

DAFTAR PUSTAKA

- Adeolu, M., S. Alnajar, S. Naushad, R.S. Gupta. 2016. Genome-based phylogeny and taxonomy of the 'Enterobacteriales': proposal for Enterobacterales ord. nov. divided into families Enterobacteriaceae, Erwiniaceae fam. nov., Pectobacteriaceae fam. nov., Yersiniaceae fam. nov., Hafniaceae fam. nov., Morganellaceae fam. nov., and Budviciaceae fam. nov. *International Journal of Systematic and Evolutionary Microbiology*. 66: 5575-5599.
- Almeida, M.V.A. de, I.L.P. Brito, A.L.S. de Carvalho, R.A. Costa. 2018. In vitro resistance of *Enterobacter cloacae* isolated from fresh seafood to colistin. *Revista Da Sociedade Brasileira de Medicina*. 51 (5): 674-675.
- Arepally, D., R.S. Reddy, T.K. Goswami. 2020. Studies on survivability, storage stability of encapsulated spray dried probiotic powder. *Current Research in Food Science*. 3: 235-242.
- Arifiantini, R.I., B. Purwantara, T.L Yusuf, D. Sajuthi. 2010. Effect of different cryoprotective agents on skim milk and dimitropoulos extender for stallion semen cryopreservation. *Journal of Indonesian Tropical Animal and Agriculture*. 35 (1): 68-74.
- Azizah, F.F.N., H. Ishihara, A. Zabala, Y. Sakai, G. Suantika, N. Yagi. 2020. Diverse perceptions on eco-certification for shrimp aquaculture in Indonesia. *Sustainability*. 12 (9387): 1-19.
- Beattie, G.M., J.H. Crowe, A.D. Lopez, V. Cirulli, C. Ricordi, A. Hayek. 1997. Trehalose: a cryoprotectant that enhances recovery and preserves function of human pancreatic islets after long-term storage. *Diabetes*. 46 (3): 519-523.
- Bhattacharya, S. 2018. Cryoprotectants and their usage in cryopreservation process. Dalam buku: *Cryopreservation Biotechnology in Biomedical and Biological Sciences*. IntechOpen. London.
- Bhattacharya, S.A. dan Prajapati, B.G. 2016. A review on cryoprotectant and its modern implication in cryonics. *Asian Journal of Pharmaceutics*. 10 (3): 1-6.
- Bowman, J.P. 2007. Bioactive compound synthetic capacity and ecological significances of marine bacterial genus *Pseudoalteromonas*. *Marine Drugs*. 5: 220-241.
- Bowman, J.P. 2015. *Pseudoalteromonas* Gauthier, Gauthier, and Christen, 1995a, 759^{VP}. Dalam buku: *Bergey's Manual of Systematics of Archaea and Bacteria*, Online. John Wiley & Sons, Inc.
- Buruiană, C.T., P.A. Georgiannan, C. Vizireanu. 2014. Effects of probiotic *Bacillus* species in aquaculture – an overview. *The Annals of the University Dunarea de Jos of Galati*. 38 (2): 9-17.
- Cabello-Olmo, M., M. Oneca, P. Torre, J.V. Diaz, I.J. Encio, M. Barajas, M. Araña. 2020. Influence of storage temperature and packing on bacteria and yeast viability in plant-based fermented food. *Foods*. 9 (302): 1-16.
- Caramelo, J.J. dan N.D. Iusem. 2009. When cells lose water: lessons from biophysics and molecular biology. *Progress in Biophysics and Molecular Biology*. 99 (1): 1-6.
- Chen, X.L., Y. Wang, P. Wang, Y.Z. Zhang. 2020. Proteases from the marine bacteria in the genus *Pseudoalteromonas*: diversity, characteristics, ecological roles, and application potentials.
- Cruz, P.M., A.L. Ibáñez, O.A.M. Hermosillo, H.C.R. Saad. 2012. Use of probiotics in aquaculture. *International Scholarly Research Network Microbiology*. (2): 1-13.



- Davin-Regli, A., J.P. Lavigne, J.M. Pages. 2019. *Enterobacter* spp.: an update on taxonomy, clinical aspect and emerging antimicrobial resistance. *Clinical Microbiology Review*. 32 (4): 1-85.
