

DAFTAR PUSTAKA

- A'yun, S., Triastuti, J., & Saputra, E. (2021). Edible straw formulation from caragenant and gelatin as a solution in reducing plastic waste. *The 3rd International Conference on Fisheries and Marine Sciences*. <https://doi.org/10.1088/1755-1315/718/1/012007>
- Abdillah, A. A., Lee, R. C., & Charles, A. L. (2024). Improving physicochemical properties of arrowroot starch films incorporated with kappa-carrageenan: Sweet cherry coating application. *International Journal of Biological Macromolecules*, 277(P1), 133938. <https://doi.org/10.1016/j.ijbiomac.2024.133938>
- Abera, B., Duraisamy, R., & Birhanu, T. (2024). Study on the preparation and use of edible coating of fish scale chitosan and glycerol blended banana pseudostem starch for the preservation of apples, mangoes, and strawberries. *Journal of Agriculture and Food Research*, 15(December 2023), 100916. <https://doi.org/10.1016/j.jafr.2023.100916>
- Alimi, B. A., Hoque, M., Pathania, S., Wilson, J., Duffy, B., & Celayeta Frias, J. M. (2023). Structural, thermal, optical, and mechanical properties of composite films developed from the button mushroom (*Agaricus bisporus*)-sourced high molecular weight chitosan and potato starch. *Lwt*, 185(August), 115201. <https://doi.org/10.1016/j.lwt.2023.115201>
- Asfaw, W. A., Tafa, K. D., & Satheesh, N. (2023). Optimization of citron peel pectin and glycerol concentration in the production of edible film using response surface methodology. *Heliyon*, 9(3), e13724. <https://doi.org/10.1016/j.heliyon.2023.e13724>
- Azkiah, F., & Indarti, E. (2022). Edible Straw Berbasis Bahan Alami Sebagai Pengganti Konvensional Straw. *Prosiding Seminar Nasional Penelitian Dan Pengabdian*, 2(September), 91–96.
- Bhowmik, S., Agyei, D., & Ali, A. (2024). Enhancement of mechanical, barrier, and functional properties of chitosan film reinforced with glycerol, COS, and gallic acid for active food packaging. *Sustainable Materials and Technologies*, 41(August), e01092.

- <https://doi.org/10.1016/j.susmat.2024.e01092>
- Chau, N. M., Hieu, T. Q., Vuong, D. D., Truc, H. T., Hoa, T. N., Van, N. T. A., & Vuong, N. D. (2024). Effects of Three Modified Starches on The Physicochemical Properties of Chitosan-Based Packaging Film. *Tropical Journal of Natural Product Research*, 8(11), 9281–9286.
- Djaafar, T. F., Sarjiman., & Pustika, A. B. (2010). Pengembangan Budidaya Tanaman Garut dan Teknologi Pengolahannya untuk Mendukung Ketahanan Pangan. *Jurnal Litbang Pertanian*, 29(1), 25–33.
- Dong, J., Chen, X., Li, Y., Luan, M., Yang, X., Chen, H., Koosha, M., Zhai, Y., & Fakhrullin, R. F. (2024). Hydrophilic chitosan: modification pathways and biomedical applications. *Russian Chemical Reviews*, 93(5), RCR5120. <https://doi.org/10.59761/rcr5120>
- Donmez, D., Pinho, L., Patel, B., Desam, P., & Campanella, O. H. (2021). Characterization of starch–water interactions and their effects on two key functional properties: starch gelatinization and retrogradation. *Current Opinion in Food Science*, 39, 103–109. <https://doi.org/10.1016/j.cofs.2020.12.018>
- Ewais, A., Ghany, A. A., Saber, R. A., Sharaf, A., & Sitohy, M. (2021). Evaluation of Chitosan As a New Natural Preservative in Orange Juice. *Journal of Productivity and Development*, 26(4), 737–754. <https://doi.org/10.21608/jpd.2021.203483>
- Fan, W., Zong, H., Zhao, J., & Li, Q. (2023). Effect of chitosan concentration on physicochemical properties of starch-based straws. *Green Materials*, 11(2), 50–59. <https://doi.org/10.1680/JGRMA.22.00021>
- Hariyono, K., Sari, V. K., Yuli Rusdiana, R., Fariroh, I., Kristiyanti Putri, W., Pudji Restanto, D., & Noviana, L. (2022). INVENTARISASI DAN IDENTIFIKASI MORFOLOGI TANAMAN GARUT (*Maranta arundinaceus* L.) DI KABUPATEN JEMBER. *Jurnal Penelitian Pertanian Terapan*, 22(3), 238–246. <https://doi.org/10.25181/jppt.v22i3.2257>
- Huang, P. H., Chen, Y. J., Lin, Y. W., & Huang, D. W. (2024). Gelatin-kappa-carrageenan-based edible film incorporated with ethanol extracts from *Premna microphylla* Turcz leaves

