

DAFTAR PUSTAKA

- Ambas, I., A. Suriawan and R. Fotedar. 2013. Immunological Responses of Customized Probiotics-fed marron, *Cherrax tenuimanus* When Challenged with *Vibrio mimicus*. Journal Fish & Shellfish Immunology. 35 : 262-270.
- Al-Bahry, S.N., Al-Wahaibi, Y.M., Al-Hinai, B., Joshi, S. J., Elshafiel, A. E., Al-Bemani, A. S., and Al-Sabahi, J. 2016. Potential in Heavy Oil Biodegradation via Enrichment of Spore Forming Bacterial Consortia. Journal of Petroleum Exploration and Production Technology.6 (4) : 787-799.
- Andriani, Y., A. A. Kanza, M. M. Rustama, dan R. Safitri. 2017. Karakterisasi *Bacillus* dan *Lactobacillus* yang Dienkapsulasi dalam Berbagai Bahan Pembawa untuk Probiotik Vannamei (*Litopenaeus vannamei* Boone, 1931). Jurnal Perikanan dan Kelautan. 7 (2): 142-154.
- Aquarista, F., Iskandar dan Subhan, U. 2012. Pembesaran Probiotik dengan Carier Zeolit pada Pembesaran Ikan Lele Dumbo (*Clarias gariepinus*). Jurnal Perikanan dan Kelautan, 3(4): 133-140.
- Bahry, S. A., A. N. Sivakumar dan M. Al-Khambashi. 2012. Effect of Nalidixic Acid on the Morphology and Protein Expression of *Pseudomonas aeruginosa*. Asian Pacifi Journal Tropical Medicine. Sultanate o Oman. Hal 265-269.
- Bailey-Brock, J.H. & Moss, S.M. 1992. Penaeid taxonomy, biology and zoogeography. In: Fast A.W. and LesterL.J. (Eds). Marine shrimp culture: principles and practices. Developments in aquaculture and fisheries science, volume 23. Elsevier Science Publisher B.V., TheNetherlands. p. 9-27.
- Blaxhall PC and KW. Daysley. 1973. Routine haematological methods for use with fish blood. *Journal Fish Biology* 5:577-581.
- Boone, R.D., and Castenholz, W.R. 2001. Bergey's Manual of Systematic Bacteriology. Second Edition. Vollspringer-Verlag. New York.
- BPS. 2016. Data Statistik Ekspor Udang Indonesia 2016. Badan Pusat Statistika. Jakarta. 2 hal.

- Braak, V.D. C. B. T., R. Faber, and J.H. Boon. 1996. Cellular and Humoral Characteristic *Penaeus monodon*. Comparative Haemolymph International. Netherlands. p. 194-203
- Braak, V.D. 2002. *Haemocytic defence in black tiger shrimp (Penaeus monodon)*. Dissertation. van waringen Universiteit, Germany. p. 12-24
- Briggs, M., S.F Smith, R. Subasinghe and M. Phillips. 2004. Introduction and Movement of *Panaeus vannamei* and *Panaeus stylostris* in Asia and the Pasific. RAP Publication. Food and Agriculture Organization of the United Nation Regional office for Asia and Pasific. Bangkok. 12 p.
- BSN (Badan Standardisasi Nasional). 2014. Udang Vaname (Litopenaeus vannamei, Boone 1931). SNI 807.1. 3 hal.
- Cappuccino, J.G. and N.Sherman. 2005. Microbio-logy: A Laboratory Manual. 7th edition. Pearson Education Inc. USA. pp. 101-102
- Chen, T.T. 2000. Aquaculture biotechnology and fish disease. In Hardjito, L. (Ed.), *International Symposium on Marine Biotechnology*. Center For Coastal and Marine Resources Studies, IPB, Jakarta, Indonesia, p. 3-8.
- Effendi, I. 2016. Budidaya intensif udang vaname Litopenaeus vannamei di laut: kajian lokasi, fisiologis dan biokimia [disertasi]. Bogor: Institut Pertanian Bogor.
- Effendy, S., R. Alexander dan T. Akbar. 2004. Peningkatan Hemosit Benur Udang Windu *Penaeus monodon* Pasca Perendaman Ekstrak Ragi Roti pada Konsentrasi Berbeda. J. Sains dan Teknologi 14(2) : 46-53
- Elovaara. A. K. 2001. Srimp Farming Manual: Practical Technology For Intensive Commercial Shrimp Production. Caribbean Press, LTD and British West Indies.United Statet of America, 2001. Chapter 4. pp. 220.
- Franco, C.D., E. Beccari, T. Santini, G. Pisanechi and G. Tecce. 2002. Colony Shape as A Genetic Trait in The Pattern-fotming *Bacillus mycoides*. BMC Microbiology 2(1) : 2-14.
- Gillor, O., A. Etzion and M. A. Riley. 2008. The Dual Role of Bacteriocins as Anti- and Probiotics. Appl Microbiol Biotechnol. 81 (4): 591-606.
- Goldman, E. and L.H. Green. 2009. Practical Handbook of Microbiology, The Genus *Bacillus*. Second Edition. CRC Press. Boca Raton. p. 41-52.

