

DAFTAR PUSTAKA

- Aldio, R. Z., Panuh, D., & Zaki, A. K. (2022). Pengembangan Lemari Asam dengan Variasi Kecepatan Putaran Exhaust Fan Menggunakan Sistem Otomatis. *Semesta Teknika*, 25(2), 161–169.
- Alhanannasir, A., Murtado, A. D., Muchsiri, M., Rudi, F., & Agustini, S. (2021). Aplikasi Labu Kuning sebagai Substitusi Zat Warna Kuning pada Pembuatan Kemplang. *Jurnal Dinamika Penelitian Industri*, 32(1), 19–26.
- Almaududi, M. (2020). Pengaruh Laju Aliran Udara Masuk Evaporator Terhadap Kapasitas Pendinginan (Coefficient Of Performance) Dan Kelembapan Udara Pada Sistem Refrigerasi Air Condition. *Edu ElektriKa Journal*, 9(1), 19–23.
- Amalia, R. R., Hairiyah, N., & Nuryati, N. (2018). Analisis kerusakan mekanis dan umur simpan pada rantai pasok buah naga di Kabupaten Tanah Laut. *Industria: Jurnal Teknologi Dan Manajemen Agroindustri*, 7(2), 107–115.
- Anggraini, R., & Sugiarti, T. (2022). Desain Kemasan Aktif Untuk Nanas (*Ananas comosus* L. Merr) Terolah Minimal. *Agrofood*, 4(1), 30–37.
- Ariani, Y., Bintoro, N., & Karyadi, J. N. W. (2019). Kinetika Perubahan Kualitas Fisik Buah Mangga Selama Pengeringan Beku dengan Perlakuan Pendinginan Awal dan Ketebalan Irisan. *Agritech*, 39(4), 298–305.
- Ashadi, R., Syam, N., & Alimuddin, S. (2021). Pengaruh Suhu Dan Jenis Kemasan Terhadap Daya Simpan Dan Kualitas Buah Tomat (*Solanum Lycopersicum* L.). *AGrotekMAS Jurnal Indonesia: Jurnal Ilmu Peranian*, 2(3), 19–28.
- Asiah, N., & Djaeni, M. (2021). *Konsep dasar proses pengeringan pangan*. AE Publishing.
- Caleb, O. J., Mahajan, P. V, Al-Said, F. A.-J., & Opara, U. L. (2013). Modified Atmosphere Packaging Technology of Fresh and Fresh-cut Produce and the Microbial Consequences—A Review. *Food and Bioprocess Technology*, 6(2), 303–329. <https://doi.org/10.1007/s11947-012-0932-4>
- Chen, C., Ding, R., Yang, S., Wang, J., Chen, W., Zong, L., & Xie, J. (2020). Development of thermal insulation packaging film based on poly(vinyl alcohol) incorporated with silica aerogel for food packaging application. *LWT*, 129, 109568. <https://doi.org/https://doi.org/10.1016/j.lwt.2020.109568>
- Defraeye, T., Lambrecht, R., Delele, M. A., Tsige, A. A., Opara, U. L., Cronjé, P., Verboven, P., & Nicolai, B. (2014). Forced-convective cooling of citrus fruit: Cooling conditions and energy consumption in relation to package design. *Journal of Food Engineering*, 121, 118–127. <https://doi.org/https://doi.org/10.1016/j.jfoodeng.2013.08.021>
- Delele, M. A., Bessemans, N., Gruyters, W., Rogge, S., Janssen, S., Verlinden, B. E., Smeets, B., Ramon, H., Verboven, P., & Nicolai, B. M. (2019a). Spatial distribution of gas concentrations and RQ in a controlled atmosphere storage container with pear fruit in very low oxygen conditions. *Postharvest Biology and Technology*, 156, 110903. <https://doi.org/https://doi.org/10.1016/j.postharvbio.2019.05.004>
- Delele, M. A., Bessemans, N., Gruyters, W., Rogge, S., Janssen, S., Verlinden, B. E., Smeets, B., Ramon, H., Verboven, P., & Nicolai, B. M. (2019b). Spatial distribution of gas concentrations and RQ in a controlled atmosphere storage

- container with pear fruit in very low oxygen conditions. *Postharvest Biology and Technology*, 156, 110903. <https://doi.org/https://doi.org/10.1016/j.postharvbio.2019.05.004>
- Delele, M. A., Ngcobo, M. E. K., Getahun, S. T., Chen, L., Mellmann, J., & Opara, U. L. (2013). Studying airflow and heat transfer characteristics of a horticultural produce packaging system using a 3-D CFD model. Part I: Model development and validation. *Postharvest Biology and Technology*, 86, 536–545. <https://doi.org/https://doi.org/10.1016/j.postharvbio.2013.08.014>
- Desvino, L. Z., Sakti, G., & Putra, A. R. S. (2021). Pengaruh perubahan kerapatan pori pada screen wind tunnel terhadap pembentukan aliran laminar eksternal. *Prosiding SNITP (Seminar Nasional Inovasi Teknologi Penerbangan)*, 5(2).
