrove regeneration community project in Terengganu, UMT, Petra-UNDP mangrove regeneration community project, 03/04/2009, National

Crab pen culture of mud crab in the mangrove forest, AKUATROP Open Day, UMT, AKUATROP, UMT, 01/11/2009, National

INTELLECTUAL PROPERTY RIGHTS

(Product),(Type),(Year),(Year Awarded).

UNPATENT INTELLECTUAL PROPERTY RIGHTS

(Product),(Type),(Reg. No),(Owner),(Cost)

PUBLICATIONS

(Publication),(Level).

Articles in Journals

Ikhwanuddin, M., Shabdin, M.L. and Abol-Munafi, A.B., (2009), *Size at maturity of blue swimming crab (Portunus pelagicus) found in Sarawak coastal water.*, Journal of Sustainability Science and Management, Vol 4(1) : 56-65

Ikhwanuddin, M., Shabdin, M.L. and Abol-Munafi, A.B., (2009), *Natural diet of blue swimming crabs found in Sarawak coastal water.*, Journal of Sustainability Science and Management, Vol 1 : 85-92

Ikhwanuddin, M., Abol-Munafi, A.B. and Shabdin, M.L., (2009), *Catch information of blue swimming crab (Portunus pelagicus) from Sarawak coastal water of South China Sea.*, Journal of Sustainability Science and Management, Vol 4(1) : 93-103

Ikhwanuddin M, Bachok Z., Hilmi MG and Zakaria MZ., (2010), *Species Diversity, Carapace Width-Body Weight Relationship, Size Distribution and Sex Ratio of Mud Crab, Genus Scylla from Setiu Wetlands of Terengganu Coastal Waters, Malaysia.*, Journal of Sustainability Science and Management, Vol 5(2) : 97-109

Ikhwanuddin M, Bachok Z, Mohd-Faizal WWY, Azmie G and Abol-Munafi AB., (2010), *Size of Maturity of Mud Crab Scylla olivacea (Herbst, 1796) from Mangrove Areas of Terengganu Coastal Waters.*, Journal of Sustainability Science and

A.J. Memon , M. Ikhwanuddin , A.D. Talpur , M.I. Khan , M.O. Fariddudin , J. Safiah and A.B. Abol-Munafi., (2011), *Assessment of Sperm Viability, Determination Fertilization Capacity and Hatching Rate by Artificial Insemination of Banana Shrimp, Penaeus merguensis (De Man, 1888)*, Research Journal of Applied Science, Vol 6(3) : 174-178

M. Ikhwanuddin, G. Azmie, H.M. Juariah, M.Z. Zakaria, M.A. Ambak., (2011), *Biological information and population features of mud crab, genus Scylla from mangrove areas of Sarawak, Malaysia.*, Fisheries Research, Vol 108(2) : 299-306

A.D. Talpur, A.J. Memon, M.I. Khan, M. Ikhwanuddin, M.M. Danish Daniel and A.B. Abol-Munafi, (2011), *A Novel of Gut Pathogenic of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758) and Pathogenic of Vibrio harveyi a Transmission Agent in Larval Culture under Hatchery Conditions.*, Research Journal of Applied Science, Vol 6(2) : 116-127

A.D. Talpur, A.J. Memon, M.I. Khan, M. Ikhwanuddin, M.M. Danish Daniel and A.B. Abol-Munafi, (2011), *Pathogenicity and Antibiotic Sensitivity of Pathogenic Flora Associated with the Gut of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1857).*, Journal of Animal and Veterinary Advances, Vol 10(16) : 2106-2119

Ikhwanuddin Abdullah @ Polity, Juariah Hafsyah Muhamad, Shabdin Mohd Long and Abol-Munafi Ambok Bolong., (2011), *Fecundity of Blue Swimming Crab, Portunus Pelagicus Linnaeus, 1758 from Sematan Fishing District, Sarawak Coastal Water of South China Sea.*, Borneo Journal of Resource Science and Technology, Vol 1 : 46-51

M. Ikhwanuddin, T. Nor Adila, M.N. Azra, Y.S. Hii, A.D. Talpur and A.B. Abol-Munafi., (2011), *Determination of Live Prey Ingestion Capability of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758) Larvae.*, World Journal of Fish and Marine Sciences, Vol 3(6) : 570-575

A.D. Talpur, A.J. Memon, M.I. Khan, M. Ikhwanuddin, M.M. Danish Daniel and A.B. Abol-Munafi, (2011), *Supplementation of Indigenous Lactobacillus Bacteria in Live Prey and Water Additive to Larviculture of Portunus pelagicus (Linnaeus, 1758).*, Advance Journal of Food Science and Technology, Vol 3(5) : 390-398

Ikhwanuddin, M., Azra, M.N., Sung, Y.Y., Abol-Munafi, A.B. and Shabdin, M.L., (2012), *Live foods for juvenile's production of blue swimming crab, Portunus pelagicus (Linnaeus, 1766).*, Journal of Fisheries and Aquatic Science, Vol 7(4) : 266-278

M. Ikhwanuddin, Nurfaseha, A.H., Abol-Munafi, A.B. and Shabdin, M.L., (2012),

Movement patterns of blue swimming crab, Portunus pelagicus in the Sarawak coastal water, South China Sea., Journal of Sustainability Science and Management., Vol 7(1) : 8-15

Ikhwanuddin, M., Azra, M. N., Talpur, A.D., Abol-Munafi, A. B. and Shabdin, M. L., (2012), *Optimal water temperature and salinity for production of blue swimming crab, Portunus pelagicus 1st day juvenile crab.*, Aquaculture, Aquarium, Conservation & Legislation., Vol 5(1) : 4-8

M. Ikhwanuddin, M. N. Azra, Y. S. Hii, A. Redzuari, Z.A. Aizam and A.B. Abol-Munafi, (2012), *Ingestion rates of brachionus sp. and artemia nauplii by blue swimming crab, Portunus pelagicus (Linnaeus, 1758) larvae.*, Journal of Fisheries and Aquatic Science., Vol 7(6) : 402-411

A.D. Talpur, A.J. Memon, M.I. Khan, M. Ikhwanuddin, M.M. Danish Daniel and A.B. Abol-Munafi, (2012), *Isolation and screening of lactic acid bacteria from the gut of blue swimming crab, Portunus pelagicus, an in vitro inhibition assay and small scale in vivo model for validation of isolates as probiotics.*, Journal of Fisheries and Aquatic Science., Vol 7(1) : 1-28

Mhd Ikhwanuddin, Juariah Hafsy Mansor, Abol-Munafi Ambok Bolong, and Shabdin Mohd Long, (2012), *Improved hatchery-rearing techniques for juvenile production of blue swimming crab, Portunus pelagicus (Linnaeus, 1758).*, Aquaculture Research, Vol 43(9) : 1251-1259

A.J. Memon, N. Hidayati, A.D. Talpur, M.I. Khan, M.O. Fariddudin, J. Safiah, M. Ikhwanuddin and A.B. Abol-Munafi, (2012), *Development of shrimp holder device for artificial insemination of banana shrimp, Penaeus merguensis (De Man, 1888).*, Research Journal of Applied Science., Vol 7(1) : 10-16

A.D. Talpur, A.J. Memon, M.I. Khan, M. Ikhwanuddin, M.M. Danish Daniel and A.B. Abol-Munafi, (2012), *Probiotic for larviculture of Portunus pelagicus (Linnaeus, 1758)*, International Journal of Current Research, Vol 4(5) : 112-119

Hidayah, M., Ikhwanuddin, M., Shahreza, M.S., Abol - Munafi, A.B. and Mohd Fariddudin, O., (2012), *Triploidy induction using cold shock treatment in banana shrimp, Penaeus merguensis (De Man, 1888)*, Borneo Science, Vol 30 : 64-69

Ikhwanuddin, M., Azmie, G., Juariah, H. M., Abol-Munafi, A. B., Zakaria, M. Z. and Ambak, M. A., (2012), *Tracking the movement of mud crabs, genus Scylla from mangrove area using telemetry system*, Borneo Science, Vol 30 : 40-56

Talpur, A.D., Memon, A.J., Khan, M.I., Ikhwanuddin, M., Danish Daniel, M.M. and Abol-Munafi, A.B., (2012), *Inhibition of pathogens by lactic acid bacteria and application as water additive multi isolates in early stages larviculture of P.*

pelagicus (Linnaeus, 1758), Journal of Animal and Plant Sciences, Vol 22(1) : 54-64

Hafiz, M. B., Hidayah, M., Yusdianatu, A. Y., Ambak, M. A., Abol-Munafi, A. B., and Ikhwanuddin, M., (2012), *Effect of estrogen hormone, 17 β - estradiol on feminization, survival rate and growth rate Of tiger shrimp, Penaeus monodon (Fabricius, 1798) postlarvae*, Borneo Science, Vol 30 : 70-80

Hasan Basri Idris, Mohd Azmi Ambak and Ikhwanuddin Mohd, (2012), *Sex determination in oxyeleotris marmorata (Bleeker, 1852) based on morphometric features*, Advances in Natural and Applied Sciences, Vol 6(6) : 763-771

Ikhwanuddin, M., Talpur, A.D., Zulizah, O., Hidayah, A.M. and Shamsuddin, A.A. and Abol-Munafi, A.B, (2012), *Masculine effect of androgen hormone, 17 α -methyltestosterone on tiger shrimp, Penaeus monodon (Fabricius, 1798) postlarvae*, International Journal of Current Research, Vol 4(10) : 59-64

A.D. Talpur, A.J. Memon, M.I. Khan, M. Ikhwanuddin, M.M. Danish Daniel and A.B. Abol-Munafi, (2012), *Gut lactobacillus sp. bacteria as probiotics for Portunus pelagicus lariculture: effects on survival, (Linnaeus, 1758)digestive enzyme activities and water quality*, Invertebrate Reproduction & Development, Vol 56(5) : 1-12

Talpur, A.D., Memon, A.J., Khan, M.I., Ikhwanuddin, M., Daniel, M.M.D. and Abol-Munafi, A.B., (2012), *Control of vibrio harveyi infection in blue swimming crab, Portunus pelagicus larvae by the gut isolated lactic acid bacteria under challenge bioassay*, Pakistan Veterinary Journal, Vol 32(3) : 408-411

Ikhwanuddin, M., Azra, M.N., Siti-Aimuni, H. and Abol-Munafi, A.B., (2012), *Fecundity, embryonic and ovarian development of blue swimming crab, Portunus pelagicus (Linnaeus, 1758) in coastal water of Johor, Malaysia.*, Pakistan Journal of Biological Sciences, Vol 15(15) : 720-728

Ikhwanuddin, M., Talpur, A.D., Azra, M.N., Mohd Azlie, B., Hii, Y.S. and Abol-Munafi, A.B., (2012), *Effects of stocking density on the survival, growth and development rate of early stages blue swimming crab, Portunus pelagicus (Linnaeus, 1758) larvae*, World Applied Sciences Journal, Vol 18(3) : 379-384

Mhd Ikhwanuddin Abdullah, Nur Aina Lyana, Noor Hidayati Abu Bakar, Safiah Jasmani and Abol-Munafi Ambok Bolong, (2012), *Stimulation of ovarian maturation using serotonin (5-hydroxytryptamine) hormone on banana shrimp, Fenneropenaeus merguensis (De Man, 1888)*, World Applied Sciences Journal, Vol 18(3) : 436-445

