

DAFTAR PUSTAKA

- Aggett, P., Agostoni, C., Axelsson, I., Edwards, C.A., Goulet, O., Hernell, O., Koletzko, B., Lafebeer, H.N., Micheli, J.L., Michaelsen, K.F., Rigo, J., Szajewska, H. & Weaver, L.T., 2003. Nondigestible carbohydrates in the diets of infants and young. *Journal of Pediatric Gastroenterology and Nutrition*, 36, pp. 329-337.
- Alawiyyah, T., Budiharjo, A., & Suprihadi, A., 2017. Isolasi, enumerasi, dan deteksi molekuler gen ToxR pada bakteri *Vibrio parahaemolyticus* dari tambak udang vannamae di Rembang. *Jurnal Biologi*, 6(3), pp.96-102.
- Alp, G. & Aslim, B., 2010. Relationship between the resistance to bile salts and low pH with exopolysaccharide (EPS) production of *Bifidobacterium* spp. isolated from infants feces and breast milk. *Anaerobe*, 16, pp.101-105.
- Aprilyanto, V. & Sembiring, L., 2016. *Filogenetika Molekuler Teori dan Aplikasi*. Yogyakarta: Innosain
- Arunachalam, K.D., 1999. Role of *Bifidobacteria* in nutrition, medicine, and technology. *Nutrition Research*, 19(10), pp.1559-1597.
- Atlas, R., Brown, A., Dobra, K. & Miller, L., 1984. *Experimental Microbiology*. New York: Macmillan Publishing Company.
- Backhed, F., Ley, R.E., Sonnenburg, J.L., Peterson, D.A. & Gordon, I.J. 2005. Host-bacterial mutualism in the human intestine. *Science*, 15, pp.1915-1920.
- Benson. 2001. *Microbiological applications laboratory manual in general microbiology* 8th ed. New York: The McGraw-Hill Companies.
- Biavati, B., Vescovo, m., Torriani, S., & Bottazzi, V., 2000. *Bifidobacteria: history, ecology, physiology and applications*. *Annals of Microbiology*, 50, pp.117-131.
- Cantabrina, C., López, P., Gueimonde, P., de los Reyes-Gavilán, C.G., Suárez, A. & Margolles, A., 2012. Immune modulation capability of exopolysaccharides synthesized by lactic acid bacteria and bifidobacteria. *Probiotics Antimicro Prot*, 4, pp.227-237.
- Cheng, H. & Jiang, N. 2006. Extremly rapid extraction of DNA from bacteria and yeasts. *Biotechnology Letters*, 28, pp.55-59.
- Coakley, M., Banni, S., Johnson, C.M., Mills, S., Devery, Rosaleen., Fitzgerald, G., Ross, P.R. & Stanton, C. 2009. Inhibitory Effect of Conjugated a-Linolenic Acid from Bifidobacteria of Intestinal Origin on SW480 Cancer Cells. *Lipids*, 44, pp.249-256.
- De Man, J., Rogosa, M. & Sharpe, M., 1960. A medium for the cultivation of Lactobacilli. *J Appl Bacteriol*, 23, pp.130-135.