- Devivilla, S., J. Stephen, M. Lekshmi, S.H. Kumar, B.B. Nayak. 2019. Evaluation of modified Zobell marine agar for differential isolation of histamine-forming bacteria from fresh fish. *Journal of Microbiological Methods*. 163: 1-3.
- Doyle, M.P., L.R. Steenson, J. Meng. 2013. *Bacteria in Food and Beverages Production*. Dalam buku: *The Prokaryotes*. Springer. Berlin. hlm: 241-256.
- El-Shahat, K.H. dan A.M. Hammam. 2014. Effect of different types of cryoprotectants on developmental capacity of vitrified-thawed immature buffalo oocytes. *Animal Reproduction*. 11 (4): 543-548.
- Elliot, G.D., S. Wang, B.J. Fuller. 2017. Cryoprotectants: a review of the actions and applications of cryoprotective solutes that modulate cell recovery from ultra-low temperatures. *Cryobiology*. 76: 74-91.
- Errington, J. dan L.T. van der Aart. 2020. Microbe profile: *Bacillus subtilis*: model organism for cellular development, and industrial workhorse. *Microbiology*. 166: 425-427.
- Fenster, K., B. Freebug, C. Hollard, C. Wong, R.R. Laursen, A.C. Ouwehand. 2019. The production and delivery of probiotics: a review of a practical approach. *Microorganisms*. 7 (83): 1-16.
- Food and Agriculture Organization of United Nations. 2006. *Probiotic in Food. Health and nutritional properties and guidelines for evaluation*. FAO Food and Nutrition Paper. WHO/FAO. Rome.
- Food and Agriculture Organization of United Nations. 2020. *The State of World Fisheries and Aquaculture 2020. Sustainability in action*. FAO. Rome.
- Freitas, R., R.O. Miranda, G.G. Netto, L.A. Nero, A.F. de Carvalho. 2015. Interference of different storage temperatures in the dynamic of probiotic *Bifidobacterium* spp. and *Streptococcus thermophilus* starter cultures in fermented milk. *Arquivos do Instituto Biológico*. 82: 1-4.
- Fritze, D. 2004. Taxonomy of the genus *Bacillus* and related genera: the aerobic endospore-forming bacteria. *Phytopathology*. 94 (11): 1245-1248.
- Fuller, B.J. 2004. Cryoprotectants: the essential antifreezes to protect life in the frozen state. *CryoLetters*. 25 (6): 375-388.
- García, A.H. 2011. Anhydrobiosis in bacteria: from physiology to applications. *Journal of Biosciences*. 36 (5): 939-950.
- Ghasemi, A. dan S. Zahediasi. 2012. Normality test for statistical analysis: a guide for non-statisticians. *International Journal of Endocrinology & Metabolism*. 10 (2): 486-489.
- Goderska, K. 2012. *Different methods of probiotics stabilization*. Probiotics. IntechOpen. London.
- Gorassi, S., M. Pasqualetti, A. Franzetti, A. Gonzales-Martinez, J. Gonzalez-Lopez, B. Muñoz-Palazon, M. Fenice. 2021. Persistence of Enterobacteriaceae drawn into a marine saltern (Saline di Tarquinia, Italy) from the adjacent coastal zone. *Water*. 13 (1443): 1-15.
- Govender, M., Y.E. Choonara, P. Kumar, L.C. du Toit, S. van Vuuren, V. Pillay. 2014. A review of the advancements in probiotic delivery: conventional vs. non-conventional formulations for intestinal flora supplementation. *AAPS PharmSciTech*. 15 (1): 29-43.



- Grimont, P.A.D. dan F. Grimont. 2015. *Enterobacter Hormaeche* and Edwards 1960b, 72AL Nom. Cons. Opin. 28, Jud. Comm. 1963, 38. Dalam buku: *Bergey's Manual of Systematics of Archaea and Bacteria*, Online. John Wiley & Sons, Inc.
- Guran, S. 2018. Sustainable waste-to-energy technologies: gasification and pyrolysis. Dalam buku: *Sustainable Food Waste-to-Energy System*. Elsevier Inc. hlm: 141-158.
