

DAFTAR PUSTAKA

- AOAC. 2005. Official Methods of Analysis of the Association of Analytical Chemist. Association of Official Analytical Chemist, Inc, Virginia, USA.
- Adjali, A., Clarot, I., Chen, Z., Marchioni, E., and Boudier, A. 2022. Physicochemical degradation of phycocyanin and means to improve its stability: A short review. *Journal of Pharmaceutical Analysis*, 12(3), 406-414.
- Arlyza, I. S. 2005. *Phycocyanin* dari mikroalga bernilai ekonomis tinggi sebagai produk industri. *Oseana*, XXX (3) : 27-36.
- Tambak, A. F. B. R. T. 2020. Pendugaan umur simpan es krim *spirulina platensis* dengan gliserol monostearat-lestin sebagai emulsifier dan natrium alginat-k-karagenan sebagai stabilizer menggunakan metode *accelerated shelf life test*. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.
- Asiah, N., L. Cempaka, dan W. David. 2018. Panduan Praktis: Pendugaan Umur Simpan Produk Pangan. UB Press. Jakarta.
- Badan Pusat Statistik. 2023. Statistik Konsumsi Pangan 2023. Jakarta : BPS.
- Biagini, A., Refrigeri, N., Caglioti, C., Sabbatini, P., Ticconi, S., Ceccarelli, G., and Fioretti, B. 2024. Accelerated stability testing in food supplements underestimates shelf life prediction of resveratrol with super-*arrhenius* behavior. *Symmetry*, 16(4), 493.
- Boyanova, P., Gradinarska, D., Dobрева, V., Panayotov, P., Momchilova, M., and Zsivanovits, G. 2022. Effect of *spirulina platensis* on the quality and antioxidants characteristics of ice cream. In *BIO Web of Conferences* (Vol. 45, p. 01009). EDP Sciences.
- Buecker, S., Grossmann, L., Loeffler, M., Leeb, E., and Weiss, J. 2022. Thermal and acidic denaturation of phycocyanin from *arthrospira platensis*: effects of complexation with λ -carrageenan on blue color stability. *Food Chemistry*, 380, 132157.
- Bürck, M., Fratelli, C., Assis, M., and Braga, A. R. C. 2024. Naturally colored ice creams enriched with c-phycocyanin and *spirulina* residual biomass: development of a fermented, antioxidant, tasty and stable food product. *Fermentation*, 10(6), 304.
- Chen, M., Li, W., Wang, W., Cao, Y., Lan, Y., Huang, Q., and Xiao, J. 2022. Effects of gelation on the stability, tribological properties and time-delayed release profile of double emulsions. *Food Hydrocolloids*, 131, 107753.
- Citi, V., Torre, S., Flori, L., Usai, L., Aktay, N., Dunford, N. T., Lutz, G. A., and Nieri, P. 2024. Nutraceutical features of the phycobiliprotein c-phycocyanin: evidence from *arthrospira platensis* (*spirulina*). *Nutrients*, 16(11), 1752.
- Ennaji, H., Bourhia, M., Taouam, I., Falaq, A., Bellahcen, T. O., Salamatullah, A. M., Alzahrani, A., Alyahya, H. K., Ullah, R., Ibenmoussa, S. and Cherki, M. 2021. Physicochemical evaluation of edible cyanobacterium *arthrospira platensis* collected from the south atlantic coast of morocco: a promising source of dietary

- supplements. Evidence-Based Complementary and Alternative Medicine, 2021(1), 3337231.
- FAO. 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStat). 2021.
- Fariyah S, Yulianto B, Yudiati E. 2014. Penentuan kandungan pigmen fikobiliprotein ekstrak s. *Platensis platensis* dengan teknik ekstraksi berbeda dan uji toksisitas metode bslt. Journal of Marine Research. 140-146.
- Fatmawati, I. 2019. Peningkatan tekstur dan stabilitas es krim spirulina platensis Selama masa penyimpanan dengan mono-dan di-gliserida. Universitas Gadjah Mada. Yogyakarta.
- Feofilaktova, O., Zavorokhina, N., and Makarova, E. 2024. Application of accelerated shelf-life testing for determination of bioactive emulsion food systems' shelf life. In *E3S Web of Conferences* (Vol. 537, p. 10017). EDP Sciences.
- Fernandes, R., Campos, J., Serra, M., Fidalgo, J., Almeida, H., Casas, A., Toubarro, D. and Barros, A. I. 2023. Exploring the benefits of phycocyanin: From Spirulina cultivation to its widespread applications. *Pharmaceuticals*, 16(4), 592.
- Goff, H.D., and R.W. Hartel. 2013. Ice Cream (7th ed.). Springer, New York.
- Gustiningtyas, A., Setyaningsih, I., Hardiningtyas, S. D., dan Susila, A. A. R. 2020. Improvement stability of phycocyanin from spirulina platensis encapsulated by water soluble chitosan nanoparticles. In *IOP 71 Conference Series: Earth and Environmental Science*. 414(1), 1-8.
- Grebenteuch, S., Kroh, L. W., Drusch, S., and Rohn, S. 2021. Formation of secondary and tertiary volatile compounds resulting from the lipid oxidation of rapeseed oil. *Foods*, 10(10), 2417.
- Harris, H., dan M. Fadli. 2014. Penentuan umur simpan (shelf life) pundang seluang (*rasbora* sp) yang dikemas menggunakan kemasan vakum dan tanpa vakum. *Jurnal Saintek Perikanan*. 9(2): 53-62.
- Hoseini, S. M., Khosravi-Darani, K., and Mozafari, M. R. 2013. Nutritional and medical applications of spirulina microalgae. *Mini reviews in medicinal chemistry*, 13(8), 1231-1237. Doi: 10.2174/1389557511313080009.
- International Dairy Federation. 1991. International Standard 74A, Method Determination of Peroxide Value in Anhydrous Milk Fat. Brussels (BE): International Dairy Federation, IDF.
- Jaeschke, D. P., Teixeira, I. R., Marczak, L. D. F., and Mercali, G. D. 2021. Phycocyanin from Spirulina: A review of extraction methods and stability. *Food Research International*, 143, 110314.
- Li, Y., Ding, S., and Wang, Y. 2022. Shelf life predictive model for postharvest shiitake mushrooms. *Journal of Food Engineering*, 330, 111099.
- Liu, R., Qin, S., and Li, W. 2022. Phycocyanin: Anti-inflammatory effect and mechanism. *Biomedicine & Pharmacotherapy*, 153, 113362.

