



DAFTAR PUSTAKA

- Bakke, A.M., 2011. *Soybean Meal in Diets for Cultured Fishes in: Soybeans: Cultivation, Uses and Nutrition*. New York: Nova Science Publishers, Inc.
- Bellaloui, N., Reddy, K.N., Bruns, H.A., Gillen, A.M., Mengistu, A., Zobiole, L.H.M., Fisher, D.K., Abbas, H.K., Zablotowicz, R.M., Kremer, R.J., 2011. *Soybean Seed Composition and Quality: Interactions of Environment, Genotype, and Management Practice*. New York: Nova Science Publisher, Inc.
- Chandan, C.R., Kilara, A., 2013. *Manufacturing Yoghurt and Fermented Milks*. UK: Wiley-Blackwell.
- Debruyne, I., 2006. *Soy Applications in Food*. Boca Raton: CRC Press.
- Fuller R., 1992. *History and development of probiotic*, In: *Probiotic the Scientific Basic*. Netherlands: Chapman and Hall.
- Imeson, A., 2010. *Food Stabilizers, thickeners and gelling agents*. UK: Blackwell Publishing Ltd.
- Koswara, S., 1995. *Teknologi Pengolahan Kedelai Menjadi Makanan Bermutu*. Jakarta: Pustaka Sinar Harapan.
- Laaman, T.R., 2011. *Hydrocolloids in Food Processing*. USA: Willey Blackwell Publishing.
- Liu, K., 1997. *Soybean: Chemistry, Technology, and Utilization*. New York: Chappman and Hall.
- Liu, K., 2008. *Soybeans: Chemistry, Production, Processing, and Utilization*. Urbana: AOCS Press.
- Rosiana, H., 2005. *Analisis Viskositas*. Jakarta: Rineka Cipta.
- Shurtleff, W., dan Aoyagi, A., 1984. *The Book of Tofu: Tofu and Soymilk Production*. Vol ke-2. USA: The Soybean Center, Lafayatte.
- Smith, A.K., dan Circle, S.J., 1972. *Soybean: Chemistry and Technology*. Westport: AVI Publishing Company Inc.
- Tamime, A.Y., dan Robinson, R.K., 2007. *Yoghurt Science and Technology: Second Edition*. England: Woodhead Publishing Limited.
- Tiwari, B.K., dan Troy, D.J., 2015. *Seaweed Sustainability, Food and Non-Food Applications*. UK: Academic Press.
- Wang, T., 2008. *Minor Constituents and Phytochemicals of Soybeans*. Urbana: AOCS Press.



Yildiz, F., 2010. *Development and Manufacture of Yoghurt and Other Functional Dairy Products*. New York: CRC Press.

Jurnal:

Alkali J.S., Okonkwo T.M., dan Lordye E.M., 2008. Effects of stabilizer on the physicchemical attributes of thermized yoghurt. *African Journal of Biotechnology*, vol. 7, no.2, hal. 158-163.

Ayu PP, I.D.S, 2021. Lactic acid bacteria (*Lactobacillus bulgaricus* and *Streptococcus thermophilus*) in yoghurt inhibit the growth of *Escherichia coli*, *Salmonella typhymutim*, and *Shigella sp*. In vitro. *Jurnal Kedokteran Brawijaya*, vol.31, no.4, hal.211-215.

Badan Standar Nasional, 2009. SNI 2981:2009 Yoghurt.

Balqis, A.M.I., Khaizura, M.A.R.N., Russly, A.R., Hanani, Z.A.N., 2017. Effects of plasticizers on the physicochemical properties of kappa-carrageenan films extracted from Eucheuma cottonii. *International Journal of Biological Macromolecules*, vol. 103, hal. 721-732.

Beal, L., Mehta, T., 1985. Zinc and phytate distribution in peas. Influence of heat treatment, germination, pH, substrate, and phosphorus on pea phytate and phytase. *J. Food Sci.*, vol.50, hal.96-100.

Chang, S.Y., Kim, D.H., Han, M.J., 2010. Physicochemical and sensory characteristics of soy yogurt fermented with *Bifidobacterium breve* K-110, *Streptococcus thermophilus* 3781, or *Lactobacillus acidophilus* Q509011. *Food Sci. Biotechnol*, vol.19, no.1, hal. 107-113.

Cheng, Y.J., 1988. Comparison of Dairy Yogurt with Imitation Yogurt Fermented by Different Lactic Culture from Soybean Milk. *Thesis*. Texas Tech University.

Djali, M., Huda, S., Andriani, L., 2018. Karakteristik fisikokimia yoghurt tanpa lemak dengan penambahan *whey protein concentrate* dan gum xanthan. *Agritech*, vol.38, no.2, hal.178-186.

