

DAFTAR PUSTAKA

- [1] Badan Pusat Statistika DIY, “Badan Pusat Statistik Provinsi DI Yogyakarta. Luas Panen Tanaman Sayuran dan Buah–Buahan Semusim Menurut Jenis Tanaman di Provinsi DI Yogyakarta,” Badan Pusat Statistika DIY. Accessed: Apr. 11, 2026. [Online]. Available: <https://yogyakarta.bps.go.id/id/statistics-table/3/VTNWM01VdGhTelZTTTNSS1NFSkVZazkzWjJKcWR6MDkjMyMzNDAw/luas-panen-tanaman-sayuran-dan-buah-buahan-semusim-menurut-jenis-tanaman-di-provinsi-di-yogyakarta.html?>
- [2] A. Dsouza, L. Newman, T. Graham, and E. D. G. Fraser, “Exploring the landscape of controlled environment agriculture research: A systematic scoping review of trends and topics,” Jun. 01, 2023, *Elsevier Ltd.* doi: 10.1016/j.agry.2023.103673.
- [3] L. Graamans, E. Baeza, A. van den Dobbelsteen, I. Tsafaras, and C. Stanghellini, “Plant factories versus greenhouses: Comparison of resource use efficiency,” *Agric. Syst.*, vol. 160, pp. 31–43, Feb. 2018, doi: 10.1016/j.agry.2017.11.003.
- [4] Z. Yang *et al.*, “Appropriate water and fertilizer supply can increase yield by promoting growth while ensuring the soil ecological environment in melon production,” *Agric. Water Manag.*, vol. 289, Nov. 2023, doi: 10.1016/j.agwat.2023.108561.
- [5] Z. Cai *et al.*, “Water and nitrogen management scheme of melon based on yield–quality–efficiency matching perspective under CO₂ enrichment,” *Agric. Water Manag.*, vol. 285, Jul. 2023, doi: 10.1016/j.agwat.2023.108379.
- [6] N. Engler and M. Krarti, “Review of energy efficiency in controlled environment agriculture,” May 01, 2021, *Elsevier Ltd.* doi: 10.1016/j.rser.2021.110786.

- [7] G. Li, J. Wu, H. J. Kronzucker, B. Li, and W. Shi, “Physiological and molecular mechanisms of plant-root responses to iron toxicity,” Jun. 01, 2024, *Elsevier GmbH*. doi: 10.1016/j.jplph.2024.154257.
- [8] F. Y. Jiang, X. Chen, and A. C. Luo, “Iron plaque formation on wetland plants and its influence on phosphorus, calcium and metal uptake,” *Aquat. Ecol.*, vol. 43, no. 4, pp. 879–890, Dec. 2009, doi: 10.1007/s10452-009-9241-z.
- [9] D. Hagassou, E. Francia, D. Ronga, and M. Buti, “Blossom end-rot in tomato (*Solanum lycopersicum* L.): A multi-disciplinary overview of inducing factors and control strategies,” Apr. 30, 2019, *Elsevier B.V.* doi: 10.1016/j.scienta.2019.01.042.
- [10] M. S. Ahamed *et al.*, “A comprehensive review of advances in sensing and monitoring technologies for precision hydroponic cultivation,” Oct. 01, 2025, *Elsevier B.V.* doi: 10.1016/j.compag.2025.110601.
- [11] W. Shi, X. Xue, F. Feng, W. Zheng, and L. Chen, “Fertigation control system based on the mariotte siphon,” *Sci. Rep.*, vol. 14, no. 1, Dec. 2024, doi: 10.1038/s41598-024-75057-1.
- [12] Supriyanto, R. A. Fahrezi, T. A. Prasetyo, A. P. Septiadi, L. Sucahyo, and M. Solahudin, “Low-Cost Monitoring and Control for Melon Cultivation in Greenhouse using Internet of Thing and Drip Irrigation,” *Jurnal Ilmiah Rekayasa Pertanian dan Biosistem*, vol. 13, no. 1, pp. 55–68, Mar. 2025, doi: 10.29303/jrpb.v13i1.1154.
- [13] B. Herdiana, J. Utama, Sutono, F. R. Adhari, and Y. Henrikus, “Autonomous Nutrient Controller System for Hydroponic Honey Melon Based on the Integration of Artificial Intelligence Algorithms According to Planting Time,” *Journal of Robotics and Control (JRC)*, vol. 6, no. 1, pp. 285–293, 2025, doi: 10.18196/jrc.v6i1.23846.
- [14] M. Alimussadad, D. Lestari, and W. M. Utomo, “Smart Hydroponic Nutrient Monitoring and Control System using Fuzzy Logic and IoT,” *Jurnal*

