

DAFTAR PUSTAKA

- Abdullateef, R., dan Osman, M. 2011. Effects of Visible Light Wavelengths on seed germinability in *Stevia Rebaudiana* Bertoni. *International Journal of Biology*, 3, 83–91.
- Agustin, E. K. 2020. Upaya Mempercepat Perkecambahan Biji *Dioscorea hispida* dengan Perlakuan Cahaya untuk Menjamin Ketersediaan Sumber Pangan Nasional. *Prosiding Seminar Nasional Masyarakat Biodiversitas Indonesia*, 6(1), 643–648. <https://doi.org/10.13057/psnmbi/m060126>
- Al-Ansari, F., dan Ksiksi, T. A. 2016. Quantitative Assessment of Germination Parameters: the Case of *Crotalaria Persica* and *Tephrosia Apollinea*. *The Open Ecology Journal*, 9, 13–21.
- Al Hamdi, M. F., Al, F., Diyanti, A. R., dan Mutia, Y.D. 2022. Studi Perkecambahan Tiga Jenis Benih Porang (*Amorphophallus muelleri*) Asal Kab. Pacitan. *Jurnal Folium*, 6(1), 23–36.
<https://doi.org/10.33474/folium.v6i1.14275>
- Ariany, S. P., Sahiri, N., dan Syakur, A. 2013 . Pengaruh kuantitas cahaya terhadap pertumbuhan dan kadar antosianin daun dewa (*Gynura pseudochina* (L.) DC) secara in vitro. *E-j. Agroteks*, 1(5), 413–420.
- Asbur, Y. 2017. Peran fotoreseptor pada tropisme tanaman sebagai respon terhadap cahaya. *Agriland*, 6(2), 91–100.
- Atta, H. El, Aref, I., dan Ahmed, A. 2013. Effects of Seed Mass and Seed Coat on Germination and Seedling Emergence of. *Life Science Journal*, 10(3), 2438–2445.
- Azizi, I, dan Kurniawan, F. 2020. Pengaruh Bibit Asal, Umur, dan Ukuran Umbi Porang terhadap Kadar Glukomanan dan Oksalat dalam Umbi Porang. *Jurnal Sains dan Seni ITS*, 9(2), 19–24.
- Azizi, Ismail, dan Kurniawan, F. 2017. Pengaruh Bibit Asal, Umur, dan Ukuran Umbi Porang terhadap Kadar Glukomanan dan Oksalat dalam Umbi Porang. *Jurnal Sains dan Seni ITS*, 9(2), 2337–3520.
- Badan Penelitian dan Pengembangan Pertanian. 2021. *Cara PerbanyakTanaman Porang (Amorphophallus muelleri) dengan Bulbi*.
<http://www.litbang.pertanian.go.id/info-teknologi/4148/>
- Bidarti, A., dan Purbiyanti, E. 2021. *Design and Planning of The Porang Supply Chain in South Sumatra*. 4(2), 133–141.
- Bourget, C. 2008. An introduction to light-emitting diodes. *HortScience*, 43, 1944–1946.
- Budiman, dan Arisoesilaningih, E. 2012. Predictive Model of *Amorphophallus muelleri* Growth in Some Agroforestry in East Java by Multiple Regression Analysis. *BIODIVERSITAS*, 13(1), 18–22.
- Bures, S., Gavilán, M. U., Kotiranta, S., Bures, S., dan Gavilan, M. U. 2018. *Technical article Artificial lighting in agriculture by. January*.
- Burescu, L., Cachita, D., dan Craciun, C. 2015. The Effect of Different Wavelengths LED Lighting on the Growth of Spruce (*Picea abies* L) Plantlets. *Romanian Biotechnological Letters*, 20(6), 11025–11034.
- Campbell, N. A., Reese, J. B., dan Mitchell, L. G. 1999. *Biology* (5th Edition).