- Dey, A., & Neogi, S. (2019). Oxygen scavengers for food packaging applications: A review. *Trends in Food Science & Technology*, 90, 26–34.
- Dhyan, C., Sumarlan, S. H., & Susilo, B. (2014). Pengaruh pelapisan lilin lebah dan suhu penyimpanan terhadap kualitas buah jambu biji (*Psidium guajava* L.). *Jurnal Bioproses Komoditas Tropis*, 2(1), 79–90.
- Djaafar, T. F., Marwati, T., Indrasari, S. D., Hatmi, R. U., Siswanto, N., Purwaningsih, P., Ambarsari, I., & Supriyadi, S. (2022). Mutu fisik buah salak pondoh (*Salacca edulis* reinw): pengaruh pelilinan dan pengemasan menggunakan kantong plastik low density polyethylene. *AgriTECH*, 42(2), 113–122.
- Du, S., Liu, T., Huang, D., & Li, G. (2018). A fast and adaptive bi-dimensional empirical mode decomposition approach for filtering of workpiece surfaces using high definition metrology. *Journal of Manufacturing Systems*, 46, 247–263. <https://doi.org/https://doi.org/10.1016/j.jmsy.2018.01.005>
- Elhadi M. Yahia. (2016). *Modified and Controlled Atmospheres for the Storage, Transportation, and Packaging of Horticultural Commodities* (Elhadi M. Yahia, Ed.). CRC Press.
- Emawati, N. K., Raka, I. D. N., Suryana, I. M., Hanum, F., & Ariati, P. E. P. (2022). Identifikasi Kualitas Dan Bobot Masa Simpan Beberapa Jenis Buah Salak Bali (*Salacca Zalacca* Var. *Amboinensis*). *AGRIMETA: Jurnal Pertanian Berbasis Keseimbangan Ekosistem*, 12(24), 26–31.
- Fatchurrohman, N., & Chia, S. (2017). Performance of hybrid nano-micro reinforced mg metal matrix composites brake calliper: simulation approach. *IOP Conference Series: Materials Science and Engineering*, 257, 012060. <https://doi.org/10.1088/1757-899X/257/1/012060>
- Guo, J., Wei, X., Du, X., Ren, J., & Lü, E. (2019). Numerical simulation of liquid nitrogen injection in a container with controlled atmosphere. *Biosystems Engineering*, 187, 53–68. <https://doi.org/https://doi.org/10.1016/j.biosystemseng.2019.08.015>
- Hakim, K. A., Islam, Md. K., Ibrahim, Md., Hossain, Md. J., Ara, N. A., & Haques, K. Md. F. (2012). Status of the behavioral pattern of biochemical properties of banana in the storage condition. *International Journal of Biosciences (IJB)*, 8(2), 83–94.
- Handoyo, E. A. (2000). Pengaruh Kecepatan Aliran Terhadap Efektivitas Shell-and-Tube Heat Exchanger. *Jurnal Teknik Mesin*, 2(2), 86–90.