- Liu, Y., Wu, Q., Zhang, J., Yan, W., and Mao, X. 2024. Food emulsions stabilized by proteins and emulsifiers: a review of the mechanistic explorations. *International Journal of Biological Macromolecules*, 261, 129795.
- Maharani, A. B. 2024. Pendugaan umur simpan es krim dengan inulin dan ekstrak fikosianin *arthrospira platensis* menggunakan metode *accelerated shelf-life test* melalui model *arrhenius*. Doctoral dissertation, Universitas Gadjah Mada.
- Markou, G., Kougia, E., Arapoglou, D., Chentir, I., Andreou, V., and Tzovenis, I. 2023. Production of *arthrospira platensis*: effects on growth and biochemical composition of long-term acclimatization at different salinities. *Bioengineering*, 10(2), 233.
- Margiati, D., D. Ramdani, and A.P. Wulandari. 2019. Comparative study of antioxidant phycocyanin extracts activity between s. *Platensis* with s. *Fusififormis* using dpph method. *Indonesian Journal of Pharmaceutical Science and Technology*, 6(2): 52-58.
- Neti, M.L., V. Larasati, and Herlina, P.A. 2018. A natural combination extract of mangosteen pericarp and phycocyanin of *spirulina platensis* decreases plasma malonaldehyde level in acute exercise-induced oxidative stress. *Majalah Ilmiah Sriwijaya*, 30(17): 1-16.
- Noorannisa, S., dan Ekantari, N. 2020. Stability of *spirulina platensis* ice cream and shelf life prediction using *accelerated shelf life test* method based on physical and antioxidant analysis. In *E3S Web of Conferences* (Vol. 147, p. 03007). EDP Sciences.
- Ntzimani, A., Tsevdou, M., Andrianos, E., Gounaris, D., Spiliotopoulos, T., Taoukis, P., and Giannakourou, M. C. 2025. Validating *accelerated shelf life testing* methodology for predicting shelf life in high-pressure-processed meat products. *Applied Sciences* (2076-3417), 15(3).
- Palazolo, G. G., Sobral, P. A., and Wagner, J. R. 2011. Freeze-thaw stability of oil-in-water emulsions prepared with native and thermally-denatured soybean isolates. *Food hydrocolloids*, 25(3), 398-409.
- Park, J. M., Koh, J. H., dan Kim, J. M. 2018. Predicting shelf-life of ice cream by accelerated conditions. *Korean journal for food science of animal resources*, 38(6), 1216.
- Park, W. S., Kim, H. J., Li, M., Lim, D. H., Kim, J., Kwak, S. S., and Ahn, M. J. 2018. Two classes of pigments, carotenoids and c-phycocyanin, in *spirulina* powder and their antioxidant activities. *Molecules*, 23(8), 1-11.
- Patel, A., Mishra, S., Pawar, R., and Ghosh, P. K. 2005. Purification and characterization of c-phycocyanin from cyanobacterial species of marine and freshwater habitat. *Protein expression and purification*, 40(2), 248-255.
- Prabakaran, G., Sampathkumar, P., Kavisri, M., and Moovendhan, M. 2020. Extraction and characterization of phycocyanin from *spirulina platensis* and evaluation of its anticancer, antidiabetic and antiinflammatory effect. *International journal of biological macromolecules*, 153, 256-263.