Talpur, A.D. and Ikhwanuddin, M., (2012), *Dietary effects of garlic (Allium sativum) on haemato-immunological parameters, survival, growth, and disease resistance*

against *vibrio harveyi* infection in Asian sea bass, *Lates calcarifer* (Bloch),
Aquaculture, Vol 364-365 : 6-12

Talpur, A.D., and Ikhwanuddin, M., (2012), *Effects of stress tests on larvae of blue swimming crab, Portunus pelagicus (Linnaeus, 1758)*, Advances in Environmental Biology, Vol 6(7) : 1909-1915

Talpur, A.D., and Ikhwanuddin, M., (2012), *First isolation of vibrio probioticus from the gut of Portunus pelagicus (Linnaeus 1758) and its probiotic competency against shellfish pathogens*, Pure and Applied Biology, Vol 1(2) : 28-32

A.D. Talpur, A.J. Memon, M.I. Khan, M. Ikhwanuddin, M.M. Danish Daniel and A.B. Abol-Munafi, (2012), *Effects of lactobacillus probiotic on the Enhancement of larval survival of Portunus pelagicus (Linnaeus, 1758) fed via bioencapsulated in live feed*, World Journal of Fish and Marine science, Vol 4(1) : 42-49

Memon, A.J., Talpur, A.D., Khan, M.I., Fariddudin, M.O., Safiah, J., Abol-Munafi, A.B. and Ikhwanuddin, M., (2012), *Morphology of fresh and cryopreserved sperms of banana shrimp Penaeus merguensis (De Man, 1888)*, Research Journal of Applied Sciences, Vol 7(1) : 54-59

Memon, A.J., Talpur, A.D., Khan, M.I., Fanddudm, M.O., Safiah, J., Abol-Munafi, A.B. and Ikhwanuddin, M., (2012), *Optimization of spermatophores cryopreservation protocol of banana shrimp (Penaeus merguensis) (De Man, 1888)*, Journal of Animal and Veterinary Advances, Vol 11(10) : 1688-1704

Memon, A.J., Ikhwanuddin, M., Talpur, A.D., Khan, M.I., Fariddudin, M.O., Safiah, J. and Abol-Munafi, A.B., (2012), *To determine the efficiency of different fresh diets in improving the spermatophore quality of banana shrimp Penaeus merguensis (De Man, 1888)*, Journal of Animal and Veterinary Advances, Vol 11(9) : 1478-1485

Nadiah, W.N., Ikhwanuddin, M. and Abol-Munafi, A.B., (2012), *Remarks on the mating behavior and success of blue swimming crab, Portunus pelagicus (Linnaeus, 1766) through the induction of limb autotomy technique*, Journal of Animal and Veterinary Advances, Vol 11(8) : 1149-1157

Redzuari, A., Azra, M.N., Abol-Munafi, A.B., Aizam, Z.A., Hii, Y.S. and Ikhwanuddin, M., (2012), *Effects of feeding regimes on survival, development and growth of blue swimming crab, Portunus pelagicus (Linnaeus, 1758) larvae*, World Applied Sciences Journal, Vol 18(4) : 472-478

Azra, M.N., Wendy, W., Talpur, A.D., Abol-Munafi, A.B. and Ikhwanuddin, M., (2012), *Effect of tank colouration on survival, growth and development rate of blue swimming crab, Portunus pelagicus (Linnaeus, 1758) larvae*, International Journal of Current Research and Review, Vol 4(12) : 117-123

Hidayah, M, Abol-Munafi, A.B., Shahreza, M.S., Fariddudin, O. and Ikhwanuddin, M., (2013), *The Effects Of Triploidy Towards Growth Performance, Survival Rate, Gender Ratio And Sex Differentiation On Banana Shrimp, Penaeus merguensis (de Man, 1888) Postlarvae Compared To Diploid Siblings*, World Applied Sciences Journal, Vol In Press : In press

M. Ikhwanuddin, Liyana, A.N., Azra, M.N., Bachok, Z. and Abol-Munafi, A.B., (2013), *Natural diet of blue swimming crab, Portunus pelagicus at Strait of Tebrau, Johor, Malaysia*, Sains Malaysiana, Vol 42(5) : In press

A.D. Talpur and M. Ikhwanuddin, (2013), *Azadirachta indica (Neem) leaf dietary effects on the immunity response and disease resistance of Asian sea bass, Lates calcarifer challenged with Vibrio harveyi*, Fish and Shellfish Immunology, Vol 34(1) : 254-264

Books

Ikhwanuddin, A. M., (2007), *Guidelines for Crab Pen Culture within Mangrove Forest, Inland Fisheries Handbook.*, 1st. Edition, Department of Agriculture, Sarawak., Kuching, Sarawak

Mhd, Ikhwanuddin, Azmie Ghazali, Mohd Ihwan Zakariah and Abol Munafi Ambok Bolong., (2011), *Mud Crab: Culture System and Practices in Malaysia.*, 1st Edition, Submitted, Penerbit Universiti (UMT)

Abdul Jabbar A.F. Memon, Mhd. Ikhwanuddin bin Abdullah and Abol-Munafi bin Ambok Bolong, (2012), *Spermatophore cryopreservation of Banana shrimp, Penaeus merguensis*, 1st Edition, Lambert Academic Publishing

Thesis Dissertations

The Biology and Fishery of Mud Crab, genus Scylla in East Malaysia, University Malaysia Sarawak, Institute of Biodiversity and Environmental Conservation, 2001

The Biology, Fishery and the Development of Seed Production Technology of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1766), Universiti Malaysia Sarawak, Faculty of Resource Science and Technology, 2007

Articles in Proceedings

Chang, W. W. S and Ikhwanuddin, A. M. (1997), *Pen culture of mud crab, genus Scylla, in the mangrove ecosystems of Sarawak, East Malaysia.*, Mud Crab Aquaculture and Biology. International Scientific Forum., 21/04/1997, 24/04/1997, Darwin, Australia

Ikhwanuddin, A. M. and Oakley, S. (1998), *Status of mud crab culture in Sarawak*,

East Malaysia., International Forum on the Culture of Portunid Crabs., 01/12/1998, 04/12/1998, Boracay, Philipines.

Ikhwanuddin, A. M. and Oakley, S. (1999), *Culture of Mud Crabs in Mangrove Areas. The Sarawak Experience.*, TCE-Project third workshop. Integrated Management of mangrove/coastal Ecosystems for sustainable Aquaculture Development., 23/03/1999, 25/03/1999, Kuching

Ikhwanuddin, A. M. and Hariffin, A. B. (1999), *Status of Mud Crab, genus Scylla breeding in Sarawak, East Malaysia.*, Tropical Fisheries and Aquaculture Conference., 05/09/1999, 07/09/1999, Kuala Terengganu

Wei Say, W.C and Ikhwanuddin, A.M. (1999), *Pen Culture of Mud Crabs, Genus Scylla in the Mangrove Ecosystems of Sarawak, East Malaysia*, Mud Crab Aquaculture and Biology: Proceedings of an International Scientific Forum, 21/04/1997, 24/04/1997, Darwin, Australia

Z. Supian and A. M. Ikhwanuddin. (2002), *Population Dynamics Of Freshwater Molluscs (Gastropod: Melanoides Tuberculata) In Crocker Range Park, Sabah.*, ASEAN Review of Biodiversity and Environmental Conservation (ARBEC)., 01/01/2002, 01/01/2002, Sabah.

Ikhwanuddin, A. M. and Kasto, M. D. (2004), *Development and Assessment of Mud Crab Culture Technology in the Mangrove Forest.*, Department of Agriculture, Sarawak Senior Offices Conference, 01/01/2004, 01/01/2004, Kuching

Ikhwanuddin M. and Shabdin, M.L. (2005), *Status of Blue Swimming Crab (Portunus spp.) Landing in Sarawak, Malaysia.*, Sustainability Science and Management: meeting challenges in Sustainable Agrotechnology, 02/05/2005, 03/05/2005, Kolej Universiti Sains dan Teknologi Malaysia, Kuala Terengganu, Terengganu

Ikhwanuddin, A. M., Shabdin, M. L. and Khairulhayadi, B. (2005), *Development of Seed Production Technology of Blue Swimming Crab, Portunus pelagicus in Sarawak.*, Tropical Fisheries and Aquaculture Conference., 01/01/2005, 01/01/2005, Kuala Terengganu

Ikhwanuddin, A. M and Hariffin, A. B. (2006), *Development of Soft-shell Crab Culture Technology in Sarawak.*, National Fisheries Symposium., 01/01/2006, 01/01/2006, Kuching

Ikhwanuddin, A. M., and Fakharuddin, B. (2006), *Fishery catches Information of Blue Swimming Crab (Portunus spp.) in Sarawak, Malaysia.*, Department of Agriculture, Sarawak Annual Research Offices Conference., 01/01/2006, 01/01/2006, Kuching

Ikhwanuddin, A. M. and Shabdin M. L. (2007), *Population Characteristics of Blue Swimming Crab, Portunus pelagicus from the Commercial Fishery Catches in Sarawak.*, Natural Resource and Environment Management, Environment Safety and Health Conference, 27/11/2007, 28/11/2007, Kuching

Ikhwanuddin, A. M and Hariffin, A. B. (2007), *Soft-shell Crab Culture in Sarawak.*, Senior Officer Conference, Department of Agriculture, Sarawak., 10/12/2007, 11/12/2007, Kuching

Ikhwanuddin, M. and Abol-Munafi, A. B. (2008), *Culture of blue swimming crab, Portunus pelagicus juveniles in nursery ponds.*, National Fisheries Symposium, Under Review, 14/07/2008, 16/07/2008, Kuala Terengganu, Terengganu

Shaharom-Harrison, F. M. and Ikhwanuddin, M. (2008), *Human Resource Development for the Development of Potential and Sustainable Aquaculture Projects in Malaysia.*, National Fisheries Symposium, Under Review, 14/07/2008, 16/07/2008, Kuala Terengganu, Terengganu

Husin, N. N., Jastan, F. N. A. and Ikhwanuddin, M. (2008), *Genetic diversity in two populations, blue swimming crab, Portunus pelagicus assayed by random amplified polymorphic DNA markers- preliminary assessment*, Symposium of the Malaysia Society of Applied Biology, 06/11/2008, 08/11/2008, Kuching, Sarawak

Ikhwanuddin, M. and Shaharom-Harrison, F. M. (2009), *Education and training programmes for Human Resource Development in aquaculture projects in Malaysia*, International Symposium on Aquaculture and Fisheries Education (ISAFE), 27/11/2009, 30/11/2009, Bangkok, Thailand

Shaharom-Harrison, F. M. and Ikhwanuddin, M. (2009), *Academic and industry partnership for aquaculture development through Agriculture R&D Fund in Malaysia*, International Symposium on Aquaculture and Fisheries Education (ISAFE), 27/11/2009, 30/11/2009, Bangkok, Thailand.

