DAFTAR PUSTAKA

Agbede, T. M. 2019. Influence of five years of tillage and poultry manure application on soil properties and ginger (*Ziginber officinale* Roscoe) productivity. Journal of Crop Science and Biotechnology 22(2): 91-99.

Ali, A. I. M., S. E. Wassi, R. G. Joergensen, D. Korir, J. P. Goopy, K. Butterbach-Bahl, L. Merbold, U. Dickhoefer, and E. Schlecht. 2021. Feed quality and feeding level effects on faecal composition in East African cattle farming systems. Animals 11(2): 1-12.

Amin, M. E. M. H. 2011. Effect of different nitrogen sources on growth, yield and quality of fodder maize (*Zea mays* L.). Journal of the Saudi Society of Agricultural Sciences 10(1): 17-23.

Anada, P., S. Muhartini, dan S. Waluyo. 2013. Pengaruh kadar atonik terhadap pertumbuhan dan hasil dua jenis jahe (*Zingiber officinale* Roscoe). Vegetalika 1(4): 90-101.

Azizah, N., S. L. Purnamaningsih, and S. Fajriani. 2019. Land characteristics impact productivity and quality of ginger (*Zingiber officinale* Rosc) in Java, Indonesia. AGRIVITA 41(3): 439-449.

Badan Meteorologi Klimatologi dan Geofisika. 2021. Prakiraan Musim Hujan 2021/2022 di Indonesia. BMKG, Jakarta.

Badan Pusat Statistik. 2020. Statistik Hortikultura 2020. Badan Pusat Statistik, Jakarta.

Balai Penelitian Tanah. 2009. Petunjuk Teknis Analisis Kimia Tanah, Tanaman, Air, dan Pupuk. Edisi ke-2. Balai Penelitian Tanah, Bogor.

Benslama, A., K. Khanchoul, F. Benbrahim, S. Boubehziz, F. Chikhi, and J. Navarro-Pedreño. 2020. Monitoring the variations of soil salinity in a palm grove in Southern Algeria. Sustainability 12(15): 1-19.

Bonan, G. 2015. Climate Change and Terrestrial Ecosystem Modeling. Cambrige University Press, United Kingdom.

Cechin, I., and T. de Fátima Fumis. 2004. Effect of nitrogen supply on growth and photosynthesis of sunflower plants grown in the greenhouse. Plant Science 166(5): 1379-1385.

Chakraborty, B., M. Sarkar, S. A. Aklade, and H. E. Patil. 2021. Foliar application of banana pseudostem sap based liquid organic fertilizer enhances growth, yield and quality of strawberry (*Fragaria* × *ananassa* Duch.). Vegetos 34(4): 847-856.

Chan, K. Y., A. Oates, D. L. Liu, G. D. Li, R. Prangnell, G. Poile, and M. K. Conyers. 2010. A Farmer's Guide to Increasing Soil Organic Carbon Under Pastures. Industry & Investment NSW, New South Wales.

Davari, M., L. Gholami, K. Nabiollahia, M. Homaeeb, and H. J. Jafari. Deforestation and cultivation of sparse forest impacts on soil quality (case study: West Iran, Baneh). Soil and Tillage Research 198:1-10.

Delgado, A., and J. A. Gómez. 2016. The Soil: Physical, Chemical and Biological Properties. In Principles of Agronomy for Sustainable Agriculture. Springer, Cham.

Din, M., W. Zheng, M. Rashid, S. Wang, and Z. Shi. 2017. Evaluating hyperspectral vegetation indices for leaf area index estimation of *Oryza sativa* L. at diverse phenological stages. Frontiers in Plant Science 8(820): 1-17.

Dinas Pertanian dan Pangan. 2021. Populasi Ternak Tingkat Kapanewon dan Kalurahan. <https://satudata.kulonprogokab.go.id/index.php/lihat/dda_detil/95/populasi-ternak-untuk-tingkat-kapanewon-dan-kalurahan>. Diakses pada 10 September 2021.

Duaja, M. D., E. Kartika, B. Buhaira, and W. P. Armita. 2021. Optimization the effect of decanter cake with fermented fertilizer of cow urine in edamame growth and yield. Advances in Engineering Research 205: 498-504.

Dusenge, M. E., A. G. Duarte, and D. A. Way. 2019. Plant carbon metabolism and climate change: elevated CO_2 and temperature impacts on photosynthesis, photorespiration and respiration. New Phytologist 221(1): 32-49.

Fageria, N. K., V. C. Baligar, and R. B. Clark. 2006. Physiology of Crop Production. Food Products Press, New York.

