

## DAFTAR PUSTAKA

- Abushelaibi, A., Al-Mahadin, S., El-Tarably, K., Shah, N. P., dan Ayyash, M. (2017). Characterization of Potential Probiotic Lactic Acid Bacteria Isolated from Camel Milk. *LWT-Food Science and Technology*, 79, 316-325.
- Addgene. 2017. Agarose Gel Elektrophoresis. Diakses dari <https://www.addgene.org/protocols/gel-electrophoresis/> pada 10 Juli 2017.
- Akerlund, T. K. Nordstrom, dan R. Bernander. (1995). Analysis of Cell Size and DNA Content in Exponentially Growing and Stationary Phase Batch Cultures of *Escherichia Coli*. *J.Bacteriol.* 177: 6791-6797
- Amraii, H.N., H. Abtahi, P. Jafari, H.R. Mohajerani, M.R. Fakhroleslam, dan N. Akbari. (2014). Invitro Study of Potentially Probiotic Lactic Acid Bacteria Strains Isolated from Traditional Dairy Products. *Jundushapur J. Microbiol* 1016. 7(6):e10168
- Angmo, K., A. Kumari, dan T. C. Bhalla. (2016). Probiotic Characterization of Lactic Acid Bacteria Isolated from Fermented Foods and Beverage of Ladakh. *LWT-Food Science and Technology*, 66, 428-435.
- Anukam KC, Osazuwa EO, Ahonkai I, dan Rheid G. (2005). 16S rRNA Gene Sequence and Phylogenetic Tree of *Lactobacillus* Species from The Vagina of Healthy Nigerian Women. *Afr. J. of Biotechnol* 4 : 1222-1227.
- APCC (Asian and Pacific Coconut Community). (2009). *Quality Standard Virgin Coconut Oil*. Diakeses dari <https://www.apccsec.org> pada 10 Mei 2017.
- Arasu, M. V., Kim, D. H., Kim, P. I., Jung, M. W., Ilavenil, S., Jane, M., dan Choi, K. C. (2014). In Vitro Antifungal, Probiotic and Antioxidant Properties of Novel *Lactobacillus plantarum* K46 Isolated from Fermented Sesame Leaf. *Annals of microbiology*, 64(3), 1333-1346.
- Argyri, A. A., Zoumpopoulou, G., Karatzas, K. A. G., Tsakalidou, E., Nychas, G. J. E., Panagou, E. Z., & Tassou, C. C. (2013). Selection of Potential Probiotic Lactic Acid Bacteria from Fermented Olives by In Vitro Tests. *Food Microbiology*, 33(2), 282-291.
- Atlas, R.M. (1988). *Microbiology Fundamentals and application*, 2<sup>nd</sup> ed. McMillan Publishing Company, New York. 106-110.
- Begley M, Hill C, Grahan CGM. (2006). Bile Salt Hydrolase Activity in Probiotics. *Appl Environ Microbiol* 72: 1729-1738.
- Bennett MF, D Brassart, JR Neeser dan AL Servin. (1997). Adhesion of Human *Bifidobacteria* Strains to Cultured Human Intestinal Epithelial Cells and Inhibition of Enteropathogen-Cell Interaction. *Applied And Environmental Microbiology*. 59(12) : 4121-4128.
- Bintang, M. 2010. *Biokimia Teknik Penelitian*. Jakarta: Penebit Erlangga.
- Bioninja. 2015. PCR. Diakses dari <http://ib.bioninja.com.au/standard-level/topic-3-genetics/35-genetic-modification-and/pcr.html> pada 10 Juli 2017
- Bourlioux P, Koletzko B, Guarner F, Braesco V. (2003). The Intestine and Its Microflora are Partners for The Protection of The Host : Report on The Danone Symposium 'The Intelligent Intestine'. *Am J Clin Nutr* 78: 675-683.
- Branen AL, Davidson PM. (1993). *Antimicrobial in Food*. New York : Marcel Dekker.

Che Man, Y.B., Suhardiyono, Asni, A.B., Azudin, M. N., dan Wei, L.S. (1996). Aqueous Enzymatic Extraction of Coconut Oil. *Journal of the American Oil Chemists' Society*. 73, 683-686

Clinical and Laboratory Standards International (CLSI). (2013). *Performance Standard for antimicrobial Susceptibility Testing; Twenty-Third Informational Supplement*. Vol. 33, No.1, M100-S23.

