

DAFTAR PUSTAKA

- Avtar, R., Ishii, R., Kobayashi, H., Fadaei, H., Suzuki, R., & Herath, S. (2013). Efficiency of multi-frequency, multi-polarized SAR data to monitor growth stages of oilpalm plants in Sarawak, Malaysia. *2013 IEEE International Geoscience and Remote Sensing Symposium - IGARSS*, 2137–2140. <https://doi.org/10.1109/IGARSS.2013.6723236>
- Avtar, R., Suab, S. A., Syukur, M. S., Korom, A., Umarhadi, D. A., & Yunus, A. P. (2020). Assessing the Influence of UAV Altitude on Extracted Biophysical Parameters of Young Oil Palm. *Remote Sensing*, 12(18), 3030. <https://doi.org/10.3390/rs12183030>
- Barcelos, E., Rios, S. de A., Cunha, R. N. V., Lopes, R., Motoike, S. Y., Babiychuk, E., Skirycz, A., & Kushnir, S. (2015). Oil palm natural diversity and the potential for yield improvement. *Frontiers in Plant Science*, 6. <https://doi.org/10.3389/fpls.2015.00190>
- Benjdira, B., Khursheed, T., Koubaa, A., Ammar, A., & Ouni, K. (2019). Car Detection using Unmanned Aerial Vehicles: Comparison between Faster R-CNN and YOLOv3. *2019 1st International Conference on Unmanned Vehicle Systems-Oman (UVS)*, 1–6. <https://doi.org/10.1109/UVS.2019.8658300>
- Badan Pusat Statistik. (2023). Statistik kelapa sawit Indonesia 2022 (Vol. 16). Diakses 16 Oktober 2024. <https://www.bps.go.id>.
- Cargill (t.t). Cargill's Sustainable Palm Oil Policy. Diakses 22 Desember 2024. <https://www.cargill.com/sustainability/palm-oil/sustainable-palm-oil>
- Chemura, A., van Duren, I., & van Leeuwen, L. M. (2015). Determination of the age of oil palm from *crown projection area* detected from WorldView-2 multispectral remote sensing data: The case of Ejisu-Juaben district, Ghana. *ISPRS Journal of Photogrammetry and Remote Sensing*, 100, 118–127. <https://doi.org/10.1016/j.isprsjprs.2014.07.013>

- Chong, K. L., Kanniah, K. D., Pohl, C., & Tan, K. P. (2017). A review of remote sensing applications for oil palm studies. *Geo-Spatial Information Science*, 20(2), 184–200. <https://doi.org/10.1080/10095020.2017.1337317>
- Chowdhury, P. N., Shivakumara, P., Nandanwar, L., Samiron, F., Pal, U., & Lu, T. (2022). Oil palm tree counting in drone images. *Pattern Recognition Letters*, 153, 1–9. <https://doi.org/10.1016/j.patrec.2021.11.016>
- Collier, P. (2009). Photogrammetry/Aerial Photography. In *International Encyclopedia of Human Geography* (pp. 151–156). Elsevier. <https://doi.org/10.1016/B978-008044910-4.00059-6>
- Corley, R. H. V. (2009). How much palm oil do we need? *Environmental Science & Policy*, 12(2), 134–139. <https://doi.org/10.1016/j.envsci.2008.10.011>
- D., S., A., C., E., M., M., van N., J., G., J., S.-G., K., W., & M., K. (2009). *The impacts and opportunities of oil palm in Southeast Asia: What do we know and what do we need to know?* Center for International Forestry Research (CIFOR). <https://doi.org/10.17528/cifor/002792>
- DJI Enterprise (2021). Drone Surveying : What is the Difference Between Aerial Photography and Photogrammetry. Diakses 18 November 2024 <https://enterprise-insights.dji.com/blog/aerial-photography-vs-photogrammetry>
- ESRI (t.t). Competitive Analysis – QGIS. Diakses 13 November 2024 <https://www.esri.cl/content/dam/distributor-restricted/esri-cl/pdf/competitiveanalysis-qgis-aug2023.pdf>
- ESRI (t.t). ArcGIS : Esri's Enterprise Geospatial Platform. Diakses 18 November 2024 <https://www.esri.com/en-us/arcgis/geospatial-platform/overview>
- ESRI Indonesia (t.t). Produk Esri. Diakses 18 November 2024 <https://esriindonesia.co.id/id/esri-full-product-list>

ESRI (t.t). ArcGIS Pro : Introduction to *deep learning*. Diakses 18 November 2024

<https://pro.arcgis.com/en/pro-app/latest/help/analysis/deep-learning/what-is-deep-learning-.htm>

ESRI (t.t). ArcGIS Pro : *Deep Learning* model Architectures.