FAO and ITPS. 2015. Status of the World's Soil Resources (SWSR) - Main Report. Food and Agriculture Organization of the United Nations and Intergovernmental Technical Panel on Soils, Rome, Italy.

Fariudin, R., E. Sulistyaningsih, dan S. Waluyo. 2013. Pertumbuhan dan hasil dua kultivar selada (*Lactuca sativa* L.) dalam akuaponika pada kolam gurami dan kolam nila. Vegetalika 2(1): 66-81.

Farjon, G., Y. Itzhaky, F. Khoroshevsky, and A. Bar-Hillel. 2021. Leaf counting: Fusing network components for improved accuracy. Frontiers in Plant Science 12: 1-12.

Fender, A. C., J. Mantilla-Contreras, and C. Leuschner. 2011. Multiple environmental control of leaf area and its significance for productivity in beech saplings. Trees 25(5): 847-857.

Ferrante, A. and L. Mariani. 2018. Agronomic management for enhancing plant tolerance to abiotic stresses: High and low values of temperature, light intensity, and relative humidity. Horticulturae 4(21): 1-19.

Forbes, J. C. and R. D. Watson. 1996. Plants in Agriculture. Cambrige University Press, New York.

Gatabazi, A., D. Marais, H. T. Araya, J. M. S. Steyn, and S. N. Mokgehle. 2019. Growth and yield responses of two ginger species to different levels of nitrogen. South African Journal of Plant and Soil 36(4): 289-298.

Gelgel, K. D., N. M. Yusa, dan I. D. G. M. Permana. 2016. Kajian pengaruh jenis jahe (*Zingiber officinale* Rosc.) dan waktu pengeringan daun terhadap kapasitas antioksidan serta sensoris wedang uwuh. ITEPA, 5(2): 11-19.

George, M., G. Nader, N. McDougald, M. Connor, and B. Frost. 2001. Rangeland Management Series: Annual Rangeland Forage Quality. UCANR Publications, United States of California.

Gotora, T., L. Masaka, and M. Sungirai. 2014. Effect of cow urine on the growth characteristics of Fusarium lateritium, an important coffee fungus in Zimbabwe. International Journal of Agronomy 2014: 1-4.

Gouda, S., R. G. Kerry, G. Das, S. Paramithiotis, H. S. Shin, and J. K. Patra. 2018. Revitalization of plant growth promoting rhizobacteria for sustainable development in agriculture. Microbiological research 206: 131-140.

Grange, R. I. and D. W. Hand. 1987. A review of the effects of atmospheric humidity on the growth of horticultural crops. Journal of Horticultural Science 62(2): 125-134.

Gravetter, F. J., and L. B. Wallnau. 2017. Statistics for the Behavioral Sciences. Tenth Edition. Chengage, USA.

Groenendyk, D. G., T. P. Ferré, K. R. Thorp, and A. K. Rice. 2015. Hydrologic-process-based soil texture classifications for improved visualization of landscape function. PloS one 10(6): 1-17.

Guo, Y. Y., X. F. Wang, dan K. Xu. 2002. Studies on the photosynthetic characteristics of ginger. In XXVI International Horticultural Congress: The Future for Medicinal and Aromatic Plants 629: 347-353.

Hanum, F., I. D. N. Raka, N. P. Pandawani, and N. G. G. A. E. Martiningsih. 2021. The effect of cow biourine concentration on growth and production of mustard plants (*Brassica juncea* L.). IJSEGCE 4(2): 146-162.

Harmono, dan A. Andoko. 2005. Budidaya dan Peluang Bisnis Jahe. PT. Agro Media Pustaka, Solo.

Hartatik, W., dan L. R. Widowati. 2006. Pupuk Organik dan Pupuk Hayati. Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian, Bogor.

Hartini, S., S. M. Sholihah, dan E. Manshur. 2019. Pengaruh konsentrasi urin kelinci terhadap pertumbuhan dan hasil bayam merah (*Amaranthus gangeticus* Voss). Jurnal Ilmiah Respati 10(1): 20-27.

Hatfield, J. L., and C. L. Walthall. 2015. Meeting global food needs: realizing the potential via genetics × environment × management interactions. Agronomy Journal 107(4): 1215-1226.

Hatfield, J. L., and J. H. Prueger. 2015. Temperature extremes: effect on plant growth and development. Weather and Climate Extremes 10: 4-10.