- Haryo Limanseto. (2022, January 29). Horticultural Commodity Development to Improve National Export Performance and Regional Economy. *Kementrian Koordinator Bidang Perekonomian Republik Indonesia*. <https://www.ekon.go.id/publikasi/detail/3679/horticultural-commodity-development-to-improve-national-export-performance-and-regional-economy>
- Hernández-Muñoz, P., Almenar, E., Valle, V. Del, Velez, D., & Gavara, R. (2008). Effect of chitosan coating combined with postharvest calcium treatment on strawberry (*Fragaria×ananassa*) quality during refrigerated storage. *Food Chemistry*, *110*(2), 428–435. <https://doi.org/https://doi.org/10.1016/j.foodchem.2008.02.020>
- Hu, B., Guo, H., Tao, X., & Zhang, Y. (2023). Construction of Digital Twin System for Cold Chain Logistics Stereo Warehouse. *IEEE Access*, *11*, 73850–73862. <https://doi.org/10.1109/ACCESS.2023.3295819>
- Husen, A., Akbar, M. I., & Cholis, N. (2020). Analisis pengaruh kecepatan aliran fluida dingin terhadap efektivitas shell and tube heat exchanger. *Bina Teknika*, *16*(1), 1–10.
- Irtwange, S. V. (2006). Application of Modified Atmosphere Packaging and Related Technology in Postharvest Handling of Fresh Fruits and Vegetables. *Gricultural Engineering International: The CIGR Ejournal*, *VIII*(40).
- Kamal-Eldin, A., Alhammadi, A., Gharsallaoui, A., Hamed, F., & Ghnimi, S. (2020). Physicochemical, rheological, and micro-structural properties of yogurts produced from mixtures of camel and bovine milks. *NFS Journal*, *19*, 26–33. <https://doi.org/https://doi.org/10.1016/j.nfs.2020.05.001>
- Kritzinger, W., Karner, M., Traar, G., Henjes, J., & Sihn, W. (2018). Digital Twin in manufacturing: A categorical literature review and classification. *IFAC-PapersOnLine*, *51*(11), 1016–1022. <https://doi.org/https://doi.org/10.1016/j.ifacol.2018.08.474>
- Kusumiyati, K., Putri, I. E., Hadiwijaya, Y., & Mubarak, S. (2019). Respon nilai kekerasan, kadar air dan total padatan terlarut buah jambu kristal pada berbagai jenis kemasan dan masa simpan. *Jurnal Agro*, *6*(1), 49–56.
- Lamona, A., Purwanto, Y. A., & Sutrisno, S. (2015). Effect of different packaging and low temperature storage on the quality changes of fresh red curly chili. *Jurnal Keteknik Pertanian*, *3*(2), 1–8.
- Lestari, R., Ebert, G., & Huyskens-Keil, S. (2013). Fruit Quality Changes Of Salak" PONDOK" Fruits (Salacca Zalacca (Gaertn.) Voss) During Maturation And Ripening. *Journal of Food Research*, *2*(1), 204.
- Li, G., Zhang, S., Shen, Z., & Zhang, H. (2024). Large eddy simulations of the turbine vane pressure side film cooling flows of cylindrical and fan-shaped holes with a saw-tooth plasma actuator. *Applied Thermal Engineering*, *257*, 124404. <https://doi.org/https://doi.org/10.1016/j.applthermaleng.2024.124404>
- Lin, R., Kwon, S., & Bae, S. (2025). Multi-stage calibration framework for a digital twin model in building operations: Cold chain logistics centers case study. *Energy and Buildings*, *337*, 115662. <https://doi.org/https://doi.org/10.1016/j.enbuild.2025.115662>

- Maharani, D. M., & Arimurti, P. (2018). Pengontrolan suhu dan kelembaban (Rh) terhadap pertumbuhan vegetatif cabai merah (*Capsicum annum* L.) pada plant factory. *Journal of Tropical Agricultural Engineering and Biosystems- Jurnal Keteknikan Pertanian Tropis Dan Biosistem*, 6(2), 120–134.
- Malekjani, N., & Jafari, S. M. (2018). Simulation of food drying processes by Computational Fluid Dynamics (CFD); recent advances and approaches. *Trends in Food Science & Technology*, 78, 206–223. <https://doi.org/https://doi.org/10.1016/j.tifs.2018.06.006>
- Marlina, L., Purwanto, Y. A., & Ahmad, U. (2014). Aplikasi pelapisan kitosan dan lilin lebah untuk meningkatkan umur simpan salak pondoh. *Jurnal Keteknikan Pertanian*, 2(1).
