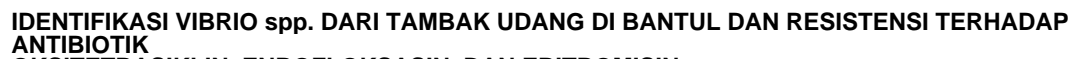


DAFTAR PUSTAKA

- Al-Sunaiher, A. E., A.S. Ibrahim, and A.A. Al-Salamah. 2010. Association of *Vibrio* species with disease incidence in some cultured fishes in the Kingdom of Saudi Arabia. *World Appl Sci J.* 8(5): 653-660.
- Amin, A. K. M. 2017. Diversity of *Vibrios* in the coral reef ecosystem of Ishigaki Island, Japan. Theses. Hokkaido University. Japan.
- Badan Pusat Statistik. 2017. Produksi Perikanan Indonesia. <https://knp.go.id/wp-content/uploads/2018/01/KKP-Dirjen-PDSPKP-FMB-Kominfo-19-Januari-2018.pdf>. Diakses 13 Oktober 2020.
- Baffone, W., A. Pianetti, F. Bruscolini, E. Barbieri, and B. Citterio. 2000. Occurrence and expression of virulence-related properties of *Vibrio* species isolated from widely consumed seafood products. *International Journal of Food Microbiology.* 54(1-2): 9-18.
- Ben, Y., C. Fu, M. Hu, L. Liu, M. H. Wong, and C. Zheng. 2019. Human health risk assessment of antibiotic resistance associated with antibiotic residues in the environment: a review. *Environmental research.* 169:483-493.
- Brown, T. A. 1992. Second edition genetics: molecular approach. London :Chapman & Hall.
- Baker-Austin, C., J. D. Oliver, M. Alam, A. Ali, M. K. Waldor, F. Qadri, and J. Martinez-Urtaza. 2018. *Vibrio* spp. infections. *Nature Reviews Disease Primers.* 4(1):1-19.
- Chalkiadakis, E., R. Dufourcq, S. Schmitt, C. Brandily, N. Kervarec, H. Amir, L. Loubersac, S. Chanteau, J. Guezennec, M. Dupont-Rouzeyrol, and S. Colin. 2013. Partial characterization of an exopolysaccharide secreted by a marine bacterium, *Vibrio neocaledonicus* sp. nov., from New Caledonia. *Journal of Applied Microbiology.* 144(1): 1702-1712.
- Chau, N.T.T., N.X. Hieu., L.T.N. Thuan., M. Matsumoto. and I. Miyajima. 2011. Identification and characterization of actinomyces antagonistic to pathogenic *Vibrio* spp. isolated from shrimp culture pond sediments in thua thien hue- viet nam. *J. Fac. Agr. Kyushu Univ.* 56(1): 15-22
- Clinical and Laboratory Standards Institute. 2015. M100-S25. file:///C:/Users/User/Downloads/CLSI_2015.pdf. Diakses 15 Oktober 2020.
- Daane, L.L., I. Harjono, S. M. Barns, L. A. Launen, N. J. Palleron, and M. M. Häggblom. 2002. PAH-degradation by *Paenibacillus* spp. and description of *Paenibacillus naphthalenovorans* sp. nov., a naphthalene-degrading bacterium from rhizosphere of salt marsh plant. *International Journal Of Systematic And Evolution Microbiology.* 52(1): 131-139

