

DAFTAR PUSTAKA

- [1] R. Setiawan, R. Sari, and M. H. Prabowo, “Studi kelayakan usaha agribisnis cabai rawit di lahan pekarangan,” *Jurnal Agribisnis Indonesia*, vol. 5, no. 2, pp. 102–110, 2017.
- [2] A. S. Nugroho, “Pengaruh lama penyimpanan terhadap kadar air dan daya simpan cabai rawit,” *Jurnal Hortikultura Indonesia*, vol. 10, no. 1, pp. 56–64, 2019.
- [3] Codex Alimentarius Commission, “Standard for chilli peppers (codex stan 307-2011),” https://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252Fstandards%252FCXS%2B307-2011%252FCXS_307e.pdf, 2011, diakses: 25 Juli 2025.
- [4] A. G. L. Talahatu, S. Notosudjono, and T. D. K. S. Widayanti, “Kajian karakteristik pengeringan dan kualitas cabai rawit (*Capsicum frutescens* L.) kering dengan metode pengeringan surya langsung,” *Jurnal Keteknikan Pertanian Tropis dan Biosistem*, vol. 3, no. 3, pp. 259–268, 2015.
- [5] N. Hasni, M. Syafutri, and F. Syaiful, “Pengaruh suhu dan jenis kemasan terhadap perubahan mutu cabai rawit (*capsicum frutescens* l.) selama penyimpanan,” *Jurnal Keteknikan Pertanian*, vol. 38, no. 1, pp. 89–98, 2024.
- [6] AOAC International, *Official Methods of Analysis of AOAC International*, 20th ed. Gaithersburg, MD: AOAC International, 2016, moisture in Dried Fruits.
- [7] T. Lestari, “Studi pengukuran kadar air komoditas hortikultura dengan metode oven dan moisture analyzer,” *Jurnal Pertanian Tropik*, vol. 4, no. 2, pp. 145–150, 2020.
- [8] S. Kamilaris and F. X. Prenafeta-Boldú, “Deep learning in agriculture: A survey,” *Computers and Electronics in Agriculture*, vol. 147, pp. 70–90, 2018.
- [9] J. Redmon, S. Divvala, R. Girshick, and A. Farhadi, “You only look once: Unified, real-time object detection,” in *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2016, pp. 779–788.
- [10] Y. Xie, L. Wang, and C. Zhang, “Non-destructive prediction of apple moisture content using rgb images and convolutional neural network,” *Postharvest Biology and Technology*, vol. 179, p. 111582, 2021.



- [11] H. Afzaal, M. Iqbal, H. Yasin, and U. Farooq, "Tomato classification based on maturity and quality using rgb images and deep learning," *Computers and Electronics in Agriculture*, vol. 182, p. 106030, 2021.
- [12] A. Luthfi, A. Suryani, and Y. Pratama, "Penentuan tingkat kematangan cabai merah berbasis pengolahan citra digital dengan transformasi YCbCr," *Jurnal Teknologi Pertanian*, vol. 24, no. 2, pp. 123–130, 2023, in Indonesian.
- [13] M. Riva, B. Santoso, and D. Wulandari, "Deteksi penyakit tanaman cabai menggunakan algoritma YOLOv5," *Jurnal Informatika dan Komputer*, vol. 15, no. 1, pp. 45–52, 2023, in Indonesian.
- [14] I. Nwaneri and D. Uyeh, "Agrimoistnet: a low-cost cnn-based system for moisture content prediction in livestock feed," in *SPIE Defense + Commercial Sensing*, vol. 13458, 2025, p. 1345804.
- [15] R. C. Gonzalez and R. E. Woods, *Digital Image Processing*, 4th ed. Upper Saddle River, NJ: Pearson, 2018.
- [16] G. M. A. M. H. . M. F. A., "Color image representation," https://miro.medium.com/v2/resize:fit:1400/format:webp/1*8k6Yk6MhED2SxF2zLctG7g.png, 2021, diakses pada 20 Juli 2025.
- [17] The MathWorks, Inc., "Representing colors in the hsv color space," <http://www.ece.northwestern.edu/local-apps/matlabhelp/toolbox/images/color11.html>, 2025, diakses pada 20 Juli 2025.
- [18] I. Goodfellow, Y. Bengio, and A. Courville, *Deep Learning*. Cambridge, MA, USA: MIT Press, 2016. [Online]. Available: <http://www.deeplearningbook.org>
- [19] E. N. Rahma, E. M. Nugroho *et al.*, "Review of deep learning application in image classification," *Jurnal Teknologi dan Sistem Komputer*, vol. 9, no. 3, pp. 319–324, 2021.
- [20] M. Haris and A. Fadli, "Konsep dan implementasi deep learning untuk pengolahan citra digital," *Jurnal Informatika*, vol. 8, no. 1, pp. 12–19, 2021.
- [21] Amazon Web Services, "Apa itu deep learning?" <https://aws.amazon.com/id/what-is/deep-learning/>, 2024, diakses pada 20 Juli 2025.
- [22] A. Krizhevsky, I. Sutskever, and G. E. Hinton, "Imagenet classification with deep convolutional neural networks," in *Advances in Neural Information Processing Systems*, vol. 25, 2012, pp. 1097–1105.



