

DAFTAR PUSTAKA

- Al Mamun, A., Masniyom, P., dan Maneesri, J. 2021. Viability of *Lactobacillus plantarum* TISTR 2083 in Protectant during Low-Temperature Drying and Storage (Kelangsungan *Lactobacillus plantarum* TISTR 2083 dalam Pelindung semasa Pengeringan pada Suhu Rendah dan Penyimpanan). *Sains Malaysiana*. 50(8), 2229-2240.
- Alcazar-Alay, S. C., dan Meireles, M. A. A. 2015. Physicochemical Properties, Modifications and Applications of Starches from Different Botanical Sources. *Journal of Food Science and Technology*. 35(2): 215–236.
- Alonso, S. 2016. Novel preservation techniques for microbial cultures. In *Series on Novel Food Fermentation Technologies*. edited by Ojha, K.S. & Tiwari, B.K. Switzerland: Springer International Publishing. pp. 7-33.
- Aprianita, A., Vasiljevic, T., Bannikova, A., dan Kasapis, S. 2014. Physicochemical properties of flours and starches derived from traditional Indonesian tubers and roots. *Journal of Food Science and Technology*. 51(12): 3669-3679.
- Astesana, D. M., Zimmermann, J. A., Frizzo, L. S., Zbrun, M. V., Blajman, J. E., Berisvil, A. P., dan Soto, L. P. 2018. Development and storage studies of high density macrocapsules containing *Lactobacillus* spp. strains as nutritional supplement in young calves. *Revista argentina de microbiología*, 50(4), 398-407.
- Astuti, R. M., Asiah, N., Setyowati, A., dan Fitriawati, R. 2018. Effect of physical modification on granule morphology, pasting behavior, and functional properties of arrowroot (*Marantha arundinacea* L.) starch. *Food Hydrocolloids*. 81: 23-30.
- Bao, J. 2019. *Rice: Chemistry and Technology*. Minnesota: AACC International Press
- Chen, M. J., Tang, H. Y., dan Chiang, M. L. 2017. Effects of heat, cold, acid and bile salt adaptations on the stress tolerance and protein expression of kefir-isolated probiotic *Lactobacillus kefiranoferiens* M1. *Food microbiology*. 66, 20-27.
- Chuzaemi, I. S., IPU, A. E., Mashudi, I. S. D. I., Ndaru, P. H., dan MP, S. P. 2020. *Ilmu Gizi Ruminansia*. Media Nusa Creative (MNC Publishing).
- Crowley, S., Mahony, J., dan van Sinderen, D. 2013. Current perspectives on antifungal lactic acid bacteria as natural bio-preservatives. *Trends in food science & technology*, 33(2). 93-109.
- De Vries, M.C., Vaughan, E.E., Kleerebezem, M. dan de Vos, W.M. 2005. *Lactobacillus plantarum* - survival, functional and potential probiotic properties in the human intestinal tract. *International Dairy Journal*. 16(9): 1018-1028.
- Estilarte, M. L., Tymczyszyn, E. E., Serradell, M., de Los, A., dan Carasi, P. 2021. Freeze-drying of *Enterococcus durans*: Effect on their probiotics and biopreservative properties. *LWT-Food Sci. Technol*. 137, 110496.

- Gong, X., Yan, Q., Wang, Y., Wang, J., Gao, E., Zhang, E., ... & Wang, L. (2018). Isolation, identification and fermentation performance analysis of *Lactobacillus casei* from kefir grains. *China Dairy Industry*, 46(6), 12-18.
- Handayani, R., dan Sulistiani, S. N. 2016. Identifikasi produksi GABA dari kultur Bakteri Asam Laktat (BAL) dengan metode TLC. In *Prosiding Seminar Nasional Masyarakat Biodiversitas Indonesia* (Vol. 2, No. 2, pp. 208-213).
- Hermiati, E., Azuma, J. I., Tsubaki, S., Mangunwidjaja, D., Sunarti, T. C., Suparno, O., dan Prasetya, B. 2012. Improvement of microwave-assisted hydrolysis of cassava pulp and tapioca flour by addition of activated carbon. *Journal Carbohydrate Polymers*. 87(1). 939-942.
- Holzapfel, W. H., dan Wood, B. J. (Eds.). 2014. *Lactic acid bacteria: biodiversity and taxonomy*. John Wiley & Sons.
- Hou, B., Wang, H., Yan, T., Shan, Y., Zhou, W., Zhang, L., dan Jiang, Y. 2016. Production for high-vitality starter culture of *Lactobacillus plantarum* NDC 75017 by high cell-density cultivation and low-temperature vacuum drying. *Food Science and Technology Research*. 22(4), 519-527.
- Hubalek, Z. 2003. Protectants used in the cryopreservation of microorganisms. *Cryobiology*, 46(3), 205-229.
- Jokicevic, K., Lebeer, S., dan Kiekens, F. 2022. Atomization gas type, device configuration and storage conditions strongly influence survival of *Lactobacillus casei* after spray drying. *Drying Technology*. 40(3), 494-504.
- Kandasamy, S., Kavita, D., dan Shetty, P. H. 2018. Lactic acid bacteria and yeasts as starter cultures for fermented foods and their role in commercialization of fermented foods. In *Innovations in Technologies for Fermented Food and Beverage Industries* (pp. 25-52). Springer, Cham.
- Kanmani, P., dan Lim, S. T. 2013. Development and characterization of novel probiotic-residing pullulan/starch edible films. *Food Chemistry*. 141, 1041-1049.
- Kulkarni, S., Haq, S. F., Samant, S., dan Sukumaran, S. 2018. Adaptation of *Lactobacillus acidophilus* to thermal stress yields a thermotolerant variant which also exhibits improved survival at pH 2. *Probiotics and Antimicrobial Proteins*. 10(4), 717-727.
- Iaconelli, C., Lemetais, G., Kechaou, N., Chain, F., Bermúdez-Humarán, L.G., Langella, P., Gervais, P. dan Beney, L. 2015. Drying process strongly affects probiotics viability and functionalities. *Journal of Biotechnology* 214: 17-26.
- Manfaati, R. 2010. Kinetika dan variabel optimum fermentasi asam laktat dengan media campuran tepung tapioka dan limbah cair tahu oleh *Rhizopus oryzae* (Doctoral dissertation. Universitas Diponegoro).