- Gullian M, F. Thompson and J. Rodríguez. 2004. Selection of Probiotic bacteria and study of their immunostimulatory effect in *Penaeus vannamei*. *Aquaculture* 233: 1 – 14.
- Gunarto., A. Mansyur dan Muliani. 2009. Aplikasi Dosis Fermentasi Probiotik Berbeda Pada Budidaya Udang Vaname (*Litopenaeus vannamei*) Pola Intensif. *Jurnal Riset Akuakultur*. 4 (2) : 241-255
- Haliman, R.W dan S.D. Adijaya. 2005. Udang Vannamei. Penebar Swadaya. Jakarta. 5 hal.
- Hartinah., L.P.L. Sennung dan R. Hamal. 2014. Performa Jumlah dan Diferensiasi Sel Hemosit Udang Windu (*Penaeus monodon*) Pada Pemeliharaan Tingkat Teknologi Budidaya yang Berbeda. *Jurnal Bionature*. 15 :104-110.
- Holt, J. G., N. R. Krieg, P. H. A. Sneath, J. T. Staley and S. T. Williams. 1994. *Bergey's Manual of Determinative Bacteriology*. 9th Edition. USA : Williams and Wilkins. 546 hal.
- Irianto, A. 2005. Patologi Ikan Teleostei. Gajah Mada University Press. Yogyakarta. 256-257.
- Isnansetyo, A. and Y. Kamei. 2003. MC21-A, a bactericidal antibiotic produced by a new marine bacterium, *Pseudoalteromonas phenolica* sp. nov., against methicillin-resistant *Staphylococcus aureus* (MRSA). *Antimicrob. Agents Chemother*. 47: 480-488.
- Isnansetyo, A. 2005. Bakteri Antagonis Sebagai Probiotik Untuk Pengendali Hayati Pada Aquakultur. *Jurnal Perikanan*. 7 (1): 1-10
- Jayasree, L., P. Janakiram and R. Madhavi. 2006. Characterization of *Vibrio* spp. Associated with Diseased Shrimp from Culture Ponds of Andhra Pradesh (India). *Journal of The World Aquaculture Society*., 37(4): 523-532.
- Johansson MW, P. Keyser, K. Sritunyalucksana and K. Soderhall. 2000. Crustacean haemosytes and haematopoiesis. *Aquacultur* 191 : 45-92.
- Kakoolaki, S., Soltani, M., Ebrahimzadeh, M.H.A., Sharifpour, I., Mirzargar, S., Afsharnasab, M., & Motalebi, A.A. 2011. The effect of different salinities on mortality and histopathological changes of SPF imported *Litopenaeus vannamei*, experimentally exposed to white spot virus and a

- new differential hemocyte staining method. *Iranian Jour. of Fisheries Sciences*, 10(3): 447-460.
- Kamei, Y. and A. Isnansetyo. 2003. Lysis of methicillin-resistant *Staphylococcus aureus* by 2,4-diacetylphloroglucinol produced by *Pseudomonas* sp. AMSN isolated from a marine alga. *Int. J. Antimicrob. Agents*. 21: 71-74.
- Kordi, K. 2007. Pemeliharaan Udang vannamei (*Litopenaeus vanamei*). Penerbit Indah. Surabaya. 100 hal.
- Kurniawan, M. H., B. Putri, Y. Elisdiana. 2018. Efektivitas Pemberian Bakteri *Bacillus polymyxa* Melalui Pakan Terhadap Imunitas Non Spesifik Udang Vannamei. *E-Jurnal Rekayassa dan Teknologi Budidaya Perairan*, 7(1) : 740-743.
- Lee, M.H. & S.Y. Shiau. 2004. Vitamin E Requirements of Juvenile Grass Shrimp, *Penaeus monodon* and Effects on Nonspecific Immune Responses, *Fish & Shellfish Immunology*, 16: 475-485.
- Liu, C.H. and J.C. Chen. 2004. Effect of Ammonia On The Immune Response of White Shrimp *Litopenaeus vannamei* and its Susceptibility to *Vibrio alginolyticus*. *Fish & Shellfish Immunology*. 16: 324-332.
- Madigan, M. and J. Martinko. Brock Biology of Microorganism. 11th Edition Prentice Hall. USA. Pp. 545-572
- Martin, G.G. and L.B. Graves. 1985. Structur and classification of shrimp haemocytes. *J. Morphology*. 185: 339-348.
- Nauwynk, H., P. Sorgeloss and J.J.P.D.R. Lima. 2011. Development of a system for separation and characterization of *Litopenaeus vannamei* haemocytes. China. Universiteit Gent. Pp 89
- Novriadi, Romi. 2015. Meneropong Sistem Kekebalan Tubuh Udang. Edisi 32. Trobosqua. hal. 54-55.
- Nur, A. 2011. Manajemen Pemeliharaan Udang Vaname. Direktorat Jendral Perikanan Budidaya. Balai Besar Pengembangan Budidaya Air Payau Jepara. 40 hal.