Coenye T, Vandamme P. (2003). Extracting Phylogenetic Information from Whole Genome Sequencing Projects : The Lactic Acid Bacteria as a Test Case. *Microbiology* 149 : 3507-3517.

Collado MC, Meriluoto J, Salminen S. (2007). *In Vitro* Analysis of Probiotic Strain Combinations to Inhibit Pathogen Adhesion to Human Intestinal Mucus. *Food Res Int.* 40:629-636.

Collins, M.D., Gibson, G.R. (1999). Probiotics, Prebiotics, and Synbiotics: Approaches for Modulating The Microbial Ecology of The Gut. *Am. J.Nutr.* 69. 1052S-1057S

Cotter PD, Hill C. (2003). Surviving The Acid Test : Responses of Gram-Positive Bacteria to Low pH. *Microbiol Molecul Biol Rev* 67: 429-453.

Das, P., Khowala, S., & Biswas, S. (2016). In Vitro Probiotic Characterization of *Lactobacillus casei* Isolated From Marine Samples. *LWT-Food Science and Technology*, 73, 383-390.

Donnel, M. N. O', B.M. Forde, B. Neville, P.R. Ross, dan P. W. O' Toole. (2011). Carbohydrate Catabolic Flexibility in The Mammali Intestinal Commensal *Lactobacillus ruminis* Revealed by Fermentation Studies Aligned to Genome Annotations. *Microbial Cell Factories*, Vol. 10,1-11

Euromonitor International. (2015). *Global and Regional Trends of the Probiotics and Omega Fatty Acid Market*. Diunduh dari <http://uschinahpa.org> pada 17 Maret 2017.

FAO-WHO. (2002). Report of a joint FAO/WHO Expert Consultation. Health and Nutritional Properties of Probiotics in food incuding Powder Milk with Live Lactic Acid Bacteria. [www.fao.org/3/a-a0512e.pdf](http://www.fao.org/3/a-a0512e.pdf)

Fatchiyah, E.L. Arumingtyas, S. Widyarti, dan S.Rahayu. (2011). *Biologi Molekular: Prinsip Dasar Analisis*. Jakarta: Penerbit Erlangga.

Fijan, S. (2014). Microorganisms with Claimed Probiotica Properties An Overview of Recent Literature. *Int. J. Environ. Res. Public Health*, 11(5), 4745-4767.

Fontana, L., M. Bermudez-Brito, J. Laza-Diaza, S. Murioz-Quezada dan A. Gil. (2013). Sources, Isolation, Characterization and Evaluation of Probiotics. *British Journal of Nutrition*. 109: S35-S50.

Fuller, R. (1989). Probiotic in Man and Animals. *J.Appl. Bacteriol.*, 66 : 365 – 378.

Garbutt, J. (1997). Essentials of Food Microbiology, 1<sup>st</sup> ed. Arnold. London. 29-37.

Global Market Insight Inc. (2016). Probiotic Market Size to Exceed USD 64 Billion by 2023: Global Market Insight Inc. Diakses dari <http://www.prnewswire.com/news-releases/probiotics-market-size-to-exceed-usd-64-billion-by-2023-global-market-insights-inc-578769201.html> pada 17 Maret 2017

Granato, D., G.F. Branco, F. Nazzaro, A.G. Cruz, dan J.A.F., Faria. (2010). Functional Foods and Nondairy Probiotic Food Development: Trends, Concepts, and Products. *Comprehensive Review in Food Science and Food Safety*, Vol 9. 292-302.