- Hai, N.V. 2015. The use of probiotics in aquaculture. *Journal of Applied Microbiology*. 119 (4): 917-935.
- Halperin, S.J. dan K.L. Koster. 2006. Sugar effects on membrane damage during desiccation of pea embryo protoplasts. *Journal of Experimental Botany*. 57 (10): 2303-2311.
- Han, L., T. Pu, X. Wang, B. Liu, Y. Wang, J. Feng, X. Zhang. 2018. Optimization of protective medium for enhancing the viability of freeze-dried *Bacillus amyloliquefaciens* B1408 based on response surface methodology. *Cryobiology*. 81: 101-106.
- Hara, J., J. Tottori, M. Anders, S. Dadhwal, P. Asuri, M. Mobed-Miremadi. 2017. Trehalose effectiveness as cryoprotectant in 2D and 3D cell cultures of human embryonic kidney cells. *Artificial Cells Nanomedicine and Biotechnology*. 45 (3): 609-616.
- Herdis, M. Surachman, I.W.A. Darmawan, Afifah. 2019. The role of sucrose as extracellular cryoprotectant on maintaining the garut rams' frozen semen quality. *International Conference on Biology and Applied Science (ICOBAS)*. 2120.
- HiMedia. 2011. Skim Milk M530 – Technical Data. HiMedia Laboratories. HiMedia Laboratories Pvt. Ltd. Mumbai.
- Hubálek, Z. 2003. Protectants used in cryopreservation of microorganisms. *Cryobiology*. 46: 205-229.
- Ibrahim, M., F. Ahmad. B. Yaqub, A. Ramzan, A. Imran, M. Afzaal, S.A. Mirza, I. Mazhar, M. Younus, Q. Akram, M.S.A. Taseer, A. Ahmad, S. Ahmed. 2020. Current trends of antimicrobials used in food animals and aquaculture. Dalam buku: *Antibiotics and Antimicrobial Resistance Genes in the Environment*. Elsevier Inc. hlm: 39-70.
- Integrated Taxonomic Information System. 2012. *Enterobacter Hormaeche* and Edwards, 1960. Integrated Taxonomic Information System (ITIS) Online Database. Diakses pada: 5 Agustus 2021 pukul 00.31 WIB.
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=246#null
- Isnansetyo, A., A. Fikriyah, N. Kasanah, Murwantoko. 2016. Non-specific immune potentiating activity of fucoidan from a tropical brown algae (Phaeophyceae), *Sargassum cristaefolium* in tilapia (*Oreochromis niloticus*). *Aquaculture International*. 24: 465-477.
- Ivanova, E.P., E.A. Kiprianova, V.V. Mikailov, G.F. Levanova, A.D. Garagulya, N.M. Gorshakova, M.V. Vysotskii, D.V. Nicolau, N. Yumoto, T. Taguchi, S. Yoshikawa. 1998. Phenotypic diversity of *Psuedoalteromonas citrea* from different marine habitats and emendation of description. *International Journal of Systematic Bacteriology*. 48: 247-256.
- Iversen, C. 2014. *Enterobacter*. Dalam buku: *Encyclopedia of Food Microbiology* 2nd Edition. Elsevier Ltd. hlm: 643-658.



- Jahangiri, L. dan M.A. Esteban. 2018. Administration of probiotics in the water in finfish aquaculture system: a review. *Fishes*. 3 (33): 1-13.
- Jalali, M., D. Abedi, J. Varshozas, M. Najjarzadeh, M. Mirlohi, N. Tavakoli. 2012. Stability evaluation of freeze-dried *Lactobacillus paracasei* subsp. *tolerance* and *Lactobacillus delbrueckii* subsp. *bulgaricus* in oral capsules. *Research in Pharmaceutical Sciences*. 7 (1): 31-36.
- Kanmani, P., R.S. Kumar, N. Yuvaraj, K.A. Paari, V. Pattukumar, V. Arul. 2011. Effect of cryopreservation and microencapsulation of probiotic in alginate-chitosan capsules improves survival in simulated gastrointestinal conditions. *Biotechnology and Bioprocess Engineering*. 16: 1106-1114.