- Pandiyan, P., D. Balaraman, R. Thirunavukkarasu, E. G. J. George, K. Subaramaniyan, S. Manikkam, and B. Sadayappan. Drug Invent. Today 5, 2013. 55–59.
- Pitrianingsih, C., Suminto dan Sarjito. 2014. Pengaruh Bakteri Kandidat Probiotik Terhadap Perubahan Kandungan Nutrien C, N, P, dan K Media Kultur Lele (*Clarias gariepinus*). Journal of Aquaculture Management and Technology. Semarang. 3 (4) : 247-256.
- Prihatiningsih N, T. Arwiyanto, B. Hadisutrisno dan J. Widada. 2015. Aktivitas Siderofor *Bacillus Subtilis* Sebagai Pemacu Pertumbuhan dan Pengendali Patogen Tanaman Terung. J. HPT Tropika. 15(1): 64–71.
- Ramdhani, I.S., E. Harpeni, Tarsim, L. Santoso. 2017. Potensi Sinbiotik Lokal Terhadap Respon Imun Non Spesifik Udang Vaname. Depik, 6(3) : 221-227
- Ramses. 2006. Antagonisme Bakteri *Bacillus* sp. dan *Pseudomonas* sp. terhadap Bakteri *Vibrio Parahaemolyticus* Patogen pada Udang Windu (*Penaeus Monodon*) Jurnal Biologi 191: 259–270.
- Rengpipat, S., S. Rukpratanporn, S. Piyatiratitivorakul, and P. Menasveta. 1998. Probiotics in aquaculture: A case study of probiotics for larvae of the black tiger shrimp (*Penaeus monodon*). In: Advance in shrimp biotechnology. Proceeding to the special session on shrimp biotechnology Asian Fisheries Forum, Chiengmai, Thailand 11-14 November 1998. T.W. Vogel (Ed.). 177-181
- Ridlo, A. & Pramesti, R. 2009. Aplikasi Ekstrak Rumput Laut sebagai Agen Imunostimulan Sistem Pertahanan Non Spesifik pada Udang Vannamei (*Litopenaeus vannamei*). Ilmu Kelautan, 14(3): 133-137.
- Rodriguez, L. & Le Moullac, G. 2000. State of the art of immunological tools and health control of penaeid shrimp. *Aquaculture*, 191: 109-119.
- Rohmin, M.F.T., G. Mahasri, dan F.A. Rantam. 2017. Response Analysis of Urban Vaname (*Litopenaeus vannamei*) Which is Exposed to Crude Protein Zoothamniumpenaei Oral and Maintained in Ponds. Jurnal Biosains Pascasarjana. 19(2): 8-10.
- Rosilawati, E., Y.C. Christinasari, dan E. Koestanti. 2011. Isolasi Identifikasi serta Uji Kepakaan *Bacillus subtilis* dari Sedimen Tambak Udang Terhadap Bahan Antimikrobial. Veterinaria Medika. 4 (2) : 117-118.

