

DAFTAR PUSTAKA

- Barbedo, J.G.A. (2019). A Review on The Use of Unmanned Aerial Vehicles and Imaging Sensors for Monitoring and Assessing Plant Stresses. *Drones*, 2019, 3(2), 40. <https://doi.org/10.3390/drones3020040>
- BPS. 2021. Luas Panen dan Produksi Padi di Indonesia 2021 (Angka Tetap). BPS
- Caasi, H., Wiyono., Giamerti, Y., Saito, D., Homma, K., dan Shishido, m. (2020). The Potential of Using Sentinel-2 Satellite Imagery in Assesing BLB on Rice in West Java, Indonesia. *Journal of the International Society for Southeast Asian Agricultural Sciences*, 2020 26(1)
- Caasi, O., Hongo, C., Suryaningsih., A., Wiyono, S., Homma, K., dan Shishido, M. (2019). Relationships between bacterial leaf blight and other diseases based on field assessment in Indonesia. *Trop. Agr. Develop.* 63 (3)
- Cai, N., Zhou, X., Yang, Y., Zhang, D., dan Hu, R. (2019). Use of UAV images to assess narrow brown leaf spot severity in rice. *Int J Precis Agric Aviat*, 2019 (2)
- Carvalho, O. A. dan Meneses, R. (2000). Spectral correlation mapper (SCM): an improvement on the spectral angle mapper (SAM).
- Cracknell, A.P. (2018). The development of remote sensing in the last 40 years. *International Journal of Remote Sensing*. 39(23) 8387-8427
- Danoedoro, P. (2012). *Pengantar Penginderaan Jauh Digital*. Yogyakarta: Penerbit Andi.
- De Carvalho Jr, O.A. dan Meneses, P.R. (2000). Spectral Correlation Mapper (SCM): An Improvement on the Spectral Angle Mapper (SAM) *Prosiding Workshop Aviris 2000* <https://aviris.jpl.nasa.gov/proceedings/workshops/>
- Deng, L., Mao, Z., Li, X., Hu, Z., Duan, F., dan Yan, Y. (2018). UAV-based multispectral remote sensing for precisioN agriculture: a comparison between different cameras. *ISPRS Journal of Photogrammetry and Remote Sensing*. 146
- Direktorat Perlindungan Tanaman Pangan. (2022, Mei 30). Petunjuk Teknis Pengamatan dan Pelaporan Organisme Pengganggu Tumbuhan dan Dampak PerubahanIklim:
<http://ditlin.tanamanpangan.pertanian.go.id/assets/front/uploads/document/>

Petunjuk%20Teknis%20Pengamatan%20dan%20Pelaporan%20OPT%20DPI%20Tahun%202021.pdf

- Duque, A., Patino, D., Colorado, J.D., Petro, E., Rebolledo, M. C., Mondragon, I. F., Espinosa, N., Amezcua, N., Puentes, O. D., Mendes, D., dan Jeramillo-Botero, A. (2023). Characterization of rice yield based on biomass and SPAD-based leaf nitrogen for large genotype plots. *Sensors*. 23, 5917
- Geipel, J., Link, J., Wirwahn, J., dan Claupein, W. (2016) A programmable aerial multispectral camera system for in-season crop biomass and nitrogen content estimation. *Agriculture* 2016, 6(4).
- Gennaro, S. F., Toscano, P., Gatti, M., Poni, S., Berton, A., dan Matese, A. (2022). Spectral Comparison of UAV-Based Hyper and Multispectral Cameras for Precision Viticulture. *Remote Sensing*, 14, 3
- Ghobadifar, F., Wayayok, A., Mansor, S., dan Shafri, HZ. (2016). Detection of BPH (brown planthopper) sheath blight in rice farming using multispectral remote sensing. *Geomatics, Natural Hazards and Risk*, 2016 7(1) <http://dx.doi.org/10.1080/19475705.2014.885468>
- Giamerti, Y., Hongo, C., Saito, D., Caasi, O., Susilawati, P.N., Shishido, M., Sudiarta, I.P., Wijaya, I.M.A.S., dan Homma, K. (2021). Evaluating Multispectral Imaging for Assessing Bacterial Leaf Blight Damage in Indonesian Agricultural Insurance. *Prosiding Volume 232, IConARD 2020, E3S Web of Conferences 232, 03008 (2021)* EDP Sciences: <https://doi.org/10.1051/e3sconf/202123203008>
- Gitelson, A.A., Kaufman, Y.J., dan Merzlyak, M.N. (1996). Use of a green channel in remote sensing of global vegetation from EOS-MODIS. *Remote Sensing of Environment*, 58(3), 289–298
- Gunawan, R., Nirwati, D., Bagariang, W., dan Nuzulullia. (2013). Inventarisasi Pustaka Spektral OPT Utama Padi. *Laporan Hasil Kegiatan* untuk Balai Besar Peramalan Organisme Pengganggu Tumbuhan (BBOPT)
- Hastuti, D., Manessa, M. D, M., dan Parlindungan, M. (2022). Tea planthealth research using spectrometer. *Intl. Journal of Remote Sensing and earth Sciences*. 19 (2)
- He, J., Li, Y., dan Zhang, K. (2012) Research of UAV Flight Planning Parameters.