Ikhwanuddin, M., Abol-Munafi, A. B. and Shabdin, M. L. (2009), *Movement Patterns of Blue Swimming Crab (Portunus pelagicus) from mark-recapture tagging study from the Sarawak coastal water of South China Sea*, 3rd Regional Natural Resources Symposium 2009, 28/08/2009, 30/08/2009, Kuching, Sarawak, Malaysia

Ikhwanuddin, M., Redzuari, A., Abol-Munafi, A. B. and Azmie, G. (2009), **EFFECT OF PROBIOTICS ON SURVIVAL RATE AND GROWTH PERFORMANCE FOR THE PRODUCTION OF THE BLUE SWIMMING CRAB *Portunus pelagicus* JUVENILES**, ASIAN PACIFIC AQUACULTURE 2009, 03/11/2009, 06/11/2009, KUALA LUMPUR, MALAYSIA

Ihwan, M. Z., Faud, M. M. A., Shaharom-Harisson, F. M. and Ikhwanuddin, M. (2009), *STUDY OF ECTOPARASITES ON BLUE SWIMMING CRAB Portunus pelagicus*, ASIAN PACIFIC AQUACULTURE 2009, 03/11/2009, 06/11/2009, KUALA LUMPUR, MALAYSIA

Fara-Nor-Asmira, J., Norainy, M. H. and Ikhwanuddin, A. M. (2009), *Population structure and genetic variation of the Blue Swimming Crab (Portunus pelagicus) in Malaysian waters inferred by Random Amplified Polymorphic DNA (RAPD)*, Proceedings of the International Conference on the Marine Ecosystems, 25/03/2009, 26/03/2009, Permai Hotel, Kuala Terengganu, Terengganu

Ikhwanuddin, M., Azmie, G., Juariah, M., Zakaria, M. Z., and Ambak, M. A. (2010), *Biological information and population features of mud crab, genus Scylla from mangrove areas of Sarawak, Malaysia coastal waters of South China Sea.*, 1st National Conference on Natural Resources, 18/05/2010, 19/05/2010, Kota Bharu, Kelantan.

Nadiah, W. N., Ikhwanuddin, M., Abol-Munafi, A. B., Yeong, Y. S., Safiah, J., and Laufer, H. (2010), *Stimulation of Ovarian Maturation by Eyestalk Ablation and the Identification of Methyl Farnesoate Hormone in Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758).*, 4th International Conference on Postgraduate Education, 27/11/2010, 28/11/2010, Cititel Hotel, Midvalley, Kuala Lumpur.

Hilmi, M. G., Bachok, Z., Azmie, G., Zakaria, M. Z., and Ikhwanuddin, M. (2010), *Species composition, carapace width-body weight relationship, size distribution and sex ratio of mud crab, genus Scylla from Setiu Wetlands of Terengganu coastal water, Malaysia*, 1st National Conference on Natural Resources, 18/05/2010, 19/05/2010, Kota Bharu, Kelantan.

Mir A. D. Talpur, Memon, A. J., K. M. Iqbal, Ikhwanuddin, M., and Abol Munafi A. B. (2010), *Profusion of potential pathogen bacteria in the gut of blue Swimming crab Portunus pelagicus (Linnaeus, 1758)*, 4th International Conference on Postgraduate Education, (ICPE-4), 27/11/2010, 28/11/2010, Cititel Hotel, Midvalley, Kuala Lumpur.

Memon. A. J., Ikhwanuddin, M., Talpur, A. D., Fariddudin. M. O., Safiah, J., and Abol Munafi, A. B. (2010), *Sperm viability assessment of banana shrimp, Fenneropenaeus merguensis (De Man, 1888) for cryopreservation process*, 4th International Conference on Postgraduate Education, (ICPE-4), 27/11/2010, 28/11/2010, Cititel Hotel, Midvalley, Kuala Lumpur

Nadiah, W. N., Ikhwanuddin, M. , and Abol- Munafi A.B. (2010), *Observations on the Mating Behavior and success of blue swimming crab, Portunus pelagicus (Linnaeus, 1758) through the induction of limb autotomy technique.*, Network on Aquaculture Development and Entrepreneurship, 19/10/2010, 20/10/2010, Universiti Malaysia Kelantan, Kota Bharu, Kelantan.

M.IKHWANUDDIN,M.L. SHABDIN & A.B. ABOL MUNAFI (2010), *OPTIMAL WATER TEMPERATURE AND SALINITY CONDITIONS FOR THE PRODUCTION OF BLUE SWIMMING CRAB, Portunus pelagicus*, ANNUAL SEMINAR ON MARINE SCIENCE & AQUACULTURE, 10/03/2010, 12/03/2010, Universiti Malaysia Sabah,Kota Kinabalu

JUARIAH,M.,IKHWANUDDIN,M.,ABOL-MUNAFI,A.B. & SHABDIN,M.L. (2010), *Effect of Water Exchange and Antibiotics on Larvae Rearing of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1766)*, ANNUAL SEMINAR ON MARINE SCIENCE AND AQUACULTURE, 10/03/2010, 12/03/2010, Universiti Malaysia Sabah,Kota Kinabalu

AZMIE,G.,IKHWANUDDIN,M.,MOHD FAUZAN,M.Z. & ABOL-MUNAFI (2010), *EFFECT OF DIFFERENT SALINITY FOR THE PRODUCTION OF BERRIED FEMALE MUD CRAB, Scylla olivacea*, ANNUAL SEMINAR ON MARINE SCIENCE AND AQUACULTURE, 10/03/2010, 12/03/2010, Universiti Malaysia Sabah,Kota Kinabalu

Memon A.J., Ikhwanuddin M., Talpur A.D., Khan M.I., Fariddudin M.O., Safiah J. and Abol-Munafi A.B. (2011), *Determine the Spermatophore Quality Improvement through Different Diets, in Banana Shrimp Penaeus merguensis (De Man, 1888).*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Cik Syahrizawati Mohd Zohri, Lee Seong Wei, Muhammad Ikhwanuddin Abdullah, Nurdiana Roslan and Zalina Che Manan (2011), *Antibiogram of Aeromonas spp. Isolated from Mud Crab, Scylla tranquebarica*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Cik Syahrizawati Mohd Zohri, Lee Seong Wei, Muhammad Ikhwanuddin Abdullah, Nurdiana Roslan and Zalina Che Manan (2011), *Antimicrobial Activity of Punica granatum L. against Edwardsiella tarda, Klebsiella spp. and Salmonella spp. Isolated from Mud Crab, Scylla tranquebarica.*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Juariah, M., Ikhwanuddin, M., Abol-Munafi, A.B., and Shabdin, M.L. (2011), *Exchange and Antibiotics on Larvae Rearing of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758)*, 9th Asian Fisheries and Aquaculture Forum, 21/04/2011, 25/04/2011, Shanghai Ocean University, China.

Hafiz, M.B.,M. Ikhwanuddin, Yusdianatu, A.Y. Ambak, M.A. and Abol-Munafi A.B. (2011), *Effect of Estrogen Hormone, 17 β -Estradiol on Feminization, Survival Rate and Growth Rate of Tiger Shrimp, Penaeus monodon (Fabricius, 1798) Postlarvae.*, 8th Annual Seminar on Marine Science & Aquaculture, 08/03/2011, 10/03/2011, Universiti Malaysia Sabah, Kota Kinabalu, Sabah

M. Ikhwanuddin, Yeong, Y.S., and Abol-Munafi, A.B. (2011), *Live Foods for Juveniles Production of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758)*., 9th Asian Fisheries and Aquaculture Forum, 21/04/2011, 25/04/2011, Shanghai Ocean University, China.

Siti Zuriati, D., Mhd Ikhwanuddin, P.A., Abol-Munafi, A.B. and Safiah, J. (2011), *Effects of Probiotic and Prebiotic on Growth and Survival Rate of White Shrimp (Litopenaeus vannamei) Reared in Low Salinity Waters*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Hidayah, M., Ikhwanuddin, M., Shahreza, M.S. and Abol-Munafi, A.B. (2011), *Triploidy Induction using Cold Shock Treatment on Banana Shrimp, Penaeus merguensis (De Man, 1888)*, 8th Annual Seminar on Marine Science & Aquaculture, 08/03/2011, 10/03/2011, Universiti Malaysia Sabah, Kota Kinabalu, Sabah

Cik Syahrizawati Mohd Zohri, Lee Seong Wei, Muhammad Ikhwanuddin Abdullah, Nurdiana Roslan and Zalina Che Manan (2011), *The Sensitivity of Vibrio alginolyticus and Vibrio parahaemolyticus against the Selected Antibiotics*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Mohammad Zaidi Z., Ikhwanuddin, M., and Jolharry A.R (2011), *Growth and Molting Periods of Mud Crab, Scylla paramamosain in Cultured Condition Using Autotomy Technique*, Universiti Malaysia Terengganu 10th International Annual Symposium on Sustainability Science and Management, 11/07/2011, 13/07/2011, Permai Hotel, Kuala Terengganu, Terengganu

Azmie G, Muhamad Sofie, M.H.N., Ikhwanuddin, M., Ihwan, M.Z. and Abol-Munafi, A.B. (2011), *Size at Maturity and Mating of Mud Crab, Scylla tranquebarica (Fabricius, 1798), from Mangrove Area of Terengganu Coastal Water.*, 8th Annual Seminar on Marine Science & Aquaculture, 08/03/2011, 10/03/2011, Universiti Malaysia Sabah, Kota Kinabalu, Sabah

Cik Syahrizawati Mohd Zohri, Lee Seong Wei, Muhammad Ikhwanuddin Abdullah, Nurdiana Roslan and Zalina Che Manan (2011), *Heavy Metal Profiling of Edwardsiella tarda, Klebsiella spp. and Salmonella spp. Isolated from Mud Crab, Scylla tranquebarica*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Z. Mohammad Zaidi, M.G. Hilmi, M. Ikhwanuddin, and Z. Bachok. (2011), *Population Dynamics of Mud Crab, Scylla olivacea from Setiu Wetland Areas, Terengganu, Malaysia.*, 10th International Annual Symposium on Sustainability Science and Management, 11/07/2011, 13/07/2011, Permai Hotel, Kuala Terengganu, Terengganu

Salah, A. Alshawish, Abdullah, I. Mohamad and G. Achuthan Nair. (2011), *Short and Longterm Toxicities of Chemical Pesticides on the Earthworm Aporetodea caliginosa (Savigny 1826)*, Universiti Malaysia Terengganu 10th International Annual Symposium on Sustainability Science and Management, 11/07/2011, 13/07/2011, Permai Hotel, Kuala Terengganu, Terengganu

Memon, A.J., Ikhwanuddin, M., Talpur, A.D., Fariddudin, M.O, Safiah, J., and Abol-Munafi, A.B. (2011), *Examination of Different Cryoprotectants for the Spermatophore Cryopreservation Process of Banana Shrimp, Penaeus merguinsis (De Man, 1888)*., 9th Asian Fisheries and Aquaculture Forum, 21/04/2011, 25/04/2011, Shanghai Ocean University, China

Nadiah, W.N., Ikhwanuddin, M., Abol- Munafi, A.B., Safiah, J., Sung, Y.Y. and Laufer, H. (2011), *Quantification of Methyl Farnesoate Levels in the Blue Swimming Crab, Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758) Induced by Eyestalk Ablation*, 9th Asian Fisheries and Aquaculture Forum, 21/04/2011, 25/04/2011, Shanghai Ocean University, China

Azmie, G., Ikhwanuddin, M., Nurfaseha, A.H., Shahreza, M.S., and Abol-Munafi, A.B. (2011), *Female Maturity Status of Blue Swimming Crab Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758) from Straits of Johor, Malaysia*, 9th Asian Fisheries and Aquaculture Forum, 21/04/2011, 25/04/2011, Shanghai Ocean University, China

Ihwan, M.Z., Nursilawati, M.K., Ikhwanuddin, M., Azmie, G. and Abol-Munafi, A.B. (2011), *Catch Fishery Information of Mud Crab, Genus Scylla from Kelantan Mangrove Forest of Peninsular Malaysia.*, 8th Annual Seminar on Marine Science & Aquaculture, 08/03/2011, 10/03/2011, Universiti Malaysia Sabah, Kota Kinabalu, Sabah

