

## DAFTAR PUSTAKA

- A'yun, Q., Harijati, N. and Mastuti, R. (2019) 'The selection technique of bulbil porang (*Amorphophallus muelleri* Blume ) based on growth response', *Journal of Environmental Engineering & Sustainable Technology*, 06(01), pp. 30–35.
- Aini, A. N., Azrianingsih, R. and Mustofa, I. (2020) 'Identification of potential pathogen bacteria causing tuber rot in Porang (*Amorphophallus muelleri* blume)', *Journal of Tropical Life Science*, 10(2), pp. 99–104. doi: 10.11594/jtls.10.02.02.
- Alifianto, F., Azrianingsih, R. and Rahardi, B. (2013) 'Peta persebaran porang (*Amorphophallus muelleri* Blume) berdasarkan topografi wilayah di Malang raya', *Jurnal Biotropika*, 1(2), pp. 75–79. Available at: <http://biotropika.ub.ac.id/index.php/biotropika/article/view/136/118>.
- Andasuryani *et al.* (2013) 'Determination of catechin as main bioactive component of gambir (*Uncaria gambir* Roxb) by FT-NIR Spectroscopy', 7(41), pp. 3076–3083. Available at: <http://www.academicjournals.org/JMPR>.
- Anturida, Z. and Azrianingsih, R. (2015) 'Pengaruh jarak tanam terhadap pertumbuhan porang (*Amorphophallus muelleri* Blume) pada fase pertumbuhan kedua', *Jurnal Biotropika*, 3(3), pp. 132–136.
- Arisoesilaningsih, E. *et al.* (2009) *Pemodelan Pertumbuhan Vegetatif dan Produksi Umbi Porang pada Beberapa Umur Tanaman Kondisi Vegetasi, Tanah, serta Iklim Agroforestri*, *Lib.Uin-Malang.Ac.Id*. Malang. Available at: <http://lib.uin-malang.ac.id/files/thesis/fullchapter/03520047.pdf>.
- Babu, B. *et al.* (2011) 'Molecular detection and identification of Dasheen mosaic virus infecting *Amorphophallus paeoniifolius*', *Archives of Phytopathology and Plant Protection*, 44(13), pp. 1248–1260. doi: 10.1080/03235408.2010.490398.
- Barker, M. and Rayens, W. (2003) 'Partial least squares for discrimination', *Journal of Chemometrics*, 17(3), pp. 166–173. doi: 10.1002/cem.785.
- Budiman, B. And Arisoelaningsih, E. (2011) 'Predictive model of

*Amorphophallus muelleri* growth in some agroforestry in East Java by multiple regression analysis', *Biodiversitas Journal of Biological Diversity*, 13(1). doi: 10.13057/biodiv/d130104.

Chakraborty, S. K. *et al.* (2021) 'Non-destructive classification and prediction of aflatoxin-B1 concentration in maize kernels using Vis-NIR (400–1000 nm) hyperspectral imaging', *Journal of Food Science and Technology*, 58(2), pp. 437–450. doi: 10.1007/s13197-020-04552-w.

Cheng, T. *et al.* (2016) 'Barcoding the kingdom Plantae: New PCR primers for ITS regions of plants with improved universality and specificity', *Molecular Ecology Resources*, 16(1), pp. 138–149. doi: 10.1111/1755-0998.12438.

Choudhary, R. *et al.* (2009) 'Rapid estimation of lycopene concentration in watermelon and tomato puree by fiber optic visible reflectance spectroscopy', *Postharvest Biology and Technology*, 52(1), pp. 103–109. doi: 10.1016/j.postharvbio.2008.10.002.

da Conceição, R. R. P. *et al.* (2021) 'Application of near-infrared hyperspectral (NIR) images combined with multivariate image analysis in the differentiation of two mycotoxigenic *Fusarium* species associated with maize', *Food Chemistry*, 344. doi: 10.1016/j.foodchem.2020.128615.

Cortés, V. *et al.* (2016) 'A new internal quality index for mango and its prediction by external visible and near-infrared reflection spectroscopy', *Postharvest Biology and Technology*, 118, pp. 148–158. doi: 10.1016/j.postharvbio.2016.04.011.

Fahri, N., Purwanto, Y. A. and Budiastra, I. W. (2016) 'Classification of Gedong gincu mango based on ratio sugar acid content using near infrared spectroscopy prediction', *Jurnal Keteknik Pertanian*, 04(1), pp. 31–36. doi: 10.19028/jtep.04.1.31-36.

Del Fiore, A. *et al.* (2010) 'Early detection of toxigenic fungi on maize by hyperspectral imaging analysis', *International Journal of Food Microbiology*, 144(1), pp. 64–71. doi: 10.1016/j.ijfoodmicro.2010.08.001.