<https://pro.arcgis.com/en/pro-app/latest/tool-reference/image-analyst/overview-of-the-deep-learning-models.htm>

ESRI (t.t). ArcGIS Dashboards. Diakses 04 November 2024.

<https://www.esri.com/en-us/arcgis/products/arcgis-dashboards/overview>

Faris, J. E. (1960). Analytical Techniques Used in Determining the Optimum Replacement Pattern. *American Journal of Agricultural Economics*, 42(4), 755–766. <https://doi.org/10.2307/1235110>

Fasa, R. A. M., Napitupulu, H., & Sukono, S. (2023). Analysis of Determining The Cost of Replanting for Smallholder Oil Palm Plantations Using Annuities Model with Python. *International Journal of Quantitative Research and Modeling*, 4(4), 286–293. <https://doi.org/10.46336/ijqrm.v4i4.547>

FITZHERBERT, E., STRUEBIG, M., MOREL, A., DANIELSEN, F., BRUHL, C., DONALD, P., & PHALAN, B. (2008). How will oil palm expansion affect biodiversity? *Trends in Ecology & Evolution*, 23(10), 538–545. <https://doi.org/10.1016/j.tree.2008.06.012>

Hanis, A., Uke, A., Sudesh, K., & Kosugi, A. (2024). Accumulation of starch and sugars, and effect on pathogenesis-related proteins in felled oil palm trunks from the replanting period. *Industrial Crops and Products*, 218, 118863. <https://doi.org/10.1016/j.indcrop.2024.118863>

Henderson, J., & Osborne, D. J. (2000). The oil palm in all our lives: how this came about. *Endeavour*, 24(2), 63–68. [https://doi.org/10.1016/S0160-9327\(00\)01293-X](https://doi.org/10.1016/S0160-9327(00)01293-X)

Hendrawan, D., & Musshoff, O. (2024). Smallholders' preferred attributes in a subsidy program for replanting overaged oil palm plantations in Indonesia.

Ecological Economics, 224, 108278.
<https://doi.org/10.1016/j.ecolecon.2024.108278>

Hoffmann, M. P., Castaneda Vera, A., van Wijk, M. T., Giller, K. E., Oberthür, T., Donough, C., & Whitbread, A. M. (2014). Simulating potential growth and yield of oil palm (*Elaeis guineensis*) with PALMSIM: Model description, evaluation and application. *Agricultural Systems*, 131, 1–10.
<https://doi.org/10.1016/j.agsy.2014.07.006>

JR Resolution (2020). What are the different types of aerial Photography?. Diakses 18 November 2024 <https://jrresolutions.com/what-are-the-different-types-of-aerial-photography/>

Kipli, K., Osman, S., Joseph, A., Zen, H., Awang Salleh, D. N. S. D., Lit, A., & Chin, K. L. (2023). *Deep learning* applications for oil palm tree detection and counting. *Smart Agricultural Technology*, 5, 100241.
<https://doi.org/10.1016/j.atech.2023.100241>

Koussihouèdé, H., Aholoukpè, H., Adjibodou, J., Hinkati, H., Dubos, B., Chapuis-Lardy, L., Barthès, B. G., Amadji, G., & Clermont-Dauphin, C. (2020). Comparative analysis of nutritional status and growth of immature oil palm in various intercropping systems in southern Benin. *Experimental Agriculture*, 56(3), 371–386. <https://doi.org/10.1017/S0014479720000022>

LeCun, Y., Bengio, Y., & Hinton, G. (2015). *Deep learning*. *Nature*, 521(7553), 436–444. <https://doi.org/10.1038/nature14539>

Li, W., & Hsu, C.-Y. (2022). GeoAI for Large-Scale Image Analysis and Machine Vision: Recent Progress of Artificial Intelligence in Geography. *ISPRS International Journal of Geo-Information*, 11(7), 385.
<https://doi.org/10.3390/ijgi11070385>

Liputan Tech (t.t). ArcGIS vs QGIS. Diakses 18 November 2024
<https://liputantech.com/id/2024/sig/arcgis-vs-qgis-2/>