Eze, C.M., Aremu, K.O., Alamu, E.O., 2020. Impact of type and level of stabilizers and fermentation period on the nutritional, microbiological and sensory properties of short-set yoghurt. *Food Science & Nutrition*, vol. 9, hal. 5477-5492.

Food Agriculture Organization, 2018. *The Global Status of Seaweed Production, Trade and Utilization*, vol.124, Roma.

Glicksman, M., 1987. Utilization of seaweed hydrocolloids in food industry. *Hydrobiologia*, vol.151, no.1, hal. 31-47.



- Gonzalez, N.J., Adhikari, K., Sancho-Madriz, M.F., 2011. Sensory characteristics of peach-flavored yoghurt drinks containing prebiotics and synbiotics. *LWT-Food Science and Technology*, vol.44, hal.158-163.
- Hendarto, D.R., Handayani, A.P., Esterelita, E., Handoko, Y.A., 2019. Mekanisme biokimiawi dan optimisasi *Lactobacillus bulgaricus* dan *Streptococcus thermophilus* dalam pengolahan yoghurt yang berkualitas. *J. Sains Dasar*, vol.8, no.1, hal. 13-19.
- Holdt, S.L. dan Kraan, S., 2011. Bioactive compounds in seaweed: functional food applications and legislation. *J Appl Phycol*, vol. 23, hal.543-597.
- Jayanti,S., Bintari, S.H., Iswari, R.S., 2015. Pengaruh penambahan konsentrasi susu sapi dan waktu fermentasi terhadap kualitas soyghurt. *Unnes Journal of Life Science*, vol.4, no.2, hal.79-84.
- Kalab, M., 1979. Microstructure of dairy foods: Milk products based on protein. *Journal of Dairy Science*, vol 62, no. 8, hal. 1352-1364.
- Kampf, N., dan Nussinovitch,A., 1997. Rheological characterization of kappa-carrageenan soy milk gels. *Food Hydrocolloids*, vol.11, no.3, hal. 261-269.
- Kesika, P., Sivamruthi, B.S., Chaiyasut, C., 2022. A review on the functional properties of fermented soymilk. *Food Sci. Technol*, vol. 42.
- Krisnaningsih A.T.N., Kustyorini, T.I.W., Meo, M., 2020. Pengaruh penambahan pati talas (*Colocasia esculenta*) sebagai stabilizer terhadap viskositas dan uji organoleptik yoghurt. *Jurnal Sains Peternakan*, vol.8, no.1, hal.66-76.
- Li J.M., dan Nie S.P., 2016. The functional and nutritional aspects of hydrocolloids in foods. *Food Hydrocolloids*, vol 53, Hal.46-61.
- Li, L., dan Yang, M., 2010. Physicochemical, textural and sensory characteristics of probiotic soy yoghurt prepared from germinated soybean. *Food Technol. Biotechnol*, vol. 48, no. 4, hal. 490-496.
- Lindawati,S.M., Suardana, I.W., 2016. Isolasi dan identifikasi spesies bakteri asam laktat penghasil senyawa antimikroba asal kolon sapi bali. *Jurnal Veteriner*, vol. 17, no. 4, hal. 576-581
- Manab, A., 2008. Kajian sifat fisik yogurt selama penyimpanan pada suhu 4°C. *Jurnal Ilmu dan Teknologi Hasil Ternak*, vol. 3, no.1, hal. 52-58.
- Milovanovic, B., Djekic I., Miocinovic, J., Djordjevic, V., Lorenzo., J.M., Barba, F.J., Morlen, D., Tomasevic, I., 2020. What is the color of milk and dairy products and how is it measured. *Foods*, vol. 9.

