DAFTAR PUSTAKA

Abdel-Warith, A. W. A., Fath El-Bab, A. F., Younis, E. S. M. I., Al-Asgah, N. A., Allam, H. Y., Abd-Elghany, M. F., Shata, Y. H. M., & Shamlol, F. S. (2020). Using of chitosan nanoparticles (CsNPs), Spirulina as a feed additives under intensive culture system for black tiger shrimp (*Penaeus monodon*). *Journal of King Saud University - Science*, *32*(8), 3359–3363. https://doi.org/10.1016/j.jksus.2020.09.022

Abu Hena, M. K. (2012). Food selection preference of different ages and sizes of black tiger shrimp, Penaeus monodon Fabricius, in tropical aquaculture ponds in Malaysia. *African Journal of Biotechnology*, *11*(22), 6153–6159. https://doi.org/10.5897/AJB11.2192

Adawiyah, L. Al, Ulkhaq, M. F., & Kenconojati, H. (2020). Growth Response of Porphyridium sp. Culture on Glass and Plastic Container in Laboratory Scale. *Journal of Aquaculture and Fish Health*, *9*(2), 155–163. https://doi.org/10.20473/jafh.v9i2.17183

Agung, M. U. K. (2007). Penelurusan Efektifitas Beberapa Bahan Alam Sebagai Kandidat Antibakteri Dalam Mengatasi Penyakit Vibriosis Pada Udang Windu. In *Skripsi*. Universitas Padjajaran.

Ardina, D. S., Santoso, L., Studi, P., Perairan, B., Pertanian, F., Lampung, U., & Lampung, B. (2021). Efektivitas penambahan triptofan pada pakan komersil untuk menekan tingkat kanibalisme udang vaname (*Litopenaeus vannamei*). *Jurnal Akuakultur Rawa Indonesia*, *9*(2), 86–96.

Arylza, I. R. (2005). Pigmen fikobillin dan kaitannya dengan fotosintesis pada alga. *Jurnal Biosains*, *12*(2), 73–78. http://www.ncbi.nlm.nih.gov/pubmed/810049%0Ahttp://doi.wiley.com/10.1002/anie.197505391%0Ahttp://www.sciencedirect.com/science/article/pii/B9780857090409500205%0Ahttp://www.ncbi.nlm.nih.gov/pubmed/21918515%0Ahttp://www.cabi.org/cabebooks/ebook/20083217094

Atmomarsono, M., & Susianingsih, E. (2015). Effect of different probiotic bacteria on survival rate, growth, and production of whiteleg shrimp in traditional-plus technology. *Indonesian Aquaculture Journal*, *10*(1), 71–79. https://doi.org/10.15578/iaj.10.1.2015.71-79

Banerjee, D., Maiti, B., Girisha, S. K., Venugopal, M. N., & Karunasagar, I. (2015). A crustin isoform from black tiger shrimp, Penaeus monodon exhibits broad spectrum anti-bacterial activity. *Aquaculture Reports*, *2*, 106–111. https://doi.org/10.1016/j.aqrep.2015.08.009

Bearson, S. (1997). Acid stress responses in enterobacteria. *FEMS Microbiology Letters*, *147*(2), 173–180. https://doi.org/10.1016/S0378-1097(96)00503-4

Booth, G. D., Steel, R. G. D., & Torrie, J. H. (1981). Principles and Procedures of Statistics: A Biometrical Approach. *Journal of the American Statistical Association*, *76*(375), 753–754. https://doi.org/10.2307/2287561

Borowitzka, M. A. (1988). (1988). Vitamins and fine chemicals from micro-algae. In *Micro-algal biotechnology* (pp. 153–196). Cambridge University Press.

Boyd, C. . (1990). *Water quality in ponds for aquaculture*.

Burford, M. A., Sellars, M. J., Arnold, S. J., Keys, S. J., Crocos, P. J., & Preston, N. P.

(2004). Contribution of the natural biota associated with substrates to the nutritional requirements of the post-larval shrimp, *Penaeus esculentus* (Haswell), in high-density rearing systems. *Aquaculture Research*, *35*(5), 508–515. https://doi.org/10.1111/j.1365-2109.2004.01052.x

Chaiyapechara, S., Uengwetwanit, T., Arayamethakorn, S., Bunphimpapha, P., Phromson, M., Jangsutthivorawat, W., Tala, S., Karoonuthaisiri, N., & Rungrassamee, W. (2022). Understanding the host-microbe-environment interactions: Intestinal microbiota and transcriptomes of black tiger shrimp Penaeus monodon at different salinity levels. *Aquaculture*, *546*, 1–18. https://doi.org/10.1016/j.aquaculture.2021.737371

Cremen, M. C. M. (2007). Martinez-Goss, Phytoplankton bloom in commercial shrimp ponds using green-water technology. *J Appl Phycol*, *19*, 615–624.