- Degeest, B. & Vuyst, L., 2000. Correlation of Activities of the Enzymes α -Phosphoglucomutase, UDP-Galactose 4-Epimerase, and UDP-Glucose Pyrophosphorylase with Exopolysaccharide Biosynthesis by *Streptococcus thermophilus* LY03. *Applied and Environmental Microbiology*, 66(8), pp.3519-3527.
- Dinoto, A., Saputra, S., Nugroho, J. & Rahayu, R., 2011. Keanekaragaman bakteri penghasil eksopolisakarida asal saluran cerna manusia. *Berk Penel Hayati*, 16, pp. 95-201.
- Drancourt, M., Bollet, C., Carlloz, A., Martelin, R., Raolt, D., & Gayral, J. 2000. 16S Ribosomal DNA Sequence Analysis of Larga Collection of Environmental and Clinical Unidentifiable Bacterial Isolates. *Journal of Clinical Microbiology*, 10, pp.3623-3630.
- Duboc, P. & Mollet, B., 2001. Applications of exopolysaccharides in the dairy industry. *International Dairy Journal*, 11, pp.756-768.
- Fanning, S., Lindsay J. H., Michelle C., Aldert Z., John MS., David G., Mary O'C.M., Fergus S., Kenneth N., Gordon D., & Douwe, van S. 2012. Bifidobacterial surface-exopolysaccharide facilitates commensal-host interaction through immune modulation and pathogen protection. *Proceedings of the National Academy of Science of the United States of America*, 109(6), pp. 2108-2113.
- Feliatra., Irwan, E., & Edwar, S., 2004. Isolasi dan identifikasi bakteri probiotik dari ikan kerapu macan (*Ephinephelus fuscogatus*) dalam upaya efisiensi pakan ikan. *Jurnal Natur Indonesia*, 6(2), pp.75-80.
- Gagnon, M., Kheadi, E., Blay, G. & Flissa, I., 2004. In vitro inhibition of *Escherichia coli* O157:H7 by Bifidobacterial strains of human origin. *International Journal of Food Microbiology*, 92, pp.69-78.
- Garrity, G.M., Brenner, D.J., Kreig, N.R., & Staley J.T. 2005. Bergey's Manual of Systematic Bacteriology, Springer, 2.
- Gill, S., Pop, M., DeBoy, R.T., Eckburg, P.B., Turnbaugh, P.J., Samuel, B.S., Gordon, J.I., Relman, D.A., Fraser-Liggett, C.M. & Nelson, K.E. 2006. Metgenomic Analysis of the human distal gut microbiome. *Science*, 312, pp.1355-1359.
- Gronlund, M.M., Pekka, E., & Erkki, K. 2009. Fecal Microflora in Healthy Infants Born by Different Methods of Delivery Permanent Changes in Intestinal Flora after CAesar on Delivery. *Journal of Pediatric Gastroenterology and Nutrition*, 28(1), pp.19-25.
- Hadadji, M., Benama, R., Saidi, N., Henni, D.E., & Kihal, M., 2005. Identification of cultivable *Bifidobacterium* species isolated from breas-fed infants feces in West-Algeria. *African Journal of Biotechnology*, 4(5), pp.422-430.

Hadioetomo, R., 1993. *Mikrobiologi Dasar Dalam Praktek : Teknik dan Prosedur Dasar Laboratorium*. Jakarta: Gramedia Pustaka Utama.

Harmsen, H., Gibson, G.R., Elfferich, P., Raangs, G.C. Wildeboor-Veloo, A.C.M., Argaiz, A., Roberfroid.M.B. & Welling, G.C. 2000. Comparison of viable cell counts and fluorescence in situ hybridization using specific rRNA-based for the quantification of human fecal bacterial. *FEMS Microbiology Letters*, 183, pp.125-129.

Hemraj, V., Sharma D., & Gupta, A., 2013. A Review On Commonly Used Biochemical Test For Bacteria. *Innovare Journal of Life Science*. 1 (1), pp.1-7.

Hendrati, P.M., Dyah, F.K., Dini, R., & Oedijono. 2017. Characterization of Bifidobacteria from infant feces with different mode of birth at Purwokerto, Indonesia. *Biodiversitas*, 18(3), pp.1265-1269.

Holt, J.G., Krieg, N.R., Sneath, P.H.A., Staley, J.T., & William, S.T., 1994. *Bergey's Manual of Determinative Bacteriology*. New York: Lippincott William and Wilkins.

Hugenholtz, J. & Kleerebezem, M., 1999. Metabolic engineering of lactic acid bacteria: overview of the approaches and results of pathway rerouting involved in food fermentations. *Current Opinion in Biotechnology*, 10(5), pp.492-497.

Irmawati. 2003. Perubahan keragaman genetik ikan kerapu tikus generasi pertama pada stok Hatchery. Tesis. IPB.

Kismiyati., Subekti, S., Yusuf, R.W.N., & Kusdarwati, N., 2009. Isolasi dan identifikasi bakteri Gram negatif pada luka ikan maskoki (*Carassius auratus*) akibat infestasi ekstoparasit *Argulus* sp. *Jurnal Ilmiah Perikanan dan Kelautan*, 1(2), pp.129-134.

Kralj, S., van G S.G.H., Dondroff, M.M.G., Kirsanovs, S., van der Maarel, M.J.E.C. & Dijkhuizen, L., 2004. Glucan synthesis in the genus Lactobacillus: isolation and characterization of glucansucrase genes, enzymes and glucan products from six different strains. *Microbiology*, 150, pp.3681-3690.

Lamendella, R., Doming, J., Kelty, C. & Oerther, D., 2008. Bifidobacteria in feces and environmental waters. *Applied and Environmental Microbiology*, 74(3), pp.575-584.

Langendijk, P., Schut, F., Jansen, G.J., Raangs, G.C., Kamphuis, G.R., Wilkinson, M.H.F. & Welling, G.W. 1995. Quantitative Fluorescence in situ hybridization of Bifidobacterium spp. with genus-specific 16S rRNA-targeted probes and its application in fecal samples. *Applied and Environmental Microbiology*, 61(8), pp.3069-3075.