- Gueimonde, M., B. Sanchez, C.G. de los Reyes-Gavilan dan A. Margolles. (2013). Antibiotic Resistance in Probiotic Bacteria. *Frontiers in Microbiology*. Volume 4: 1-6.
- Guerra A, Etienne-Mesmin L, Livrelli V, Denis S, Blanquet-Diot S, Alric M. (2012). Relevance and challenges in modeling human gastris and small intestinal digestion. *Trens Biotechnol.* 30(1):591-600.
- Hawaz, Estifanos. (2014). Isolation and Identification of Probiotic Lactic Acid Bacteria from Curd; an In Vitro Evaluation of Growth Inhibition Activities Against Pathogenic Bacteria. *African Journal of Microbiology Research*. Vol. 8 (13): 1419-1425
- Hayek S.A., dan S.A. Ibrahim. (2013). Current Limitations and Challenges with Lactic Acid Bacteria: A Review. *Food and Nutrition Science*, 4, 73-78.
- Hiraishi, A. (1992). Direct Automated Sequencing of 16S rDNA Amplified by Polymerase Chain Reaction from Bacterial Cultures without DNA Purification. *Letters in Applied Microbiology*, 15(5), 210-213.
- Holt, J.G, et al. (1994). *Bergey's manual of determinative bacteriology*, 9<sup>th</sup> ed. The William & Wilkim Co.Inc. USA
- Horiike T et al. (2009). Phylogenetic Construction of 17 Bacterial Phyla by New Method and Carefully Selected Orthologs. *Gene* 429 : 59-64.
- Husmaini. 2012. Potensi *Lactococcus plantarum* Isolat Limbah Pengolahan Virgin Coconut Oil (Blondo) sebagai Probiotik dan Aplikasinya untuk Meningkatkan Perfomans Unggas. Disertasi. Universitas Andalas.
- Hutkins RW, Nannen NL. (1993). pH Homeostasis in Lactic Acid Bacteria. *J Dairy Science*. 76:2354-2365.
- Idoui, T. (2014). Probiotic Properties of Lactobacillus Strains Isolated from Gizzard of Local Poultry. *Iranian Journal of Microbiology*, 6(2), 120–126.
- Kaushik, J.K., A. Kumar, R.K. Duary, A.K. Mohanty, S. Grover, dan V.K. Batish. (2009). Functional and Probiotic Attributes of an Indigenous Isolate of *Lactobacillus plantarum*. *PLoS ONE*, 4(12):e8099.
- Kos, B., J. Suskovic, S. Vukovic, M. Simpraga, J. Frece & S. Matosic. (2003). Adhesion and Aggregation Ability of Probiotic Strain *Lactobacillus acidophilus* M92. *J. Appl. Microbiol.*, 94(6): 981-987.
- Kumalaningsih, S., dan M. Padaga. (2012). The Utilization of Microorganism Isolated from Fermented Coconut Milk for The Production of Virgin Coconut Oil. *J of Basic and Applied Scientific Research*, 2 (3): 2286-2290.
- Leboffe, M and Pierce, B.E. (2011). A Photographic Atlas for the Microbiology Laboratory 4<sup>th</sup> ed. Morton Publishing Company. United States of America
- Leverrier P, Dimova D, Pichereau V, Auffray Y, Boyaval P, Jan G. (2003). Susceptibility and Adaptive Response to Bile Salts in *Propionibacterium freudenreichii* : Physiological and Proteomic Analysis. *Appl Env Microbiol.* 69(7):3809-3818.
- Lim, Sung-Mee dan Dong-Soon Im. (2009). Screening Characterization of Probiotic Lactic acid Bacteria Isolated from Korean Fermented Foods. *J.Microbiology and Technology*. 19(2): 178-186