- for preservation of sailfish fillets. *Lwt*, 208(September), 116710. <https://doi.org/10.1016/j.lwt.2024.116710>
- Jati, I. R. A. ., Natasha, L., Nugraha, D. ., Virly, & Setijawaty, E. (2023). Synergistic effect of kappa-carrageenan and konjac flour in enhancing physicochemical and organoleptic properties of wheat-based edible straw. *Food Research*, 7, 179–187.
- Ji, S., Torres, S. A. G., Chen, J., Lei, L., & Li, L. (2025). Molecular dynamics simulation of film water thickness and properties at different interfaces in partially saturated frozen soil systems. *Scientific Reports*, 15(1), 2343. <https://doi.org/10.1038/s41598-025-85975-3>
- Khairati, M. (2022). Pemurnian Gliserol. *Jurnal Jejaring Matematika Dan Sains*, 4(2), 35–40. <https://doi.org/10.36873/jjms.2022.v4.i2.706>
- Kusumawati, R., Syamdidi, Abdullah, A. H. D., Nissa, R. C., Firdiana, B., Handayani, R., Munifah, I., Dewi, F. R., Basmal, J., & Wibowo, S. (2025). Physical Properties of Biodegradable Chitosan-Cassava Starch Based Bioplastic Film Mechanics. *Science and Technology Indonesia*, 10(1), 191–200. <https://doi.org/10.26554/sti.2025.10.1.191-200>
- Lestari, I., Rosida, D. F., & Wicaksono, L. A. (2023). Study of Phycical Quality of Edible Straw from Yellow Sweet Potato Starch (*Ipomea Batatas* L .). *Jurnal Pangan Dan Agroindustri*, 11(2), 53–60.
- Liu, Y., Li, N., Zhang, X., Wei, T., Ma, M., Sun, Q., Li, M., & Xie, F. (2024). Eco-friendly drinking straws: Navigating challenges and innovations. *Trends in Food Science and Technology*, 148(April). <https://doi.org/10.1016/j.tifs.2024.104511>
- Magnoni, L. J., Gonçalves, O., Cardoso, P. G., Silva-Brito, F., Ozório, R. O. A., Palma, M., & Viegas, I. (2023). Growth performance and quality indicators of European seabass (*Dicentrarchus labrax*) fed diets including refined glycerol. *Aquaculture*, 569(January). <https://doi.org/10.1016/j.aquaculture.2023.739377>
- Malki, M. K. S., Wijesinghe, J. A. A. C., Ratnayake, R. H. M. K., & Thilakarathna, G. C. (2023). Characterization of arrowroot

- (*Maranta arundinacea*) starch as a potential starch source for the food industry. *Heliyon*, 9(9), e20033. <https://doi.org/10.1016/j.heliyon.2023.e20033>
- Muharam, T., Fitriani, D., Fataya Miftahul Jannah, D., Zidan Al Ghifari, M., & Pasonang Sihombing, R. (2022). Karakteristik Daya Serap Air Dan Biodegradabilitas Pada Bioplastik Berbasis Pati Singkong Dengan Penambahan Polyvinyl Alcohol. *Prosiding Snast*, November, D35-49. <https://doi.org/10.34151/prosidingsnast.v8i1.4152>
- Ni, H., Li, H., Hou, W., Chen, J., Miao, S., Wang, Y., & Li, H. (2024). From sea to sea: Edible, hydrostable, and degradable straws based on seaweed-derived insoluble cellulose fibers and soluble polysaccharides. *Carbohydrate Polymers*, 334, 122038. <https://doi.org/10.1016/J.CARBPOL.2024.122038>
- Nogueira, G. F., Leme, B. de O., Santos, G. R. S. dos, Silva, J. V. da, Nascimento, P. B., Soares, C. T., Fakhouri, F. M., & de Oliveira, R. A. (2021). Edible Films and Coatings Formulated with Arrowroot Starch as a Non-Conventional Starch Source for Plums Packaging. *Polysaccharides*, 2(2), 373–386. <https://doi.org/10.3390/polysaccharides2020024>
- Nogueira, G. F., Soares, C. T., Cavasini, R., Fakhouri, F. M., & de Oliveira, R. A. (2019). Bioactive films of arrowroot starch and blackberry pulp: Physical, mechanical and barrier properties and stability to pH and sterilization. *Food Chemistry*, 275(September 2018), 417–425. <https://doi.org/10.1016/j.foodchem.2018.09.054>
- Nur Farahayu Abd Rahman, S., & Amira Othman, S. (2024). Chitosan Properties: A Preliminary Review. *Journal of Advanced Mechanical Engineering Applications*, 5(1), 8–12. <https://publisher.uthm.edu.my/ojs/index.php/jamea>
- Prakoso, F. A. H., Indiarto, R., & Utama, G. L. (2023). Edible Film Casting Techniques and Materials and Their Utilization for Meat-Based Product Packaging. *Polymers*, 15(13). <https://doi.org/10.3390/polym15132800>
- Przywara, M., Przywara, R., Zapła, W., & Opaliński, I. (2023). Mechanical Properties of Solid Biomass as Affected by Moisture Content. *AgriEngineering*, 5(3), 1118–1135. <https://doi.org/10.3390/agriengineering5030071>