ELTIKOM : Jurnal Teknik Elektro, Teknologi Informasi dan Komputer, vol. 9, no. 2, pp. 115–129, Dec. 2025, doi: 10.31961/eltikom.v9i2.1494.

- [15] A. Tzounis, N. Katsoulas, T. Bartzanas, and C. Kittas, “Internet of Things in agriculture, recent advances and future challenges,” Dec. 01, 2017, *Academic Press*. doi: 10.1016/j.biosystemseng.2017.09.007.
- [16] R. H. Harefa and H. Gunawan, “Perancangan Smart Agriculture System Berbasis Internet of Things,” *Digital Transformation Technology*, vol. 4, no. 1, pp. 79–86, Mar. 2024, doi: 10.47709/digitech.v4i1.3647.
- [17] M. Nawaz and M. I. K. Babar, “IoT and AI for smart agriculture in resource-constrained environments: challenges, opportunities and solutions,” *Discover Internet of Things*, vol. 5, no. 1, Dec. 2025, doi: 10.1007/s43926-025-00119-3.
- [18] F. Chuzaini, P. Studi Fisika, J. Fisika, and U. Negeri Surabaya, “IoT MONITORING KUALITAS AIR DENGAN MENGGUNAKAN SENSOR SUHU, pH, DAN TOTAL DISSOLVED SOLIDS (TDS),” 2022.
- [19] R. Zamora and dan Wildian, “PERANCANGAN ALAT UKUR TDS (TOTAL DISSOLVED SOLID) AIR DENGAN SENSOR KONDUKTIVITAS SECARA REAL TIME,” vol. 1, pp. 11–15, 2015.
- [20] C. Sonneveld and W. Voogt, *Plant nutrition of greenhouse crops*. Springer Netherlands, 2009. doi: 10.1007/978-90-481-2532-6.
- [21] A. Arif Darmawan, W. Dinarto, and A. Widodo, “Jurnal Pertanian Konservasi Lahan Kering International Standard of Serial Number 2477-7927 Darmawan,” *Savana Cendana*, vol. 9, no. 3, pp. 78–82, 2024, doi: 10.32938/sc.v9i03.2340.
- [22] Howard M. Resh, “A Definitive Guidebook for the Advanced Home Gardener and the Commercial Hydroponic Grower SEVENTH EDITION.”