- Mulyawanti, I., Syaefullah, E., & Amiarsi, D. (2018). Teknologi Pengemasan Atmosfir Termodifikasi (Modified Atmosphere Packaging/map) Dan Vakum Pada Buah Durian. *Indonesian Journal of Agricultural Postharvest Research*, 14(1), 1–10.
- Mutirani, A., Giyanto, G., & Tondok, E. T. (2023). Perlakuan Air Panas untuk Pengendalian Penyakit Busuk Buah Salak selama Penyimpanan. *Jurnal Keteknikan Pertanian*, 11(2), 205–221.
- Ningtyas, R., Aprilliansah, A., & Muryeti, M. (2025). Aplikasi edible coating lidah buaya dengan penambahan konsentrasi CMC pada stroberi selama penyimpanan suhu rendah. *Journal of Food Industrial Technology*, 2(2), 44–52.
- Nurjanah, A., Widodo, A. W., & Furqon, M. T. (2020). Optimasi Rute Distribusi Lokal Buah Segar Menggunakan Algoritme Genetika (Studi Kasus: PT Great Giant Pineapple). *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, 4(12), 4321–4328.
- Organization, W. H. (2021). *The State of Food Security and Nutrition in the World 2021: Transforming food systems for food security, improved nutrition and affordable healthy diets for all* (Vol. 2021). Food & Agriculture Org.
- Perdana, L. P. R., Djoyowasito, G., Musyarofatunnisa, E., & Sandra, S. (2019). Pengaruh Jenis Kemasan dan Frekuensi Penggetaran terhadap Kerusakan Mekanis Buah Apel Manalagi (*Malus sylvestris*). *Jurnal Ilmiah Rekayasa Pertanian Dan Biosistem*, 7(1), 8–16.
- Plants of the World Online. (2023). *Salacca zalacca* (Gaertn.) Voss. Papadakis Publisher.
- Prasetyo, T. F., Isdiana, A. F., & Sujadi, H. (2019). Implementasi alat pendeteksi kadar air pada bahan pangan berbasis internet of things. *Smartics Journal*, 5(2), 81–96.
- Pratama, R. A., Ikhsan, M., Wicaksono, D., Rieza, M. S., & Abidin, M. Z. (2025). Analisis Intensitas Turbulensi Terhadap Kestabilan Kecepatan Angin Test Section pada Struktur Wind Tunnel. *Infotekmesin*, 16(1), 269–275.
- Purnomo, A. S., Nurhadi, H., Hakim, M. L., Alkas, T. R., Asranudin, A., Rohmah, A. A., Moyo, D. T. L., Rizky, K. H. A., Hidayah, N. N., & Firdausa, Y. A. (2023). Aplikasi Adsorpsi Fotokatalitik TiO₂ dan Panel Surya dalam Degradasi Limbah Pewarna Sintetik UMKM Batik Pelangi Desa Klampar, Kecamatan Proppo, Pamekasan. *Sewagati*, 7(6), 930–940.

- Rashvand, M., Matera, A., Altieri, G., Genovese, F., Fadji, T., Linus Opara, U., Mohamadifar, M. A., Feyissa, A. H., & Carlo Di Renzo, G. (2023). Recent advances in the potential of modeling and simulation to assess the performance of modified atmosphere packaging (MAP) systems for the fresh agricultural product: Challenges and development. *Trends in Food Science & Technology*, *136*, 48–63. <https://doi.org/https://doi.org/10.1016/j.tifs.2023.04.012>
- Risqiyah, I. A., & Santoso, I. (2017). Risiko rantai pasok agroindustri salak menggunakan fuzzy fmea. *Jurnal Manajemen & Agribisnis*, *14*(1), 1.
- Saldivar, S. O. S., & García-Lara, S. (2016). Cereals: Storage. In B. Caballero, P. M. Finglas, & F. Toldrá (Eds.), *Encyclopedia of Food and Health* (pp. 712–717). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-384947-2.00129-X>
- Salsabila, F., Manunggal, B. P., & Yuliani, I. (2021). Pembuatan Cooling Box untuk Penyimpanan Vaksin Sinovac Berbasis Thermoelectric. *Prosiding Industrial Research Workshop and National Seminar*, *12*, 907–914.