Hodge, A., G. Berta, C. Doussan, F. Merchan, and M. Crespi. 2009. Plant root growth, architecture and function. Plant and soil 321(1): 153-187.

Hossain, S., M. S. Rahman, K. N. Kona, M. S. Bari, N. Akter, and M. M. Ali. 2019. Growth Performance of two Ginger (*Zingiber officinale* Roscoe) varieties under different agroforestry systems in Bangladesh. Asian Plant Research Journal 3(3-4): 1-10.

Indabo, S. S. and A. A. Abubakar. 2020. Effect of rabbit urine application rate as a bio-fertilizer on agro-mophorlogical traits of UC82B tomato (*Lycopersicon esculentum Mill*) variety in Zaria, Nigeria. DUJOPAS 6(2): 344-352.

Jabborova, D., R. Choudhary, A. Azimov, Z. Jabbarov, S. Selim, M. Abu-Elghait, S. E. Desouky, I. H. El-Azab, A. M. Alsuhaibani, A. Khattab, and A. El-Saied. 2022. Composition of *Zingiber officinale* Roscoe (Ginger), soil properties and soil enzyme activities grown in different concentration of mineral fertilizers. Horticulturae 8(1): 43-44.

Jaidka, M., R. Kaur, and S. Sepat. 2018. Scientific cultivation of ginger (*Zingiber officinalis*). Indian Agricultural Research Institute 110(12): 191-197.

Jandaik, S., P. Thakur, and V. Kumar. 2015. Efficacy of cow urine as plant growth enhancer and antifungal agent. Advances in Agriculture 2015: 1-7.

Jimenez-Berni, J. A., D. M. Deery, P. Rozas-Larraondo, A. T. G. Condon, G. J. Rebetzke, R. A. James, W. D. Bovill, R. T. Furbank, and X. R. R. Sirault. 2018. High throughput determination of plant height, ground cover, and above-ground biomass in wheat with LiDAR. Frontiers in plant science 9(237): 1-18.

Khaledian, Y., E. C. Brevik, P. Pereira, A. Cerdà, M. A. Fattah, and H. Tazikeh. 2017. Modeling soil cation exchange capacity in multiple countries. Catena 158: 194-200.

Kusnadi, K., dan I. Tivani. 2017. Pengaruh pemberian urine kelinci dan air kelapa terhadap pertumbuhan rimpang dan kandungan minyak atsiri jahe merah. Kultivasi 16(3): 444-450.

López-Bucio, J., A. Cruz-Ramırez, and L. Herrera-Estrella. 2003. The role of nutrient availability in regulating root architecture. Current opinion in plant biology 6(3): 280-287.

Merga, J. 2021. Epidemiology and Management Strategies of Ginger Leaf spot Disease (Phyllosticta zingiberi). Plant Pathology & Quarantine 11(1): 138-143.

Nair, K. P. 2019. Turmeric (*Curcuma Longa* L.) and Ginger (*Zingiber Officinale* Rosc.) - World's Invaluable Medicinal Spices. Springer, Switzerland.

Nautiyal, V., and R. C. Dubey. 2021. FT-IR and GC-MS analyses of potential bioactive compounds of cow urine and its antibacterial activity. Saudi Journal of Biological Sciences 28(4): 2432-2437.

Nugrahini, T. 2013. Respon tanaman bawang merah (*Allium ascolonicum* L.) varietas Tuk Tuk terhadap pengaturan jarak tanam dan konsentrasi pupuk organik cair nasa. Ziraa'ah 36(1): 60-65.

Oliveira, N. L. C., M. Puiatti, R. H. S. Santos, P. R. Cecon, and P. H. R. Rodrigues. 2009. Soil and leaf fertilization of lettuce crop with cow urine. Horticultura Brasileira 27: 431-437.

Oswald, A., P. C. Velez, D. Zúñiga Dávila, and J. A. Pineda. (2010). Evaluating soil rhizobacteria for their ability to enhance plant growth and tuber yield in potato. Annals of applied biology, 157(2), 259-271.

Pandey, R. 2015. Mineral nutrition of plants. In Plant biology and biotechnology. Springer, New Delhi.

Pearce, R. B., R. H. Brown, and R. E. Blaser. 1965. Relationships between leaf area index, light interception and net photosynthesis in orchardgrass 1. Crop Science 5(6): 553-556.

Peterhansel, C., I. Horst, M. Niessen, C. Blume, R. Kebeish, S. Kürkcüoglu, F. Kreuzaler. 2010. Photorespiration. The arabidopsis book 2010(8): 1-24.