- Mital, B.K., dan Steinkraust,K.H., 1975. Utilization of oligosaccharides by lactic acid bacteria during fermentation of soy milk. *J.Food Science*, vol. 40, hal.114-118.
- Mugiyanto, E., dan Slamet, 2018. Pengaruh konsentrasi stabilizer dalam formulasi *fruitgurt cavendish*, *Jurnal Farmasi Sains dan Praktis*. vol.4, no.2, hal.67-72.
- Naibaho, B., Hutagalung, H., Pandiangan, S., 2020. The effect of comparison between soybean extract and jicama extract and duration of fermentation on soyghurt quality. *Jurnal Visi Eksakta (JVIEKS)*, vol.1, no.1, hal. 142-163.
- Nuryady, M. M, T. Istiqomah, R. Faizah, and S Ubaidillah. 2013. Isolasi dan Identifikasi Bakteri Asam Laktat Asal Youghurt (Isolation And Identification of Lactic Acid Bacteria From Youghurt). *Unej Jurnal*, vol. 1, no. 5, hal. 1–11.
- Oroian, M.A., Gutt, S., Gutt, G., 2011. Influence of hydrocolloids on the rheological behavior of blueberries yoghurt. *Proceedings of the 22nd International DAAAM Symposium*, vol. 22, no. 1, hal. 1031-1032.
- Osana, N.D., Henriksson, A., Shah N.P., dan Vasilkevic, T., 2007. Rheological properties and sensory characteristics of set-type soy-yoghurt. *J. Agric Food Chem*, vol.55, hal. 9868-9876.
- Park, M.J., dan Lee, S.Y., 2015. Quality characteristics of sot yogut produced using proteases and mixed microbial consortia. *J. Korean Soc Appl Biol Chem*, vol 58, no. 5, hal. 761-769.
- Posecion, N.C., Crowe, N.L., Robinson,A.R., Asiedu, S.K., 2005. The development of a goat's milk yoghurt, *Journal of the Science of Food and Agriculture*, vol. 85, hal. 1909-1913.
- Putri, N.P., Sanjaya, A.S., Sari, N.K., Sari, R.P., Bindar, Y., 2018. Carrageenan Extracted from Eucheuma cottonii Through Variant of Drying Time. *Proceeding of MATEC Web of Conferences* 156, Bandung: 14 Maret 2018, hal. 1-3.
- Prajapati, V.D., Maheriya, P.M., Jani, G.K., Solanki, H.K., 2014. Carrageenan: a natural seaweed polysaccharide and its applications. *Carb. Poly.*, vol. 105, hal. 97–112.
- Priadi, G., Setiyingningrum, F., Afiat., 2019. The shelf life of yogurt starter and its derivatives based on the microbiological, physical and sensory aspects. *IOP Conf. Series: Earth and Environmental Science* 462, Indonesia.
- Raharjanti, Z., Pramono, Y.B., Al-Baarri, A.N., 2019. Nilai pH dan kekentalan cocogurt dengan penambahan ekstrak daun stevia. *Jurnal Teknologi Pangan*, vol. 3, no. 2, hal. 305-308.



- Rana, M. R., Babor, M., Sabuz, A.A., 2021. Traceability of sweeteners in soy yoghurt using linear discriminant analysis of physicochemical and sensory parameters. *Journal of Agriculture and Food Research*, vol. 5, hal. 1-6.
- Rivai, A.A., Syam, H., Rauf, R.F., Jamaluddin, 2020. Pengaruh umur panen terhadap produksi rumput laut *Eucheuma cottonii* di Kabupaten Takalar saat musim timur. *Jurnal Pendidikan Teknologi Pertanian*, vol.6, no.2, hal.361-371.
- Rohman, E., dan Maharani, S., 2020. Peranan warna, viskositas dan sineresis terhadap produk yoghurt. *Edufortech*, vol.5, no.2.
- Simanjuntak, P.L., Sitohang, A., Sihombing, D.S., Pandiangan, M., Tampubolon, S.D.R., Panjaitan, D., Sibuea, P., Zega, A.V., Harefa, K.S.E., 2018. Quality improvement of yogurt through the addition of corn and tomato juice. *IOP CONF Series: Earth and Environmental Science* 205 (012047).
- Syachroni, Maruddin, F., Yuliati, F.N., Mukhlisah, A.N., 2020, Karakteristik mikrobiologi dan kimiawi susu fermentasi menggunakan kultur campuran *Lactobacillus plantarum* dan *Lactobacillus acidophilus*. *Jurnal Sains dan Teknologi Peternakan*, vol.1, no. 2, hal. 26-41.
- Sagdic, O., Simsek, B., Orhan, H., Dogan, M., 2004. Effect of kappa-carrageenan on bacteria and some characteristics of yoghurt. *Milchwissenschaft*, vol.59, no.1-2, hal.45-47.
- Schnebly, S. R. dan Fehr, W. R., 1993. Effect of years and planting dates on fatty acid composition of soybean genotypes. *Crop Sci.*, vol. 33, hal.716-719.
- Setioningsih, E., Setyaningsih, R., Susilowati, A., 2004. Pembuatan minuman probiotik dari susu kedelai dengan inokulum *Lactobacillus casei*, *Lactobacillus plantarum*, dan *Lactobacillus acidophilus*. *Bioteknologi*, vol.1, no.1, hal.1-6.
- Shaker,R., Jumah, R., Abu-Jdayil, B., 2010. Rheological properties of plain yogurt during coagulation process: impact of fat content and preheat treatment oil milk. *Journal of Food Engineering*, vol.44, hal.175-180.
- Sigit, S., Enggar, P., Narumi, H.E., Utami, S., 2010. Potensi sari kedelai hitam dan sari kedelai kuning terhadap kadar trigliserida tikus(*Rattus norvegicus*) dengan diet tinggi lemak. *Veterinaria Medika*, vol.3, no.1, hal.57-59.
- Skryplonek, K., Henriques, M., Gomes, D., Viegas, J., Fonseca, C., Pereira, C., Dmytrow, I., Mituniewicz-Malek,A., 2019. Characteristics



of lactose-free frozen yoghurt with k-carrageenan and cornstarch as stabilizers. *J. Dairy Sci.*, vol. 102, no. 9.