Lathifah, A.U., Buwono, I.D. & Subhan, U., 2016. Deteksi Keragaman Genotip Hibrid Ikan Lele Sangkuriang, Mutiara Transgenik dan Mutiara Non Transgenik pada Keturunan Pertama. *Jurnal Perikanan Kelautan*, 7(2), pp.111-20.

- Lay, W., 1994. *Analisa Mikroba di Laboratorium*. I penyunt. Jakarta: Raja Grafindo Persada.
- Lievin, V., I. Peiffer., S. Hudault., F. Rochat., D. Bassart., J-R Neeser., & a.L Servin. 2000. Bifidobacterium strains from resident infant human gastrointestinal microflora exert antimicrobial activity. *Gut*, 47, pp.646-652.
- Lopez, P., Monteserin, D.C., Guemonde, M., de los Reyes-Gavilan, C.G., Margolles, A., Suarez, A. & Madiedo, R., 2012. Exopolysaccharide-producing Bifidobacterium strains elicit different in vitro responses upon interaction with human cells. *Food Research International*, 46, pp.99-107.
- Madiedo, P., Hugenholtz, J. & Zoon, P. 2002. An overview of the functionality of exopolysaccharides produced by lactic acid bacteria. *International Dairy Journal*, 12, pp.163-171.
- Malik, A., Ariestanti, D., Nurfachtiyani, A. & Yanuar, A., 2008. Skrining gen glukosiltransferase (gtf) dari bakteri asam laktat penghasil eksopolisakarida. *Sakara Sains*, 12(1), pp.1-6.
- Malik, A., Hermawati, A.K., Hestiningtyas, M., Soemiati, A. & Radji, M., 2010. Isolasi dan skrining molekuler bakteri asam laktat pembawa gen glukosiltransferase dari makanan dan minuman mengandung gula. *Makara Sains*, 14(1), pp.63-68.
- Malik, A., Radji, M., Kralj, S. & Dijkhuizen, L., 2009. Screening of lactic acid bacteria from Indonesia reveals glucansucrase and fructansucrase genes in two different Weissella confusa strains from soya. *FEMS Microbiology Letters*, 300(1), pp.131-138.
- Mullie, C., Odou, M.F., Singer, E., Romond, M.B. & Izzard, D., 2003. Multiplex PCR using 16S rRNA gene-targeted primers for the identification of Bifidobacteria from human origin. *FEMS Microbiology Letters*, 222, pp.129-136.
- Nurkanto, A. & Agusta, A., 2015. Identifikasi Molekular dan Karakterisasi Morfo-Fisiologi Actinomycetes Penghasil Senyawa Antimikroba. *Jurnal Biologi Indonesia*, 11(2), pp.195-203.
- Pangastuti, A., 2006. Definisi Spesies Prokaryota Berdasarkan Urutan Basa Gen Penyandi 16s rRNA dan Gen Penyandi Protein. *Biodiversitas*, 7(3), pp.292-296.
- Patel, JB., RJ. Wallace Jr., BA. Coklat-Elliott, C. Imperatrice, DBG. Leonard, RW. Wilson, L. Mann, KC. Jost, & I. Nachamkin., 2004. Sequence-based identification of aerobic *Actinomycetes*. *Journal Clinical microbiology*, 42, pp.2530-40.
- Penders, J., Carel, T., Cornelis, V., Foekje, F.S., Bianca, S., Ischa K., Piet A. van den B., & Ellen, E. S., 2006. Factors influencing the composition of the intestinal microbiota in early infancy. *Pediatrics*, 118(2), pp.511-521.