Phibunwatthanawong, T., and N. Riddech. 2019. Liquid organic fertilizer production for growing vegetables under hydroponic condition. International Journal of Recycling of Organic Waste in Agriculture 8(4): 369-380.

Prabowo, R., dan R. Subantoro. 2018. Analisis tanah sebagai indikator tingkat kesuburan lahan budidaya pertanian di Kota Semarang. Cendekia Eksakta 2(2): 59-64.

Prajapati, K., and H. A. Modi. 2012. The importance of potassium in plant growth - a review. Indian Journal of Plant Sciences 1(2-3): 177-186.

Pratiwi, G. R. 2010. Tanggap pertumbuhan tanaman gandum terhadap naungan. Widyariset 13(2): 37-45.

Pratiwi, Y. I., F. Nisak, dan B. Gunawan. 2019. Peningkatan Manfaat Pupuk Organik Cair Urine Sapi. Uwais Inspirasi Indonesia, Ponorogo.

Rafiuddin, R. Musfira, and K. Mantja. 2019. Effect of liquid bio-slurry on the growth and production of two varieties of melon (*Cucumis melo* L.). IOP Conference Series: Earth and Environmental Science 343(1): 1-8.

Rehman, T. and Q. Fatima. 2018. Ginger (*Zingiber officinale*): a mini review. Int J Complement Alt Med 11(2): 88-89.

Rusdi, M., R. Roosli, and M. S. S. Ahamad. 2015. Land evaluation suitability for settlement based on soil permeability, topography and geology ten years after tsunami in Banda Aceh, Indonesia. The Egyptian Journal of Remote Sensing and Space Science 18(2): 207-215.

Rusmin, D., M. R. Suhartanto, S. Ilyas, D. Manohara, dan E. Widajati. 2018. Karakteristik pola pertumbuhan, biokimia dan fisiologi untuk penentuan umur panen rimpang benih jahe putih besar. Buletin Penelitian Tanaman Rempah dan Obat 29(1): 9-20.

Saenprom, K., S. Saensouk, P. Saensouk, and C. Senakun. 2018. Karyomorphological analysis of four species of *Zingiberaceae* from Thailand. The Nucleus 61(2): 111-120.

Safitri, W. R. 2016. Analisis korelasi pearson dalam menentukan hubungan antara kejadian demam berdarah dengue dengan kepadatan penduduk di Kota Surabaya pada Tahun 2012-2014. Jurnal Ilmiah Keperawatan 2(2): 21-29.

Saidy, A. R. Bahan Organik Tanah: Klasifikasi, Fungsi dan Metode Studi. ULM Press, Banjarmasin.

Sari, V. P., Y. Yulnafatmawita, dan G. Gusmini. 2021. Pengukuran erosi tanah di bawah tanaman aren (*Arenga pinnata* Merr) pada tiga tingkatan umur tanaman di Kecamatan Lintau Buo Utara, Sumatra Barat. Agrikultura 32(1): 63-71.

Schober, P., C. Boer, and L. A. Schwarte. 2018. Correlation coefficients: appropriate use and interpretation. Anesthesia & Analgesia 126(5): 1763-1768.

Septianingtyas, L. and S. Nyoto. 2021. Effectiveness of giving organic fertilizer with different doses on the growth and yield of red ginger (*Zingiber officinale* var Rubrum). IOP Conference Series: Earth and Environmental Science 905(1): 1-7.

Setyaningrum, H. D. dan C. Saparinto. Jahe (Plus Kalender Budi Daya Monokultur dan Polikultur). Penebar Swadaya, Jakarta.

Setyanto, N. W., L. Riawati, dan R. P. Lukodono. 2014. Desain eksperimen taguchi untuk meningkatkan kualitas pupuk organik berbahan baku kotoran kelinci. JEMIS 2(2): 32-36.

Shafiq, I., S. Hussain, M. A. Raza, N. Iqbal, M. A. Asghar, A. Raza, F. Yuan-Fang, M. Mumtaz, M. Shoaib, M. Ansar, A. Manaf, Y. Wen-Yu, and Y. Feng. 2021. Crop photosynthetic response to light quality and light intensity. Journal of Integrative Agriculture 20(1): 4-23.

Sharangi, A. B. 2018. Indian Spices: The Legacy, Production and Processing of India's Treasured Export. Springer International Publishing, Switzerland.