- [23] G. De Rijck and E. Schrevels, "Distribution of nutrients and water in rockwool slabs," *Sci. Hortic.*, vol. 72, no. 3–4, pp. 277–285, Feb. 1998, doi: 10.1016/S0304-4238(97)00144-1.
- [24] Y. Topcu, S. U. Nambeesan, and E. van der Knaap, "Blossom-end rot: a century-old problem in tomato (*Solanum lycopersicum* L.) and other vegetables," Dec. 01, 2022, *BioMed Central Ltd.* doi: 10.1186/s43897-021-00022-9.
- [25] V. Raja and K. J. Fernandes, "Reverse Engineering: An Industrial Perspective."
- [26] M. Sokovic and J. Kopac, "RE (reverse engineering) as necessary phase by rapid product development," *J. Mater. Process. Technol.*, vol. 175, no. 1–3, pp. 398–403, Jun. 2006, doi: 10.1016/j.jmatprotec.2005.04.047.
- [27] C K CHUA, K F LEONG, and C S LIM, "Principles and Principles and Applications Applications RAPID RAPID PROTOTYPING PROTOTYPING."
- [28] D. Bourell *et al.*, "Materials for additive manufacturing," *CIRP Ann. Manuf. Technol.*, vol. 66, no. 2, pp. 659–681, 2017, doi: 10.1016/j.cirp.2017.05.009.
- [29] Syaiful Arif, Joni Arif, and Erwindia Fenty Anggraeni, "MEKANIKA FLUIDA DASAR."
- [30] Coulson, "CHEMICAL ENGINEERING VOLUME 6."
- [31] GEANKOPLIS, "GEANKOPLIS CHEMICAL ENGINEERING".
- [32] Johann Friedrich Gulich, "Centrifugal Pumps," 2010. doi: 10.1007/978-3-642-12824-0.
- [33] A. P. . Field, *Discovering statistics using SPSS*. SAGE, 2009.
- [34] "EasyEDA Official Documentation. (2024). EasyEDA User Guide.," EasyEDA. Accessed: Mar. 02, 2026. [Online]. Available: <https://docs.easyeda.com/en/>

- [35] “Arduino. (2024). Arduino IDE Documentation,,” Arduino. Accessed: Mar. 02, 2026. [Online]. Available: <https://docs.arduino.cc/software/ide/>
- [36] “Dassault Systèmes. (2024). SolidWorks User Manual,” Dassault Systèmes. Accessed: Mar. 02, 2026. [Online]. Available: <https://www.solidworks.com/>
- [37] “IBM Corp. (2023). IBM SPSS Statistics Documentation,,” IBM Corp. Accessed: Mar. 02, 2026. [Online]. Available: <https://www.ibm.com/products/spss>
- [38] R. N. Sesanti and P. N. Lampung, *Prosiding Seminar Nasional Pengembangan Teknologi Pertanian Politeknik Negeri Lampung 08 Oktober*. 2018. [Online]. Available: <http://jurnal.polinela.ac.id/index.php/PROSIDING>
- [39] I. Masfuri, A. Pertiwi, B. Muharto, and T. B. P, “Simulasi Homogenitas Pencampuran Air Limbah Pabrik Kelapa Sawit dan Pengaruhnya Terhadap Pengolahan Awal di Kolam Ekualisasi Pilot Plant Biogas Sei Pagar Mixing Homogeneity Simulation of Palm Oil Mill Effluent and Its Effect of Equalization Tank Preatreatment in Sei Pagar Biogas Pilot Plant,” 2020.
- [40] R. Putri and U. Barokah, “THE EFFECT OF TIME AND FLOWERPOLLINATION ON MELON PLANTS IN REJOSARI VILLAGE, AMBAL DISTRICT, KEBUMEN REGENCY.”
- [41] S. Krisdiyantoro, S. Triyono, A. Tusi, and A. Haryanto, “Optimasi Ukuran Pot dan Dosis Pupuk pada Budidaya Melon (Cucumis melo L),” *Jurnal Agricultural Biosystem Engineering*, vol. 2, no. 3, p. 419, Sep. 2023, doi: 10.23960/jabe.v2i3.8052.
- [42] M. Saure, “Blossom-end rot of tomato (*Lycopersicon esculentum* Mill.) Is a calcium-or a stress-related disorder?”
- [43] D. P. Sari, Y. C. Ginting, and D. Pangaribuan, “PENGARUH KONSENTRASI KALSIUM TERHADAP PERTUMBUHAN DAN

PRODUKSI DUA VARIETAS TANAMAN MELON (Cucumis melo L.)
PADA SISTEM HIDROPONIK MEDIA PADAT,” Januari-Juni, 2013.