García-Sánchez, F. *et al.* (2017) 'Using Near-Infrared Spectroscopy in Agricultural Systems', in *Developments in Near-Infrared Spectroscopy*. InTech. doi:

10.5772/67236.

- Guha Roy, S. and Hong, C. X. (2008) ‘The first finding of pythium root rot and leaf blight of elephant foot yam (*Amorphophallus paeonifolius*) in India’, *Plant Pathology*, 57(2), p. 369. doi: 10.1111/j.1365-3059.2007.01744.x.
- Guidetti, R., Beghi, R. and Bodria, L. (2010) ‘Evaluation of Grape QualityParameters by a System’, 53(2), pp. 477–484.
- Harmayani, E., Aprilia, V. and Marsono, Y. (2014) ‘Characterization of glucomannan from *Amorphophallus oncophyllus* and its prebiotic activity in vivo’, *Carbohydrate Polymers*, 112, pp. 475–479. doi: 10.1016/j.carbpol.2014.06.019.
- Huby, I. M., Wanma, J. F. and Peday, M. H. (2020) ‘Ordinance Pattern of Secondary Forest Tree Community in Manokwari Utara Sub- district , District of Manokwari’, 6(1), pp. 21–36.
- Kalogiouri, N. P. and Samanidou, V. F. (2020) ‘Liquid chromatographic methods coupled to chemometrics: a short review to present the key workflow for the investigation of wine phenolic composition as it is affected by environmental factors’, *Recent Developments And Innovative Strategies In Environmental Sciences In Europe*, 28(Environmental Science and Pollution Research), pp. 59150–59164. doi: 10.1007/s11356-020-09681-5/Published.
- Kusumiyati, K., Hadiwijaya, Y. and Putri, I. E. (2019) ‘Non-Destructive Classification of Fruits Based on Vis-nir Spectroscopy and Principal Component Analysis’, *Jurnal Biodjati*, 4(1), pp. 89–95. doi: 10.15575/biodjati.v4i1.4389.
- Lasalvia, M., Capozzi, V. and Perna, G. (2022) ‘applied sciences A Comparison of PCA-LDA and PLS-DA Techniques for Classification of Vibrational Spectra’.
- López-Maestresalas, A. *et al.* (2016) ‘Non-destructive detection of blackspot in potatoes by Vis-NIR and SWIR hyperspectral imaging’, *Food Control*, 70, pp. 229–241. doi: 10.1016/j.foodcont.2016.06.001.
- Mallik, A. U. and Hamilton, J. (2017) ‘Harvest date and storage effect on fruit size,

- phenolic content and antioxidant capacity of wild blueberries of NW Ontario, Canada’, *Journal of Food Science and Technology*, 54(6), pp. 1545–1554. doi: 10.1007/s13197-017-2586-8.
- Marlina, M. *et al.* (2021) ‘Pengaruh Ukuran Bulbil terhadap Pertumbuhan Bibit Tanaman Porang (*Amorphophallus oncophyllus* Prain)’, *Prosiding Seminar Nasional*, pp. 755–762.
- Masithoh, R. E. *et al.* (2020) ‘Development of multi-product calibration models of various root and tuber powders by fourier transform near infra-red (FT-NIR) spectroscopy for the quantification of polysaccharide contents’, *Heliyon*, 6(10). doi: 10.1016/j.heliyon.2020.e05099.
- Masithoh, R. E., Pahlawan, M. F. R. and Wati, R. K. (2021) ‘Non-destructive determination of SSC and pH of banana using a modular Vis/NIR spectroscopy: Comparison of Partial Least Square (PLS) and Principle Component Regression (PCR)’, in *IOP Conference Series: Earth and Environmental Science*. IOP Publishing Ltd. doi: 10.1088/1755-1315/752/1/012047.
- Min, M. *et al.* (2006) *Nondestructive Detection of Nitrogen in Chinese Cabbage Leaves Using VIS-NIR Spectroscopy*, *Hortscience*.
- Mine, Y. *et al.* (2010) ‘The Effects of Pot Sizes and Number of Plants per Pot on the Growth of *Amorphophallus muelleri* Blume’, *J. Agron. Indonesia*, 38(3), pp. 238–242.
- Nasir, S. *et al.* (2015) ‘Porang’, pp. 978-979–1159.
- Noorvitri, I. . (2017) *Idemtifikasi Molekur Jamur Patogen Penyebab Penyakit Pada Porang (*Amorphophallus muelleri*)*. Gadjah Mada Yogyakarta.
- Nurharyati, S., Susilawati, I. and Indriani, N. P. (2021) ‘Pengaruh berbagai varietas jagung manis (*Zea mays saccharata* Sturt.) Terhadap Berat Segar, Berat dan Kandungan Serat Kasar Biomassa Tanaman Jagung’, *Jurnal Nutrisi Ternak Tropis dan Ilmu Pakan*, 3(September), pp. 95–105.
- Pahlawan, M. F. R., Wati, R. K. and Masithoh, R. E. (2021) ‘Development of a low-cost modular Vis/NIR spectroscopy for predicting soluble solid content of banana’, in *IOP Conference Series: Earth and Environmental*

*Science*. IOP Publishing Ltd. doi: 10.1088/1755-1315/644/1/012047.