Positioning, 3, 43-45

Hernina, R., dan Putra T. D. (2021) *Foto Udara Dijital: Teori dan Praktikum*.

Depok: Departemen Geografi FMIPA UI

IRRI. (2020, Desember) RiceDoctor Fact Sheets: Bacterial Blight:

<http://www.knowledgebank.irri.org/decision-tools/rice-doctor/rice-doctor-fact-sheets/item/bacterial-blight>

IRRI. (2024, April) Stem Borer – IRRI Rice Knowledge Bank Fact Sheet:

<http://www.knowledgebank.irri.org/training/fact-sheets/pest-management/insects/item/stem-borer?tmpl=component&print=1>

Isnaen, Z., Utari, D., Ramadhan A. F., dkk., Putri, C. R., Kusuma, D. W., dan

Kamal, M. (2019). Comparison of mangrove and other objects spectral reflectance from small format aerial photography image, worldview-2 image, and field measurement. *International Conference on Science and Technology (ICST)*, 5

Jensen, J.R. (2014) *Remote Sensing of the Environment an Earth Resource*

Perspective. Harlow: Pearson Education Limited

Jimenez-Jimenez, S.I., Ojeda-Bustamante, W., de Jesus Marcial-Pablo, M., da

Enciso, J. (2021) Digital Terrain Models Generated with Low-Cost UAV Photogrammetry: Methodology and Accuracy. *ISPR Int. J. Geo-Inf*, 10, 285

Kalischuk, M., Paret, M.L., Freeman, J.H., Raj, D., Da Silva, S., Eubanks, S.,

Wiggins, D.J., Lollar, M., Marois, J.J., Mellinger, H.C., dan Das, J. (2019). An improved crop scouting technique incorporating unmanned aerial vehicle-assisted multispectral crop imaging into conventional scouting practice for gummy stem blight in watermelon. *Plant Dis*. 103, 1642–1650.

Krezhova, D., Velichkova, K., Petrov, N., dan Maneva, S. (2017). The effect of

plant diseases on hyperspectral leaf reflectance and biophysical parameters. *RAD Conference Proceedings*, 2, 269–275