- Kechagia, M., D. Basoulis, S. Konstantopoulou, D. Dimitriadi, K. Gyftopoulou, N. Skarmoutsou, E.M. Fakiri. 2013. Health benefits of probiotics: a review. *International Scholarly Research Network Nutrition*. (5): 1-7.
- Kesarcodi-Watson, A., H. Kaspar, M.J. Letegan, L. Gibson. 2008. Probiotics in aquaculture: The need, principles and mechanisms of action and screening processes. *Aquaculture*. 274 (1): 1-14.
- Kiron, V. 2012. Fish immune system and its nutritional modulation for preventive health care. *Animal Feed Science and Technology*. 173: 111-133.
- Lahtinen, S.J. 2012. Probiotic viability – does it matter? *Microbial Ecology in Health and Disease*. 23: 18567.
- Langlois, L., N. Akhtar, K.C. Tam, B. Dixon, G. Reid. 2021. Fishing for the right probiotic: host-microbe interactions at the interface of effective aquaculture strategies. *FEMS Microbiology Reviews*. fuab030.
- Liu, D., J. Huang, C. Liu, R. Huang, W. Wang, T. Yin, X. He, L. Chen. 2019. Purification, characterization, and application for preparation of antioxidant peptides of extracellular protease from *Pseudoalteromonas* sp. H2. *Molecules*. 24 (18): 1-17.
- Liu, W.Y., C.F. Wong, K.M.K. Chung, J.W. Jiang, F.C.C. Leung. 2013. Comparative genome analysis of *Enterobacter cloacae*. *PLOS One*. 8 (9): 1-15.
- Logan, N.A. dan P. De Vos. 2009. Genus I. *Bacillus* Cohn 1872, 174AL. Dalam buku: *Bergey's Manual of Systematic Bacteriology 2nd Edition Volume Three*. Springer. New York. hlm: 21-127.
- Mailoa, M.N., A.M. Tapotubun, T.E.A.A. Matrutty. 2017. Analysis Total Plate Count (TPC) on fresh steak tuna applications edible coating *Caulerpa* sp. during stored at chilling temperature. *IOP Conf. Series: Earth and Environmental Science*. 89: 1-5.
- Maligan, J.M., J. Kusnadi, E.S. Murtini. 2006. Studi viabilitas bakteri probiotik *Bifidobacterium bifidum*, *Lactobacillus acidophilus*, dan *Lactobacillus casei* terimobilisasi pada sistem emulsi air dalam minyak jagung dan daya tahannya pada perlakuan lanjutan. *Jurnal Teknologi Pertanian*. 7 (3): 141-149.
- Marinova, V.Y., I.K. Rasheva, Y.K. Kizheva, Y.D. Dermenzhieva, P.K. Hristova. 2019. Microbiological quality of probiotic dietary supplements. *Biotechnology & Biotechnological Equipment*. 33 (1): 834-841.
- Markowiak, P. dan Śliżwekska, K. 2017. Effects of probiotics, prebiotics, and synbiotics on human health. *Nutrients*. 9 (1021): 1-30.
- Martínez-Villaluenga, C., J. Frías, R. Gomez, C. Cidal-Valverde. 2006. Influence of addition of raffinose family oligosaccharides on probiotic survival in fermented milk during refrigerated storage. *International Dairy Journal*. 16 (7): 768-774.
- Matsuyama, H., H. Minami, H. Kasahara, Y. Kato, M. Murayama, I. Yumoto. 2013. *Pseudoalteromonas arabiensis* sp. nov., a marine polysaccharide-producing



- bacterium. *International Journal of Systematic and Evolutionary Microbiology*. 63: 1805-1809.
- Mensink, M.A., H.W. Frijlink, K. van der Voort Maarschalk, W.L.J. Hinrichs. 2017. How sugars protect protein in the solid state and during drying (review): mechanisms of stabilization in relation to stress conditions. *European Journal of Pharmaceutics and Biopharmaceutics*. 114: 288-295.
- Miao, S., S. Mills, C. Stanton, G.F. Fitzgerald, Y. Roos, R.P. Ross. 2008. Effects of disaccharides on survival during storage of freeze-dried probiotics. *Dairy Science and Technology*. 88 (1): 19-30.
- Morrison, S.L. 1997. Preparing frozen bacterial stocks. *Current Protocols in Immunology*. 21 (1): A.3M.1-A.3M.2.