- Putra, H. B. P., Al-Baarri, A. N. M., Saputra, F. D., Cahyanti, F. P., and Dewi, S. 2024. The impact of ginger extract (*zingiber officinale rosc.*) Addition on *overrun* value, melting resistance, viscosity, and hedonic ratings in gelato. *Journal of Applied Food Technology*, 11(1), 14-19.
- Raczyk, M., K. Polanowska., B. Kruszewski., A. Grygier, and D. Michalowska. 2022. Effect of spirulina (*arthrospira platensis*) supplementation on physical and chemical properties of semolina (*triticum durum*) based fresh pasta. *Molecules*. 27(2): 1-13.
- Ridlo, A., Sedjati, S., dan Supriyantini, E. 2016. Aktivitas antioksidan fikosianin dari spirulina sp. Menggunakan metode transfer elektron dengan dpph (1, 1-difenil-2-pikrilhidrazil). *Jurnal Kelautan Tropis*, 18(2).
- Rojas-Franco, P., Garcia-Pliego, E., Vite-Aquino, A. G., Franco-Colin, M., Serrano-Contreras, J. I., Paniagua-Castro, N., and Cano-Europa, E. 2022. The nutraceutical antihypertensive action of c-phycoyanin in chronic kidney disease is related to the prevention of endothelial dysfunction. *Nutrients*, 14(7), 1464.
- Romay, C., Armesto, J., Ramirez, D., Gonzalez, R., Ledon, N., & Garcia, I. 1998. Isolation and purification of phycocyanin from *Spirulina platensis*. *Methods in Molecular Biology*, 31, 289-295.
- Sacchi, R., N. *et al.* 2019. Sensory profile, biophenolic and volatile compounds of an artisanal ice cream ('gelato') functionalized using extra virgin olive oil. *International Journal of Gastronomy and Food Science*, 18: 100-173.
- Saldanha, A. 2022. Influence of celebrity endorsements on the purchase of ice cream during covid pandemic. *Ushus Journal of Business Management*, 21(1), 01-16.
- Sari, Dian Erlina. 2024. Pengaruh penambahan ekstrak fikosianin dari *arthrospira platensis* terhadap karakteristik fisik dan sensoris gelato. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.
- Secondi, L. 2019. Expiry Dates, Consumer Behavior, and Food Waste: How Would Italian Consumers React If There Were No Longer "Best Before" Labels?. *Sustainability*, 11(23), 6821.
- Sheu, M. J., Hsieh, Y. Y., Lai, C. H., Chang, C. C., and Wu, C. H. 2013. Antihyperlipidemic and antioxidant effects of c-phycoyanin in golden syrian hamsters fed with a hypercholesterolemic diet. *Journal of Traditional and Complementary Medicine*, 3(1), 41-47.
- Shingh, S., Rani, R., and Kanse, S. 2020. A review on gelato: an italian delicacy. *Emergent Life Sciences Research*, 6, 74-81.
- Shiota, M. N. Takahashi, H. Konishi, and T. Yoshioka. 2004. Impact of oxidized off-flavor of ice cream prepared from milk fat. *AOCS* 81(5): 455-60.
- Sitnikova, P. B., dan Tvorogova, A. A. 2022. Storage temperature effect on structural elements of ice cream. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1052, No. 1, p. 012073). IOP Publishing.

- SNI. 2018. 3713-2018. Standar Nasional Indonesia (SNI). Es Krim. Jakarta: Badan Standarisasi Nasional.
- Soukoulis, Christos, Iason Chandrinos, and Constantina Tzia. 2008. Study of the functionality of selected hydrocolloids and their blends with κ -carrageenan on storage quality of vanilla ice cream. *Lwt* 41(10): 1816–27.
- Spinola, M.P., M.M. Costa, and J.A. Prates. 2022. Digestive constraints of *arthrospira platensis* in poultry and swine feeding. *Foods*. 11(19): 1-14.
- Tamimi, W., Nurwantoro, N., dan Bintoro, V. P. 2019. Karakteristik gelato susu kambing dengan penambahan ekstrak daun pegagan. *Jurnal Teknologi Pangan*, 3(1), 51-62.
- Thevarajah, B., Nishshanka, G. K. S. H., Premaratne, M., Nimarshana, P. H. V., Nagarajan, D., Chang, J. S., and Ariyadasa, T. U. 2022. Large-scale production of spirulina-based proteins and c-phycoyanin: a biorefinery approach. *Biochemical Engineering Journal*, 185, 108541.
- Yoga, I. K.W. 2015. Penentuan konsentrasi optimum kurva standar antioksidan; asam Galat, asam askorbat dan trolox® terhadap radikal bebas dp_{ph} (2, 2-Diphenyl-1-picrylhydrazyl) 0, 1 mm. In *Prosiding Seminar Nasional MIPA*.
- Yu, C., Hu, Y., Zhang, Y., Luo, W., Zhang, J., Xu, P., and Shao, S. 2024. Concurrent enhancement of biomass production and phycoyanin content in salt-stressed *Arthrospira platensis* A glycine betaine-supplementation approach. *Chemosphere*, 353, 141387.
- Zhang, D. 2017. A coefficient of determination for generalized linear models. *The American Statistician*, 71(4), 310-316.