- Deng, Y., H. Xu, Y. Su, S. Liu, L. Xu, Z. Guo, J. Wu, C. Cheng and J. Feng. 2019. Horizontal gene transfer contributes to virulence and antibiotic resistance of *Vibrio harveyi* 345 based on complete genome sequence analysis. BMC genomics. 20(1): 1-19.
- Drais, A. A., A. Ahmad, M. G Alwan, and F. K. Sahrani. 2018. Antimicrobial resistance and Plasmid profile of *Vibrio alginolyticus* isolated from Malaysian seawater. International Journal ChemTech Research.11(10): 375-83.
- Felsenstein, J. 1985. Confidence limits on phylogenies: an approach using the bootstrap. Evolution . 29: 783-791
- Frans, I., C. W. Michiels, P. Bossier, K. A. Williems, B. Liviens, and H. Rediers. 2011. *Vibrio anguillarum* as a fish pathogen: virulence factors, diagnosis and prevention: Review. Journal of Fish Diseases. 34: 643–66.
- Gabriel, M. W., G. Y. Matsui, R. Friedman, and C. R. Lovell. 2014. Optimization of multilocus sequence analysis for identification of species in the genus *Vibrio*. Applied And Environmental Microbiology. 80(17): 5359-5365.
- Garrity, G. 2007. Bergey's Manual® of Systematic Bacteriology: Volume 2: The *Proteobacteria*, Part B: The Gammaproteobacteria (Vol. 2). Springer Science & Business Media.
- Garza, M., C. V. Mohan, M. Rahman, B. Wieland, and B. Häsler. 2019. The role of infectious disease impact in informing decision-making for animal health management in aquaculture systems in Bangladesh. Preventive veterinary medicine. 167: 202-213.
- Gelband, H., P. M. Molly, S. Pant, S. Gandra, J. Levinson, D. Barter, A. White, and R. Laxminarayan. 2015. The state of the world's antibiotics 2015. Wound Heal. South. Afr. 8:30–34.
- Glaeser, S. P., and P. Kämpfer. 2015. Multilocus sequence analysis (MLSA) in prokaryotic taxonomy. Systematic And Applied Microbiology. 38(4):237-245.
- Hagström, Å., J. Pinhassi, & U. L. Zweifel. 2000. Biogeographical diversity among marine bacterioplankton. Aquatic Microbial Ecology. 21(3): 231-244.
- Hikmawati, F. A., Susilowati, and Setyaningsih. 2019. Colony morphology and molecular identification of *Vibrio* spp. on green mussels (*perna viridis*) in Yogyakarta, Indonesia tourism beach. Biodiversitas Journal of Biological Diversity. 20(10):1891-2889
- Hannan, M. A., M. M. Rahman, M. N. Mondal, D. S. Chandra, G. Chowdhury, and M. T. Islam. 2019. Molecular identification of *Vibrio alginolyticus* causing vibriosis in shrimp and its herbal remedy. Polish Journal Of Microbiology. 68(4):429.

- Horváth, G., T. Bencsik, K. Ács, and B. Kocsis. 2016. Sensitivity of ESBL-producing gram-negative bacteria to essential oils, plant extracts, and their isolated compounds. Academic Press, Amsterdam. 239-269.
- 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).
- Kang, C. H., Y. Kim, S. J. Oh, J. S. Mok, M. H. Cho, and J. S. So. 2014. Antibiotic resistance of *Vibrio harveyi* isolated from seawater in Korea. Marine Pollution Bulletin. 86(1-2): 261-265.
- Khouadja, S., F. Lamari, and A. Bakhrouf. 2013. Characterization of *Vibrio parahaemolyticus* isolated from farmed sea bass (*Docentrarchus labrax*) during disease outbreaks. International Aquatic Research. 5(13): 1-11.
- Kitaoka, M., Miyata, S. T., Unterweger, D., & Pukatzki, S. (2011). Antibiotic resistance mechanisms of *Vibrio cholerae*. *Journal of medical microbiology*, 60(4), 397-407.
- Kumar S., G. Stecher, M. Li, C. Knyas, and K. Tamura. 2018. MEGA-X : molecular evolution genetic analysis across computing platform. Molecular Biology and Evolution. 35(6):1547-1549
- Kusmarwati, A., Hermana, I., Yennie, Y., & Wibowo, S. 2017. Keberadaan *Vibrio parahaemolyticus* patogenik pada udang tambak yang berasal dari Pantai Utara Jawa. Jurnal Pascapanen dan Bioteknologi Kelautan dan Perikanan. 11(1): 41- 54.
- Latifah Amalia N. 2021. Isolasi dan karakterisasi bakteri vibrio dari udang vaname (*Litopenaeus vannamei* boone, 1931) di Kabupaten Bantul. Skripsi
- Leal, J. F., E. B. Santos, and V. I. Esteves. 2019. Oxytetracycline in intensive aquaculture: water quality during and after its administration, environmental fate, toxicity and bacterial resistance. Reviews in Aquaculture. 11(4): 1176-1194.
- Licona-Cassani, C., E. Marcellin, L. E. Quek, S. Jacob, and L. K. Nielsen. 2012. Reconstruction of the *Saccharopolyspora erythraea* genome-scale model and its use for enhancing erythromycin production. Antonie Van Leeuwenhoek. 102(3): 493-502.
- Liu, C. H., K. Wu, T. Chu, and T. Wu. 2018. Dietary supplementation of probiotic, *Bacillus subtilis* E20, enhances the growth performance and disease resistance against *Vibrio alginolyticus* in parrot fish (*Oplegnathus fasciatus*). Aquaculture International. 26(1):63-74
- Madigan, M. T., and J. Martinko. 2005. Brock Biology Of Microorganisms, 11th Edn.
- Ma, R., Y. Wang, X. Zou, G. Fu, C. Li, P. Fan, and W. Fang. 2019. Pharmacokinetics of oxytetracycline in Pacific white shrimp, *Penaeus vannamei*, after oral administration of a single-dose and multiple-doses. Aquaculture. 512, 734348.