- Mulyadin, A., Widanarni, M. Yuhana, D. Wahyuningrum. 2021. Growth performance, immune response, and resistance of Nile tilapia fed paraprobiotic *Bacillus* sp. NP5 against *Streptococcus agalactiae* infection. *Jurnal Akuakultur Indonesia*. 20 (1): 34-46.
- Myers, D. 2007. Probiotics. *Journal of Exotic Pet Medicine*. 16 (3): 195-197.
- Nagpal, R., A. Kumar, M. Kumar, P.V. Behare, S. Jain, H. Yadav. 2012. Probiotics, their health benefits and applications for developing healthier food: a review. *Federation of European Microbiological Societies Microbiology Letters*. 334: 1-15.
- Nam, E.S. dan J.K. Ahn. 2011. Antarctic marine bacterium *Pseudoalteromonas* sp. KNOUC808 as a source of cold-adapted lactose hydrolyzing enzyme. *Brazilian Journal of Microbiology*. 42 (3): 927-936.
- Nanda, A., B.B. Mohapatra, A.P.K. Mahapatra, A.P.K. Mahapatra, A.P.K. Mahapatra. 2021. Multiple comparison test by Tukey's honestly significant difference (HSD): do the confident level control type I error. *International Journal of Applied Mathematics and Statistics*. 6 (1): 59-65.
- Nasran, H.S., H.M. Yusof, M. Halim, N.A.A. Rahman. 2020. Optimization of protective agents for the freeze-drying of *Paenibacillus polymyxa* Kp10 as a potential biofungicide. *Molecules*. 25 (11): 2618.
- Newaj-Fyzul, A., A.H. Al-Harbi, B. Austin. 2014. Review: developments in the use of probiotics for disease control in aquaculture. *Aquaculture*. 431: 1-11.
- Nguyen, T.L., C.I. Park, D.H. Kim. 2017. Improved growth rate and disease resistance in olive flounder, *Paralichthys olivaceus*, by probiotic *Lactococcus lactis* WFL12 isolated from wild marine fish. *Aquaculture*. 471: 113-120.
- Okacha, R.C., I.O. Olatoye, O.B. Adediji. 2018. Food safety impacts of antimicrobial use and their residues in aquaculture. *Public Health Review*. 39: 1-22.
- Ondaral, S., E. Çelik, O.Ç. Kurtuluş. 2019. The adsorption of phosphate-buffered saline to model films composed of nanofibrillated cellulose and gelatin. *Journal of Applied Biomaterials & Functional Materials*. 00 (0): 1-7.
- Oscar, E.V., E.O. Joshua, E. Felix, A.F. Eyerituvie. 2020. A review on the application and benefits of probiotics supplements in fish culture. *Oceanography & Fisheries Open Access Journal*. 11 (4): 62-65.
- Ostertagová, E. dan O. Ostertag. 2013. Methodology and application of one-way ANOVA. *American Journal of Mechanical Engineering*. 1 (7): 256-261.
- Ostertagová, E., O. Ostertag, J. Kovác. 2014. Methodology and application of the Kruskal-Wallis test. *Applied Mechanics and Materials*. 611: 115-120.
- Otero, M.C., M.C. Espeche, M.E. Nader-Macías. 2007. Optimization of the freeze-drying media and survival throughout storage of free-dried *Lactobacillus gasseri* and



- Lactobacillus delbrueckii* subsp. *Delbrueckii* for veterinarian probiotic applications. *Process Biochemistry*. 42 (10): 1406-1411.
- Öztuna, D., A.H. Elhan, E. Tüccar. 2006. Investigation of four different normality tests in terms of type 1 error rate and power under different distributions. *Turkey Journal of Medical Science*. 36 (3): 171-176.
- Park, S.H., K.K. Kwon, D.S. Lee, H.K. Lee. 2002. Morphological diversity of marine microorganisms on different isolation media. *The Journal of Microbiology*. 40 (2): 161-165.
- Parrilli, E., P. Tedesco, M. Fondi, M.L. Tutino, A.L. Giudice, D. de Pascale, R. Fani. 2021. The art of adapting to extreme environments: the model system *Psudomonas*. *Physics of Life Review*. 36: 137-161.
