

DAFTAR PUSTAKA

- [1] Food and Agriculture Organization of the United Nations, *The State of Food and Agriculture 2023*, Rome: FAO, 2023. [Online]. Available: <https://openknowledge.fao.org/server/api/core/bitstreams/5aac5078-625d-4b94-b964-bea40493016c/content>
- [2] Y. Gai and H. Wang, "Plant Disease: A Growing Threat to Global Food Security," *Agronomy*, vol. 14, no. 8, Art. 1615, 24 Jul. 2024. doi: 10.3390/agronomy14081615. [Online]. Available: <https://www.mdpi.com/2073-4395/14/8/1615>
- [3] Kementerian Pertanian Republik Indonesia, "Statistik Organisme Pengganggu Tanaman (OPT) 2024," Direktorat Perlindungan Tanaman Pangan, 2024. [Online]. Available: https://satudata.pertanian.go.id/assets/docs/publikasi/Statistik_IKLIM,_OPT_dan_DPI_2023.pdf
- [4] S. U. Khan, A. Alsuhaibani, A. Alabduljabbar, F. Almarshad, Y. Altherwy, and T. Akram, "A review on automated plant disease detection: motivation, limitations, challenges and recent advancements for future research," *J. King Saud Univ. Comput. Inf. Sci.*, vol. 37, 2025. doi: 10.1007/s44443-025-00040-3. [Online]. Available: https://www.researchgate.net/publication/391610335_A_review_on_automated_plant_disease_detection_motivation_limitations_challenges_and_recent_advancements_for_future_research
- [5] A. Tripathi, V. Karad, V. Gohokar, and R. Kute, "Comparative Analysis of YOLOv8 and YOLOv9 Models for Real-Time Plant Disease Detection in Hydroponics," *Engineering, Technology & Applied Science Research*, vol. 14, no. 5, pp. 17269-17275, 2024. [Online]. Available: https://www.researchgate.net/publication/384820576_Comparative_Analysis_of_YOLOv8_and_YOLOv9_Models_for_Real-Time_Plant_Disease_Detection_in_Hydroponics
- [6] M. Tan and Q. Le, "EfficientDet: Scalable and Efficient Object Detection," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020. [Online]. Available: https://openaccess.thecvf.com/content_CVPR_2020/html/Tan_EfficientDet_Scalable_and_Efficient_Object_Detection_CVPR_2020_paper.html
- [7] T.-Y. Lin et al., "Focal Loss for Dense Object Detection," in *Proceedings of the IEEE International Conference on Computer Vision (ICCV)*, 2017. [Online]. Available: https://openaccess.thecvf.com/content_iccv_2017/html/Lin_Focal_Loss_for_ICCV_2017_paper.html
- [8] M. Hussain, "YOLOv5, YOLOv8 and YOLOv10: The Go-To Detectors for Real-Time Vision," *arXiv preprint arXiv:2407.02988*, 2024. [Online]. Available: <https://arxiv.org/pdf/2407.02988>
- [9] X. Wang and J. Liu, "Vegetable disease detection using an improved YOLOv8 algorithm in the greenhouse plant environment," *Scientific Reports*, vol. 14, Art. no. 4261, 21 Feb. 2024. [Online]. Available: <https://www.nature.com/articles/s41598-024-54540-9>
- [10] D. Goklani, "Real-Time Plant Disease Detection Using Mobile Device with TensorFlow Lite and Flutter," *SSRN*, posted 12 Sep. 2024. doi: 10.2139/ssrn.4921827. [Online]. Available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4921827