- [23] Pemrograman MATLAB, “Arsitektur umum dari convolutional neural network (cnn),” <https://pemrogramanmatlab.com/wp-content/uploads/2023/07/3-figure1-1-edited.png>, 2023, diakses pada 20 Juli 2025.
- [24] Y. LeCun, Y. Bengio, and G. Hinton, “Deep learning,” *Nature*, vol. 521, no. 7553, pp. 436–444, 2015.
- [25] J. Needhi, “Transfer learning: Definition, research, usage, and applications,” https://medium.com/@jeyadev_needhi/transfer-learning-definition-research-usage-and-applications-3348a886826b, Jun. 2024, diakses pada 23 Juli 2025.
- [26] F.-F. Li, J. Johnson, and S. Yeung, “Cs231n convolutional neural networks for visual recognition: Convolutional neural networks,” <https://cs231n.github.io/convolutional-networks/#pool>, 2017, diakses pada 23 Juli 2025.
- [27] A. I. Aramendía, “Convolutional neural networks (cnn) from scratch,” <https://towardsdatascience.com/convolutional-neural-networks-cnn-from-scratch-b603335ff459>, Jun 2021, diakses: 25 Juli 2025.
- [28] P. Wang, W. Liu, J. Zhu, Y. Yuan, and M. Q.-H. Meng, “A cnn regression approach for real-time 3d facial expression estimation from rgb images,” *Pattern Recognition*, vol. 76, pp. 120–132, 2018.
- [29] S. J. Pan and Q. Yang, “A survey on transfer learning,” *IEEE Transactions on Knowledge and Data Engineering*, vol. 22, no. 10, pp. 1345–1359, 2010.
- [30] BioMed Research International, “Figure 2 from “magnetic resonance imaging in patients with cardiac implantable electronic devices”,” <https://static-01.hindawi.com/articles/bmri/volume-2018/4605191/figures/4605191.fig.002.svgz>, 2018, diakses pada 23 Juli 2025.
- [31] C. Tan, F. Sun, T. Kong, W. Zhang, C. Yang, and C. Liu, “A survey on deep transfer learning,” in *International Conference on Artificial Neural Networks*. Springer, 2018, pp. 270–279.
- [32] A. Rosebrock, “Fine-tuning with keras and deep learning (figure illustrating freeze/unfreeze workflow),” <https://pyimagesearch.com/2019/06/03/fine-tuning-with-keras-and-deep-learning/>, Jun. 2019, diakses pada 23 Juli 2025.