Daneshvar, E., Sik Ok, Y., Tavakoli, S., Sarkar, B., Shaheen, S. M., Hong, H., Luo, Y., Rinklebe, J., Song, H., & Bhatnagar, A. (2021). Insights into upstream processing of microalgae: A review. *Bioresource Technology*, *329*(January). https://doi.org/10.1016/j.biortech.2021.124870

Defoirdt, T., Boon, N., Bossier, P., & Verstraete, W. (2004). Disruption of bacterial quorum sensing: An unexplored strategy to fight infections in aquaculture. *Aquaculture*, *240*(1–4), 69–88. https://doi.org/10.1016/j.aquaculture.2004.06.031

Elkomy, R., Yousef, R., Elala, M. A., & Mohamed, Y. (2015). No Title空間像再生型立体映像の 研究動向. *Environmental Science and Pollution Research*, *22*(22), 17879–17887.

Falaise, C., François, C., Travers, M. A., Morga, B., Haure, J., Tremblay, R., Turcotte, F., Pasetto, P., Gastineau, R., Hardivillier, Y., & Leignel, V. (2016). Antimicrobial compounds from eukaryotic microalgae against human pathogens and diseases in aquaculture. *Marine Drugs*, *I4*(9), 159. http://dspace.unitru.edu.pe/bitstream/handle/UNITRU/10947/Miñano Guevara%2C Karen Anali.pdf?sequence=1&isAllowed=y%0Ahttps://repository.upb.edu.co/bitstream/handle/20.500.11912/3346/DIVERSIDAD DE MACROINVERTEBRADOS ACUÁTICOS Y SU.pdf?sequence=1&isAllowed=

Fallahi, A., Rezvani, F., Asgharnejad, H., Khorshidi, E., Hajinajaf, N., & Higgins, B. (2021). Interactions of microalgae-bacteria consortia for nutrient removal from wastewater: A review. *Chemosphere*, *272*, 129878. https://doi.org/10.1016/j.chemosphere.2021.129878

Feng, T. (2018). *Spermatogenesis and sperm assessment in the black tiger prawn , Penaeus monodon*. Ph.D Thesis, University of Queensland, Australia.

Flegel, T. W. (2012). Historic emergence, impact and current status of shrimp pathogens in Asia. *Journal of Invertebrate Pathology*, *110*(2), 166–173. https://doi.org/10.1016/j.jip.2012.03.004

Fujino, T., Okuno, Y., Nakada, D., Ayoma, A., Fukai, K., Mukai, T., Ueho, T. (1951). On the bacteriological examination of shirasu food poisoning (in Japanese). Journal of the Japanese Association of Infectious Diseases. 25: 11.

Fuqua, C., Parsek, M. R., & Greenberg, E. P. (2011). Regulation of gene expression by cell-to cell communication: acyl-homoserine lactone quorum sensing. *Annu. Rev. Genet.*,

35(439–468).

Ghosh, A. K., Panda, S. K., & Luyten, W. (2021). Anti-vibrio and immune-enhancing activity of medicinal plants in shrimp: A comprehensive review. *Fish and Shellfish Immunology*, *117*(April), 192–210. https://doi.org/10.1016/j.fsi.2021.08.006

Gode-Potratz, C. J., Kustusch, R. J., Breheny, P. J., Weiss, D. S., & McCarter, L. L. (2011). Surface sensing in Vibrio parahaemolyticus triggers a programme of gene expression that promotes colonization and virulence. *Molecular Microbiology*, *79*(1), 240–263. https://doi.org/10.1111/j.1365-2958.2010.07445.x

Ham, H., & Orth, K. (2012). The role of type III secretion System 2 in *Vibrio parahaemolyticus* pathogenicity. *Journal of Microbiology*, *50*(5), 719–725. https://doi.org/10.1007/s12275-012-2550-2

Hamouda, R. A. E., Mahmoud, H. K., & S.Z, S. Z. S. (2018). Antimicrobial Activity of Cultured Microalgae, Porphyridium sp. and Nannochloropsis oculata and their Application in Shrimp Aquaculture. *Journal of the Arabian Aquaculture Society*, *13*(1), 49–58. http://www.tfd.org.tw/opencms/english/about/background.html%0Ahttp://dx.doi.org/10.1016/j.cirp.2016.06.001%0Ahttp://dx.doi.org/10.1016/j.powtec.2016.12.055%0Ahttps://doi.org/10.1016/j.ijfatigue.2019.02.006%0Ahttps://doi.org/10.1016/j.matlet.2019.04.024%0A

Harlina, Rosmiati, Jafar, S., Sukmawati, Nurhidayah, & Kamaruddin. (2019). Effect of *Chromolaena odorata* as bioactive compound in artificial diet on survival rate of tiger prawn *Penaeus monodon*. *IOP Conference Series: Earth and Environmental Science*, *253*, 1–9. https://doi.org/10.1088/1755-1315/253/1/012015

Havanapan, P. orn, Taengchaiyaphum, S., Ketterman, A. J., & Krittanai, C. (2016). Yellow head virus infection in black tiger shrimp reveals specific interaction with granule-containing hemocytes and crustinPm1 as a responsive protein. *Developmental and Comparative Immunology*, *54*(1), 126–136. https://doi.org/10.1016/j.dci.2015.09.005

Hideaki, A., Ichiro, O., & Katsuyoshi, M. (1993). Cell type-specific roles in the hemocyte clotting system of the spiny lobster, Panulirus japonicus. *Comp. Biochem. Physiol*, *105*, 11–15.