- Lisal, J.S. (2005). Konsep Probiotik dan Prebiotik untuk Modulasi dan Mikrobiota Usus besar. *J. Med. Nus.* 26 (4) : 259 – 262.
- Lopez, J. (2000). Probiotic in Animal Nutrition. Recent Advances in Animal Nutrition Asian-Australian. *Journal of Animal Sciece*, 55: 1238 – 1246.
- Mansor, T. S. T, Y.B. Che Man, M. Suhaimi, M. J. Abdul Afiq, dan F.K.M. Nurul. (2012). Physicochemical Properties of Virgin Coconut Oil Extracted from Different Processing Methods. *International Food Research Journal*, 19 (3): 837-845.
- Marina, A.M., Y.B. Che Man, dan S.A.H. Nazimah. (2009). Chemical Properties of Virgin Coconut Oil. *J. Am. Oil. Chem. Soc.*, 86:301-307
- Mathur, S. and R. Singh. (2005). Antibiotic Resistance in Food Lactic Acid Bacteria - A Review. *Int. J. Food Microbiol.* 105: 281-295.
- Meira, S.M.M., V. E. Helfer, R. V. Velho, F. C. Lopes, dan A. Brandelli. (2012). Probiotic Potential of *Lactobacillus* spp. Isolated from Brazilian Regional Ovine Cheese. *Journal of Dairy Research*, 79: 119-127.
- Mojgani, N., Fatimah, H.F., Vasej, N., (2015). Characterization of Indegineous *Lactobacillus* Strains for Probiotic Properties. *Jundisha-pur J. Microbial.* 8 (2), 1-2.
- Moser SA, Savage DC. (2001). Bile Salt Hydrolase Activity and Resistance to Toxicity of Conjugated Bile Salts Are Unrelated Properties in *Lactobacilli*. *Appl & Environ Microbiol.* 67(8):3476-3480
- Naidu AS dan RA Clemens. Nissen-Meyer J, Holo H, Havastein S, Sketten K, Nes IF. 1992. A novel lactococcal bacteriocin whose activity depend on the complementary action of two peptides. *Journal Bacteriology*. 174 : 5686-5692 Probiotics. Di Dalam Natural Food Antimicrobial Systems. Naidu AS (Ed). CRC Press, LLC
- Nissen-Meyer J, Holo H, Havastein S, Sketten K, Nes IF. (1992). A Novel *Lactococcal* Bacteriocin Whose Activity Depend on The Complementary Action of Two Peptides. *Journal Bacteriology*. 174 : 5686-5692.
- Ogunbanwo ST, Sanni AI, Onilude AA. (2003). Characterization of Bacteriocin Produced by *Lactobacillus plantarum* F1 and *Lactobacillus brevis* OG1. *Afr J Biotechnol* 2:219-227
- Otero, M.C., V.S. Ocaña & E.M. Nader-Macías. (2004). Bacterial Surface Characteristics Applied to Selection of Probiotic Microorganisms. *Method. Mol. Cell. Biol.*, 268: 435-440.
- Pelczar MC, ECS Chan dan Krieg NR. (1993). Microbiology Concept and Application. Mc Graw-Hill, Inc., New York
- Pundir, R.K, S. Rana, N. Kashtap, dan A. Kaur. (2013). Probiotic Potential of Lactic Acid Bacteria Isolated from Food Samples: an In Vitro Study. *Journal of Applied Pharmaceutical Science*, Vol. 3 (03): 085-093
- Rosenberg, M.D., D. Gutnick & E. Rosenberg. (1980). Adherence of Bacteria to Hydrocarbons: A Simple Method for Measuring Cell-Surface Hydrophobicity. *FEMS Microbiol. Lett.*, 9: 29-33
- Rubio, R., A. Jofre, b. Martin, T Aymerich, dan M.Garriga. (2013). Characterization of Lactic Acid Bacteria Isolated from Infant Feces as Potential Probiotic Starter Cultures for Fermented Sausages. *Food Microbiology*. 38: 303-311

- Ruiz-Moyano, S., A. Martin, M.J. Benito, F. Perez-Nevado, dan M.G. Cordoba. (2008). Screening of Lactic Acid Bacteria and Bifidobacteria for Potential Probiotic Use in Iberian Dry-Fermented Sausages. *Meat Sci*, 80: 715-721.
- Salminen, S. , A. Ouwehand, Y. Benno, dan Y.K. Lee. (1999). Probiotics : How Should They be Defined. *Trend in Food Sci & Technol*. 10 : 107 – 110.
- Sander, M.E., F. Guamer, R. Guerrant, P.R. Holt, E. MM Quigley, R. B. Sartor, P. M. Sherman, dan E.A. Mayer. (2013). An Update on The Use and Investigation of Probiotics in Health and Disease. *Gut* 62;787-796.
- Savadogo A, Outtara CAT, Bassole IHN, dan Traore AS. (2006). Bacteriocins and Lactic Acid Bacteria – A Minireview. *Afr J Biotechnol* 5: 678-683.
- Soccol, C. R., Prado, M. R. M., Garcia, L. M. B., Rodrigues, C., Medeiros, A. B. P., dan Soccol, V. T. (2014). Current Developments in Probiotics. *J. Microb. Biochem. Technol*, 7, 011-020.
- Sudarut T., dan. 2010..Utilization of Wastewater Originated from Naturally Fermented Virgin Coconut Oil Manufacturing Process for Bioextract Production: Physico-Chemical and Microbial Evolution. *Journal of Bioresources Technology* , 6345-6353.
- Sulistijowati, S.R. (2012). Potensi Filtrat *Lactobacillus acidophilus* ATCC 4796 sebagai Biopreservatif Pada Rebusan daging Ikan Tongkol. *IJAS*. 2(2)
- Surono IS. (2004). Probiotik, Susu Fermentasi dan Kesehatan. YAPPMI. Jakarta.
- Suryani, A. Dharma, Y. Manjang, S. Arief, E. Munaf, dan N. Nasir. (2014). Antimicrobial an antifungal Activity of Lactic Acid Bacteria Isolated from Coconut Milk Fermentation. *Research Journal of Pharmaceutical, Biological, and Chemical Sciences*. Vol 5 (6): 1592.
- Suryani, Y. Astuti. Oktavia, B. Umniyati, S. (2010). Isolasi dan Karakterisasi Bakteri Asam Laktat dari Limbah Kotoran Ayam sebagai Agensi Probiotik dan Enzim Kolesterol Reduktase. Prosiding. Seminar Nasional Biologi 3 Juli 2010”Biologi dan Pengembangan Profesi Pendidik Biologi”.
- Syukur, S dan E. Purwati. (2013). *Biotehnologi Probiotik Untuk Kesehatan Masyarakat*. Yogyakarta: Penerbit Andi. ISBN 978-979-29-2998
- Syukur, S. B. Bisping, Z. A. Noli, E. Purwati. (2013). Antimicrobial Properties *Lactase* Activities from Selected Probiotic *Lactobacillus brevis* Associated with Green Cacao Fermentation in West Indonesia. *Journal Probiotic and Health*, 1: 113.
- Syukur, S. S. Yolanda, Jamsari, dan E. Fachrial. (2015). Isolation, Antimicrobial Activity and Bioremediation of Heavy metal Cadmium (Cd) by Using Lactic Acid Bacteria from Dadih Origin Lareh sago Halaban, Payakumbuh, West Sumatera, Indonesia. *Journal of Chemical and Pharmaceutical Resarch*, 7 (9):235-241.
- Syukur, S., F. Rijal, Jamsari, dan E. Purwati. (2014). Isolation and Molecular Characterization of Lactic acid Bacteria by Using 16S rRNA from Fermented Buffalo Milk (Dadih) in Sijunjung, West Sumatera. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. Vol 5 (6):871.
- Syukur, S., H. Aziz, dan E. Fachrial. (2016). Probiotic and Strong Antimicrobial of Buffalow Milk Fermentation from Different Places in West Sumatra. *Journal of Chemical and Pharmaceutical Research*. Vol (7), 6, 386.