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- Melo, L. M. R. D., D. Almeida, E. Hofer, C. M. F. D. Reis, G. N. D. Theophilo, A. F. D. M. Santos, & R. H. S. D. F. Vieira. 2011. Antibiotic resistance of *Vibrio parahaemolyticus* isolated from pond-reared *Litopenaeus vannamei* marketed in Natal, Brazil. *Brazilian Journal of Microbiology*. 42(4):1463-1469.
- Mohamad, N., M. N. A. Amal, M. Yasin, M. Z. Saad, N. S. Nasruddin, N. Al-saari, S. Mino and T. Sawabe. 2019. Vibriosis in cultured marine fishes: a review. *Aquaculture*. 512, 734289.
- Morita, Y., J. Tomida, and Y. Kawamura. 2014. Responses of *Pseudomonas aeruginosa* to antimicrobials. *Frontiers in microbiology*. 4:422.
- Munita, J. M., and C. A. Arias. 2016. Mechanisms of antibiotic resistance. *Virulence mechanisms of bacterial pathogens*, 481-511.
- Mustapha, S., E. M. Mustapha, and C. Nozha. 2013. *Vibrio alginolyticus*: an emerging pathogen of food borne diseases. *International Journal of Science and Technology*. 2(4): 302-309.
- Oh, E. G., K. T. Son, H. Yu, T. S. Lee, H. J. Lee, S. Shin, J. Kwon, K. Park, and J. Kim. 2011. Antimicrobial resistance of *Vibrio parahaemolyticus* and *Vibrio alginolyticus* strains isolated from farmed fish in Korea from 2005 through 2007. *Journal of food protection*. 74(3):380-386.
- Oliphant, C. M., and K. Eroschenko. 2015. Antibiotic resistance, part 2: gram-negative pathogens. *The Journal for Nurse Practitioners*. 11(1): 79-86.
- Peraturan menteri kelautan dan perikanan Republik Indonesia No 1 Pasal 51. 2019. Obat Ikan. [e71b8-1-permen-kp-2019.pdf \(kkp.go.id\)](https://www.kkp.go.id/e71b8-1-permen-kp-2019.pdf). Diakses 20 Oktober 2020.
- Patel, J. B., F. R. Cockerill, and P. A. Bradford, B.R. Zimmer. 2015. Performance standards for antimicrobial susceptibility testing: twenty-fifth informational supplement M100-S25. *Clinical and Laboratory Standards Institute*. Wayne. pp: 62-63.
- Petković, H., T. Lukežič, and J. Šušković. 2017. Biosynthesis of oxytetracycline by *Streptomyces rimosus*: past, present and future directions in the development of tetracycline antibiotics. *Food Technology and Biotechnology*. 55(1):3-13.
- Ramesh, K., M. Natarajan, H. Sridhar, and S. Umamaheswari. 2014. Virulence determination among *Vibrio harveyi* hatchery isolates through haemolysis and growth constraint. *Global of Journal Bio-Science and Biotechnology*. 3(1):109-114.
- Reda, R. M., R.E., Ibrahim, E.G. Ahmed, and Z.M. El-Bouhy. 2013. Effect of oxytetracycline and florfenicol as growth promoters on the health status of cultured *Oreochromis niloticus*. *The Egyptian Journal of Aquatic Research*. 39(4):241-248.
- Rodloff, A., T. Bauer, S. Ewig, P. Kujath, and E. Müller. 2008. Susceptible, intermediate, and resistant—the intensity of antibiotic action. *Deutsches Ärzteblatt International*. 105(39): 657.

Ruppé, É., P. L. Woerther, and F. Barbier. 2015. Mechanisms of antimicrobial resistance in Gram-negative bacilli. *Annals of intensive care*.5(1): 1-15.

Soto-Rodriguez, S. A., R. Lozano-Olvera, D.A. Palacios-Gonzalez, C. Bolan-Mejia, and K. G. Rendon-Aguilar. 2019. Characterization and growth condition of *Vibrio parahaemolyticus* strains with different virulence degrees that cause acute hepatopancreatic necrosis disease in *Litopenaeus vannamei*. *Journal World Aquaculture Society*. 50(5):1002-1015.

Sáez-Nieto, J. A., M.J. Medina-Pascual, G. Carrasco, N. Garrido, M.A. Fernandez-Torres, P. Villalón, and S. Valdezate. 2017. *Paenibacillus* spp. isolated from human and environmental samples in Spain: detection of 11 new species. *New Microbes and New Infections*. 19:19-27.

Sahoo, K. C., A. J. Tamhankar, S. Sahoo, P. S. Sahu, S. R. Klintz, and C. S. Lundborg. 2012. Geographical variation in antibiotic-resistant *Escherichia coli* isolates from stool, cow-dung and drinking water. *International Journal Of Environmental Research And Public Health*. 9(3): 746-759

Sandlund, N., O. M. Rødseth, D. H. Knappskog, I. U. Fiksdal, and , Ø. Bergh. 2010. Comparative susceptibility of turbot, halibut, and cod yolk-sac larvae to challenge with *Vibrio* spp. *Diseases of Aquatic Organisms*. 89(1):29-37.