Jayaraman, A., & Wood, T. (2008). Bacterial quorum sensing: signals, circuits, and implications for biofilms and disease Annu. *Rev. Biomed. Eng*, *10*, 145–167.

Jiang, Y., Wang, Y., Zhang, Z., Liao, M., Li, B., Rong, X., & Chen, G. (2019). Responses of microbial community structure in turbot (*Scophthalmus maximus*) larval intestine to the regulation of probiotic introduced through live feed. *PLOS ONE*, *14*(5), e0216590. https://doi.org/10.1371/journal.pone.0216590

Kadriah, I. A. K., Kamaruddin, & Nurhidayah. (2020). Survival of *Penaeus monodon* shrimp fed diets supplemented with extract *Porphyridium aerugineum* and *Porphyridium* sp. after challenges by *Vibrio harveyi*. *IOP Conference Series: Earth and Environmental Science*, *564*(1), 012055. https://doi.org/10.1088/1755-1315/564/1/012055

Kadriah, I. A. K., & Nurbaya. (2019). *Detection of vibrio harveyi using iavh primer in shrimp fry infected under different immersion time Detection of vibrio harveyi using iavh primer in shrimp fry infected under different immersion time*. 0–6. https://doi.org/10.1088/1755-1315/253/1/012004

Kamaruddin, K., Usman, U., & Laining, A. (2016). Performa pertumbuhan krablet kepiting bakau (*Scylla olivacea*) dengan frekuensi pemberian pakan berbeda pada stadia pendederan. *Jurnal Riset Akuakultur*, *11*(2), 163–170. https://doi.org/10.15578/jra.11.2.2016.163-170

Kasmawati. (2014). *Optimasi Padat Tebar Yang Berbeda Terhadap Sintasan Dan Pertumbuhan Udang Windu(Penaeus Monodon) Pasca Larva (Tahap Penggelondongan) Dengan Sistem Resirkulasi Pada Wadah Terkontrol*. https://digilibadmin.unismuh.ac.id/upload/15320-Full_Text.pdf

Kerdmusik, C., Fernando, S., Attasart, P., Vanichviriyakit, R., Boonya, N., Pongtippatee, P., Krishna, S., & Withyachumnarnkul, B. (2018). Needle biopsy of the hepatopancreas of the black tiger shrimp *Penaeus monodon* with *Penaeus monodon* densovirus detection. *Aquaculture*, *490*(February), 1–4. https://doi.org/10.1016/j.aquaculture.2018.02.019

Khumaidi, A. (2016). Mikroalga laut Nannochloropsis oculata sebagai alternatif antivirus Viral Nervous Necrotic (VNN) pada ikan kerapu tikus (Cromileptes Altivelis). *Samakia: Jurnal Ilmu Perikanan*, *7*(1), 45–50. http://www.samakia.aperiki.ac.id/index.php/JSAPI/article/view/11

Kusmiyati, K., & Agustini, N. W. S. (2006). Antibacterial activity assay from Porphyridium cruentum microalgae. *Biodiversitas Journal of Biological Diversity*, *8*(1), 48–53. https://doi.org/10.13057/biodiv/d080110

Lakshmi, B., Viswanath, B., & Sai Gopal, D. V. R. (2013). Probiotics as Antiviral Agents in Shrimp Aquaculture. *Journal of Pathogens*, *2013*, 1–13. https://doi.org/10.1155/2013/424123

Lante, S., & Herlinah, H. (2015). Pengaruh pakan alami chaetoceros spp. terhadap perkembangan dan sintasan larva udang windu, Penaeus monodon. *Jurnal Riset Akuakultur*, *10*(3), 389–396. https://doi.org/10.15578/jra.10.3.2015.389-396

Letchumanan, V., Chan, K.-G., & Lee, L.-H. (2014). Vibrio parahaemolyticus: a review on the pathogenesis, prevalence, and advance molecular identification techniques. *Frontiers in Microbiology*, *5*(705), 1–13. https://doi.org/10.3389/fmicb.2014.00705

Li-Beisson, Y., & Nakamura, Y. (2016). *Lipids in plant and algae development (Vol. 86). Berlin: Springer. https://doi.org/10.1007/ 978-3-319-25979-6.* (Vol. 86). Berlin: Springer. https://doi.org/10.1007/ 978-3-319-25979-6.