Kumar, P., Bhatnagar, R., Gaur, K., dkk. (2021). Classification of Imbalanced

Data: Review of Methods and Applications. *IOP Conf. Ser.: Mater. Sci. Eng.*

Kumar, P., Gupta, D.K., Mishra, V.N., dan Prasad, R. (2015). Comparison of

support vector machine, artificial neural network, and spectral angle mapper

- algorithms for crop classification using LISS IV data. *International Journal of Remote Sensing*. 36 (6), 1604-1617
- Lee, W.S. (2015). *Plant Health Detection and Monitoring*. In Park B. dan Lu, R. Hyperspectral Imaging Technology in Food and Agriculture (pp.275 - 288). New York: Springer
- Lu, B., He, Y dan Dao, P.D. (2019). Comparing the performance of multispectral and hyperspectral images for estimating vegetation properties. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 12, 6
- Lu, H., Fan, T., Ghimire, P., dan Deng, L. (2020). Experimental Evaluation and Consistency Comparison of UAV Multispectral Minisensors. *Remote Sensing*, 12, 2542
- Mahlein, A., Rumpf, T., Welke, P., Dehne, H., Plümer, L., Steiner, U., Oerke, E., (2013). Development of spectral indices for detecting and identifying plant diseases. *Remote Sens. Environ.* 128
- Mirandilla, J.R.F. dan Paringit, E.C. (2019). Detection of Selected Rice Diseases Using Hyperspectral Data. *Prosiding Volume 1, The 40th Asian Conference on Remote Sensing* (2019) Daejeon, Korea Selatan: AARS
- Mokhtari, M. (2021). From Raw Images to an Orthomosaic. *Reference Document Defence Research and Development Canada*
- Neupane, K., dan Gurel, F.B. (2021). Automatic Identification and Monitoring of Plant Diseases Using Unmanned Aerial Vehicles: A Review. *Remote Sens.* 13, 384
- Nhamo, L., Ebrahim, G.Y., Mabhaudhi, T., Mpandeli, S., Magombeyi, M., Chitakira, M., Magidi, J., dan Sibanda, M. (2020). An assessment of groundwater use in irrigated agriculture using multi-spectral remote sensing. *Phys. Chem. Earth Parts A/B/C* 115, 102810
- Olivares, B., Paredes, F. J., Lujan, D, L., Galvis-Causil, S., dan Rey, J. S. (2021). The relationship between the normalized difference vegetation index, rainfall, and potential evapotranspiration in a banana plantation of Venezuela. *Journal of Soil Science and Agroclimatology*, 18 (1)
- Osco, L.P., Ramos, A.P.M., Moriya, E.A.S., de Souza, M., Junior, J.M., Matsubara, E.T., Imai. N.N., dan Creste, J.E. (2019). Improvement of leaf nitrogen

- content inference in Valencia-orange trees applying spectral analysis algorithms in UAV mounted-sensor images. *Int J Appl Earth Obs Geoinformation*, (83), 101907
- Ou, S.H. 1985. Rice diseases (2nd ed) CMI Kew.380 pp.
- Petropoulos, G. P., Vadrevu, K. P., Xanthopoulos, G., Karantounias, G., dan Scholze, M. (2010). A Comparison of Spectral Angle Mapper and Artificial Neural Network Classifiers Combined with Landsat TM Imagery Analysis for Obtaining Burnt Area Mapping. *Sensors* 10, 3
- Rahman, M.F.F., Fan, S., Zhang, Y., dan Chen, L. (2021). A comparative study on application of unmanned aerial vehicle systems in agriculture. *Agriculture*, 11, 22
- Ramadhana, A. D. (2021). *Pemetaan Distribusi Jenis Mangrove Melalui Integrasi Citra Worldview-2 dan Spektrometer Lapangan di Pulau Karimunjawa dan Kemuja, Kabupaten Jepara* [Thesis, Universitas Gadjah Mada]. Universitas Gadjah Mada Repository. <https://etd.repository.ugm.ac.id/penelitian/detail/204351>
- Razali, M. F., Ahmad, A., Bahari, N. I. S., dan Mohd, O. (2014). The effects of pixel aggregation on the radiometric properties of landsat-8 satellite imagery. *Sci.Int.(Lahore)*. 26 (5)
- Sadenova, M. A., Beisekenov, N. A., Anuarbekov, T. B., Kapasov, A. K., dan Kulenova, N. A. (2023). Study of Unmanned Aerial Vehicle Sensors for Practical Remote Application of Earth Sensing in Agriculture. *Chemical Engineering Transactions*, 98, 243-248
- Shwetank., Jain, K., Bhatia, K. (2011). Development of Digital Spectral Library and Supervised Classification of Rice Crop Varieties Using Hyperspectral Image Processing. *Asian Journal of Geoinformatics*, 11(3)
- Singh, D., Maurya, R., Shukla, A. S., Sharma, M. K., dan Gupta, P. R. (2012). Building extraction from very high resolution multispectral images using NDVI based segmentation and morphological operators. *Students Conference on Engineering and Systems*. doi:10.1109/sces.2012.6199034
- Sudir, N. dan Kadir. (2012). Epidemiologi, Patotipe, dan Strategi Pengendalian Penyakit Hawar Daun Bakteri pada Tanaman Padi. *IPTEK TANAMAN*