- Pokusaeva, K., Fitzgerald, G. F. & van Sinderen, D., 2011. Carbohydrate metabolism in Bifidobacteria. *Genes Nutr*, 6, pp.285-306.
- Ramakrishna, B., 2013. Role of the gut microbiota in human nutrition and metabolism. *Journal of Gastroenterology and Hepatology*, 28(4), pp. 9-17.
- Ramesh.C.C., White, C.H., Kilara, A., & Hui, Y.H., 2006. *Manufacturing yogurt and fermented milks*. New york: Wiley-Blackwell.
- Sakata, S., Kitahara, S., Sakamoto, M., Hayashi, H., Fukuyama, M. & Benno, Y., 2002. Unification of *Bifidobacterium infantis* and *Bifidobacterium suis* as *Bifidobacterium longum*. *International Journal of Systematic and Evolutionary Microbiology*, 52, pp.1945-1951.
- Salazar, N., Prieto, A., Leal, J. A., Mayo, B., Bada-Gancedo, J. C., de los Reyes-Gavilán, C.G. & Ruas-Madiedo, P., 2009. Production of exopolysaccharide by Lactobacillus and *Bifidobacterium* strains of human origin and metabolic activity of the producing bacteria in milk. *J. Dairy Sci*, 92, pp. 4158-4168.
- Schell, M., Karmirantzou, M., Snel, B., Vilanova, D., Berger, B., Pessi, G., Zwahlen, M.C., Desiere, F., Bork, P., Delley, M., Pridmore, D. R. & Arigoni, F., 2002. The genome sequence of *Bifidobacterium longum* reflects its adaptation to the human gastrointestinal tract. *Proceedings of the National Academy of science of the United States of America*, 99(22), pp.14422-14427.
- Sinkiewicz, G. & Nordstrom, E., 2005. 353 Occurrence of *Lactobacillus reuteri*, *Lactobacilli* and *Bifidobacteria* in human breast milk. *ESPR European Society for Pediatric Research*, 58, pp.415.
- Sirilun, S., Takahashi, H., Boonyaritichaikji, S., Chaiyasuti, C., Lertruangpanya, P., Koga, Y. & Mikami, K., 2015. Impact of maternal bifidobacteria and the mode of delivery on *Bifidobacterium* microbiota in infants. *Beneficial Microbes*, 6(6), pp.767-774.
- Sirois, M., 2015. *Laboratory Procedures for Veterinary Technicians*. sixth penyunt. Missouri: Elsevier Inc.
- Tallon, R., Bressollier, P. & Urdaci, M., 2003. Isolation and characterization of two exopolysaccharides produced by *Lactobacillus plantarum* EP56.. *Research in Microbiology*, 154, pp.705-712.
- Turroni, F., Foroni, E., Pizzetti, P., Giubellini, V., Ribbera, A., Merusi, P., Cagnasso, P., Bizzarri, B., de'Angelis, G.L., Shanahan, F., van Sinderen, D. & Ventura, Ml., 2009. Exploring the diversity of the Bifidobacterial population in the human intestinal tract. *Applied and Environmental Microbiology*, 75(6), pp.1534-1545.
- Venkatesan, S., Kirithika, M., Roselin, I., Ganesan, R., & Muthucelian, K., 2012. Comparative invitro and invivo study of three probiotic organisms, *Bifidobacterium* sp., *Lactobacillus* sp., *S. Cerevisiae* and analyzing its

- improvement with the supplementation of prebiotics. *International Journal of Plant, Animal, and Environmental Sciences*, 2(2), pp.94-106.
- Ventura, M., Canchaya, C., Zhang, Z., Bernini, V., Fitzgerald, G.F. & van Sinderen, D., 2006. How high G+C Gram-positive bacteria in particular bifidobacteria cope with heat stress: protein players and regulators. *FEM Microbiol Rev*, 30, pp.734-759.
- Welman, A. & Maddox, S., 2003. Exopolysaccharides from lactic acid. *TRENDS in Biotechnology*, 21(6), pp.269-274.
- Widyadnyana, D., Sukrama, D. & Suardana, I., 2015. Identifikasi Bakteri Asam Laktat Isolat 9A dari Kolon Sapi Bali sebagai Probiotik melalui Analisis Gen 16S rRNA. *Jurnal Sain Veteriner*, 33(2), pp.228-233.
- Wikaningrum, R., Jekti T.R., Titiek D., Dian W. & Abdul R.P., 2008. Populasi Bakteri pada Feses Neonatus: Penelitian Pendahuluan. *Jurnal Medical YARSI*, 16(2).
- Wu, M.-H., Pan T-M., Wu Y.J., Chang S.J., Chang, S.C. & Hu, C.Y., 2010. Exopolysaccharide activities from probiotic bifidobacterium: Immunomodulatory effects (on J774A.1 macrophages) and antimicrobial properties. *Journal of Food Microbiology*, 144, pp.104-110.
- Yan, S., Guozhong Z., Xiaoming L., Jianxin Z., Hao Z. & Wei C., 2017. Production of exopolysaccharide by Bifidobacterium longum isolated from elderly and infant feces and analysis of priming glycosyltransferase genes. *Royal Society of Chemistry Advances*, 7, pp.31736-31744.
- Zinedine, A. & Faid, M., 2007. Isolation and characterization of strains of Bifidobacteria with probiotic proprieties In vitro.. *World Journal of Dairy & Food Science*, 2(1), pp.28-34.
- Zubaidah, E., Liasari, y., & Saparianti, E., 2012. Produksi eksopolisakarida oleh *Lactobacillus plantarum* B2 pada produk probiotik berbasis buah murbei. Universitas Brawijaya.