LI, M., Ye, X., Li, G., & Wu, S. (2015). Effect of Organic Matter on Microbial Communities in Closed Aquaculture Systems. *Aquaculture Research*, *46*(11), 2687–2703.

Lightner, D. V. (1996). *A Handbook of Shrimp Pathology and Diagnostic Procedures for Diseases of Cultured Penaeid Shrimp.* Baton Rouge, LA: World Aquaculture Society.

Little, T. J., Hultmark, D., & Read, A. F. (2005). Invertebrate immunity and the limits of mechanistic immunology. *Nature Immunology*, *6*(7), 651–654. https://doi.org/10.1038/ni1219

Liu, D. (2011). *Molecular detection of human bacterial pathogens*. CRC Press Taylor & Francis Group. https://doi.org/10.3168/jds.S0022-0302(60)90360-X

Lu, Z. Bin, Li, Y. D., Jiang, S. G., Yang, Q. Bin, Jiang, S., Huang, J. H., Yang, L. shi, Chen, X., & Zhou, F. L. (2022). Transcriptome analysis of hepatopancreas in P*enaeus*

monodon under acute low pH stress. *Fish and Shellfish Immunology*, *131*(September), 1166–1172. https://doi.org/10.1016/j.fsi.2022.11.031

Lu, Q., Chen, P., Addy, M., Zhang, R., Deng, X., Ma, Y., Cheng, Y., Hussain, F., Chen, C., Liu, Y., & Ruan, R. (2018). Carbon-dependent alleviation of ammonia toxicity for algae cultivation and associated mechanisms exploration. *Bioresource Technology*, *249*, 99–107. https://doi.org/10.1016/j.biortech.2017.09.175

Majano-Mendoza, A., Bravo-Fariñas, L., Fernández-Abreu, A., Martínez-Motas, I., Núñez, F., Mederos-Cuervo, L. M., Ramírez-Álvarez, M., & Castro-Escarpulli, G. (2009). Caracterización fenotípica de bacilos gramnegativos anaerobios facultativos oxidasa positiva, aislados de pacientes con enfermedad diarreica aguda en Cuba. *Revista Biomédica*, *20*(June 2015), 25–32.

Mata, T. M., Martins, A. A., & Caetano, N. S. (2010). Microalgae for biodiesel production and other applications: A review. *Renewable and Sustainable Energy Reviews*, *14*(1), 217–232. https://doi.org/10.1016/j.rser.2009.07.020

Mohamad, A., Zamri-Saad, M., Amal, M. N. A., Al-Saari, N., Monir, M. S., Chin, Y. K., & Md Yasin, I. S. (2021). Vaccine efficacy of a newly developed feed-based whole-cell polyvalent vaccine against vibriosis, streptococcosis and motile aeromonad septicemia in asian seabass, lates calcarifer. *Vaccines*, *9*(4). https://doi.org/10.3390/vaccines9040368

Mudimu, O., Rybalka, N., Bauersachs, T., Born, J., Friedl, T., & Schulz, R. (2014). Biotechnological Screening of Microalgal and Cyanobacterial Strains for Biogas Production and Antibacterial and Antifungal Effects. *Metabolites*, *4*(2), 373–393. https://doi.org/10.3390/metabo4020373

Mulders, K., Janssen, J., Martens, D., Wijffels, R., & Lamers, P. (2014). Effect of biomass concentration on secondary carotenoids and triacylglycerol accumulation in nitrogen-depleted Chlamydomonas reinhardtii. *European Journal of Endocrinology*, *26*(2), 581–590.

Nair, G. B., Ramamurthy, T., Bhattacharya, S. K., Dutta, B., Takeda, Y., & Sack, D. A. (2007). Global Dissemination of Vibrio parahaemolyticus Serotype O3:K6 and Its Serovariants. *Clinical Microbiology Reviews*, *20*(1), 39–48. https://doi.org/10.1128/CMR.00025-06

Natrah, F. M. ., Defoirdt, T., Sorgeloos, P., & Bossier, P. (2011). NDisruption of bacterial cell-tocell communicatiFuqua, C., M.R. Parsek, and E.P. Greenberg. “Regulation of Gene Expression by Cell- to Cell Communication: Acyl-Homoserine Lactone Quorum Sensing.” Annu. Rev. Genet. 35, no. 439–468 (2011).on by marine organ. *Mar. Biotechnol.*, *13*, 109–126.

Natrah, F. M. I., Kenmegne, M. M., Wiyoto, W., Sorgeloos, P., Bossier, P., & Defoirdt, T. (2011). Effects of micro-algae commonly used in aquaculture on acyl-homoserine lactone quorum sensing. *Aquaculture*, *317*(1–4), 53–57. https://doi.org/10.1016/j.aquaculture.2011.04.038

Nguyen, T. V, & Austin, C. M. (2014). Effects of Organic Pollution on Growth, Mortality,and Reproduction of the Giant Freshwater Prawn, Macrobrachium rosenbergii. *Journal of the World Aquaculture Society*, *45*(6), 694–704. https://eje.bioscientifica.com/view/journals/eje/171/6/727.xml

Nida Khafiyyah. (2022). *Aktivitas Antibakteri Dari Senyawa Bioaktif EkstrakMikroalga Porphyridium Cruentum Terhadap BakteriStaphylococcus epidermidis*. Bogor Agricultural Institute.