- Marwati, T., Djaafar, T. F., Setiawan, E. E., Utami, T., dan Rahayu, E. S. 2020. Viability and Antifungal Activity of *Lactobacillus plantarum* HL-15 Oven Dried Culture during Storage. *Digital Press Life Sciences*. 2. 00009.
- Murakami, S., Kuramochi, M., Koda, T., Nishio, T. dan Nishioka, A. 2016. Relationship between rice flour particle sizes and expansion ratio of pure rice bread. *Journal of Applied Glycoscience*. 63(1): 19-22.
- Oleksy, M., dan Klewicka, E. 2018. Exopolysaccharides produced by *Lactobacillus* sp.: biosynthesis and applications. *Critical reviews in food science and nutrition*. 58(3), 450-462.
- Paéz, R., Lavari, L., Vinderola, G., Audero, G., Cuatrin, A., Zaritzky, N., dan Reinheimer, J. 2012. Effect of heat treatment and spray drying on lactobacilli viability and resistance to simulated gastrointestinal digestion. *Food Research International*, 48(2), 748-754.
- Rabiei, M., Zarrini, G., dan Mahdavi, M. 2020. *Lactobacillus casei* UT1 Isolated from Northwest of Iran Traditional Curd Exerts Anti-proliferative and Apoptosis Inducing Effects in Human Colorectal Tumor HCT 116 Cells. *Advanced pharmaceutical bulletin*, 10(1), 125.
- Saputri, R., Syauqi, A., dan Santoso, H. 2019. Penambahan nutrisi *pottato dextrose agar* pada pembuatan starter mikroorganisme jamur dengan bahan baku tepung beras. *Biosaintropis (Bioscience-Tropic)*. 4(2). 40-45.
- Savedboworn, W., Noisumtang, C., Arunyananon, C., Kongcharoen, P., Phungamngoen, C., Rittisak, S., dan Phattayakorn, K. 2020. Potential of protein-prebiotic as protective matrices on the storage stability of vacuum-dried *probiotic Lactobacillus casei*. *LWT*. 131. 109578.
- Setiarto, R. H. B., Widhyastuti, N., dan Saskiawan, I. 2016. Pengaruh fermentasi fungi, bakteri asam laktat dan khamir terhadap kualitas nutrisi tepung sorgum. *Agritech*, 36(4), 440-449.
- Shin, Y., Kang, C. H., Kim, W., dan So, J. S. 2019. Heat adaptation improved cell viability of probiotic *Enterococcus faecium* HL7 upon various environmental stresses. *Probiotics and antimicrobial proteins*. 11(2). 618-626.
- Soraya, H. 2016. Analisis Sifat Fisik Dan Kimia Pada Pembuatan Modifikasi Tepung Umbi Gadung (*Dioscorea Hispida Dennst*) Dengan Proses Fermentasi Menggunakan *Lactobacillus Plantarum* (Doctoral dissertation, Universitas Brawijaya).
- Stephan, D., Da Silva, A.P.M., dan Bisutti, I.L. 2016. Optimization of a freeze-drying process for the biocontrol agent *Pseudomonas* spp. and its influence on viability, storability and efficacy. *Biol Control* 94: 74–81.



UNIVERSITAS
GADJAH MADA

Ketahanan Hidup Inokulum Bakteri Asam Laktat yang Diformulasikan dalam Bentuk Serbuk
AMELIA NUR SALSABILA, Ir. Donny Widiyanto, Ph.D.; Ir Ngadiman, M.Si., Ph.D.
Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

- Tan, D.T., Poh, P.E. dan Chin, S.K. 2018. Microorganism preservation by convective air-drying - A review. *Drying Technology: An International Journal*. 36(7): 764-779.
- Urry, L. A., M. L. Cain, S. A. Wasserman, P. V. Minorsky, dan J. B. Reece. 2014. *Campbell Biology*, 11th edition. London: Pearson
- Zhang, C., Lu, J., Yang, D., Chen, X., Huang, Y., dan Gu, R. 2018. Stress influenced the aerotolerance of *Lactobacillus rhamnosus* hsryfm 1301. *Biotechnology letters*. 40(4). 729-735.