REFERENCES

[1] Y. A. Andi, I. Baroh, and J. T. Ibrahim, "Analisis trend ekspor teh Indonesia," Agriecobis: Journal of Agricultural Socioeconomics and Business, vol. 2, no. 1, pp. 23–31, 2019.

[2] Badan Pusat Statistik, Indonesian Tea Statistics 2023. Jakarta, Indonesia: BPS, 2024.

[3] Kementerian Pertanian, Outlook Teh 2024. Pusat Data dan Sistem Informasi Pertanian, 2024.

[4] Chicago Botanic Garden, Optimal Monitoring of Plant Populations: Report II. Glencoe, Illinois, USA, 2013.

[5] H. M. Rizeei, H. Z. Shafri, M. A. Mohamoud, B. Pradhan, and B. Kalantar, "Oil palm counting and age estimation from WorldView-3 imagery and LiDAR data using an integrated OBIA height model and regression analysis," Journal of Sensors, vol. 2018, pp. 1–13, 2018.

[6] J. Xue and B. Su, "Significant remote sensing vegetation indices: a review of developments and applications," Journal of Sensors, vol. 2017, 17 pages, May 2017.

[7] Z. Abidin, F. Fatchurrohman, and O. Q. Aziz, "Identifikasi pohon tropis di daerah perkotaan menggunakan multispectral drone imagery," *Techno. Com*, vol. 21, no. 4, pp. 829–837, 2022

[8] A. P. Rizky and M. Solahudin, "Analysis of aerial photo for estimating tree numbers in oil palm plantation," in *IOP Conf. Series: Earth and Environmental Science*, vol. 284, no. 1, p. 012003, May 2019.

[9] X. Liu, K. H. Ghazali, F. Han, and I. I. Mohamed, "Automatic detection of oil palm tree from UAV images based on the deep learning method," *Applied Artificial Intelligence*, vol. 35, no. 1, pp. 13–24, 2021.

[10] J. Li, W. Wu, L. Guo, Y. Liu, and C. Zhang, "Tea yield estimation based on UAV RGB and Sentinel-2 multi-spectral data," *Plants*, vol. 14, no. 3, p. 373, Feb. 2025.

[11] H. Xu, T. Jin, and Z. Yang, "Unmanned aerial vehicle multisensor data fusion for plant phenotyping: A review," *Frontiers in Plant Science*, vol. 13, p. 898962, Jun. 2022.

[12] D. Henry, H. Aubert, T. Véronèse, and É. Serrano, "Remote estimation of intra-parcel grape quantity from three-dimensional imagery technique using ground-based microwave FMCW radar," *IEEE Instrumentation & Measurement Magazine*, vol. 20, no. 3, pp. 20–24, 2017.

[13] . Q. Mayoral, A. Jiménez-Buendía, A. M. Moreno-Ruiz, J. F. Martínez-Gimeno, and J. M. Molina-García-Pardo, "Water content continuous monitoring of grapevine xylem tissue using a portable low-power cost-effective FMCW radar," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, no. 9, pp. 5595–5605, 2019.

[14] T. F. Bastos, P. F. Lima, R. C. Oliveira, and L. H. Silva, "Non-destructive estimation of forage biomass using UAV-borne radar and multispectral sensors," *Computers and Electronics in Agriculture*, vol. 215, p. 108477, Aug. 2024.

[15] M. A. C. Pacheco, J. R. Silva, and P. J. Mendes, "UAV-based radar remote sensing for vegetation structure characterization: A proof-of-concept," *Frontiers in Plant Science*, vol. 13, p. 820585, Feb. 2022.

[16] A. Abdelmawla and S. S. Kim, "Application of ground penetrating radar to estimate subgrade soil density," *Infrastructures*, vol. 5, no. 2, p. 12, 2020.

[17] D. D. Morgan, D. A. Gurnett, D. L. Kirchner, J. L. Fox, E. Nielsen, and J. J. Plaut, "Variation of the Martian ionospheric electron density from Mars Express radar soundings," *J. Geophys. Res.: Space Phys.*, vol. 113, no. A9, Sep. 2008.

[18] M. I. Skolnik, *Radar Handbook*, 3rd ed. New York: The McGraw-Hill Companies, 2008.