Novita, H., Rusmana, I., Yuhana, M., & Pasaribu, F. H. (2015). *Karakterisasi bakteri anti quorum sensing (aqs) sebagai penghambat virulensi penyakit pada ikan lele dumbo (Clarias gariepinus)*. *10*(1), 89–98. file:///C:/Users/DELL/Downloads/151-309-1-SM (1).pdf

Nur, I., . S., & Kurnia, A. (2019). Efficacy of Guava (*Psidium guajava*) Leaves Extract to Prevent Vibriosis in White Shrimp (*Litopenaeus vannamei*). *Research Journal of Medicinal Plants*, *13*(3), 136–144. https://doi.org/10.3923/rjmp.2019.136.144

Nurbaya, Atmomarsono, M., Kadriah, I. A. K., & Susianingsih, E. (2020). *Nurbaya., Atmomarsono, M, Kadriah IAK, Susianingsih, E. 2020. Laporan Teknis Kegiatan Riset. Pencegahan Penyakit Pada Budidaya Udang Ramah Lingkungan. Balai Riset Perikanan Budidaya Air Payau dan Penyuluhan Perikanan. Badan Riset dan Sumber daya Manusia K*.

Nurhasan. (2015). *Aquacultur:Budidaya perairan serta organisme akuatik*. https://nurhasanaquacultur.wordpress.com/2015/02/17/klasifikasi-dan-morfologi-udang-windu/

Nurhidayah, Muliani, Atmomarsono, M., & Nurbaya. (2022). Peer Review Statement. *IOP Conference Series: Earth and Environmental Science*, *1119*(1), 011002. https://doi.org/10.1088/1755-1315/1119/1/011002

Papenfort, K., & Bassler, B. L. (2016). Quorum sensing signal–response systems in Gram-negative bacteria. *Nature Reviews Microbiology*, *14*(9), 576–588. https://doi.org/10.1038/nrmicro.2016.89

Patil, V., Källqvist, T., Olsen, E., Vogt, G., & Gislerød, H. R. (2007). Fatty acid composition of 12 microalgae for possible use in aquaculture feed. *Aquaculture International*, *15*(1), 1–9. https://doi.org/10.1007/ s10499-006-9060-3

Pratiwi, R. (2018). Aspek biologi dan ablasi mata pada udang windu *Penaeus monodon* suku Penaeidae (Decapoda: Malacostraca). *OSEANA*, *43*(2), 34–47. https://doi.org/10.14203/oseana.2018.Vol.43No.2.19

Promwikorn, W., Kirirat, P., & Thaweethamsewee, P. (2004). Index of molt staging in the black tiger shrimp (Penaeus monodon). *Journal of Science and Technology*, *26*(5), 765–772.

Rahi, M. L., Azad, K. N., Tabassum, M., Irin, H. H., Hossain, K. S., Aziz, D., Moshtaghi, A., & Hurwood, D. A. (2021). Effects of Salinity on Physiological, Biochemical and Gene Expression Parameters of Black Tiger Shrimp (*Penaeus monodon*): Potential for Farming in Low-Salinity Environments. *Biology*, *10*(12), 1220. https://doi.org/10.3390/biology10121220

Rajamani, S., Bauer, W. D., Robinson, J.B.I.I.I., Farrow, J. M., Pesci, E. C., Teplitski, M., Gao, & M., Sayre, R.T., Phillips, D.A., 2008. The vitamin. (2008). Rajamani, S., Bauer, W.D., Robinson, J.B.I.I.I., Farrow, J.M., Pesci, E.C., Teplitski, M., Gao, M., Sayre, R.T., Phillips, D.A., 2008. The vitamin riboflavin and its derivative lumichrome activate the LasR bacterial quorum-sensing receptor. *Mol. Plant. Microbe Interact.*, *21*, 1184–1192.

Raman, S. V, Natarajan, K. R., & Srinivasan, P. (2008). Characterization of Dissolved Organic Matter (DOM) in Water. , 146(1-3), 1-7. *Environmental Monitoring and Assessment*, *146*(1–3), 1–7.

Rasch, J. A., & Bauer, R. T. (2016). The functional morphology and role of the thelycum in insemination, and its relation to the mating system in the seagrass shrimp *Ambidexter symmetricus* (Decapoda: Processidae). *Invertebrate Biology*, *135*(2), 163–173. https://doi.org/10.1111/ivb.12126

Razaghi, A., Hussain, F., Labavitch, J., & Goyal, A. (2014). Effect of nutrient limitation and temperature on growth and lipid content of Chlorella vulgaris. *Journal of Applied Phycology*, *26*, 131–141.