Anur A. Nagi, Safiah Jasmani, Mhd Ikhwanuddin and Marina Hassan (2011), *Effect of a Methanolic Extract of Melaleuca cajaputi on African Catfish (Clarias gariepinus).*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Cik Syahrizawati Mohd Zohri, Lee Seong Wei, Muhammad Ikhwanuddin Abdullah, Nurdiana Roslan and Zalina Che Manan ((2011), *Mud Crab, Scylla spp. Fecundity in the Captivity.*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Mohd Faizal, W. W. Y., Ikhwanuddin, M., Abol-Munafi, A. B. and Ambak, M. A. (2011), *Size at maturity of mud crab, Scylla olivacea (Herbst, 1796): Comparison between morphological appearance and relative growth.*, Universiti Malaysia Terengganu 10th International Annual Symposium on Sustainability Science and Management, 11/07/2011, 13/07/2011, Permai Hotel, Kuala Terengganu, Terengganu

Mohd Faizal, W.W. Y., Ikhwanuddin, M., Abol-Munafi, A.B. and Ambak, M.A. (2011), *Effects of Monsoon Season on Size of Maturity of Mud Crab, Scylla olivacea (Herbst, 1796) in Terengganu Coastal Water, Malaysia.*, 9th Asian Fisheries and Aquaculture Forum, 21/04/2011, 25/04/2011, Shanghai Ocean University, China

Amar Sakhawi A.S., Najiah M., Diyana N. and Mohd Ikhwanuddin A. (2011), *Effects of Wild Shrub Homalomena sagittifolia Extract on Vibrio spp. Isolated from Orange Mud Crab, Scylla olivacea.*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Noor Aisyah M.Z., Aizam, Z.A. and Ikhwanuddin M. (2011), *Production of All Male Post Larvae Giant Freshwater Prawn, Macrobrachium rosenbergii Using Testosterone Undercoate Hormone.*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Juariah, H.M., Ikhwanuddin, M. and Abol-Munafi, A.B. (2011), *Effect of Antibiotic and Lactobacillus spp. as the Potential Probiotic for Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758) Larvae Rearing.*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Talpur, A.D., Memon, A.J., Khan, M.I., Ikhwanuddin, M., M. Danish Daniel M. and Abol-Munafi, A.B. (2011), *First Isolation of Lactic Acid Bacteria from the Gut Tract of Blue Swimming Crab, Portunus pelagicus and Pathogen-Probiotic Bioassay Under Hatchery Conditions*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Cik Syahrizawati Mohd Zohri, Lee Seong Wei, Muhammad Ikhwanuddin Abdullah, Nurdiana Roslan and Zalina Che Manan (2011), *Antimicrobial Activity of Allamanda cathartica L. against Edwardsiella tarda, Klebsiella spp. And Salmonella spp. From Mud Crab, Scylla tranquebarica.*, 1st International Fisheries Symposium, 01/01/1991, 01/01/1991, Permai Hotel, Kuala Terengganu, Terengganu

Nadiah W.N., Ikhwanuddin M., and Abol-Munafi A.B. (2011), *Remarks on the Mating Behaviour and Success of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1766) through the Induction of Limb Autonomy Technique.*, 1st International Fisheries Symposium, 03/10/2011, 05/10/2011, Permai Hotel, Kuala Terengganu, Terengganu

Hidayah, M., Ikhwanuddin, M., Shahreza, M.S., Mohd Fariddudin, O. and Abol - Munafi, A.B. (2011), *The Effects of Triploidy towards Growth Performance, Survival Rate, Gender Ratio and Sex Differentiation on Banana Shrimp, Penaeus merguensis (De Man, 1888) Postlarvae Compared to Diploid Siblings.*, 10th International Annual Symposium on Sustainability Science and Management, 11/07/2011, 13/07/2011, Permai Hotel, Kuala Terengganu, Terengganu

Hidayah, M., Ikhwanuddin, M., Shahreza, M.S., Mohd Fariddudin, O. and Abol - Munafi, A.B (2011), *The Effects of Triploidy Towards Growth Performance, Survival Rate, Gender Ratio and Sex Differentiation on Banana Shrimp, Penaeus merguensis (de man, 1888) Postlarvae Compared to Diploid Siblings.*, Universiti Malaysia Terengganu 10th International Annual Symposium on Sustainability Science and Management, 11/07/2011, 13/07/2011, Permai Hotel, Kuala Terengganu, Terengganu

Redzuari, A., Ikhwanuddin, M., Abol-Munafi, A. B. and Aizam, Z.A. (2011), *Appropriate Food Type and Feeding Regimes Larvae of the Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758)*, Universiti Malaysia Terengganu 10th International Annual Symposium on Sustainability Science and Management, 11/07/2011, 13/07/2011, Permai Hotel, Kuala Terengganu, Terengganu

Redzuari, A., Ikhwanuddin, M., Abol-Munafi, A.B. and Aizam, A.Z. (2011), *Ingestion of Rotifer, Brachionus sp and Brine Shrimp Artemia nauplii by Blue Swimming Crab, Portunus pelagicus (Linnaeus 1758) Larvae*, 8th Annual Seminar on Marine Science & Aquaculture, 08/03/2011, 10/03/2011, Permai Hotel, Kuala Terengganu, Terengganu

Azmie, G.M., Nur Farhana, M.J., Abol-Munafi, A.B. and Ikhwanuddin, M. (2012), *Species Composition and Biological Information of Mud Crab, Genus Scylla from Johor Coastal Water, Malaysia*, International Seminar on Marine Science & Aquaculture, 12/03/2012, 15/03/2012, Kota Kinabalu, Sabah

Azra, M.N., Wendy, W., Abol-Munafi, A.B. and Ikhwanuddin, M. (2012), *Effects of Tank Colour on Survival, Growth and Development of Blue Swimming Crab, Portunus pelagicus (Linnaeus, 1758) Larvae*, International Seminar on Marine Science & Aquaculture, 13/03/2012, 15/03/2012, Kota Kinabalu, Sabah

Z. Siti Nor Fatimah, A. H. Nurfaseha, A. M. Muhammad Effendy , A. Siti Aishah and M. Ikhwanuddin. (2012), *Effect of Temperature on the Embryonic Development of Mud Spiny Lobster, Panulirus polyphagus*, UMT 11th International Annual Symposium on Sustainability Science and Management, 09/07/2012, 11/07/2012, Terengganu

Ikhwanuddin, M., Rabiatul Adawiyah and Abol-Munafi, A.B (2012), *Fecundity and ovarian maturation stages of flathead lobster, Thenus orientalis (Lund, 1793) from peninsular Malaysia*, International Fisheries Symposium, 06/12/2012, 08/12/2012, Can Tho, Vietnam

Noor Baiduri S., Nurul Akmal S. and Ikhwanuddin, M. (2012), *Induce mating trials and observation of mating process for crossbreeding of two mud crab species, Scylla olivacea and scylla tranquebarica*, International Fisheries Symposium, 06/12/2012, 08/12/2012, Can Tho, Vietnam

Azmie, G., Abol-Munafi, A.B., Mohd Faizal, W.W.Y. and Ikhwanuddin, M. (2012), *Effects of natural diets on ovarian maturation stages of orange mud crab, Scylla olivacea (Herbst, 1796)*, International Fisheries Symposium, 06/12/2012, 08/12/2012, Can Tho, Vietnam

Zakaria, M.Z., Ikhwanuddin, M. and Hilmi, M.G. (2012), *Population biology and assessment of mud crab, Scylla olivacea from Setiu wetland area of Terengganu, Malaysia*, International Fisheries Symposium, 06/12/2012, 08/12/2012, Can Tho, Vietnam

Noor Hidayati, A.B., Shahreza, M.S. and Ikhwanuddin, M. (2012), *Gynogenesis success of banana shrimp, Fenneropenaeus merguensis through sperm viability assessment*, International Fisheries Symposium, 06/12/2012, 08/12/2012, Can Tho, Vietnam

A. H. Nurfaseha, Z. Siti Nor Fatimah, Z.Z Tira, A. Ahmad Shamsudin and M. Ikhwanuddin (2012), *Effect of Salinity on Ovarian Development of Mud Spiny Lobster, Panulirus polyphagus.*, UMT 11th International Annual Symposium on Sustainability Science and Management, 09/07/2012, 11/07/2012, Terengganu

M. B. Hafiz, J. Safiah, A. B. Abol-Munafi and M. Ikhwanuddin (2012), *Effect of Estrogen Hormone, 17 β -estradiol on Feminization, Survival and Growth Rate of Banana Shrimp, Fenneropenaeus merguensis (De Man, 1888) Postlarvae.*, UMT 11th International Annual Symposium on Sustainability Science and Management, 09/07/2012, 11/07/2012, Terengganu

D. Siti Zuriati, M. Ikhwanuddin, A. B. Abol-Munafi and J. Safiah (2012), *Effect of Prebiotics on Growth and Survival Rate of Pacific White Shrimp, Litopenaeus vannamei Postlarvae Cultured at Low Salinity.*, UMT 11th International Annual Symposium on Sustainability Science and Management, 09/07/2012, 11/07/2012, Terengganu

M.N. Azra, J. Safiah, A.B. Abol-Munafi and M. Ikhwanuddin (2012), *Effects of 20-Hydroxyecdysone on Early Larval Stages of Blue Swimming Crab's, Portunus pelagicus (Linnaeus, 1758)*, UMT 11th International Annual Symposium on Sustainability Science and Management, 09/07/2012, 11/07/2012, Terengganu

G. Azmie, A. B. Abol-Munafi, W.W.Y. Mohd Faizal and M. Ikhwanuddin (2012), *Ovarian Maturation Stages of Orange Mud Crab, Scylla olivacea.*, UMT 11th International Annual Symposium on Sustainability Science and Management, 09/07/2012, 11/07/2012, Terengganu

Ikhwanuddin, M., Nurul Jannah, R., Nurfaseha, A.H., Zakaria, M.Z. and Abol-Munafi, A.B. (2012), *Biological Features of Mud Spiny Lobster, Panulirus polyphagus (Herbst, 1793) from Johor Coastal Water, Malaysia*, International

Seminar on Marine Science & Aquaculture, 13/03/2012, 15/03/2012, Kota Kinabalu, Sabah

Suhairi, M., Hafizani, Z., Abol-Munafi, A.B. and Ikhwanuddin, M. (2012), *Biological Information of Orange Mud Crab, Scylla olivacea (Herbst, 1796) from Kedah Coastal Water, Malaysia*, International Seminar on Marine Science & Aquaculture, 13/03/2012, 15/03/2012, Kota Kinabalu, Sabah

Siti Nor Fatimah, Z., Nurul Syazwani, M., Safiah, J. And Ikhwanuddin, M (2012), *Effects of 17 β -Testosterone Undercoate on the Quality of Mud Spiny Lobster, Panulirus polyphagus (Herbst, 1793).*, International Seminar on Marine Science & Aquaculture, 13/03/2012, 15/03/2012, Kota Kinabalu, Sabah

Nurul Huda, A., Chark, L.W. Safiah, J., Abol-Munafi, A.B. and Ikhwanuddin, M (2012), *Effect of Water Temperature and Photoperiod on Female Ovarian Development and Oviposition of Orange Mud Crab, Scylla olivacea (Herbst, 1796)*, International Seminar on Marine Science & Aquaculture, 13/03/2012, 15/03/2012, Kota Kinabalu, Sabah

Nurfaseha, A.H., Fathiah, M., Ahmad Shamsuddin, A. and Ikhwanuddin, M (2012), *Effects of Water Temperature on Ovarian Development of Mud Spiny Lobster, Panulirus polyphagus (Herbst, 1793)*, International Seminar on Marine Science & Aquaculture, 13/03/2012, 15/03/2012, Kota Kinabalu, Sabah

Posters

Ikhwanuddin, A. M., Shabdin, M. L. and Fakharuddin, B., (2005), *Status of Blue Swimming Crab (Portunus spp.) landing in Sarawak, Malaysia.*, Tropical Fisheries and Aquaculture Conference., Kuala Terengganu

Husin, N. N., Jastan, F. N. A. and Ikhwanuddin, M., (2008), *Genetic diversity in two populations, blue swimming crab Portunus pelagicus assayed by random amplified polymorphic DNA markers- preliminary assessment.*, Symposium of the Malaysia Society of Applied Biology., Kuching, Sarawak, Submitted

Shaharom-Harrison, F. M. and Ikhwanuddin, M., (2009), *Academic and industry partnership for aquaculture development through Agriculture R&D Fund in Malaysia*, International Symposium on Aquaculture and Fisheries Education (ISAFE), Bangkok, Thailand

EXPERT LINKAGES

(Client),(Linkage),(Year Involve),(Duration),(Level Award).