- Mariyah, M., Syaukat, Y., Hartoyo, S., Fariyanti, A., & Krisnamurthi, B. (2018). Penentuan Umur Optimal Peremajaan Kelapa Sawit di Kabupaten Paser Kalimantan Timur. *Jurnal Ekonomi Kuantitatif Terapan*, 103. <https://doi.org/10.24843/JEKT.2018.v11.i01.p08>
- Muna, M. S., Nugroho, A. P., Syarovy, M., Wiratmoko, A., Suwardi, & Sutiarso, L. (2022). *Development of Automatic Counting System for Palm Oil Tree Based on Remote Sensing Imagery*. https://doi.org/10.2991/978-94-6463-086-2_68
- Najafabadi, M. M., Villanustre, F., Khoshgoftaar, T. M., Seliya, N., Wald, R., & Muharemagic, E. (2015). *Deep learning applications and challenges in big data analytics*. *Journal of Big Data*, 2(1), 1. <https://doi.org/10.1186/s40537-014-0007-7>
- Narkhede, S (2018). Understanding Confusion Matrix. Diakses pada 14 Desember 2024 <https://towardsdatascience.com/understanding-confusion-matrix-a9ad42dcfd62>
- Nurfatriani, F., Ramawati, Sari, G. K., & Komarudin, H. (2019). Optimization of Crude Palm Oil Fund to Support Smallholder Oil Palm Replanting in Reducing Deforestation in Indonesia. *Sustainability*, 11(18), 4914. <https://doi.org/10.3390/su11184914>
- Pathak, A. R., Pandey, M., & Rautaray, S. (2018). Application of *Deep Learning* for Object Detection. *Procedia Computer Science*, 132, 1706–1717. <https://doi.org/10.1016/j.procs.2018.05.144>
- Pohl, C., Kanniah, K. D., & Loong, C. K. (2016). Monitoring oil palm plantations in Malaysia. *2016 IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, 2556–2559. <https://doi.org/10.1109/IGARSS.2016.7729660>
- Price, Z., Mayes, S., Billotte, N., Hafeez, F., Dumortier, F., & MacDonald, D. (2007). Oil palm. In *Technical Crops* (pp. 93-108). Berlin, Heidelberg: Springer Berlin Heidelberg.

Menteri Pertanian Republik Indonesia (2013). Pedoman Budidaya Kelapa Sawit.

Peraturan Menteri Pertanian Nomor 131/Permentan/OT.140/12/2013 Tahun 2013. Jakarta.

SPKS (2024). 7. Modul Standard Operating Procedure (SOP) Manajemen Pemeliharaan Kelapa Sawit. Diakses 10 November 2024.

<https://spks.or.id/detail-publikasi-7-modul-standard-operating-procedure-sop-manajemen-pemeliharaan-kelapa-sawit>

SPKS (2024). 15. Modul Standard Operating Procedure (SOP) Manajemen *Replanting*. Diakses 10 November 2024. <https://spks.or.id/detail-publikasi-15-modul-standard-operating-procedure-sop-manajemen-replanting>

Southworth, A. (1985). Palm oil and palm kernels. *Journal of the American Oil Chemists' Society*, 62(2), 250–254. <https://doi.org/10.1007/BF02541386>

Suab, S. A., Syukur, M. S., Avtar, R., & Korom, A. (2019). UNMANNED AERIAL VEHICLE (UAV) DERIVED NORMALISED DIFFERENCE VEGETATION INDEX (NDVI) AND *CROWN PROJECTION AREA* (CPA) TO DETECT HEALTH CONDITIONS OF YOUNG OIL PALM TREES FOR PRECISION AGRICULTURE. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLII-4/W16, 611–614. <https://doi.org/10.5194/isprs-archives-XLII-4-W16-611-2019>

Terven, J., Córdova-Esparza, D.-M., & Romero-González, J.-A. (2023). A Comprehensive Review of YOLO Architectures in Computer Vision: From YOLOv1 to YOLOv8 and YOLO-NAS. *Machine Learning and Knowledge Extraction*, 5(4), 1680–1716. <https://doi.org/10.3390/make5040083>

Wahid, Mohd. B., Abdullah, S. N. A., & Henson, I. E. (2005). Oil Palm — Achievements and Potential. *Plant Production Science*, 8(3), 288–297. <https://doi.org/10.1626/pps.8.288>

- Wang, J., Sammis, T. W., Gutschick, V. P., Gebremichael, M., Dennis, S. O., & Harrison, R. E. (2010). Review of Satellite Remote Sensing Use in Forest Health Studies~!2010-01-27~!2010-04-05~!2010-06-29~! *The Open Geography Journal*, 3(1), 28–42.
<https://doi.org/10.2174/1874923201003010028>
- Woittiez, L. S., van Wijk, M. T., Slingerland, M., van Noordwijk, M., & Giller, K. E. (2017). Yield gaps in oil palm: A quantitative review of contributing factors. *European Journal of Agronomy*, 83, 57–77.
<https://doi.org/10.1016/j.eja.2016.11.002>
- Zhang, W. J., Yang, G., Lin, Y., Ji, C., & Gupta, M. M. (2018). On Definition of Deep Learning. *2018 World Automation Congress (WAC)*, 1–5.
<https://doi.org/10.23919/WAC.2018.8430387>
- Zhao, J., Elmore, A. J., Lee, J. S. H., Numata, I., Zhang, X., & Cochrane, M. A. (2023). Replanting and yield increase strategies for alleviating the potential decline in palm oil production in Indonesia. *Agricultural Systems*, 210, 103714. <https://doi.org/10.1016/j.agsy.2023.103714>