[19] S. Jannah, A. A. Pramudita, and F. Y. Suratman, "Experiment of FMCW radar for small displacement detection using VNA," in *Proc. 2021 Int. Conf. on Radar, Antenna, Microwave, Electronics, and Telecommunications (ICRAMET)*, pp. 1–6, 2021.

[20] R. Rahmatullah, P. D. P. Adi, S. Prasetya, A. B. Santiko, Y. Wahyu, B. B. S. Wicaksana, *et al.*, "Analyze transmission data from a multi-node patient's respiratory FMCW radar to the Internet of Things," *International Journal of Advanced Computer Science and Applications*, vol. 14, no. 5, 2023.

[21] M. Jankiraman, *FMCW Radar Design*. Norwood, MA: Artech House, 2018.

[22] C. Q. Mayoral *et al.*, "Water content continuous monitoring of grapevine xylem tissue using a portable low-power cost-effective FMCW radar," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, pp. 5595–5605, 2019.

[23] C. Nguyen and J. Park, *Stepped-Frequency Radar Sensors: Theory, Analysis and Design*. Cham: Springer, 2016.

[24] V. Tuzlukov, Signal processing in radar systems. Boca Raton, FL: CRC Press, 2017.

[25] K. Ramya, "Radar absorbing medium (RAM)," *Applied Mechanics and Mediums*, vol. 390, pp. 450–453, 2013.

[26] L. D. Landau and E. M. Lifshitz, *Electrodynamics of Continuous Media*. New York: Pergamon, 1984.

[27] H. Looyenga, "Dielectric constants of heterogeneous mixtures," *Physica*, vol. 31, no. 3, pp. 401–406, 1965.

[28] G. J. Maxwell and B. A. Garnett, "Colours in metal glasses and in metallic films," *Philosophical Transactions of the Royal Society of London. Series A*, vol. 203, pp. 385–420, 1904.

[29] O. Nelson, "Dielectric property measurements and techniques," *NTNU Proceedings Journal*, 2004.

[30] F. J. I. Lamia, J. E. X. Rogi, dan D. Tiwow, “Pengukuran ketajaman Ground Sampling Distance (GSD) di berbagai ketinggian lahan sawah dengan menggunakan drone tipe Mavic 2 Pro di Desa Matani Kecamatan Tumpaan,” *Agrisosioekonomi: Jurnal Transdisiplin Pertanian*, vol. 19, no. 1, pp. 557–562, Jan. 2023.

[31] J. Xue and B. Su, “Significant remote sensing vegetation indices: a review of developments and applications,” *Journal of Sensors*, vol. 2017, Article ID 1353691, 17 pages, May 2017.

[32] L. S. Eng, R. Ismail, W. Hashim, dan A. Baharum, “The use of VARI, GLI, and VIgreen formulas in detecting vegetation in aerial images,” *International Journal of Technology*, vol. 10, no. 7, pp.

[33] G. E. Meyer and J. Camargo Neto, "Verification of color vegetation indices for automated crop imaging applications," *Computers and Electronics in Agriculture*, vol. 63, pp. 282–293, 2008.

[34] P. K. M. Nkwari, S. Sinha, and H. C. Ferreira, “Through-the-Wall Radar Imaging: A Review,” IETE Technical Review, vol. 34, no. 1, pp. 1–9, 2017.

[35] S. Kidera, T. Sakamoto, and T. Sato, “High-resolution 3D imaging algorithm with an envelope of modified spheres for UWB through-the-wall radars,” IEEE Transactions on Geoscience and Remote Sensing, vol. 47, no. 7, pp. 2041–2051, Jul. 2009.

[36] A. V. Oppenheim and R. W. Schafer, *Discrete-Time Signal Processing*, 2nd ed. Upper Saddle River, NJ: Prentice Hall, 1999.

[37] Z. Wang, A. C. Bovik, H. R. Sheikh, and E. P. Simoncelli, “Image quality assessment: From error visibility to structural similarity,” *IEEE Transactions on Image Processing*, vol. 13, no. 4, pp. 600–612, 2004.

[38] Gonzalez, R. C., & Woods, R. E. (2018). Digital Image Processing (4th ed.). Pearson.