Lembaga Kemajuan Ikan Malaysia, Mud crab aquaculture - Softshell crab production, 2011, 36, N

Adviser and Researcher for IRIS Marine Sdn. Bhd., Lobster Seed Production, 2011, 24, D

Adviser for Blue Archipelago Bhd., Lobster Production, 2011, 24, N

Department of Environment, Panel for Kualiti air Masin, 2011, 12, N

Department of Fisheries, Malaysia, Mud crab aquaculture - Crab seed production, 2009, 36, N

Department of Fisheries, Malaysia, Marine Shrimp aquaculture - Production of monosex PL, 2009, 36, N

Researchers and ACIAR, Mud crab aquaculture, 1999, 24, I

Researchers and SEAFDEC, Mud crab aquaculture, 1998, 36, I

Local farmers and Department of Agriculture Sarawak, Mud crab and blue swimming crab aquaculture, 2008, 10, N

ACADEMIC PROJECT SUPERVISION

(Student's Name),(Degree),(Thesis Title),(Year Awarded).

Talpur Mir Allah Dad, Doctor of Philosophy, Bacteria associated with Blue Swimming Crab, *Portunus pelagicus* (Linnaeus, 1766) and the development of Potential Probiotics for the Production of its juvenile crabs., 2012

Memon Abdul Jabbar, Doctor of Philosophy, Development of cryopreservation protocols for banana shrimp, *Penaeus merguensis*, 2013

Anur Abdalah Nagi Melad, Doctor of Philosophy, Pathological studies of *Melaleuca cajuputi* extracts in African catfish, *Clarias gariepinus*, N/A

Siti Nor Fatimah Binti Zakaria, Doctor of Philosophy, Spermatophore Production, Cryopreservation and Artificial Insemination of Mud Spiny Lobster, *Panulirus polyphagus*, N/A

Khor Wai Ho, Doctor of Philosophy, Development of New Orange Mud Crab (*Scylla Olivacea*) Culture Strains Via Selective Breeding (3x3 Diallel Cross) of Screened *S. Olivacea* Strains from Different Regions in Malaysia., N/A

Nor Juneta Abu Seman, Doctor of Philosophy, Effects of 20-hydroxecdysone on Mud Spiny Lobster, *Panulirus polyphagus* larvae., N/A

Nur Aina Lyana binti Mohamad Ali, Doctor of Philosophy, Gynogenesis in Banana Shrimp, *Fenneropenaeus merguensis* (De Man, 1888) for the Production of All Female Post Larvae, N/A

Mohd Fazhan Bin Mohd Hanafiah, Doctor of Philosophy, Genetic Assessment, Morphological Documentation and Performance Comparison of New Hybrid Species Produced from Crossbreeding (*Scylla Olivacea* & *Scylla Tranquebarica*), N/A

Taufik Hajimad, Doctor of Philosophy, Study on Larvae Development and Feeding Regimes of Spiny Lobster, *Panulirus polyphagus* Larvae, N/A

Julia Moh Hwei Zhong, Doctor of Philosophy, Selective Breeding in Black Tiger Prawn Banana, *Penaeus monodon* for Disease Resistance, N/A

Norhidayah binti Abdul Manan, Doctor of Philosophy, Production of Monosex Post Larvae of Banana Shrimp, *Penaeus merguiesis*., N/A

Adillah Ibrahim, Master, Early growth development of *Macrobrachium rosenbergii* fed on rotifer., 2008

Muhammad Farouk bin Harman, Master, Development of artificial insemination technique of mud crab, genus *Scylla*., N/A

Roshamiza Ishak, Master, Early growth development of *Macrobrachium rosenbergii* fed on rotifer and *Artemia*., 2009

Mohd Hilmi Husaini Omar, Master, Production of juvenile crab of blue swimming crab (*Portunus pelagicus*) using probiotics, 2010

Badrulnizam Basri, Master, Production of juvenile crab of mud crab (*Scylla olivacea*) using probiotics., 2010

Mohd Adam Nashriq bin Bani Yamin, Master, Masculinisation of Giant Freshwater Prawn (*Macrobrachium rosenbergii*) using High Concentration of 17alpha-methyltestosterone Hormone, 2010

Elzein Mohmmmed Hamza Fahal, Master, Effect of eyestalk ablation on the quality of post larval stages of black tiger shrimp, *Penaeus monodon*, 2010

Nor Juneta Abu Seman, Master, Determine of Spermatophore Quantity Improvement Through Different Diets in Mud Crab, *Scylla serrata*., 2010

Nur Atiqah Bt. Mohamad Yusoff, Master, The effects of estuarine pollution on heavy metals concentration in water, sediment and selected edible mollusc of Sarawak, N/A

Ahmad Ikhwan Muftahuddin, Master, The suitability of free-living nematodes as the live food for blue swimming crab (*Portunus pelagicus*) larvae., 2010

Syahrizawati binti Mohd Zohri, Master, Description of Larval Development Stages of Mud Crab (*Scylla tranquebarica*) and the Effectiveness of Antimicrobial Agents Against Bacterial Isolates, 2011

Wan Nurul Nadiah binti Wan Rasdi, Master, Stimulation of ovarian maturation in blue swimming crab, *Portunus pelagicus* by eyestalk ablation and methyl farnesoate hormone, 2011

Sellinna Mohd Zaki Tan, Master, Population Growth And Physiology Of Marine Copepod In Different Culture Technique, 2011

Juariah Hafsyah binti Muhamad @ Mansor, Master, Development of Potential Probiotics from Foregut of Blue Swimming Crab, *Portunus pelagicus* (Linnaeus, 1766) for the Production of Its Juvenile., N/A

Redzuari bin Alias, Master, Development of food type and feeding schedule for the zoea larvae of mud crab, *Scylla olivacea*, 2012

Muhammad Hafiz bin Mohd Bahar, Master, Effect of 17 beta estradiol for the production of all female post larvae of banana shrimp, *Penaeus merguiesis*, N/A

Wan Mohd Faizal bin Wan Yusoff, Master, Reproductive Biology of Mud Crab, *Scylla olivacea* from Terengganu Coastal Water of South China Sea., 2012

Norhidayah binti Abdul Manan, Master, Induction of triploidy for the production of monosex post larvae of banana shrimp, *Penaeus merguiesis*, 2012

Nurul Huda Bt Abdullah, Master, Study on ovarian development in female mud crab, *Scylla olivacea* through eyestalk ablation and methyl farnesoate hormone induction, N/A

Nora Faten Afifah Binti Mohamad, Master, Optimization of Ultraviolet Irradiation on Sperm of African Catfish (*Clarias gariepinus*) for Gynogenesis, 2012

Ahmad Zaki Bin Zakaria, Master, Reproductive and Larvae Performance of Hybrid Catfish of Bighead Catfish (*Clarias macrocephalus*) and African Catfish, (*Clarias gariepinus*), 2012

Nursyaza Haziqah Binti Jumahat, Master, Optimization of Ultraviolet Irradiation on Eggs of African Catfish, *Clarias gariepinus* for Androgenesis, 2012

Azmie B. Ghazali, Master, Study on embryology and larval development of mud crab, *Scylla olivacea* under laboratory conditions, 2013

Le Son Trang, Master, Spawning induction and larval culture of crystal eyed catfish, *Hemibagrus wyckii* (Bleer, 1858), 2012

Helmi bin Mat Ghani, Master, Population estimate and assessment of mud crab, *Scylla* spp. from Setiu Wetland, N/A

Gusti Afiz Gusti Ruslan Noor, Master, Design of dynamic combination raceway using recirculating aquaculture system for ornamental fish culture, N/A

Mohd Ihwan bin Zakariah, Master, Parasites and Symbionts of Wild Mud Crabs (*Scylla* spp.) in Malaysia, N/A

Mohamad Nor Azra Bin Md Adib, Master, Determination of level and effects of 20-hydroxecdysone on blue swimming crab, *Portunus pelagicus* larvae, N/A

Nur Aina Lyana Binti Mohamad Ali, Master, Stimulation Of Ovarian Maturation Using Serotonin (5-Hydroxytryptamine) Hormone On Banana Shrimp, *Fenneropenaus Merguiesis*., 2012

Bryan Raveen Nelson A/L Nelson Bennett, Master, Toxicity Studies on Eggs and Larvae of the Horseshoe crab *Tachypleus gigas* (Muller), 2012

Lim Keng Chin, Master, A Comparative Study On The Population Growth And Paste Production Of Marine *Chlorella* Sp. And *Chaetoceros Calcitrans*, 2012

Nurfaseha Binti Abdul Hamid, Master, Methyl farnesoate stimulates gonad development of Mud Spiny Lobster, *Panulirus polyphagus*, N/A

Noor Hidayati Binti Abu Bakar, Master, Artificial Induction of Gynogenesis in Banana Shrimp, *Fenneropenaeus merguensis* (De Man, 1888) for the Production of All Female Postlarvae, N/A

Mohd Taufik Bin Muhammad, Master, Study on feeding regimes of Spiny Lobster, *Panulirus polyphagus* larvae, N/A

Wan Mohd Hafiz bin W. Mansor @ W. Ismail, Master, Study on feeding regimes of Orange Mud Crab, *Scylla serrata* larvae through fatty acids biomarker, N/A

Noor Baiduri binti Shaibani, Master, Cryopreservation and egg development of Mud crab, *Scylla serrata*, N/A

Siti Zuriati Daud, Master, Effects of Probiotic and Prebiotic on Growth and Survival Rate of white Shrimp (*Litopenaeus vannamei*) Reared in Low Salinity Water, N/A

Amar Sakhawi Awang Soh, Master, Effect of Wild Shrub *Homalomena sagittifolia* Extract on *Vibrio* spp. from Giant Freshwater Prawn, *Macrobrachium rosenbergii* Larvae, N/A

Noor Aisyah M.Z., Master, Production of All Male Post-Larvae Giant Freshwater Prawn, *Macrobrachium rosenbergii* Using Testosterone Undercoat Hormone, 2012

Zakirah Mohamad Taupek, Master, Diversity and Community Structure of Brachyuran Crab in Setiu Wetland, Terengganu, N/A