- Rusdianto, A. S., Hidayah, R. W., & Amilia, W. (2024). Application of Edible Coating from Konjac Flour added with Chitosan on the Quality of Red Chili. *Agroindustrial Journal*, 11(1), 34–44. <https://doi.org/10.22146/aij.v11i1.90047>
- Savitri, N. H. M., Sedjati, S., & Ridlo, A. (2024). Penambahan Sorbitol Terhadap Karakteristik Edible Straw dari Karagenan. *Journal of Marine Research*, 13(1), 115–120. <https://doi.org/10.14710/jmr.v13i1.39043>
- Setyaningrum, N. M. A., & Adi, A. C. (2022). Literature Review: Potensi Umbi Garut sebagai Pangan Alternatif untuk Penderita Diabetes Melitus. *Media Gizi Kesmas*, 11(2), 595–603. <https://doi.org/10.20473/mgk.v11i2.2022.595-603>
- Shapii, R. A., Othman, S. H., Basha, R. K., & Naim, M. N. (2022). Mechanical, thermal, and barrier properties of starch films incorporated with chitosan nanoparticles. *Nanotechnology Reviews*, 11(1), 1464–1477. <https://doi.org/10.1515/ntrev-2022-0094>
- Silvestre, J., Delattre, C., Michaud, P., & de Baynast, H. (2021). Optimization of chitosan properties with the aim of a water resistant adhesive development. *Polymers*, 13(22). <https://doi.org/10.3390/polym13224031>
- Soares, L. de S., Tonole, B., Milião, G. L., Teixeira, Á. V. N. de C., Coimbra, J. S. dos R., & de Oliveira, E. B. (2021). Aqueous solutions of glycolic, propionic, or lactic acid in substitution of acetic acid to prepare chitosan dispersions: a study based on rheological and physicochemical properties. *Journal of Food Science and Technology*, 58(5), 1797–1807. <https://doi.org/10.1007/s13197-020-04691-0>
- Sreelakshmi, P., Gladis, R., Rani, B., Shajan, V. R., Aparna, B., & Swaroop, R. (2024). Chitosan and its Derivatives for Agriculture Applications : A Review. *International Journal of Plant & Soil Science*, 36(10), 577–589.
- Sukarsa, E. (2011). Tanaman Umbi Garut. *Kementerian Pertanian*. <https://bbppplembang.bppsdp.pertanian.go.id/publikasi-detail/1138>
- Sulaeman, R., Roro, R., Diva, Z., Putri, W., Damayanti, R., & Fauzan, F. (2024). Characterization of Eco-Friendly Straw Based on Chitosan from Pupae Exuviae of Black Soldier Fly

- (*Hermetia illucens*). *AgriHealth: Journal of Agri-Food, Nutrition and Public Health*, 5(2), 92–100.
- Suryani, R. R., Hakim, A., Yusrianti, Y., Auvaria, S. W., & Mustika, I. (2021). Penambahan Chitosan Dan Plasticizer Glycerin Dalam Pembuatan Bioplastik Berbahan Dasar Ekstrak Protein Ampas Tahu. *Jukung (Jurnal Teknik Lingkungan)*, 7(2), 159–169. <https://doi.org/10.20527/jukung.v7i2.11952>
- Susilowati, E., & Lestari, A. E. (2019). Preparation and Characterization of Chitosan-Avocado Seed Starch (KIT-PBA) Edible Film. *JKPK (Jurnal Kimia Dan Pendidikan Kimia)*, 4(3), 197. <https://doi.org/10.20961/jkpk.v4i3.29846>
- Syukri, D. (2021). *Bagan Alir Analisis Proksimat Bahan Pangan (Volumetri dan Gravimetri)* (S. Hidayat, I. Anwar, & S. Ramadhanty (eds.); Pertama). Andalas University Press.
- Tarique, J., Sapuan, S. M., Khalina, A., Sherwani, S. F. K., Yusuf, J., & Ilyas, R. A. (2021). Recent developments in sustainable arrowroot (*Maranta arundinacea* Linn) starch biopolymers, fibres, biopolymer composites and their potential industrial applications: A review. *Journal of Materials Research and Technology*, 13, 1191–1219. <https://doi.org/10.1016/j.jmrt.2021.05.047>
- Wahyurini, E., & Susilowati. (2020). *Kultur Jaringan Tanaman Garut*. Lembaga Penelitian dan Pengabdian kepada Masyarakat UPN “Veteran” Yogyakarta.
- Wulandari, Y., Harini, N., & Warkoyo. (2019). Characterization of Edible Film from Starch of Taro (*Colocasia esculenta* (L.) Schott) with Addition of Chitosan on Dodol Substituted Seaweed (*Eucheuma cottonii* L.). *Food Technology and Halal Science Journal*, 1(1), 22. <https://doi.org/10.22219/fths.v1i1.7544>
- Xu, J., Liu, K., Chang, W., Chiou, B. Sen, Chen, M., & Liu, F. (2022). Regulating the Physicochemical Properties of Chitosan Films through Concentration and Neutralization. *Foods*, 11(11). <https://doi.org/10.3390/foods11111657>