PANGAN VOL. 7 NO. 2

- Sulaiman, A. A., Syahyuti, Sumaryanto, dan Inounu, I. (2017). *Asuransi Pengayom Petani: Pembelajaran dan Arah Pengembangan*. Jakarta : IAARD Press
- Sun, Z., Wang, X., Wang, Z., Tang L., Xie Y., dan Huang, Y. (2021). UAVs as remote sensing platforms in plant ecology: review of applications and challenges. *Journal of Plant Ecology*. 14(6), 1003-1023.
- Suparyono dan Sudir. (1992). Perkembangan penyakit bakteri hawar daun pada stadia tumbuh yang berbeda dan pengaruhnya terhadap hasil padi. *Media Penelitian Sukamandi* 12: 6-9
- Velez, S., Martinez-Pena, R., dan Castrillo, D. (2023). Beyond Vegetation: A Review Unveiling Additional Insights into Agriculture and Forestry through the Application of Vegetation Indices. *J*, 6, 3
- Viljanen, N., Honkavaara, E., Näsi, R., Hakala, T., Niemeläinen, O., dan Kaivosoja, J. (2018). A novel machine learning method for estimating biomass of grass swards using a photogrammetric canopy height model, images and vegetation indices captured by a drone. *Agriculture*, 8, 70.
- Vina, A., Gitelson, A., Rundquist, D.C., Keydan, G.P., Leavitt, B., dan Schepers, J.S. (2004). Monitoring maize (*L.*) phenology with remote sensing. *Agronomy Journal*, 96, 4. Doi: 10.2134/agronj2004.1139
- Wicaksono, P., Kumara, I.S.W.K., Kamal, M., Fausan, M.A., Zhafarina, Z., Nurswantoro, D.A., dan Yogyantoro, R.N. (2017). Multispectral Resampling of Seagrass Species Spectra: WorldView-2, Quickbird, Sentinel-2A, ASTER VNIR, and Landsat 8 OLI. *Prosiding volume 98, The 5th Geoinformation Science Symposium 2017 (GSS 2017): IOP Publishing. doi :10.1088/1755-1315/98/1/012039*
- Widiastuti, F. 2009. Pemanfaatan Model Climex 1.1 Untuk Menganalisis Potensi Penyebaran Penggerek Batang Padi Kunig (*Scirpophaga Incertulas*) dan Wereng Batang Coklat (*Nilaparvata Lugens*) (Studi Kasus Kabupaten Klaten, Jawa Tengah)
- Wong, D. W. S. (2004). The Modifiable Areal Unit (MAUP), in. Janelle, dkk. (eds.), *WorldMinds: Geographical Perspectives on 100 Problems*, Geogre Mason University, USA: Kluwer Acaemic Publishers. 571-575.

- Yang, C. (2009). Assessment of severity of bacterial leaf blight in rice using canopy hyperspectral reflectance. *Precision Agric.* 11
- Yuan, L., Pu, R., Zhang, J., Wang, J., dan Yang, H. (2016). Using high spatial resolution satellite imagery for mapping powdery mildew at a regional scale. *Precision Agric.* 17 hal. 332 – 348
- Yudarwati, Caasi, H., Sigit, Barus, dan Utoyo. (2020) Bacterial Leaf Blight Detection in Rice Crops using ground-based spectroradiometer data and multi-temporal satellite images. *Journal of Agricultural Science* 12(2)
- Zhang, D., Zhou, X., Zhang, J., Lan, Y., Xu, C., dan Liang, D. Detection of rice sheath blight using an unmanned aerial system with high-resolution color and multispectral imaging. *Plos one*, 13 (5)
- Zhang, J., Huang, Y., Pi, R., Gonzalez-Moreno, P., Yuan, L., Wu, K., dan Huang, W. (2019). Monitoring plant diseases and pests through remote sensing technology: A review. *Computers and Electronics in Agriculture* (165) 104943
- Zhang, J., Pu, R., Huang, W., Yuan, L., Luo, J., dan Wang, J., (2012). Using in-situ hyperspectral data for detecting and discriminating yellow rust disease from nutrient stresses. *Field Crop. Res.* 134.