Rosales, D., Ellett, A., Jacobs, J., Ozbay, G., Parveen, S., & Pitula, J. (2022). Investigating the Relationship between Nitrate, Total Dissolved Nitrogen, and Phosphate with Abundance of Pathogenic Vibrios and Harmful Algal Blooms in Rehoboth Bay, Delaware. *Applied and Environmental Microbiology*, *88*(14), 1–15. https://doi.org/10.1128/aem.00356-22

Ruane, J., Sonnino, A., & Agostini, A. (2010). Bioenergy and the potential contribution of agricultural biotechnologies in developing countries. *Biomass and Bioenergy*, *34*(10), 1427–1439. https://doi.org/10.1016/j.biombioe.2010.04.011

Rutherford, S. T., & Bassler, B. L. (2012). Bacterial Quorum Sensing: Its Role in Virulence and Possibilities for Its Control. *Cold Spring Harbor Perspectives in Medicine*, *2*(11), 1–26. https://doi.org/10.1101/cshperspect.a012427

Safi, C., Charton, M., Pignolet, O., Pontalier, P. Y., & Vaca-Garcia, C. (2013). Evaluation of the protein quality of Porphyridium cruentum. *Journal of Applied Phycology*, *25*(2), 497–501. https://doi.org/10.1007/s10811-012-9883-4

Sahandi, J., Sorgeloos, P., Xiao, H., Wang, X., Qi, Z., Zheng, Y., & Tang, X. (2019). The use of selected bacteria and yeasts to control *Vibrio* spp. in live food. *Antibiotics*, *8*(95), 1–16. https://doi.org/10.3390/antibiotics8030095

Salvesen, I., Reitan, K. I., Skjermo, J., & OØie, G. (2000). Microbial environments in marine larviculture: Impacts of algal growth rates on the bacterial load in six microalgae. *Aquaculture International*, *8*(4), 275–287. https://doi.org/10.1023/A:1009200926452

Scott, T. M., Rose, J. B., Jenkins, T. M., Farrah, S. R., & Lukasik, J. (2002). Microbial source tracking: Current methodology and future directions. *Applied and Environmental Microbiology*, *68*(12), 5796–5803. https://doi.org/10.1128/AEM.68.12.5796-5803.2002

Shailender, M., Babu, C. S., Srikanth, B., Kishor, B., Silambarasan, D., & Jayagopal, P. (2012). Sustainable Culture method of Giant Black Tiger Shrimp, *Penaeus monodon* (Fabricius) in Andhra Pradesh, India. *IOSR Journal of Agriculture and Veterinary Science*, *1*(3), 12–16. https://doi.org/10.9790/2380-0131216

Shinn, A. P., Pratoomyot, J., Griffiths, D., Trong, T. Q., Vu, N. T., Jiravanichpaisal, P., & Briggs, M. (2018). Asian shrimp production and the economic costs of disease. *Asian Fisheries Science*, *31*(Special Acute Hepatopancreatic Necrosis Disease (AHPND)), 29–58. https://doi.org/10.33997/j.afs.2018.31.s1.003

Sinha, R. P., Singh, G., Kesheri, M., & Kannaujiya, V. K. (2011). Biotechnological Potentials of Phycobiliproteins Richa , Vinod K . Kannaujiya , Minu Kesheri , Garvita. *International*

Journal of Pharma and Bio Science2, *2*(4), 446–454.

Sony, M., Sumithra, T. G., Anusree, V. N., Amala, P. V., Reshma, K. J., Alex, S., & Sanil, N. K. (2021). Antimicrobial resistance and virulence characteristics of *Vibrio vulnificus*, *Vibrio parahaemolyticus* and *Vibrio harveyi* from natural disease outbreaks of marine/estuarine fishes. *Aquaculture*, *539*(December 2020), 736608. https://doi.org/10.1016/j.aquaculture.2021.736608

Spolaore, P., Joannis-Cassan, C., Duran, E., & Isambert, A. (2006). Commercial applications of microalgae. *Journal of Bioscience and Bioengineering*, *101*(2), 87–96. https://doi.org/10.1002/ejoc.201200111

Stickney.RR. (2005). *Aquaculture an introduction text.UK, Biddles Ltd, Kings Lynn, 265p.*

Sun, M., Li, S., Zhang, X., Xiang, J., & Li, F. (2020). Isolation and transcriptome analysis of three subpopulations of shrimp hemocytes reveals the underlying mechanism of their immune functions. *Developmental and Comparative Immunology*, *108*, 1–12. https://doi.org/10.1016/j.dci.2020.103689

Supungul, P., Klinbunga, S., Pichyangkura, R., Hirono, I., Aoki, T., & Tassanakajon, A. (2004). Antimicrobial peptides discovered in the black tiger shrimp Penaeus monodon using the EST approach. *Diseases of Aquatic Organisms*, *61*(1–2), 123–135. https://doi.org/10.3354/dao061123

Suwoyo, H. S., & Sahabuddin. (2017). Performa pertumbuhan calon induk udang windu *Penaeus monodon* transfeksi pada generasi yang berbeda. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, *9*(1), 185–199. http://itk.fpik.ipb.ac.id/ej_itkt91

Suyanto, R., & Mudjiman, A. (2006). *Budidaya udang windu Jakarta*. Swadaya.