Hasan Basri Idris, Master, Broodstock Husbandry Aspect of Marble Goby *Oxyletris marmorata*., 2012

Mohd Asri B. Zulkifli, Master, Development of artificial system of Giant Freshwater Prawn, *Macrobrachium rosenbergii* (de Man), N/A

Nur Syazwani Bt. Abdullah, Master, Development of artificial insemination of *Lates calcarifer*, N/A

Nurul Huda Bt. Mahmud, Master, Effects of Papaya leaf tree on *Lates calcarifer*, N/A

Mohamad Roshidy bin Mohammad Rathy, Master, A study on Temperature Shock for the Production of All-Male Soft-Shell Freshwater Prawn, *Macrobrachium rosenbergii* (De Man), N/A

Sufian bin Mustafa, Master, Hybrid Breeding Trial between Giant Grouper, *Epinephelus lanceolatus* and Tiger Grouper, *Epinephelus fuscoguttatus*., N/A

Mohd Zuraidi Zakaria, Bachelor, The Effect of Unilateral Eye-stalk Ablation and Sex Ratio on the Production of Mud Crab (*Scylla olivacea*) Berried Female, 2009

Siti Nazirah binti Lutfi, Bachelor, Production of White Leg Shrimp, *Penaeus vannamei* Postlarvae Day 15 (PL15) using Live Food Bioencapsulated with Probiotics., 2009

Ainnu Danial, Bachelor, The development of ovigerous female production technique in captivity of Blue Swimming Crab (*Portunus pelagicus*)., 2009

Mohd Fauzan bin Mamat Zawawi, Bachelor, The Development of Berried Female Production Technique in Captivity of Mud Crab (*Scylla olivacea*)., 2009

Redzuari bin Alias, Bachelor, Effect of Probiotics on Growth Performance and Survival Rate for the Production of Blue Swimming Crab, (*Portunus pelagicus*) Juvenile., 2009

Azura binti Markus, Bachelor, Effect of Probiotics on Growth Performance and Survival Rate of the White Shrimp (*Penaeus vannamei*) Postlarvae., 2009

Mohd Mukriz bin Mohd Kasim, Bachelor, The Effect of Water Temperature on Survival Rate and Metamorphosis Rate for the Production of Giant Freshwater Prawn (*Macrobrachium rosenbergii*) Postlarvae., 2009

Ahmad Zulkarnain bin Mamat, Bachelor, Effects of Probiotics on Growth Performance and Survival Rate for the Production of Giant Freshwater Prawn Larvae., 2009

Muhd Ranzi bin Abdullah Dawawi, Bachelor, Application of Indian Almond, *Terminalia catappa* Leaves Solution in the Larvae Rearing of Giant Freshwater Prawn, *Macrobrachium rosenbergii*., 2009

Mohd Fakrul Radzi bin Bemawi, Bachelor, The Development of Mud Crab (*Scylla olivacea*) Soft-shell Crab Culture Technology., 2009

Ng Kok Chun, Bachelor, Effects of Salinity on Growth and Survival of Tiger Grouper (*Epinephelus fuscoguttatus*), Larvae and Juvenile., 2009

Zainab binti Johari, Bachelor, The Effect of Dissolved Organic Matter on Survival Rate and Reproductive Performance of *Moina macrocoppa*., 2009

Wan Mohd Faizal bin Wan Yusoff, Bachelor, Size at Maturity and Stomach Content Analysis of Mud Crab (*Scylla olivacea*) From Mangrove Area of Terengganu., 2009

Nik Mohd Firdaus bin Nik Mohammad, Bachelor, Gut content and size at maturity of swimming blue crab (*Portunus pelagicus*) at Terengganu water., 2009

Norhidayah binti Abdul Manan, Bachelor, Comparison of the food sources in the mud crab, *Scylla olivacea* and the blue swimming crab, *Portunus pelagicus* as indicated by fatty acid marker from marine ecosystem in Terengganu., 2009

Helmi bin Mat Ghani, Bachelor, Catch fisheries information of mud crab from Setiu Wetland, Terengganu., 2009

Mohamad Fuad bin Mohamad Anuar, Bachelor, The study of Ectoparasite on blue swimming crab, *Portunus pelagicus*, 2009

Balqis binti Ahmad Shahar, Bachelor, Growth of Tiger Prawn (*Penaeus monodon*) Postlarvae Fed on *Artemia nauplii* and Rotifer., 2009

Wan Nurul Nadiah binti Wan Rasdi, Bachelor, Growth of *Penaeus monodon* Postlarvae (PL) Fed on Cultured Benthic Harpacticoid Copepods., 2009

Siti Nadirah binti Baharudin, Bachelor, The Growth Rate and Ingestion Rate of *Penaeus vannamei* Larvae Fed on Copepod *Leptocaris* sp., 2009

Juariah Hafsyah binti Muhamad @ Mansor, Bachelor, Production of *Macrobrachium rosenbergii* Postlarvae (PL) using Live Foods Bioencapsulated with Probiotics., 2009

Mohd Taufik bin Muhammad, Bachelor, The Effect of Feeding Egg Custard on Survival Rate, Growth Rate and Quality for *Macrobrachium rosenbergii* Larvae., 2010

Muhammad Sofie bin Mohd. Hafiz Ngoo, Bachelor, Size at Maturity and Mating of Mud Crab, *Scylla tranquebarica* from Mangrove Area of Terengganu Coastal Water, 2010

Hairulnizam bin Azizi, Bachelor, Application of Indian Almond, *Terminalia catappa* Leaves Solution in the Larvae Rearing of Blue Swimming Crab, *Portunus pelagicus*., 2010

Nurfaseha binti Abdul Hamid, Bachelor, Gonad Development Status of Female Blue Swimming Crab, *Portunus Pelagicus* (Linnaeus, 1766) from Strait of Johor, 2010

Muhamad Musa, Bachelor, Effect of Size and Gender of Mud Crab, *Scylla tranquebarica* on Moulting Period and Specific Growth Rate (SGR) in Soft Shell Crab Production Through Limb Autotomy Technique, 2010

Nursilawati binti Mohd Khaidir, Bachelor, Catch Fishery Information of Mud Crab, Genus *Scylla* from Tumpat Mangrove Forest, Kelantan Coastal Water of Peninsular Malaysia, 2010

Abdul Quddus bin Puteh, Bachelor, Effect of Bioencapsulation in *Artemia* on Growth Rate, Survival Rate and Quality of *Penaeus monodon* Larvae., 2010

Fatmalfalah Nordin, Bachelor, Biological and fishery information of flathead lobster, *S. orientalis* from Striat of Johor, 2010

Khairil Izwan Othman, Bachelor, Biological information and population features of sentinel crab, *Podophthalmus vigil* at Terengganu coasatal water, 2010

Azimah Abdul Rahim, Bachelor, Biological information and population features of three spotted crab, *Portunus senguolentus* at Terengganu coasatal water, 2010

Yusdianatu Asraz Yusof, Bachelor, A Study on Effect of Estrogen Hormone, 17Beta-Estradiol on Feminization of Tiger Shrimp, *Penaeus monodon* (FABRICIUS, 1798) Postlarvae, 2010

Nurulmira Mulana, Bachelor, The effect of limb autotomy and eyestalk ablation for the production of softshell crab of mud crab, *Scylla oivacea*, 2010

Zulizah Ochi, Bachelor, The masculine effect of the androgen hormone, 17 alpha methyl testosterone for the production of all male post larvae of tiger shrimp, *Penaeus monodon*, 2010

Syed Mohamad Aizat Syed Mohamad Nor, Bachelor, Biological and fishery information of blue swimming crab, *Portunus peligicus* from Striat of Johor, 2010

Hafizah binti Mas Hassan, Bachelor, Reproduction of Sea Cucumber (*Aspidochirotida*) Through Transverse Fission., 2010

Foon Weng Lian, Bachelor, Fatty acid Composition of Flathead Lobster, *Thenus orientalis* in Terengganu Waters., 2010

Wan Mohd Hafiz bin W. Mansor @ W. Ismail, Bachelor, Effect of Salinity and temperature on the Embryo Development and Incubation period of Mud Crab, *Scylla olivacea*., 2011

Mohamad Hanif bin Ibrahim, Bachelor, Effect of Eyestalk Ablation on Gonad Maturation and Production of Berried Females of Mud Crab, *Scylla olivacea*., 2011

Nor Adila Binti Tuah, Bachelor, Ingestion Of Rotifer And Artemia Nauplii By Blue Swimming Crab, *Portunus Pelagicus* (Linnaeus, 1758) Larvae, 2011

Mohd Azlie bin Baharudin, Bachelor, Effect Of High Stocking Density On The Survival, Growth And Development Rate Of Blue Swimming Crab, *Portunus Pelagicus* (Linnaeus, 1758) Larvae, 2011

Mohamad Nor Azra Bin Md Adib, Bachelor, Effect Of Tank Colouration On The Survival, Growth And Development Rate Of Blue Swimming Crab, *Portunus pelagicus* (Linnaeus, 1758) Larvae, 2011

Nurul Jannah binti Razman, Bachelor, Biological Information and Population features of Spiny Lobster, *Panulirus polyphagus* from the Fishery Catches of Johor Coastal Water, 2011

Afiq Quaiyum bin Zuber, Bachelor, Biological and Fishery Catch Information of Mantis Shrimp, *Harpisquilla harpax* of Kedah and Perlis Coastal Water, 2011

Nur Azama Binti Ibrahim, Bachelor, Growth Performance of Blue Swimming Crab, *Portunus pelagicus* (Linnaeus, 1758) Culture in Captivity, 2011

Chark Ling Wei, Bachelor, Effects of Water Temperature and Photoperiod on Female Ovarian Development and Oviposition of Orange Mud Crab, *Scylla olivacea*(Herbst, 1796), 2011

Shew Son Luan, Bachelor, Induced Mating and Early Embryonic Development of Orange Mud Crab, *Scylla olivacea* (Herbst, 1796), 2011

Nurul Akmal Binti Sudin, Bachelor, Induced Mating Trials and Observation of Mating Process for Crossbreeding of Two Mud Crab Species, *Scylla olivacea* (Herbst, 1796) and *Scylla tranquebarica* (Fabricius, 1798), 2011

Hafizani bt Zainudin, Bachelor, Size at Maturity and Biological Information of Mud Crab, *Scylla olivacea* (Herbst, 1796) From Kedah Coastal Water, 2011

Kamarul Izam Bin Mohd Shamsuddin, Bachelor, The Effects of Lethal Copper Concentration on Orange Mud Crab, *Scylla olivacea* (Herbst, 1796), 2011

Yee Woei Shyan, Bachelor, Effect of Methyl Farnesoate Hormone on Moulting P eriod of Orange Mud Crab, *Scylla olivacea* (Herbst, 1796), 2011

Nur Farhana binti Mohamad Jonet, Bachelor, Species Composition and Biological Information of Mud Crab, Genus *Scylla* from Johor Coastal Water of South China Sea., 2011

Noor Baiduri binti Shaibani, Bachelor, Movement Pattern of Mud Crab, Genus *Scylla* Assessment through Mark-Release-Recapture Technique, 2011

Ahmad Ridwan Ishak, Bachelor, Effect of Different Natural Diet on The Sperm Maturation Period, Quality and Quantity of Banana Shrimp, *Peneaus Merguensis* (De Man, 1888), 2011

Noor Hidayati Binti Abu Bakar, Bachelor, Development of Artificial Insemination Technique for Banana Shrimp, *Peneaus Merguensis* (De Man, 1888), 2011