Soukoulis, C., Panagiotidis, P., Koureli, R., Tzia, C., 2007. Industrial yoghurt manufacture: monitoring of fermentation process and improvement of final product quality. *J. Dairy Sci*, vol. 90, hal. 2641-2654.

Stern N.J., Konishi, F., Hesseltine C.W., Wang H.L., 1977. *Lactobacillus acidophilus* utilization of sugars and production of a fermented soybean product, Canadian Institute of Food Science and Technology Journal. vol. 10, no. 3, hal. 197-200.

Tangyu, M., Muller, J., Bolten, C.J., Witmann, C., 2019. Fermentation of plant-based milk alternatives for improved flavour and nutritional value. *Applied Microbiology and Biotechnology*, vol. 103, hal 9263-9275.

Wahyuningtyas, D., 2017. Pemanfaatan susu kedelai menjadi produk minuman sehat soyghurt bagi warga Dusun Blawong II, Jetis, Kabupaten Bantul. *Jurnal Inovasi Proses*, vol.2, no.2, hal.78-83.

Widiantoko, R. K., dan Yunianta, 2014. The making of ice cream from tempe and ginger: study of raw materials proportion and stabilizers proportions on the physical, chemical and organoleptic properties). *Jurnal Pangan dan Agroindustri*, vol. 2, hal. 54-66.

Yusmarini, Indrati, R., Utami, T., Marsono, Y., 2009. Isolasi dan identifikasi bakteri asam laktat proteolitik dari susu kedelai yang terfermentasi spontan. *Jurnal Natur Indonesia*, vol.12, no.1, hal.28-33.

Yusmarini, Indrati, R., Utami, T., Marsono, Y., 2010. Aktivitas Proteolitik bakteri asam laktat dalam fermentasi susu kedelai. *J.Teknol. dan Industri Pangan*, vol.21, no. 2, hal.129-134.

Adie, M.M., Krisnawati, A., 2016. *Biologi Tanaman Kedelai*, Balai Penelitian Tanaman Kacang-kacangan dan Umbi-umbian, Malang [Online]. Available at: https://balitkabi.litbang.pertanian.go.id/wp-content/uploads/2016/03/dele_3.muchlish-1.pdf [diakses pada 30 April 2022]

CP Kelko, 2001. GENU Carrageenan Books. [Online]. Available at: [http://www.bisi.cz/cmsres.axd/get/cms\\$7CVwRhc3USVqgzxkKF96gI\\$2BChNrXcTq\\$2BOUdiEtz5TfYA\\$2Fg1ADRHMfXfdEjUsYQagqUs9N6byPOkok\\$3D](http://www.bisi.cz/cmsres.axd/get/cms$7CVwRhc3USVqgzxkKF96gI$2BChNrXcTq$2BOUdiEtz5TfYA$2Fg1ADRHMfXfdEjUsYQagqUs9N6byPOkok$3D) [Diakses pada 20 Juni 2022].

Ginting, E., dan Tastra, I.K., 2016. *Standar Mutu Biji Kedelai*, Balai Penelitian Tanaman Kacang-kacangan dan Umbi-umbian, Malang



UNIVERSITAS
GADJAH MADA

Pengaruh Penambahan Kappa Karagenan terhadap Karakteristik Fisik, Kimia, dan Sensoris Yoghurt Sari Kedelai

DINDA NABILA, Dr. Rini Yanti, S.T.P., M.P.; Dr. Dian Anggraini Suroto, S.T.P., M.P., M.Eng.

Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

[Online]. Available at: https://balitkabi.litbang.pertanian.go.id/wp-content/uploads/2016/03/dele_19.erli_.pdf [diakses pada 30 April 2022]

Kementerian Kelautan dan Perikanan, 2019. *Rumput Laut, Komoditas Penting yang Belum Dioptimalkan* [Online]. Available at: <https://kkp.go.id/djpdspkp/bbp2hp/artikel/14127-rumput-laut-komoditas-penting-yang-belum-dioptimalkan> [Diakses pada 03 Januari 2022]