- Benjamin-Cummings Publication Co.
- Chen, W. 2016. *Studies on the effects of three artificial light sources on plant growth and their possible regulations by phytohormones*. <https://www.researchgate.net/publication/305560398%0AStudies>
- Dewi, K., Agustina, R., dan Nurmalika, F. 2016. Effect of Blue Light and Paclobutrazol on Seed Germination, Vegetative Growth and Yield of Black Rice (Riza Sativa L. 'Cempo Ireng'). *BIOTROPIA*, 23(2), 84–95.
- Djukri, dan Purwoko. 2003. Pengaruh naungan paranet terhadap sifat toleransi tanaman talas. *Ilmu Pertanian*, 2(10), 17–25.
- Dong, C., Fu, Y., Liu, G., dan Liu, H. 2014. Growth, photosynthetic characteristics, antioxidant capacity and biomass yield and quality of wheat (*Triticum aestivum* L.) exposed to LED light sources with different spectra combinations. *Journal of Agronomy and Crop Science*, 200(3), 219–230. <https://doi.org/10.1111/jac.12059>
- Dyśko, J., dan Kaniszewski, S. 2021. *Effects of LED and HPS lighting on the growth, seedling morphology and yield of greenhouse tomatoes and cucumbers*. 2021(1), 22–29.
- Estiasih, T., Putri, W. D. R., dan Wazihiroh, E. 2017. Umbi-umbian dan Pengolahannya. In *1st ed. Malang: Universitas Brawijaya Press*, 2017. Universitas Brawijaya Press.
- FuseSchool. 2017. *Plant Growth: Auxins and Gibberellins*. https://www.youtube.com/watch?v=EZ5tU45Ti_gdanlist=PL__1nOp81kO5PKNvaMv4tL7Cz6CS7s4Odanindex=19.
- G.D, M., H.-H, K., R.M, W., dan Mitchell, C. A. 2008. Plant productivity in response to LED lighting. *HortScience*, 43(7), 1951–1956. <https://doi.org/10.21273/HORTSCI.43.7.1951>
- Goins, G. D., Yorio, N. C., Sanwo, M. M., dan Brown, C. S. 1997. Photomorphogenesis, photosynthesis, and seed yield of wheat plants grown under red light-emitting diodes (LEDs) with and without supplemental blue lighting. *Journal of Experimental Botany*, 48(312), 1407–1413.
- Goro, E. 2003. Effect of light quality on growth of crop plants under artificial lighting. *Environment Control in Biology*, 41(2), 121–132.
- Gusmalawati, D., Indriyani, S., dan Azrianingsih, R. 2013. Anatomi dan Histokimia Organ Generatif *Amorphophallus muelleri*. *Floribunda*, 4(7), 161–189. <https://doi.org/https://doi.org/10.32556/floribunda.v4i7.2013.110>
- Handayani, T., dan Yuzammi. 2019. Effect of Growing Media on Seed Germination and Seedling Growth of Porang (*Amorphophallus muelleri* Blume). *The 3rd Satreps Conference*, 119–128.
- He, W., Pu, M., Li, J., Gang, Z., dan Lijun, X. 2021. Potato Tuber Growth and Yield Under Red and Blue LEDs in Plant Factories. *Journal of Plant Growth Regulation*, 2(2017). <https://doi.org/10.1007/s00344-020-10277-z>
- Indrawan, R. R., Suryanto, A., dan Soelistyono, R. 2017. Kajian Iklim Mikro Terhadap Berbagai Sistem Tanam Dan Populasi Tanaman Jagung Manis (*Zea Mays Saccharata* Sturt.). *Jurnal Produksi Tanaman*, 5(1), 92–99. <https://doi.org/10.21176/protan.v5i1.356>
- Indriyani, S., dan Widoretno, W. 2016. The Effect of Photoperiod to Break