Sharifi-Rad, M., E. M. Varoni, B. Salehi, J. Sharifi-Rad, K. R. Matthews, S. A. Ayatollahi, F. Kobarfard, S. A. Ibrahim, D. Mnayer, Z. A. Zakaria, M. Sharifi-Rad, Z. Yousaf, M. Iriti, A. Basile, and D. Rigano. 2017. Plants of the genus *Zingiber* as a source of bioactive phytochemicals: from tradition to pharmacy. Molecules 22(12): 1-20.

Sinaga, A., dan A. Ma'ruf. 2016. Tanggapan hasil pertumbuhan tanaman jagung akibat pemberian pupuk urea, SP-36 dan KCl. Bernas 12(3): 51-58.

Singh, M. K., R. P. Singh, and S. Rai. 2014. Effect of nitrogen levels and cow urine on soil N status, growth and yield on paddy (*Oryza sativa* L.). Environ. Ecol 32(4): 1277-1281.

Sinha, D. and P. K. Tandon. 2020. An overview of nitrogen, phosphorus and potassium: key players of nutrition process in plants. Sustainable Solutions for Elemental Deficiency and Excess in Crop Plants 85-117.

Sudhakar, P., P. Latha, and P. V. Reddy. 2016. Phenotyping Crop Plants for Physiological and Biochemical Traits. Elsevier Science, London.

Sukarman, S. (2013). Produksi dan pengelolaan benih jahe putih besar (*Zingiber Officinale* var. Officinale) melalui proses industri. Jurnal Penelitian dan Pengembangan Pertanian 32(2): 76-84.

Sulistyaningsih, E., B. Kurniasih, dan E. Kurniasih. 2005. Pertumbuhan dan hasil caisin pada berbagai warna sungkup plastik. Ilmu Pertanian 12(1): 65-76.

Sunadra, I. K., N. L. K. S. Mudra, A. A. N. M. Wirajaya, M. S. Yuliartini, L. Kartini, I. G. B. Udayana, dan I. B. K. Mahardika. 2019. Response to growth and yield melon plant (*Cucumis melo* L.) in the giving of rabbit urine and KNO_3. Seas 3(2): 106-112.

Suud, H. M., M. F. Syuaib, dan I. W. Astika. 2015. Pengembangan model pendugaan kadar hara tanah melalui pengukuran daya hantar listrik tanah. Jurnal Keteknikan Pertanian 3(2): 105-112.

Syukur, C. 2001. Agar Jahe Berproduksi Tinggi. Penebar Swadaya, Jakarta.

Teapon, A., dan R. Hadun. 2018. Evaluasi status kesuburan kimia tanah pada beberapa subgroup tanah di Kecamatan Tidore Timur. Jurnal Agriment 3(1): 7-15.

USDA, NRCS. 2021. The PLANTS Database. National Plant Data Team, Greensboro, NC USA. <http://plants.usda.gov>. Diakses 6 November 2021.

Virgo, G. dan S. Sopianto. 2019. Efektivitas kompres jahe merah terhadap penurunan skala nyeri pada lansia yang menderita rheumatoid arthritis di Puskesmas Pembantu Bakau Aceh Wilayah Kerja Puskesmas Batang Tumu. Jurnal Ners 3(1): 82-111.

Wang, M., Q. Zheng, Q. Shen, and S. Guo. 2013. The critical role of potassium in plant stress response. International journal of molecular sciences 14(4): 7370-7390.

Watkins, J. E., P. W. Rundel, and C. L. Cardelús. 2007. The influence of life form on carbon and nitrogen relationships in tropical rainforest ferns. Oecologia 153(2): 225-232.

Xi, L. and L. Yong. 2016. Varietal difference in the correlation between leaf nitrogen content and photosynthesis in rice (*Oryza sativa* L.) plants is related to specific leaf weight. Journal of integrative agriculture 15(9): 2002-2011.

Xu, J., T. A. Volk, L. J. Quackenbush, and S. V. Stehman. 2021. Estimation of shrub willow leaf chlorophyll concentration across different growth stages using a hand-held chlorophyll meter to monitor plant health and production. Biomass and Bioenergy 150: 1-11.

Yan, M., P. Liu, R. Zhao, L. Liu, W. Chen, X. Yu, and J. Zhang. 2018. Field microclimate monitoring system based on wireless sensor network. Journal of Intelligent & Fuzzy Systems 35(2): 1325-1337.

Zhang, M., R. Zhao, D. Wang, L. Wang, Q. Zhang, S. Wei, F. Lu, W. Peng, and C. Wu. 2020. Ginger (*Zingiber officinale* Rosc.) and its bioactive components are potential resources for health beneficial agents. Phytother. Res. 35(2): 711–742.