- Sinaga, A. S., & Informatika, T. (2019). Segmentasi ruang warna $L^* a^* b$. *Jurnal Mantik Penusa*, *3*(1), 43–46.
- Srimurni, R. R., Yuliasih, I., Darmawati, E., Muliani, Y., & Herdiana, M. (2024). Pengaruh Jenis Kemasan pada Perubahan Kualitas Salak Pondoh Banjarnegara dalam Bentuk Tandan Selama Transportasi dan Penyimpanan. *Jurnal Ilmu Pertanian Indonesia*, *29*(4), 581–589.
- Sumiasih, I. H., & Nurainani, N. (2023). Kajian Stadia Kematangan dan Jenis Kemasan Selama Pengangkutan Terhadap Mutu Buah Belimbing (*Averrhoa Carambola*). *Jurnal Ilmiah Respati*, *14*(2), 135–143.
- Suneth, N. A., & Tuapattinaya, P. M. T. (2016). Uji organoleptik selai buah salak (*Salacca edulis* Reinw) berdasarkan penambahan gula. *BIOPENDIX: Jurnal Biologi, Pendidikan Dan Terapan*, *3*(1), 40–45.
- Susilawaty, & Nugraheni, W. (2024). *Buku Atap Hortikultura 2023*. Direktorat Jenderal Hortikultura, Kementerian Pertanian.
- Tarihoran, A. S., Adriadi, A., Anggraini, J. H., & Purba, C. A. (2023). Efektivitas edible coating dari pati singkong terhadap susut bobot dan daya simpan buah duku (*Lansium domesticum*). *Bio-Lectura: Jurnal Pendidikan Biologi*, *10*(1), 74–81.
- Tay, R. (2021). *Food Systems and Services: Illustrative Case Studies on Horticulture Food Systems and Services in Mexico and Indonesia APEC Policy Partnership on Food Security*. www.apec.org
- Titahelu, N., & Litolily, S. J. (2018). Analisis Laju Kondensasi Akibat Pengaruh Kecepatan Udara Terhadap Karakteristik Perpindahan Panas Pada Oven Pengereng Pati Sagu Kapasitas. *ALE Proceeding*, *1*, 108–114.
- Varun Ch, S., Anantharaman, K., & Rajasekaran, G. (2023). Effect of blade number on the performance of centrifugal fan. *Materials Today: Proceedings*, *72*, 1143–1152. <https://doi.org/https://doi.org/10.1016/j.matpr.2022.09.185>
- Wang, L., Zhang, S., Ye, Z., Zhou, H., Shen, S., Zheng, X., & Huan, C. (2025). The effects of chilling (4 °C) and non-chilling (12 °C) temperatures on storage quality and flavor development of yellow peach fruit. *Journal of Food*

- Composition and Analysis*, 139, 107094.
<https://doi.org/https://doi.org/10.1016/j.jfca.2024.107094>
- Wu, Z., Rong, Z., Mark, G., Yuan, W., Zhitao, X., & Song, W. (2024). A digital twin-based modularized design approach for smart warehouses. *International Journal of Computer Integrated Manufacturing*, 37(10–11), 1404–1425. <https://doi.org/10.1080/0951192X.2023.2278100>
- Wulandari, U., Sulistyowati, B. I., Istrianto, K., & HS, D. S. (2023). Eksperimen Pembuatan Ice Gel Skala Rumah Tangga Sebagai Media Pendingin Cool Box Untuk Ikan Hasil Tangkap atau Pasca Panen. *Media Teknologi Hasil Perikanan*, 11(1), 38–42.
- Yahia, E. M. (2019). *Postharvest technology of perishable horticultural commodities*. Woodhead Publishing.
- Zhuang, C., Miao, T., Liu, J., & Xiong, H. (2021). The connotation of digital twin, and the construction and application method of shop-floor digital twin. *Robotics and Computer-Integrated Manufacturing*, 68, 102075. <https://doi.org/https://doi.org/10.1016/j.rcim.2020.102075>