- [11] I. G. K. A. W. Beratha, N. P. Sutramiani and N. K. A. Wirdiani, "Network Reduction Strategy on YOLOv8 Model for Mango Leaf Disease Detection," *Jurnal Buana Informatika*, vol. 16, no. 2, pp. 124-133, Oct. 2025. [Online]. Available: <https://ojs.uaajy.ac.id/index.php/jbi/article/view/12420>
- [12] "Artificial Intelligence: Types and Applications," *IEEE Xplore*, 2024. [Online]. Tersedia: <https://ieeexplore.ieee.org/abstract/document/10954653>
- [13] "Understanding Computer Vision for Intelligent Autonomous Systems," dalam *Handbook of Intelligent Automation Systems Using Computer Vision and Artificial Intelligence*, Wiley, 2024. [Online]. Tersedia: <https://ieeexplore.ieee.org/document/11173791>
- [14] S. Ren, K. He, R. B. Girshick, dan J. Sun, "Faster R-CNN: Towards Real-Time Object Detection with Region Proposal Networks," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 39, no. 6, pp. 1137–1149, Jun. 2017.
- [15] N. Redmon, S. Divvala, R. Girshick, dan R. B. Girshick, "You Only Look Once: Unified, Real-Time Object Detection," *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Las Vegas, NV, USA, Jun. 2016, pp. 779–788.
- [16] A. Kamilaris and F. X. Prenafeta-Boldú, "Deep learning in agriculture: A survey," *Frontiers in Plant Science*, vol. 13, Art. no. 957961, 2022, doi: 10.3389/fpls.2022.957961.
- [17] H. Barnhart, S. Lancaster, D. Goodin, J. Spotanski, and J. A. Dille, "Use of open-source object detection algorithms to detect Palmer amaranth (*Amaranthus palmeri*) in soybean," *Weed Science*, vol. 70, no. 6, pp. 648–662, 2022.
- [18] Suraj Jagadeesh Janaki K B, Jishnu A Tushar V Aradhyamath, dan lainnya, "Image Classification using Convolutional Neural Networks (CNNs)," ResearchGate, 2025. [Online]. Available: https://www.researchgate.net/publication/396609546_Image_Classification_using_Convolutional_Neural_Networks_CNNs
- [19] Y. Zhang, X. Wang, dan lainnya, "A Lightweight One-Stage Defect Detection Network for Small Object Based on Dual Attention Mechanism and PAFPN," ResearchGate, 2021. [Online]. Available: https://www.researchgate.net/publication/355104724_A_Lightweight_One-Stage_Defect_Detection_Network_for_Small_Object_Based_on_Dual_Attention_Mechanism_and_PAFPN
- [20] J. Redmon, S. Divvala, R. Girshick, dan A. Farhadi, "You Only Look Once: Unified, Real-Time Object Detection," in *Proc. IEEE Conf. Comput. Vis. Pattern Recognit. (CVPR)*, 2016. [Online]. Available: https://pjreddie.com/static/papers/yolo_1.pdf
- [21] N. Redmon, S. Divvala, R. Girshick, dan R. B. Girshick, "You Only Look Once: Unified, Real-Time Object Detection," *Proc. IEEE CVPR*, Las Vegas, NV, USA, Jun. 2016, pp. 779–788.
- [22] M. Hussain, "YOLOv5, YOLOv8 and YOLOv10: The Go-To Detectors for Real-Time Vision," arXiv preprint arXiv:2407.02988, 2024.
- [23] A. Elhanashi, P. Dini, S. Saponara, and Q. Zheng, "TeleStroke: real-time stroke detection with federated learning and YOLOv8 on edge devices," *Journal of Real-Time Image Processing*, vol. 21, art. no. 121, 2024, doi: 10.1007/s11554-024-01500-1.
- [24] M. Hussain, "What is YOLOv8: An In-Depth Exploration of the Internal Features of YOLOv8," *arXiv preprint*, arXiv:2408.15857, 2024. [Online]. Available: <https://arxiv.org/abs/2408.15857>