- Peraturan Menteri Kelautan dan Perikanan Nomor 1/Permen-KP/2019 tentang Obat Ikan.
- Pflugrath, J.W. 2015. Practical macromolecular cryocrystallography. *Acta Crystallographica Section F – Structural Biology Communications*. 1 (71 Pt. 6): 622-642.
- Portner, D.C., R.G.K. Leuschner, B.S. Murray. 2007. Optimizing the viability during storage of freeze-dried cell preparations of *Campylobacter jejuni*. *Cryobiology*. 54 (3): 265-270.
- Pugliese, A., G. Cabassi, E. Chiavaro, M. Paciulli, E. Carini, G. Mucchetti. 2017. Physical characterization of whole and skim dried milk powder. *Journal of Food Science Technology*. 54 (11): 3433-3442.
- Pyar, H. dan K.K. Peh. 2014. Cost effectiveness of cryoprotective agents and Modified De-man Rogosan Sharpe medium on growth of *Lactobacillus acidophilus*. *Pakistan Journal of Biological Sciences*. 17: 462-471.
- Ramirez, D. dan M. Giron. 2021. *Enterobacter* infections. StatPearls. Florida.
- Randazzo, C.L., I. Pitino, F. Licciardello, G. Muratore, C. Caggia. 2013. Survival of *Lactobacillus rhamnosus* probiotic strains in peach jam during storage at different temperatures. *Food Science and Technology*. 33 (4): 652-659.
- Reddy, K.B.P.K., S.P. Awasthi, A.N. Madhu, S.G. Prapulla. 2009. Role of cryoprotectants on the viability and functional properties of probiotic lactic acid bacteria during freeze drying. *Food Biotechnology*. 23: 243-265.
- Ren, H., J. Zentek, W. Vahjen. 2019. Optimization of production parameters for probiotic *Lactobacillus* strains as feed additive. *Molecules*. 24 (18): 1-17.
- Rico, A., T.M. Phu, K. Satapornvanit, J. Min, A.M. Shahabuddin, P.J.G. Henriksson, F.J. Murray, D.C. Little, A. Dalsgaard, P.J. Van den Brink. 2013. Use of veterinary medicines, feed additives and probiotics in four major internationally traded aquaculture species farmed in Asia. *Aquaculture*. 412-413 (1): 231-243.
- Ringø, E., S.H. Hoseinifar, K. Ghosh, H.V. Doan, B.R. Beck, S.K. Song. Lactic acid bacteria in finfish-an update. *Frontier in Microbiology*. 9 (1818): 1-37.
- Rodrigues, J.P., F.H. Paraguassú-Braga, L. Carvalho, E. Abdelhay, L.F. Bouzas, L.C. Porto. 2008. Evaluation of trehalose and sucrose as cryoprotectants for hematopoietic stem cells of umbilical cord blood. *Cryobiology*. 56: 144-151.
- Romano, N., E. Tymczyszyn, P. Mobili, A. Gomez-Zavaglia. 2016. Chapter 10: Prebiotics as protectants of lactic acid bacteria. Dalam buku: *Bioactive Food in Promoting Health: Probiotics, Prebiotics, and Synbiotics*. Elsevier Inc. hlm: 155-163.



- Sahu, M.K., N.S. Swarnakumar, K. Sivakumar, T. Thangaradjou, L. Kannan. 2008. Probiotics in aquaculture: importance and future perspectives. *Indian Journal of Microbiology*. 48 (3): 299-308.
- Samad, A.P.A., R. Humairani, N.R. Purnama, E. Ayuzar. 2020. Marine fisheries and aquaculture production of Indonesia: recent status of GDP growth. *Journal of Marine Science Research and Oceanography*. 3 (4): 135-139.
- Sekar, V.T., T.C. Santiago, K.K. Vijayan, S.V. Alavandi, V.S. Raj, J.J.S. Rajan, M. Sanjuktha, N. Kalaimani. 2008. Involvement of *Enterobacter cloacae* in the mortality of the fish, *Mugil cephalus*. *Letters in Applied Microbiology*. 46: 667-672.