- [33] D. Polzer, “Ilustrasi dari artikel di towards data science (gambar: U9noagjuzwfufqw30b-92q.png),” <https://towardsdatascience.com/wp-content/uploads/2021/06/1kcBsTJsIiDEC9XcizmmnYg-1536x658.png>, 2021, diakses pada 23 Juli 2025.
- [34] G. James, D. Witten, T. Hastie, and R. Tibshirani, *An Introduction to Statistical Learning: with Applications in R*. Springer, 2013.
- [35] The MathWorks, Inc., “Train a convolutional neural network for regression,” <https://www.mathworks.com/help/deeplearning/ug/train-a-convolutional-neural-network-for-regression.html>, 2025, diakses pada 20 Juli 2025.
- [36] R. Parashar and P. Johri, “Deep learning for cotton leaf disease detection,” *Proceedings of the 2nd IEEE International Conference on Device Intelligence, Computing and Communication Technologies (DICCT)*, pp. 158–162, 2024. [Online]. Available: <https://ieeexplore.ieee.org/document/10533021>
- [37] Z. Zuo, J. Mu, W. Li, Q. Bu, H. Mao, X. Zhang, L. Han, and J. Ni, “Study on the detection of water status of tomato (*solanum lycopersicum* l.) by multimodal deep learning,” *Frontiers in Plant Science*, vol. 14, pp. 1–10, May 2023.
- [38] A. G. Howard, M. Zhu, B. Chen, D. Kalenichenko, W. Wang, T. Weyand, M. Andreetto, and H. Adam, “Mobilenets: Efficient convolutional neural networks for mobile vision applications,” *arXiv preprint arXiv:1704.04861*, 2017.
- [39] M. Sandler, A. Howard, M. Zhu, A. Zhmoginov, and L.-C. Chen, “Mobilenetv2: Inverted residuals and linear bottlenecks,” in *2018 IEEE/CVF Conference on Computer Vision and Pattern Recognition*, Salt Lake City, UT, USA, 2018, pp. 4510–4518.
- [40] A. Howard, M. Sandler, G. Chu, L.-C. Chen, B. Chen, M. Tan, W. Wang, Y. Zhu, R. Pang, V. Vasudevan, Q. V. Le, and H. Adam, “Searching for mobilenetv3,” *arXiv preprint arXiv:1905.02244*, 2019.
- [41] Raspberry Pi Foundation, “Ethernet cable connection diagram,” <https://www.raspberrypi.com/documentation/computers/images/peripherals/cable-net.png?hash=e0fdbec2031b78b2b3f169aab8d1c068>, diakses pada 23 Juli 2025.



- [42] —, “Compute module 3 (cm3) – product photograph,” <https://www.raspberrypi.com/documentation/accessories/images/cm3.jpg?hash=87abd731a81318a03d494783da281fc9>, diakses pada 23 Juli 2025.
- [43] Pimoroni Ltd., “Hyperpixel 4.0 product image,” https://shop.pimoroni.com/cdn/shop/products/HyperPixel_4.0_4_of_7_1500x1500_crop_center.JPG?v=1559725080, 2019, diakses pada 23 Juli 2025.
- [44] Kuongshun Electronic, “Dc-dc xl4015 adjustable step-down module (4-38v to 1.25-36v, 5a),” <https://id.szks-kuongshun.com/uno/uno-board-shield/dc-dc-xl4015-adjustable-step-down-module.html>, 2025, diakses pada 23 Juli 2025.
- [45] Badan Standardisasi Nasional, *Cara Uji Kimia Makanan dan Minuman (SNI 01-2891-1992)*. Jakarta: BSN Indonesia, 1992, standar Nasional Indonesia.
- [46] FAO/WHO, *Codex Alimentarius: General Standard for Contaminants and Toxins in Food and Feed*. Rome: Codex Alimentarius Commission, 1995.
- [47] D. R. Muas and R. A. Putra, “Estimasi kadar air cabai rawit berbasis citra rgb dan transfer learning,” *Jurnal Teknologi Pertanian*, vol. 25, no. 1, pp. 33–42, 2024.
- [48] A. Khairunnisa and R. Prasetya, “Analisis kadar air pada komoditas hortikultura menggunakan pengeringan oven,” *Jurnal Pangan dan Gizi*, vol. 13, no. 2, pp. 115–122, 2021.
- [49] I. Gonçalves, B. T. Ribeiro, and A. C. Teodoro, “Estimating moisture content of forest fuel using rgb images and convolutional neural networks,” *Fire*, vol. 8, no. 6, p. 187, 2023. [Online]. Available: <https://www.mdpi.com/2571-6255/8/6/187>
- [50] Sumarno, “Cabai, kunci keberhasilan panen dan pascapanen,” Balai Penelitian Tanaman Sayuran, 2015, diakses dari <https://balitsa.litbang.pertanian.go.id/>.
- [51] B. S. N. (BSN), *SNI 01-4485-1998: Cabai Kering*. Jakarta, 1998.
- [52] Badan Pusat Statistik, “Statistik hortikultura nasional 2021,” Jakarta, Indonesia, 2021.
- [53] D. Handayani, H. Susanto, and R. Syahputra, “Studi kadar air dan kualitas fisik cabai pasca panen,” *Jurnal Ilmu Pertanian*, vol. 15, no. 2, pp. 87–95, 2020.
- [54] M. Herok and S. Ahmed, “Cotton leaf disease identification using transfer learning,” *Proceedings of the 2023 International Conference on Information and*