- Syukur, S., Syafrizayanti, S. Zulaiha, M. Ismet., dan E. Fachrial. (2017). Virgin Coconut Oil Increase HDL, Lower Triglyceride and Fatty Acids Profile in Blood Cerum of *Mus musculus*, *Journal of Chemical and Pharmaceutical Research*,8 (2): 1077.
- Tamura K, Dudley J, Nei M, Kumar S. (2007). MEGA 4: Molecular Evolutionary Genetics Analysis (MEGA) Software Version 4.0. *Mol Biol Evol* 24: 1596-1599
- Toha, A.H.A, N. Widodo, L. Hakim, dan S. B. Sumitro. (2016). *Panduan Analisis Data Genetik untuk Publikasi*. Diakses dari <http://www.researchgate.net/publication/30537991> pada 3 Juli 2017
- Usmiati, S and Marwati, T. (2009). Selection and Optimization Process of Bacteriocin Production from *Lactobacillus* sp. *Indonesian Journal of Agriculture*.2(2) : 82-92 .
- Verón, H. E., Di Risio, H. D., Isla, M. I., & Torres, S. (2017). Isolation and Selection of Potential Probiotic Lactic Acid Bacteria from *Opuntia ficus-indica* Fruits That Grow in Northwest Argentina. *LWT-Food Science and Technology*.
- Villarino, B.J., Sy, L.M., dan Lizada, C.C. (2007). Descriptive Sensory Evaluation of Virgin Coconut Oil and Refined, Bleached and Deodorized Coconut Oil. *LWT-Food Science an Technology*, 40,193-199.
- vlab.amrita.edu,. (2011). *Bacterial Growth Curve*. Diakses dari [vlab.amrita.edu/?sub=3&brch=73&sim=1105&cnt=1](http://vlab.amrita.edu/?sub=3&brch=73&sim=1105&cnt=1) pada 21 Juli 2017.
- Wahyudi A, Samsundari S. 2008. *Bugar dengan Susu Fermentasi*. Malang (ID): UMM Pr. hal 104-105
- Widodo AD. 2003. *Biotehnologi Industri Susu*. Cetaka ke-1. Yogyakarta: Lacticia Press.
- Wilson, K and Walker, J. 2009. *Principles and Techniques of Biochemistry and Molecular Biology*. 7th edition. Cambridge University Press. New York.
- Yotpanya, P., M. Panya, C. Enchanil, N. Suebwongso, W. Namwat, H. Thaw, V. Lulitanond. (2016). Probiotic Characterization of Lactic Acid Bacteria Isolated from Infant Feces and Its Application for the Expression of Green Flouroscent Protein. *Malaysian Journal of Microbiology*. Vol 12 (1): 76-84.