- Phetpan, K., Udompetaikul, V. and Sirisomboon, P. (2018) 'An online visible and near-infrared spectroscopic technique for the real-time evaluation of the soluble solids content of sugarcane billets on an elevator conveyor', *Computers and Electronics in Agriculture*, 154, pp. 460–466. doi: 10.1016/j.compag.2018.09.033.
- Pravi, V., Jeeva, M. L. and Archana, P. V. (2014) 'Rapid and sensitive detection of *Sclerotium rolfsii* associated with collar rot disease of *Amorphophallus paeoniifolius* by species-specific polymerase chain reaction assay', *Molecular Biotechnology*, 56(9), pp. 787–794. doi: 10.1007/s12033-014-9757-x.
- Pujiarto, D., Soekarno, B. P. W. and Maddu, A. (2018) 'Deteksi Cepat Fusarium sp. pada Benih Kedelai Menggunakan Metode Spektroskopi Fluoresens', *Jurnal Fitopatologi Indonesia*, 14(3), p. 97. doi: 10.14692/jfi.14.3.97.
- Rady, A. and Guyer, D. (2015) 'Utilization of visible/near-infrared spectroscopic and wavelength selection methods in sugar prediction and potatoes classification', *Journal of Food Measurement and Characterization*, 9(1), pp. 20–34. doi: 10.1007/s11694-014-9207-2.
- Roggo, Y. *et al.* (2007) 'A review of near infrared spectroscopy and chemometrics in pharmaceutical technologies', *Journal of Pharmaceutical and Biomedical Analysis*, 44(3 SPEC. ISS.), pp. 683–700. doi: 10.1016/j.jpba.2007.03.023.
- Ruiz-Perez, D. *et al.* (2020) 'So you think you can PLS-DA?', *BMC Bioinformatics*, 21(Suppl 1), pp. 1–10. doi: 10.1186/s12859-019-3310-7.
- Rungpichayapichet, P. *et al.* (2015) 'Non-destructive determination of  $\beta$ -carotene content in mango by near-infrared spectroscopy compared with colorimetric measurements', *Journal of Food Composition and Analysis*, 38, pp. 32–41. doi: 10.1016/j.jfca.2014.10.013.
- Sakaroni, R., Suharjono, S. and Azrianingsih, R. (2019) 'Identification of potential pathogen fungi which cause rotten on Porang (*Amorphophallus muelleri* Blume) tubers', *AIP Conference Proceedings*, 2120(July). doi:

10.1063/1.5115748.

- Sari, H. P., Purwanto, Y. A. and Budiastara, I. W. (2016) 'Pendugaan Kandungan Kimia Mangga Gedong Gincu Menggunakan Spektroskopi Inframerah Dekat, *Jurnal Agritech*, 36(03), p. 294. doi: 10.22146/agritech.16599.
- Sari, M. *et al.* (2019) 'Seed Quality and Seedling Growth of Iles-Iles (*Amorphophallus muelleri* Blume) from Different Growing Media', *Jurnal Ilmu Pertanian Indonesia*, 24(2), pp. 144–150. doi: 10.18343/jipi.24.2.144.
- Sari, M., Nasution, I. S. and Zulfahrizal, Z. (2019) 'Prediksi Kadar Air Gabah Menggunakan Near Infrared Reflectance Spectroscopy dengan Metode Principal Component Regression (Pre-treatment Multiplicative Scatter Correction, Second Derivative dan De-trending)', *Jurnal Ilmiah Mahasiswa Pertanian*, 4(1), pp. 568–577. doi: 10.17969/jimfp.v4i1.9830.
- Satriana, E. (2016) 'Pengaruh Dosis Pupuk N (Nitrogen) Terhadap Kandungan Protein Kasar dan Serat Kasar Rumput Gajah CV.Moot Pada Tanah Regosol', *Universitas Matararam*, pp. 1–9. Available at: <http://etd.lib.metu.edu.tr/upload/12620012/index.pdf>.
- Sekaran, U. and Bougie, R. (2016) 'Research Methods for Business', *Angewandte Chemie International Edition*, 6(11), 951–952., 4(1), pp. 1–23.
- Shahin, M. A. and Symons, S. J. (2012) 'Detection of fusarium damage in Canadian wheat using visible/near-infrared hyperspectral imaging', *Journal of Food Measurement and Characterization*, 6(1–4), pp. 3–11. doi: 10.1007/s11694-012-9126-z.
- Shahin, M. A., Symons, S. J. and Hatcher, D. W. (2014) 'Quantification of Mildew Damage in Soft Red Winter Wheat Based on Spectral Characteristics of Bulk Samples: A Comparison of Visible-Near-Infrared Imaging and Near-Infrared Spectroscopy', *Food and Bioprocess Technology*, 7(1), pp. 224–234. doi: 10.1007/s11947-012-1046-8.
- Sivachandra Kumar, N. T. and Banniza, S. (2017) 'Assessment of the effect of seed infection with *Ascochyta pisi* on pea in western Canada', *Frontiers in Plant Science*, 8(June), pp. 1–7. doi: 10.3389/fpls.2017.00933.
- Skolik, P., McAinsh, M. R. and Martin, F. L. (2019) 'ATR-FTIR spectroscopy non-