- Communication Technology for Sustainable Development (ICICT4SD)*, pp. 158–162, 2023. [Online]. Available: <https://ieeexplore.ieee.org/document/10303323>
- [55] A. Kurniawan, A. Darmawan, and E. Setiawan, “Deployment of banana ripeness detection on raspberry pi using tensorflow lite,” *International Journal of Embedded Systems and Applications*, vol. 10, no. 2, pp. 35–43, 2020.
- [56] National Instruments, “Gray-scale value,” <https://docs-be.ni.com/bundle/ni-vision-concepts-help/page/gpixel.gif>, 2025, diakses pada 20 Juli 2025.
- [57] A. Nugroho and D. Irawan, “Pengaruh kadar air terhadap mutu cabai selama penyimpanan,” *Jurnal Teknologi Pangan*, vol. 9, no. 1, pp. 23–28, 2018.
- [58] W. K. Pratt, *Digital Image Processing: PIKS Inside*, 4th ed. Hoboken, NJ: John Wiley & Sons, 2007.
- [59] M. Rahim, M. H. Siregar, and D. Fitriani, “Estimasi kadar air cabai merah menggunakan metode citra digital dan jaringan syaraf tiruan,” *Jurnal Teknologi Pertanian*, vol. 18, no. 1, pp. 11–20, 2022.
- [60] J. Redmon and A. Farhadi, “Yolov3: An incremental improvement,” *arXiv preprint arXiv:1804.02767*, 2018. [Online]. Available: <https://arxiv.org/abs/1804.02767>
- [61] M. Sandler, A. Howard, M. Zhu, A. Zhmoginov, and L.-C. Chen, “Figure 3: Block diagram of the mobilenetv2 architecture,” <https://www.researchgate.net/publication/368539704/figure/fig3/AS:11431281143702109@1681264260877/Block-diagram-of-the-MobileNetV2-architecture.png>, 2018, diakses pada 23 Juli 2025; sumber asli: makalah “MobileNetV2: Inverted Residuals and Linear Bottlenecks”, CVPR 2018.
- [62] R. Setiawan *et al.*, “Pengukuran kadar air menggunakan metode gravimetri: Efisiensi dan aplikasinya,” *Jurnal Kimia Terapan*, vol. 11, no. 2, pp. 45–52, 2019.
- [63] S. Sujarwo, R. Setyani, and B. Nugroho, “Pengaruh suhu dan lama penyimpanan terhadap mutu cabai rawit (*capsicum frutescens* l.) merah selama penyimpanan,” *Jurnal Keteknikaan Pertanian (Journal of Agricultural Engineering)*, vol. 34, no. 2, pp. 129–136, 2020.
- [64] T. Yang, X. Zheng, H. Xiao, C. Shan, and J. Zhang, “Moisture content online detection system based on multi-sensor fusion and convolutional neural network,” *Frontiers in Plant Science*, vol. 15, pp. 1–12, March 2024.