San Millan Alvaro. 2018. Evolution of plasmid-mediated antibiotic resistance in the clinical context. *Trends in microbiology*. 26(12):978-985.

Sawabe, T., K. Hayashi, J. Moriwaki, Y. Fukui, F.L. Thompson, J. Swings, and R. Christen. 2004. *Vibrio neonatus* sp. and *Vibrio ezurae* sp. isolated from the gut of Japanese abalones. *Syst Appl Microbiology*. 27:527–534.

Sawabe, T., Y. Ogura, Y. Matsumura, F. Gao, A. K. M. Amin, S. Mino, and M. Satomi. 2013. Updating the *Vibrio* clades defined by multilocus sequence phylogeny: proposal of eight new clades, and the description of *Vibrio tritonius* sp. nov. *Frontiers in Microbiology*. 4:414.

Schäfer, J., Jäckel, U., and Kämpfer, P. 2010. Development of a new PCR primer system for selective amplification of Actinobacteria. *FEMS Microbiology Letters*. 311(2),103-112.

Serrano, P. H. 2005. Responsible use of antibiotics in aquaculture (Vol. 469). Food & Agriculture Org.

Slifka, K. J., A. E. Newton, and B. E. Mahon. 2017. *Vibrio alginolyticus* infections in the USA, 1988–2012. *Epidemiology & Infection*. 145(7): 1491-1499.

Stalin, N., and Srinivasan, P. 2016. Molecular characterization of antibiotic resistant *Vibrio harveyi* isolated from shrimp aquaculture environment in the south east coast of India. *Microbial Pathogenesis*. 97:110-118.

- Sun, J., Liu, L., Song, J., Zhan, Y., Zhang, W., Wang, B., and Chang, Y. 2021. Characterization of two strains of *Vibrio* sp. from cultured sea urchin, *Strongylocentrotus intermedius*, in China. *Aquaculture Reports*, 20:100667.
- Supono, S., Wardiyanto, W., and Harpeni, E. 2019. Identification of *Vibrio* sp. as a cause of white feces diseases in white shrimp *Penaeus vannamei* and handling with herbal ingredients in East Lampung Regency, Indonesia. *AACL Bioflux*, 12(2):417-425.
- Tran, L., Nunan, L., Redman, R. M., Mohny, L. L., Pantoja, C. R., Fitzsimmons, K., and Lightner, D. V. 2013. Determination of the infectious nature of the agent of acute hepatopancreatic necrosis syndrome affecting penaeid shrimp. *Diseases of Aquatic Organisms*, 105(1):45-55.
- Trouchon, T., and Lefebvre, S. 2016. A review of enrofloxacin for veterinary use. *Open Journal of Veterinary Medicine*, 6 (2):40-58.
- Driessche, V.P. 2017. Reproduction numbers of infectious disease models. *Infectious Disease Modelling*, 2(3):288-303.
- Vezzulli, L., Colwell, R. R., & Pruzzo, C. 2013. Ocean warming and spread of pathogenic *vibrios* in the aquatic environment. *Microbial Ecology*, 65(4):817-825.
- 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.
- Widowati, I., Zainuri, M., Kusumaningrum, H. P., Maesaroh, Y., Hardivillier, Y., Leignel, V., & Mouget, J. L. 2018. Identification of agents causing vibriosis in *Litopenaeus vannamei* shrimp culture in Kendal, Central Java, Indonesia and application of microalgae *Dunaliella salina* and *Tetraselmis chui* as bio-control agents against vibriosis. *Aquaculture, Aquarium, Conservation & Legislation*, 11(1):101-107.
- Yang, B., Zhai, S., Li, X., Tian, J., Li, Q., Shan, H., & Liu, S. 2021. Identification of *Vibrio alginolyticus* as a causative pathogen associated with mass summer mortality of the Pacific Oyster (*Crassostrea gigas*) in China. *Aquaculture*, 535:736363.
- Yoshizawa, S., M. Wada, K. Kita-Tsukamoto, E. Ikemoto, A. Yokota, and K. Kogure. 2009. *Vibrio azureus* sp. nov., a luminous marine bacterium isolated from seawater. *International Journal of Systematic and Evolutionary Microbiology*. 59(7):1645-1649.
- You, K. G., C. W. Bong, and C. W. Lee. 2016. Antibiotic resistance and plasmid profiling of *Vibrio* spp. in tropical waters of Peninsular Malaysia. *Environmental Monitoring And Assessment*. 188(3): 171.

Zorriehzahra, M. J., & Banaederakhshan, R. 2015. Early mortality syndrome (EMS) as a new emerging threat in shrimp industry. *Adv. Anim. Vet. Sci*, 3(2):64-72.