- Sanjaya, B. R. L., D. Wahyuni, dan I. N. Asyiah. Perbedaan Daya Hambat *Pseudomonas diminuta*, *Pseudomonas fluorescens* dan *Pseudomonas putida* terhadap Pertumbuhan Bakteri *Ralstonia solanacearum*. Berkala Saintek. 1 (1) : 1-5
- Sharma, N. and B. N. Johri. 2003. Growth Promoting Influence of Siderophore-producing *Pseudomonas* strains GRP3A and PRS9 in Maize (*Zea mays* L.) Under Iron Limiting Conditions. Microbiological Research. 158 (3) : 243-248.
- Sharma, N. and N. Gautam. 2008. Antibacterial Activity and Characterization of Bacteriocin of *Bacillus mycoides* Isolated From Whey. Indian Journal of Biotechnology. 7:117-121
- Simanjuntak, I. C. B. H., Suminto dan A. Sudaryo. 2016. Pengaruh Konsentrasi Probiotik yang Berasosiasi dalam Usus Sebagai Bioflok Terhadap Efisiensi Pemanfaatan Pakan, Pertumbuhan, dan Kelulushidupan Lele Dumbo (*Clarias gariepinus*). Journal of Aquaculture Management and Technology. Semarang. 5 (2) : 1-8.
- Smith VJ, JH. Brown and Ch. Hauton. 2003. Immunostimulation in crustaceans: does it really protect against infection? *Fish and Shellfish Immunology* 15:71–90
- Son, M., Y. Moon, O. J. Mi, S. B. Han, K. H. Park, K. Jung-Gon, and J. H. Ahn. 2012. Lipase and Protease Double-Deletion Mutant of *Pseudomonas fluorescens* Suitable for Extracellular Protein Production. Journal Applied and Environmental Microbiology. 78 (23): 8454-8462.
- Sucharita, V. and S. Jyoti. 2013. An Identification of Penaeid Prawn Species Based on Histogram Values. International Journal of Advanced Research in Computer Science and Software Engineering. 3 (7) : 807-811.
- Suprapto, H. 2005. Studi Pendahuluan *Bacillus* sp. sebagai Probiotik Untuk Mengurangi Jumlah Bakteri *Vibrio* sp. pada Hepatopankreas dan Air Pemeliharaan Udang Windu (*Penaeus monodon*). Jurnal perikanan. VII (1): 54-59
- Suprapto, H., A. B. Siswanto dan B. S. Raharja. 2010. Pengaruh Pemberian Vaksin Whole Cell Killed Virus Terhadap Sintasan Udang Vaname (*Litopenaeus vannamei*) yang Diinfeksi Whitespot Baculovirus (WSBV) Jurnal Ilmiah Perikanan dan Kelautan, 2 (1) : 51-54.

- Suyono, Y. dan F. Salahudin. 2011. Identifikasi dan Karakterisasi Bakteri *Pseudomonas* sp. pada Tanah Yang Terindikasi Terkontaminasi Logam. Jurnal Biopropal Industri. 2 (1) : 8-13
- Swapna, B., Ch. Venkatrayulu and A. V. Swathi. 2015. Effect of Probiotic Bacteria *Bacillus licheniformis* and *Lactobacillus rhamnosus* on Growth of The PacificWhite Shrimp *Litopenaeus vannamei* (Boone, 1931). European Journal of Experimental Biology. 5(11): 31-36.
- Syahailatua, D.Y. 2009. Seleksi Bakteri Probiotik Sebagai Stimulator Sistem Imun Pada Udang Vaname *Litopenaeus vannamei*. Tesis. IPB. Bogor. 17 hal.
- Usmiati, S., Miskiyah, dan R.A.M. Rarah. 2009. Pengaruh Penggunaan Bakteriosin dari *Lactobacillus* sp. galur SCG 1223 Terhadap Kualitas Mikrobiologi Daging Sapi Segar. Jurnal Ilmu Ternak dan Veteriner. 14 (2) : 150–166.
- Verschuere, L., G. Rombout, P. Sorgeloos and W. Verstraete. 2000. Probiotics bacteria as biocontrol agents in aquaculture. App. Environ. Microbiol. 64: 655-671.
- Vijayan, K. K., I. S. B. Singh, N. S. Jayaprakash, S.V. Alavandi, S. S. Pai, R. Preetha, J. J. S. Rajan, T. C. Santiago. 2006. A Brackishwater Isolate of *Pseudomonas* PS-102, a Potential Antagonistic Bacterium Against Pathogenic Vibrios In Penaeid and Non-penaeid Rearing System. Aquaculture, 251: 192-200.
- Wen YH and CC. Jiann. 2005. The immunostimulatory effect of hot-water extract of *Gracilaria tenuistipitata* on the white shrimp *Litopenaeus vannamei* and its resistance against *Vibrio alginolyticus*. Fish and Shellfish Immunology 19 : 127-138.
- Wyban, J.A. and Sweeney, J. 1991. Intensif Shrimp Production Technology the Oceanic. Institute Shrim Manual the Oceanic Institute, Honolulu, HI. 158 pp.
- Yudiati, E., Z. Arifin, dan I. Riniatsih. 2010. Pengaruh Aplikasi Probiotik terhadap Laju Sintasan dan Pertumbuhan Tokolan Udang Vanamei (*Litopeneus vannamei*), Populasi Bakteri *Vibrio*, serta Kandungan Amoniak dan Bahan Organik Media Budidaya. Ilmu Kelautan. 15 (3): 153-158.

Zokaei, H.F., Saad, C.R.B, Daud, H.M., Sharr Azni Harmin, S.A., & Shakibazadeh, S. 2009. Effect of *Bacillus subtilis* on the growth and survival rate of shrimp (*Litopenaeus vannamei*). *African Journal of Biotechnology*, 8(14).