- destructively detects damage-induced sour rot infection in whole tomato fruit', *Planta*, 249(3), pp. 925–939. doi: 10.1007/s00425-018-3060-1.
- Slater A, Scott N, Fowler M, Davies, W. P. (2003) 'Plant biotechnology: the genetic manipulation of plants.', *Annals of Botany*, 94(4), pp. 646–646. doi: 10.1093/aob/mch186.
- Soedarjo, M. and Djufry, F. (2021) 'Identified diseases would threaten on the expansion of *Amorphophallus muellery* Blume cultivation in Indonesia', in *IOP Conference Series: Earth and Environmental Science*. IOP Publishing Ltd. doi: 10.1088/1755-1315/648/1/012043.
- Soedarjo Muchdar, Y. B. F. D. (2020) 'Growth Response of Porang (*Amorphophallus muelleri* Blume) Grown with Different Sizes of Bulbils on Saline Soil', *International Journal of Research Studies in Agricultural Sciences*, 6(4). doi: 10.20431/2454-6224.0604002.
- Sulistiyo, R. H. and Soetopo, L. (2014) 'Eksplorasi Dan Identifikasi Karakter Morfologi Porang (*Amorphophallus Muelleri* B) Di Jawa Timur Eksploration And Identification Morphological Character Of Elephant Yam (*Amorphophallus muelleri* B .) In East Java', *Jurnal Produksi Tanaman*, 3(5), pp. 353–361.
- Sumarwoto (2012) 'Peluang Bisnis Beberapa Macam Produk Hasil Tanaman Iles Kuning di DIY melalui Kemitraan dan Teknik Budidaya', *Business Conference*, 20, pp. 1–13.
- Sumarwoto, S. (2005) 'Iles-iles (*Amorphophallus muelleri* Blume); description and other characteristics', *Biodiversitas Journal of Biological Diversity*, 6(3). doi: 10.13057/biodiv/d060310.
- Tamburini, E. *et al.* (2016) 'Quantitative determination of *Fusarium proliferatum* concentration in intact garlic cloves using near-infrared spectroscopy', *Sensors (Switzerland)*, 16(7). doi: 10.3390/s16071099.
- Tiwari, R. K. *et al.* (2020) 'Potato dry rot disease: current status, pathogenomics and management', *3 Biotech*, 10(11), pp. 1–18. doi: 10.1007/s13205-020-02496-8.
- Turner, R. E. *et al.* (2020) 'Effects of purple seed stain on seed quality and

composition in soybean', *Plants*, 9(8), pp. 1–10. doi: 10.3390/plants9080993.

Wati, R. K., Pahlawan, M. F. R. and Masithoh, R. E. (2021) 'Development of calibration model for pH content of intact tomatoes using a low-cost Vis/NIR spectroscopy', in *IOP Conference Series: Earth and Environmental Science*. IOP Publishing Ltd. doi: 10.1088/1755-1315/686/1/012049.

Wijayanto, N. and Pratiwi, E. (2011) 'Pengaruh Naungan dari Tegakan Sengon (*Paraserianthes falcataria* (L.) Nielsen) terhadap Pertumbuhan Tanaman Porang (*Amorphophallus onchophyllus*)', *Jurnal Silvikultur Tropika*, 1, pp. 46–51.

Wu, N. *et al.* (2020) 'Practicability investigation of using near-infrared hyperspectral imaging to detect rice kernels infected with rice false smut in different conditions', *Sensors and Actuators, B: Chemical*, 308. doi: 10.1016/j.snb.2020.127696.

Yan, J. *et al.* (2020) 'A prediction model based on deep belief network and least squares SVR applied to cross-section water quality', *Water (Switzerland)*, 12(7). doi: 10.3390/w12071929.