Taga, M. E., Semmelhack, J. L., & Bassler, B. L. (2008). The LuxS-dependent autoinducer AI-2 controls the expression of an ABC transporter that functions in AI-2 uptake in Salmonella typhimurium. *Molecular Microbiology*, *42*(3), 777–793. https://doi.org/10.1046/j.1365-2958.2001.02669.x

Tannin-Spitz, T., Bergman, M., van Moppes, D., Grossman, S., & Arad, S. M. (2005). Antioxidant activity of the polysaccharide of the red microalga Porphyridium sp. *Journal of Applied Phycology*, *17*(3), 215–222. https://doi.org/10.1007/ s10811-005-0679-7

Tantulo, U., & Fotedar, R. (2006). Comparison of growth, osmoregulatory capacity, ionic regulation and organosomatic indices of black tiger prawn (*Penaeus monodon* Fabricius, 1798) juveniles reared in potassium fortified inland saline water and ocean water at different salinities. *Aquaculture*, *258*(1–4), 594–605. https://doi.org/10.1016/j.aquaculture.2006.04.038

Tassanakajon, A., Rimphanitchayakit, V., Visetnan, S., Amparyup, P., Somboonwiwat, K., Charoensapsri, W., & Tang, S. (2018). Shrimp humoral responses against pathogens: antimicrobial peptides and melanization. *Developmental and Comparative Immunology*, *80*, 81–93. https://doi.org/10.1016/j.dci.2017.05.009

Teplitski, M., Chen, H., Rajamani, S., Gao, M., Merighi, M., Sayre, R. T., Robinson, J. B., Rolfe, B. G., Bauer, W. D., & reinhardtii secretes compounds that mimic bacterial signals and interfere with quorum sensing regulation in bacteria. Plant Physiology 134, 137-146.Teplitski, M., Chen , H., Rajamani, S., Gao, M., Merighi, M., Sayre, R.T., Robinson, J.B., Rolfe, B.G., Bau, W. D. (2004). Chlamy-domonas reinhardtii secretes

compounds that mimic bacterial signals and interfere with quorum sensing regulation in bacteria. *Plant Psycology*, *134*, 137-146.

Versalovic, J., & Lupski, J. R. (2002). Molecular detection and genotyping of pathogens: More accurate and rapid answers. *Trends in Microbiology*, *10*(10), 15–21. https://doi.org/10.1016/S0966-842X(02)02438-1

Wang, R. X., Wang, J. Y., Sun, Y. C., Yang, B. L., & Wang, A. L. (2015). Antibiotic resistance monitoring in *Vibrio* spp. isolated from rearing environment and intestines of abalone Haliotis diversicolor. *Marine Pollution Bulletin*, *101*(2), 701–706. https://doi.org/10.1016/j.marpolbul.2015.10.027

Wang, Y., Zhang, H. Y., Fodjo, E. K., Kong, C., Gu, R. R., Han, F., & Shen, X. S. (2018). Temperature Effect Study on Growth and Survival of Pathogenic *Vibrio parahaemolyticus* in Jinjiang Oyster (*Crassostrea rivularis*) with Rapid Count Method. *Journal of Food Quality*, *2018*. https://doi.org/10.1155/2018/2060915

Waters, C. M., & Bassler, B. L. (2005). Quorum sensing: cell-to-cell communication in bacteria. *Annu. Rev. Cell Dev. Biol.*, *21*, 319–346.

Widiyastuti, E., Rusmana, I., & Yuhana, M. (2021). Skrining dan identifikasi bakteri anti quorum sensing asal tambak udang vaname penghambat virulensi *Vibrio parahaemolyticus*. *Jurnal Riset Akuakultur*, *16*(1), 61. https://doi.org/10.15578/jra.16.1.2021.61-69

Wiyoto, ., & Ekasari, J. (2010). Bacterial quorum sensing and the role of algae in bacterial diseases control in aquaculture. *Jurnal Akuakultur Indonesia*, *9*(2), 110. https://doi.org/10.19027/jai.9.110-118

Wong, L. L., Chun, L. C., Deris, Z. M., Zainudin, A. A., Ikhwanuddin, M., Iehata, S., Rahman, M. M., & Asaduzzaman, M. (2021). Genetic diversity and population structure of wild and domesticated black tiger shrimp (*Penaeus monodon*) broodstocks in the Indo-Pacific regions using consolidated mtDNA and microsatellite markers. *Gene Reports*, *23*(October 2020), 101047. https://doi.org/10.1016/j.genrep.2021.101047