Khairul Hafiz Bin Ab. Rahman, Bachelor, Masculinization of *Fenneropenaeus Merguensis* Postlarvae by Androgen Hormone, Testosterone Undecanoate, 2011

Anis Syamimi Bt. Mohamed, Bachelor, LC50 and Histology of Blue Swimming Crab, *Portunus Pelagicus* Gills, Hepatopancreas and Gonad Following Exposure to Zinc, 2011

Wan Zarin Fariha Binti Wan Ismail, Bachelor, Cadmium And Copper Uptake Into Orange Mud Crab, *Scylla Olivacea*, 2011

Mimi Marlina binti Mokhtar, Bachelor, Biological Features of Flathead Lobster, *Thenus orientalis* from Peninsular Malaysia, 2012

Rabiatul Adawiyah binti Othman, Bachelor, Fecundity of Female of Flathead Lobster, *Thenus orientalis* from Peninsular Malaysia, 2012

Siti Aimuni binti Hasim, Bachelor, Fecundity of Females of Blue Swimming Crab, *Portunus pelagicus* from Johor Straits, Malaysia, 2012

Farhanida binti Ibrahim, Bachelor, Biological Features of Blue Swimming Crab, *Portunus pelagicus* from Peninsular Malaysia, 2012

Siti Nur Syafawati Ab. Shatar, Bachelor, Effect of Limb Autotomy on Moulting and Growth of Blue Swimming Crab, *Portunus pelagicus* for the Production of Soft-Shell Crab, 2012

Wan Nurul Shuhada binti Wan Ibrahim, Bachelor, Effect of Eyestalk Ablation on Moulting and Growth of Blue Swimming Crab, *Portunus pelagicus* for the Production of Soft-Shell Crab, 2012

Muhammad Farouk Bin Harman, Bachelor, Application of Artificial Insemination Technique on Mud Spiny Lobster, *Panulirus polyphagus*, 2012

Nurul Syazwani Binti Che Lazim, Bachelor, Effect of 17 alpha Testosterone Undercoats on the Spermatophore Production of Male Mud Spiny Lobster, *Panulirus Polyphagus*, 2012

Huda Binti Mustafa, Bachelor, Study of Sexual Maturity and Gonadal Maturation through Histological Assessment of Female Mud Lobster, *Thalassina anomala*, 2012

Nurul Ain Binti Mohd Aris, Bachelor, Biological features of Mud Lobster, *Thalassina anomala* from Terengganu Coastal Water of Malaysia, 2012

Ahmad Shahril Bin Rosli, Bachelor, Effect of Monsoon Season on the Size at Maturity of Mud Crab, *Scylla tranquebarica* from Terengganu Coastal Water, Malaysia, 2012

Nor Hazirah Binti Mohd Zuki, Bachelor, Effect of Monsoon Season on the Ovarian Development of Mud Crab, *Scylla olivacea* from Terengganu Coastal Water, Malaysia, 2012

Siti Sarah Binti Che Salim, Bachelor, Reproductive Performance of *Scylla olivacea* Fed With Various Diet, 2012

Umami Nazihah Binti Abdul Rahman, Bachelor, Effect of Temperature and Light Intensity to the Gonadal Development of Mud Crab, *Scylla tranquebarica*, 2012

Nur Atika Binti Jamal, Bachelor, Sexual maturity and Gonadal Maturation through Histological Assessment of Female Mud Crab, *Scylla tranquebarica*, 2012

Mohamad Arif Bin Sapuan, Bachelor, Biological Features of Banana Shrimp, *Penaeus merguensis* (de Man, 1888) in Kedah Coastal Water, Malaysia, 2012

Norkamarul Azhan Bin Norwadi, Bachelor, Biological Features of *metapenaeus* sp. from Kedah Coastal Water of Malaysia, 2012

Tira Zeliara Zaki Bt Md Zaki Khairuddin, Bachelor, Effect of Salinity on Ovarian Maturation Stages of Mud Spiny Lobster, *Panulirus polyphagus*, 2012

Nur Juliana Bte Mohd Haris, Bachelor, Effect Of 20-Hydroxyecdysone On The Larvae Development Of Blue Swimming Crab, *Portunus pelagicus*, 2012

Noor Liyana Binti Azman, Bachelor, Natural Diets from Gut Content of Mud Spiny Lobster (*Panulirus Polyphagus*) Found In Johor Coastal Water, 2012

Ruhinisa Binti Razak, Bachelor, Effect of salinity on embryonic development of mud spiny lobster *Panulirus polyphagus*, 2012

Nurul Amirah Binti Matmor, Bachelor, Effect of Different Natural Diet on the Sperm Maturation Period, Quality and Quantity of Mud Spiny Lobster, *Panulirus Polyphagus*, 2012

Shazwani Binti Mohamed, Bachelor, Effect of Natural Diets on Ovarian Maturation Stage of Mud Spiny Lobster, *Panulirus polyphagus*, 2012

Muhammad Effendy Bin Abd Malek, Bachelor, Effect of temperature on early embryonic development of Mud Spiny Lobster, *Panulirus Polyphagus*, 2012

Fathiah Binti Mahsan, Bachelor, Effect of Temperature on Ovarian Maturation Stages of Mud Spiny Lobster, *Panulirus polyphagus*, 2012

Nur Mazita Binti Md Nor, Bachelor, Ingestion rate of *Nanocloropsis* sp. And *Chorella* sp. By blue swimming crab, *Portunus pelagicus* larvae, N/A

Megat Fadhlul Hazmi Bin Megat Ghazali, Bachelor, Comparative study of embryonic development in two mud crab species, *Scylla paramamosain* and *S. olivacea* from Malaysia, N/A

Wan Norfaizza Binti Wan Ibrahim, Bachelor, Mating success and spawning characteristics of orange mud crab, *Scylla olivacea* in captivity, N/A

Mohd Fadhil Bin Adnan, Bachelor, Effect of methly funsonate on the ovarian development of mud spiny lobster Panulirus polyphagus., N/A

Rushana Binti Rusdi, Bachelor, Effect of 17 β -hydroxyprogesterone on male mud spiny lobster, Panulirus polyphagus., N/A

Norfilzah Binti Ismail, Bachelor, Detection of natural occuring inter-species mating of mud crab from genus scylla, in Matang Perak, N/A

Hazza Roshada Binti Ramli, Bachelor, Molecular assessment of mud crab genus Scylla from Matang, Perak using Polymerase Chain Reaction Restriction Fragment Length, N/A

Muhamad Mustaqim Bin Mustaffa, Bachelor, Optimization of culture practices in captivity for the production of mud crab, Scylla olivacea berried females, N/A

Mohamad Zainul Haris Bin Che Zainudin, Bachelor, Progesterone hormone in lobster towards fecundity and normality of eggs, N/A

NOR FAIZAH BINTI M M K NOORULHUDHA, Bachelor, EMBRYOLOGICAL DEVELOPMENT OF Scylla tranquebarica AT DIFFERENT SALINITY FROM PENINSULAR MALAYSIA, N/A

SYAZREEN SOPHIA BINTI ABDUL HALIM, Bachelor, ORANGE MUD CRAB (Scylla olivacea) LARVAE QUALITY COMPARISON BETWEEN EAST COAST AND WEST COAST OF PENINSULAR MALAYSIA VIA STRESS RESISTANCE TESTS (STARVATION, TEMPERATURE AND SALINITY)., N/A

SUBJECT TAUGHT

(Subject),(Session),(Credit Hour),(Student Level),(Organisation).

Advanced Seed Production, 2012/2013-S, 3, 18, 2, UMT

KULTUR INVERTEBRAT AKUATIK, 2012/2013-S, 3, 45, 3, UMT

BIOLOGI INVERTEBRAT AKUATIK II, 2011/2012-F, 3, 104, 3, UMT

Advanced Seed Production, 2011/2012-S, 3, 15, 2, UMT

KULTUR INVERTEBRAT AKUATIK, 2011/2012-S, 3, 86, 3, UMT

BIOLOGI INVERTEBRAT AKUATIK II, 2010/2011-F, 3, 109, 3, UMT

Advanced Seed Production, 2009/2010-D, 3, 16, 2, UMT

BIOLOGI INVERTEBRAT AKUATIK II, 2009/2010-D, 3, 87, 3, UMT

KULTUR INVERTEBRAT AKUATIK, 2009/2010-J, 3, 75, 3, UMT

Aquaculture Economic and management, 2009/2010-J, 3, 12, 2, UMT

Advanced Seed Production, 2008/2009-D, 3, 7, 2, UMT

BIOLOGI INVERTEBRAT AKUATIK II, 2008/2009-D, 3, 75, 3, UMT

Advanced Seed Production, 2008/2009-J, 3, 13, 2, UMT

Aquaculture Economic and Management, 2007/2008-D, 3, 15, 2, UMT

EXPERT CONSULTATION

(Consultation),(Role),(Client),(Level), (From - Until), (Cost).

Spiny lobster aquaculture in Malaysia, Advisor, Blue Achepilago Bhd., January 2010 - March 2010

Mud crab aquaculture in Sarawak, Sarawak Land Development Board, November 2008 - Present, 2500000

COMMERCIALIZATION

(Comm. Type),(Industry Type),(Product),(Company Name),(Comm. Value).

EXPO/EXHIBITION

(Expo),(Venue),(Organizer),(Level),(Date),(Cost).

EXTERNAL/INTERNAL/INDEPENDENT EXAMINER

(Candidate/Body),(Degree Level),(Role),(From)-(Until).

Le Son Trang, M.Sc. (Aquaculture), UMT, Internal, 01/04/2009

Sellinna Mohd Zaki Tan, M.Sc. (Aquaculture), Universiti Malaysia Terengganu, Internal, 01/01/2011

Aileen May Anak Ridis Rinyod, M.Sc. (Aquaculture), Universiti Malaysia Sarawak, External, 01/05/2011

Wan Nurul Nadiah binti Wan Rasdi, M.Sc. (Aquaculture), Universiti Malaysia Terengganu, Internal, 01/05/2011

Marjorie Charam, M.Sc. (Aquaculture), Universiti Malaysia Terengganu, Internal, 01/10/2011

Ayad Giuma Ayad Sammud, M.Sc. (Aquaculture), Universiti Malaysia Terengganu, Internal, 01/11/2011

Ibrahim Said Al-Anbouri, M.Sc. (Aquaculture), Universiti Malaysia Terengganu, Internal, 01/02/2012

Rohisyamuddin Bin Othman, M.Sc. (Aquaculture), Universiti Malaysia Terengganu, Internal, 01/06/2012

Zalikhha Binti Azmi, M.Sc. (Aquaculture), Universiti Malaysia Terengganu., Internal, 01/09/2012

Sheikh Eldin Mohamed Elamin Elnaeim, PhD., Universiti Malaysia Terengganu, Internal, 01/08/2012

Mubarak Eisa Abdelrahman Tibin, PhD., Universiti Malaysia Terengganu, Internal,
01/12/2012

Nur Atiqah Binti Mohamad Yusoff, M.Sc., Universiti Malaysia Sarawak, External,
01/12/2012

EXTERNAL REVIEWER/EDITORIAL

(Activity),(Role),(From)-(Until)

Journal of Fisheries and Aquatic Sciences, Editor, 01/06/2011 - 01/01/2021

Asian Journal of Animal and Veterinary Advances, Editor, 01/06/2012 - 01/01/2021

Asian Journal of Agricultural Research, Editor, 01/03/2012 - 01/01/2021

Asian Journal of Scientific Research, Editor, 01/01/2012 - 01/01/2021

Asian Journal of Biological Science, Editor, 01/01/2012 - 01/01/2021

Journal of Freshwater Ecology, Reviewer, 01/12/2012 - 01/03/2013

Malaysia Fisheries Journal, Reviewer, 01/03/2012 - 01/06/2012

Journal of Fisheries and Aquatic Sciences, Reviewer, 01/06/2012 - 01/09/2012

Asian Journal of Animal and Veterinary Advances, Reviewer, 01/08/2012 - 01/11/2012

World Applied Science Journal, Reviewer, 01/01/2012 - 01/01/2014

Journal of Sustainability Science and Management, Reviewer, 01/01/2011 - 01/01/2013

Journal of the Association of Arab Universities for Basic and Applied Sciences,
Reviewer, 01/06/2012 - 01/09/2012

Songklanakarin Journal of Science and Technology, Reviewer, 01/01/2012 - 01/04/2012

Indian Journal of Geo-Marine Sciences, Reviewer, 01/01/2012 - 01/01/2013

ATTENDED COURSE/SEMINARS

(Name of Seminar/Course),(Role),(From)-(Until),(Place),(Title of Paper Presented - if applicable).