- [25] A. G. Howard, et al., "A Comprehensive Review of YOLO Object Detection Algorithms and Its Applications," *Journal of Imaging*, vol. 9, no. 3, p. 83, MDPI, 2023. [Online]. Available: <https://www.mdpi.com/2504-4990/9/3/83>
- [26] Ultralytics, "YOLOv8 Documentation: Model Architecture and Comparison," *Ultralytics Docs*, 2024. [Online]. Available: <https://docs.ultralytics.com/compare/yolov8-vs-yolov6/>
- [27] ResearchGate, "YOLOv8 Network Architecture," *ResearchGate Figure*, 2024. [Online]. Available: https://www.researchgate.net/figure/YOLOv8-network-architecture_fig1_381458105
- [28] A. Ultralytics Team, "Relation between the YOLOv8n, YOLOv8s, YOLOv8m, YOLOv8l, and YOLOv8x model," *ResearchGate*, 2024. [Online]. Available: https://www.researchgate.net/figure/Relation-between-the-YOLOv8n-YOLOv8s-YOLOv8m-YOLOv8l-and-YOLOv8x-model-65_tbl1_380749139
- [29] P. Singh, *Hands-On Artificial Intelligence for Android: Build smart applications using TensorFlow Lite, ML Kit, and Firebase*. Packt Publishing, 2018. [Online]. Available: <https://subscription.packtpub.com/book/data/9781789611212/1/ch01lvl1sec06/methods-of-integrating-ai-on-android-and-ios>
- [30] D. Goklani, "Real-Time Plant Disease Detection Using Mobile Device ... By integrating a TensorFlow Lite model with the Flutter framework, the application provides a practical and accessible tool ..." *SSRN*, 2024. [Online]. Available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4921827
- [31] *Dart Tutorial*, Dart.dev, Jan. 21, 2026. [Online]. Available: <https://dart.dev/learn/tutorial>
- [32] "Computer Vision Datasets - Roboflow," *Roboflow Public*, 2025. [Online]. Available: <https://public.roboflow.com>
- [33] W. Wartono, W. Wawan, D. N. Susilowati, Sukanto, and J. Kosasih, "*Colletotrichum spp. Causes of Anthracnose Disease on Red Chilli Plants (Capsicum annuum) in Ciapus, Bogor, West Java*," *Al-Kauniyah: Jurnal Biologi*, vol. 17, no. 1, pp. 81–90, 2024. [Online]. Available: <https://journal.uinjkt.ac.id/kauniyah/article/download/27460/pdf/110241>
- [34] R. Dean et al., "The Top 10 fungal pathogens in molecular plant pathology," *Molecular Plant Pathology*, vol. 13, no. 4, pp. 414–430, 2012.
- [35] R. S. Situmeang, "Penyakit Bercak Daun Serkospora (*Cercospora capsici*) pada Tanaman Cabai," Dinas Pertanian Kabupaten Buleleng, 06-Nov-2025. [Online]. Available: https://distan.bulelengkab.go.id/informasi/detail/artikel/98_penyakit-bercak-daun-serkospora-cercospora-capsici-pada-tanaman-cabai
- [36] I. K. Purnawirawan Putra, "Pengaruh Curah Hujan terhadap Perkembangan Organisme Pengganggu Tanaman (OPT) Hawar Daun Bakteri pada Padi," Dinas Pertanian Kabupaten Buleleng, 26-Mar-2025. [Online]. Available: https://distan.bulelengkab.go.id/informasi/detail/artikel/38_pengaruh-curah-hujan-terhadap-perkembangan-organisme-pengganggu-tanaman-opt-hawar-daun-bakteri-pada-padi
- [37] R. Ardiani, "Identifikasi Dini Penyakit Bulai pada Tanaman Jagung," Dinas Pertanian Kabupaten Buleleng, 27-Sep-2024. [Online]. Available: https://distan.bulelengkab.go.id/informasi/detail/artikel/71_identifikasi-dini-penyakit-bulai-pada-tanaman-jagung
- [38] *Gosong Bengkak, Penyakit Yang Sebabkan Jagung Gagal Panen*, Indozone.id, Senin, 09-Sep-

- 2019.[Online].Available:<https://fadami.indozone.id/ramalan/441345922/gosong-bengkak-penyakit-yang-sebabkan-jagung-gagal-panen>
- [39] “*Hati-hati Gerak Gerik Sang Penggerek Batang Jagung*,” JagungBISI.com, 13-Nov-2010. [Online].Available:<https://jagungbisi.com/mewaspada-gerak-gerik-sang-penggerek-batang-jagung/>
- [40] “*Penyakit Karat Daun Tanaman Jagung*,” BBPOPT – Balai Besar Pengendalian Organisme Pengganggu Tanaman, Kementerian Pertanian RI, 29-Sep-2023. [Online]. Available:<https://bbpopt.tanamanpangan.pertanian.go.id/artikel/penyakit-karat-daun-tanaman-jagung>
- [41] IRRI, *Hawar Daun Bakteri (Bacterial Leaf Blight) of Rice*, International Rice Research Institute, 2022.
- [42] I. W. Rusman, “*Mirip Dengan Penyakit Blas, Kenali Penyakit Bercak Coklat (Bercak Coklat (Brown Spot)) pada Padi (Helminthosporium oryzae)*,” Dinas Pertanian Kabupaten Buleleng, 22-Jul-2025.[Online].Available:https://distan.bulelengkab.go.id/informasi/detail/artikel/66_mirip-dengan-penyakit-blas-kenali-penyakit-bercak-coklat-brown-spot-pada-padi-helminthosporium-oryzae
- [43] S. V. Vasantha, B. Kiranmai, and S. Rama Krishna, “*Techniques for rice leaf disease detection using machine learning algorithms*,” in *Proc. International Conference on Advances in Computing and Communication Technology (ICACT)*, vol. 9, no. 08, Jun. 2021, pp. 1–6, doi: 10.17577/IJERTCONV9IS08032.
- [44] Ultralytics, “YOLOv8 Documentation,” 2024. [Online]. Available: <https://docs.ultralytics.com/models/yolov8/>
- [45] Roboflow, “Image Augmentation,” Roboflow Documentation, 2025. [Online]. Available: <https://docs.roboflow.com/datasets/dataset-versions/image-augmentation>
- [46] Ultralytics, “ConfusionMatrix: Ultralytics Metrics Reference,” Ultralytics Documentation, 2026. [Online]. Available: <https://docs.ultralytics.com/reference/utils/metrics/>