Xue, M., He, Y., Chen, D., Wang, L., Liang, H., Liu, J., & Wen, C. Q. (2020). Temporal dynamics of aquatic microbiota and their correlation with environmental factors during larviculture of the shrimp *Litopenaeus vannamei*. *Aquaculture*, *529*, 735605. https://doi.org/10.1016/j.aquaculture.2020.735605

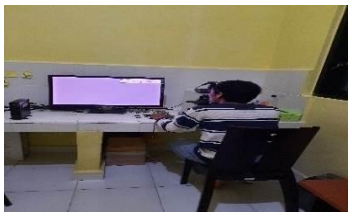
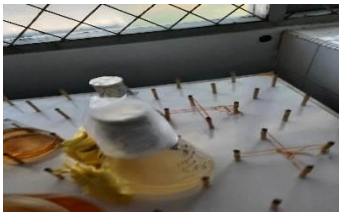
Yanuhar, U. (2015). Effects of Pigment-Protein Fraction from Nannocloropsis Oculata on TNFα and IL- 6 which Act as an Anti-Inflammatory Against Viral Nervous Necrosis (VNN) Infection. *Procedia Chemistry*, *14*, 437–443.

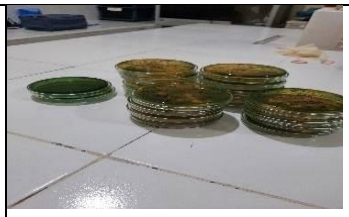
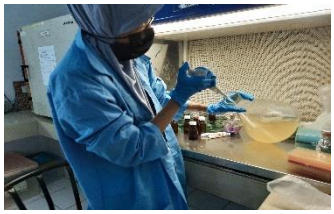
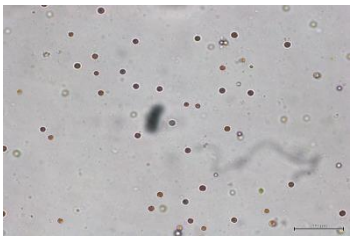
Zalfiatri, Y., Restuhadi, F., & Maulana, T. (2017). Pemanfaatan Simbiosis Mikroorganisme B-DECO3 dan Mikroalga *Chlorella* sp untuk Menurunkan Pencemaran Limbah Cair Pabrik Kelapa Sawit. *Dinamika Lingkungan Indonesia*, *4*(1), 8. https://doi.org/10.31258/dli.4.1.p.8-17

Zhang, W., Fan, X., Li, J., Ye, T., Mishra, S., Zhang, L., & Chen, S. (2021). Exploration of the Quorum-Quenching Mechanism in *Pseudomonas nitroreducens* W-7 and Its Potential to Attenuate the Virulence of Dickeya zeae EC1. *Frontiers in Microbiology*, *12*, 1–12. https://doi.org/10.3389/fmicb.2021.694161

Lampiran 1. Dokumentasi Kegiatan Penelitian

 **Pencucian bak dan pemasangan batu aerasi**	 **Kultur Skeletonema**	 **Kultur Porphyridiumsp**
 **Kultur P.aerugineum**	 **Pengisian air kedalam bak**	 **Pengecekan suhu udara dan suhu air**
 **Menutup bak**	 **Perhitungan naupli**	 **Naupli yg sudah dihitung**
 **Penebaran**	 **Pemberian plankton**	 **Sampling kualitas air, bakteri**
 **Pengangkutan ke Maros**	 **Penanaman bakteri *Vibrio* dan bakteri umum**	 **Perhitungan bakteri**

 **Sampling mikroalga**	 **Penimbangan pakan buatan**	 **Pemberian pakan buatan**
 **Estimasi larva**	 **Pergantian, pemasukan air media**	 Pemberian P.aerugineum
 **Pemberian *Porphyridium* sp**	 **Pemberian pakan alami**	 **Pengamatan mikroalga dimikroskop**
 **Pengeluaran air untuk panen**	 **Panen**	 **Hasil Panen PL12**
 Persiapan pengangkutan benur	 **Aklimatisasi benur**	 **Kultur *V.Parahaemolyticus***

 **Penanaman *V.Parahaemolyticus***	 **Perhitungan bakteri**	 **Persiapan uji tantang**
 **Penanaman bakteri siap uji tantang**	 **Infeksi bakteri *V.Parahaemolyticus***	 **Perhitungan larva u. uji tantang**
 **Perendaman salinitas 15 ppt**	 **Penebaran**	 **Sampling bakteri *V. parahaemolyticus***
 **Menghitung bakteri**	 **Pengambilan benur untuk Histopatologi**	 **Panen hasil uji tantang**
 **Sampel benur (alkohol 75%)**	 **Gambar P.aerugineum**	 **Gambar *Porphyridium* sp**