International Fisheries Symposium, Oral Presenter, 06/12/2012 - 08/12/2012, Can Tho,
Vietnam, Fecundity and ovarian maturation stages of flathead lobster, *Thenus orientalis*
(Lund, 1793) from peninsular Malaysia

UMT 11th International Annual Symposium on Sustainability Science and Management,
Oral Presenter, 09/07/2012 - 11/07/2012, Kuala Terengganu, Terengganu, Malaysia,
Effect of Salinity on Ovarian Development of Mud Spiny Lobster, *Panulirus polyphagus*

International Seminar on Marine Science & Aquaculture, Oral Presenter,
13/03/2012 - 15/03/2012, Kota Kinabalu, Sabah, Malaysia, Biological Features of Mud
Spiny Lobster, *Panulirus polyphagus* (Herbst, 1793) from Johor Coastal Water, Malaysia.

Annual Seminar on Marine Science & Aquaculture ,Indicators for Sustainability of Fisheries & Aquaculture, Oral Presentation, 10/03/2010 - 12/03/2010, Universiti Malaysia Sabah,Kota Kinabalu, Effect of Water Exchange and Antibiotics on Larvae Rearing of Blue Swimming Crab,Portunus pelagicus (Linnaeus, 1766)

International Symposium on Aquaculture and Fisheries Education (ISAFE), Oral Presentation, 27/11/2009 - 30/11/2009, Bangkok, Thailand, Education and training programmes for Human Resource Development in aquaculture projects in Malaysia

International Symposium on Aquaculture and Fisheries Education (ISAFE), Poster Presentation, 27/11/2009 - 30/11/2009, Bangkok, Thailand, Academic and industry partnership for aquaculture development through Agriculture R&D Fund in Malaysia

ASIAN PACIFIC AQUACULTURE 2009, Oral Presentation, 03/11/2009 - 06/11/2009, Kuala Lumpur, Malaysia, EFFECT OF PROBIOTICS ON SURVIVAL RATE AND GROWTH PERFORMANCE FOR THE PRODUCTION OF THE BLUE SWIMMING CRAB Portunus pelagicus JUVENILES

3rd Regional Natural Resources Symposium 2009, Oral Presentation, Session Chairman, 28/08/2009 - 30/08/2009, Kuching, Sarawak, Movement Patterns of Blue Swimming Crab (Portunus pelagicus) from mark-recapture tagging study from the Sarawak coastal water of South China Sea

Bengkel Training of Trainers (TOT) Penilaian Kertas Cadangan Penyelidikan, Participation, 03/12/2009 - 03/12/2009, UMT

Bengkel e-Rintis Sistem e-Rms, Participation, 12/11/2009 - 14/11/2009, Kijal, Terengganu

Bengkel Halatuju Penyelidikan bagi Institut Akuakultur Tropika, Participation, 26/05/2009 - 27/05/2009, UMT

Seminar dan Bengkel Statistik Industri, Participation, 20/05/2009 - 20/05/2009, Kuala Terengganu, Terengganu

Bengkel Halatuju dan Kecemerlangan Institut, Participation, 17/05/2009 - 18/05/2009, UMT

Bengkel Pemurnian Kertas Cadangan "Developments of Remote Real Time Monitoring and Control of a Super Intensive Fish Farming System", Participation, 07/03/2009 - 07/03/2009, Setiu, Terengganu

Bengkel Pelan Perniagaan : Projek Kemasyarakatan Pemuliharaan Hutan Paya Laut UMDP-PETRA-UPEN-UMT, Oral presentation, 03/04/2009 - 04/04/2009, UMT, Culture of Mud Crab and Mangrove Forest

Bengkel Fungsi dan Penstrukturan Pusat Kecemerlangan Penyelidikan Peringkat UMT, Participation, 19/03/2009 - 19/03/2009, UMT

Seminar Pensijilan Halal dan Pendaftaran Produk Herba Ecer-Kpt-Udm untuk Usahawan Industri Kecil dan Sederhana (IKS), Participation, 16/02/2009 - 16/02/2009, Kuala Terengganu, Terengganu

Bengkel Fungsi dan Penstrukturan Pusat Kecemerlangan Penyelidikan UMT, Participation, 04/02/2009 - 06/02/2009, Paka, Terengganu

Bengkel Peneguhan Bidang Perikanan dan Penawaran Program Baru, Participation, 29/01/2009 - 31/01/2009, Kota Bharu, Kelantan

Bengkel Statistik Penyelidikan Sains Marin, FMSM, Participation, 16/01/2009 - 17/01/2009, UMT

UMT Graduate Supervision Workshop 2008, Participation, 13/12/2008 - 14/12/2008, Ri-Yaz Heritage Resort & Spa, Kuala Terengganu.

AKUATROP Annual Aquaculture Seminar, Seminar Committee, 05/11/2008 - 06/11/2008, UMT

Kursus PTK / TK3 (Khas), Participation, 16/10/2008 - 20/10/2008, UMT

Induksi Penyelidikan 2008, Participation, 05/08/2008 - 06/08/2008, UMT

Training Workshop on Crustacean Immunobiology, Participation, 28/07/2008 - 30/07/2008, UM, Kuala Lumpur

National Fisheries Symposium (NaFiS) 2008, Oral Presentation, 14/07/2008 - 16/07/2008, Kuala Terengganu, Culture of blue swimming crab, *Portunus pelagicus* juveniles in nursery ponds

National Fisheries Symposium (NaFiS) 2008, Oral Presentation, 14/07/2008 - 16/07/2008, Kuala Terengganu, Human Resource Development for the Development of Potential and Sustainable Aquaculture Projects in Malaysia.

Workshop on Application Guiderlines for Science Fund Grant (MOSTI), Participation, 25/06/2008 - 25/06/2008, UMT

Bengkel Pengajaran dan Pembelajaran Kali ke-9 Tahun 2008, Participation, 15/06/2008 - 19/06/2008, UMT

Bengkel Pemurnian Dasar Penerbitan UMT, Participation, 05/06/2008 - 07/06/2008, Hotel Vistana, Kuantan

International Conference on Marine Organisms and their Biomedical Potentials: Expectations and Realizations., Conference Committee, 18/05/2008 - 20/05/2008, UMT

Induksi Modul Khusus, Participation, 11/05/2008 - 15/05/2008, Residence resort, Peka & UMT

Taklimat Permohonan Geran KPT, Peserta, 01/01/2012 - 01/01/2012, Auditorium INOS

Konvensyen KIK UMT, Peserta, 04/01/2012 - 04/01/2012, Auditorium Mahyuddin, FPE

Program Discover UMT, Peserta, 15/05/2012 - 15/05/2012, Auditorium INOS

Program Retreat Akuatrop, Peserta, 01/03/2012 - 03/03/2012, Hotel Grand Continental, Pulau Langkawi, Kedah

Program KIK Peringkat Kebangsaan, Peserta, 05/03/2012 - 07/03/2012, Universiti Islam Antarabangsa

International Seminar On Marine Science and Aquaculture 2012, Peserta, 12/03/2012 - 16/03/2012, Kota Kinabalu, Sabah

Bengkel Pemurnian Bidang Pengajian, Program Pasca Siswazah UMT 2012, Peserta, 19/03/2012 - 19/03/2012, Gem Beach Resort, Kuala Terengganu

Majlis Perasmian Bidong Underwater & Land Challenge 2012, Peserta, 19/04/2012 - 19/04/2012, Pulau Bidong, Terengganu

Majlis Perasmian Language Festival 2012, 19/04/2012 - 19/04/2012, Auditorium INOS

Seminar Kepimpinan dan Pembangunan Organisasi, Peserta, 02/05/2012 - 02/05/2012, Auditorium Mahyuddin, FPE

Syarahan Umum Pelantikan Profesor ? Potensi Penggunaan Minyak Kelapa Sawit dalam Industri Akuakultur Global by Ng Wing Keong, Peserta, 18/05/2012 - 18/05/2012, Universiti Sains Malaysia, Pulau Pinang

Seminar On Aquaculture Technology, Peserta, 19/05/2012 - 19/05/2012, Crowne Plaza Mutiara, KL

Bengkel KIK (Kumpulan Inovatif dan Kreatif), Peserta, 10/06/2012 - 11/06/2012, Hotel Grand Continental, Kuala Terengganu

Pra Bengkel Halatuju Akuakultur, Peserta, 25/07/2012 - 25/07/2012, Bilik e-Persidangan, PTM

Bengkel Pemurnian Polisi Data UMT, Peserta, 02/08/2012 - 02/08/2012, Bilik Seminar INOS

Bengkel Penulisan Jurnal Saintifik, Peserta, 19/09/2012 - 19/09/2012, Bilik Tutorial AKUATROP

Program EduTalk : Teaching and Learning In Higher Education (Prof. Keith Trigwell, University of Sydney), Peserta, 22/10/2012 - 22/10/2012, Auditorium PSNZ

Persidangan Kebangsaan Pembangunan Komuniti Nelayan (PEKON 2012) UMT, Pengerusi Sesi, 19/12/2012 - 19/12/2012, Primula Beach Resort, Kuala Terengganu

PROFFESIONAL DEVELOPMENT

(Name of Training),(From)-(Until),(Place),(Sponsor).

Training Workshop on Crustacean Immunobiology, 28/07/2008 - 30/07/2008, Universiti Malaya, Kuala Lumpur, Institute of Ocean & Earth Science, UM & Agro-Biotechnology Institute, Malaysia

INTERNSHIP SUPERVISION

(Student Name),(Organisation),(From)-(Until)

Mohd Fazrul Hisam Abd Aziz, AKUATROP, UMT AND PRINCE SONGKHLA

UNIVERSITY, THAILAND, 01/01/2012 - 31/12/2016

STUDENT ADVISORY

(Matric),(Student),(From)-(Until).

OTHER CONTRIBUTIONS

(Activity),(Role),(From)-(Until),(Level).

Kelab Bolasepak Mahasiswa Universiti Malaysia Terengganu, Penasihat, 01 January 2011 - Present, National

Pasukan Ragbi SMK(A) Tok Jiring, Kuala Terengganu, Jurulatih, 01 March 2008 - 31 December 2010, National

Pasukan Bolasepak Veteran UMT, Pemain, 01 December 2008 - Present, National