- Sequeiros, C., M.E. Garcés, M. Vallejo, E.R. Marguet, N.L. Olivera. 2014. Potential aquaculture probiont *Lactococcus lactis* TW34 produces nisin Z and inhibits the fish pathogen *Lactococcus garvieae*. *Archives of Microbiology*. 197 (3): 1-10.
- Shori, A.B. 2017. Microencapsulation improved probiotics survival during gastric transit. *HAYATI Journal of Biosciences*. 24 (1): 1-5.
- Song, A.A., L.L.A. In, S.H.E. Lim, R.A. Rahim. 2017. A review on *Lactococcus lactis*: from food to factory. *Microbial Cell Factories*. 16 (55): 1-15.
- Song, D., S. Ibrahim, S. Hayek. 2012. Recent application of probiotics in food and agricultural science. *Probiotics*. IntechOpen. London.
- Succi, M., P. Tremonte, A. Reale, E. Sorrentino, R. Coppola. 2007. Preservations by freezing of potentially probiotic strains of *Lactobacillus rhamnosus*. *Annals of Microbiology*. 57 (4): 537-544.
- Supardy, N.A., D. Ibrahim, S.R.M. Nor, W.N.M.D. Noordin. 2019. Bioactive compounds of *Pseudoalteromonas* sp. IBRL PD4.8 inhibit growth of fouling bacteria and attenuate biofilms of *Vibrio alginolyticus* FB3. *Plish Journal of Microbiology*. 1-13.
- Teuber, M. 2009. Genus II. *Lactococcus* Schleifer, Kraus, Dorovak, Klipper-Bälz, Collins and Fischer 1986, 354^{VP}. Dalam buku: *Bergey's Manual of Systematic Bacteriology 2nd Edition Volume Three*. Springer. New York. hlm: 711-722.
- Terpou, A., A. Papadaki, I.K. Lappa, V. Kachrimanidou, L.A. Bosenia, N. Kopsahelis. 2019. Probiotics in food systems: significance and emerging strategies towards improved viability and delivery of enhanced beneficial value. *Nutrients*. 11 (1591): 1-32.
- Tripathi, M.K. dan S.K. Giri. 2014. Probiotic functional foods: survival of probiotics during processing and storage. *Journal of Functional Foods*. 9: 225-241.
- Wang, Y.B., Z.R. Xu, M.S. Xia. 2005. The effectiveness of commercial probiotics in Northern white shrimp (*Penaeus vannamei* L.) ponds. *Fisheries Science*. 71: 1034-1039.
- Wang, Y.B., J.R. Li, J. Lin. 2008. Probiotics in aquaculture: challenges and outlook. *Aquaculture*. 281: 1-4.
- Windaningrum, Miskiyah, Indrasti D, Hidayat HC. 2018. Improvement of viability of *Lactobacillus casei* and *Bifidobacterium longum* with several encapsulating materials using extrusion method. *Jurnal Ilmu Ternak dan Veteriner*. 23 (4): 189-201.
- Wowk, B. 2007. How Cryoprotectants Work. *Cryonics - Alcor*. Diakses pada: 17 Agustus 2021 pukul 15.44 WIB. <https://www.alcor.org/docs/how-cryoprotectants-work.pdf>
- World Gastroenterology Organization Global Guideline. 2011. Probiotics and Prebiotics. WGO.



- Wuertz, S., A. Schroeder, K.M. Wanka. 2021. Probiotics in fish nutrition – long-standing household remedy or native nutraceuticals?. *Water*. 13 (1348): 1-19.
- Zeigler, D.R. dan J.B. Perkins. 2008. The Genus *Bacillus*. Dalam buku: *Practical Handbook of Microbiology* 2nd Edition. CRC Presss. Florida. hlm: 309-337.
- Zheng, L., H. Chen, X. Han, W. Lin, X. Yan. 2005. Antimicrobial screening and active compound isolation from marine bacterium NJ6-3-1 associated with the sponge *Hymeniacidon perleve*. *World Journal of Microbiology & Biotechnology*. 21: 201-206.
- Zou, Y. dan X. Hou. 2017. Histamine production by *Enterobacter aerogenes* in chub mackerel (*Scomber japonicus*) at various storage temperature. *Food Science and Technology*. 37 (1): 76-79.