- Dormancy of Porang's (*Amorphophallus muelleri* Blume) Tuber and Growth. *Research Journal of Life Science*, 3(3), 166–171. <https://doi.org/10.21776/ub.rjls.2016.003.03.5>
- Jala, A. 2015. Effects of Different Light Treatments on the Germination of *Nepenthes mirabilis*. *International Transaction Journal of Engineering, Management, dan Applied Sciences dan Technologies*, 2(1), 83–91. <https://www.researchgate.net/publication/49611089%0AEffects>
- Jansen, P. C. M., Westphal, E., dan Wulijarni-Soetipto, N. 1996. *Amorphophallus Blume ex Decaisne. PROSEA: Plant Resources of South-East Asia*, 9, 45–50.
- Kader, M. 2005. A Comparison of Seed Germination Calculation Formulae and the Associated Interpretation of Resulting Data. *Journal and Proceedings of the Royal Society of New South Wales*, 138, 65–75.
- Kamal, K., Khodaeiaminjan, M., El-Tantawy, A., Moneim, D., Salam, A., Ash-shormillesy, S., Attia, A., Ali, M., Herranz, R., El-Esawi, M., dan Nassrallah, A. 2020. Evaluation of growth and nutritional value of Brassica microgreens grown under red, blue and green LEDs combinations. *Physiol Plant*, 169, 625–638.
- Koga, R., Meng, T., Nakamura, E., Miura, C., Irino, N., Devkota, H. P., dan Al., E. 2013. The effect of photo-irradiation on the growth and ingredient composition of young green barley (*Hordeum vulgare*). *Agric. Sci.*, 4, 185–194. 10.4236/as.2013.44027
- Kusumo, B., dan Bakti, A. 2020. Penguatan kapasitas kelompok tani dalam budidaya porang berbasis pertanian konservasi-agroforestry di Desa Sambi Elen, Lombok Utara. *J. Siar Ilmuwan Tani*, 1(2), 67–74.
- Lal, N., dan Sachan, P. 2017. Effect of different Visible Light wavelengths on Seed Germination and Photosynthetic Pigment Contents in *Vigna unguiculata* (L.) Walp . Effect of Different Visible Light Wavelengths on Seed Germination and Photosynthetic Pigment Contents in *Vigna unguicu*. *Indian Jpurnal*, 4(2), 132–236.
- Li, C. X., Xu, Z. G., Dong, R. Q., Chang, S. X., Wang, L. Z., Khalil-Ur-Rehman, M., dan Tao, J. M. 2017. An RNA-seq analysis of grape plantlets grown in vitro reveals different responses to blue, green, red LED light, and white fluorescent light. *Frontiers in Plant Science*, 8. <https://doi.org/10.3389/fpls.2017.00078>
- Li, H., Tang, C., Xu, Z., Liu, X., dan Han, X. 2012. Effects of Different Light Sources on the Growth of Non-heading Chinese Cabbage (*Brassica campestris* L.). *Journal of Agricultural Science*, 4(4), 262–273. <https://doi.org/10.5539/jas.v4n4p262>
- Lin, K.-H., Huang, M.-Y., Huang, W.-D., Hsu, M.-H., Yang, Z.-W., dan Yang, C.-M. 2013. The effects of red, blue, and white light-emitting diodes on the growth, development, and edible quality of hydroponically grown lettuce (*Lactuca sativa* L. var. capitata). *Scientia Horticulturae*, 150, 86–91.
- Liu, J., dan van Iersel, M. W. 2021. Photosynthetic Physiology of Blue, Green, and Red Light: Light Intensity Effects and Underlying Mechanisms. *Frontiers in Plant Science*, 12. <https://doi.org/10.3389/fpls.2021.619987>
- Liu, N., Ji, F., Xu, L., dan He, D. 2019. Effects of LED light quality on the growth

- of pepper seedling in plant factory. *Int J Agric dan Biol Eng Open*, 12(5), 44–50. <https://doi.org/10.25165/j.ijabe.20191205.4847>
- Lobiuc, A., Vasilache, V., Pintilie, O., Stoleru, T., Burducea, M., Oroian, M., dan Zamfirache, M. M. 2017. Lobiuc, A., Vasilache, V., Pintili Blue and red LED illumination improves growth and bioactive compounds contents in acyanic and cyanic ocimum Basilicum L. Microgreens. *Molecules*, 22(12). <https://doi.org/10.3390/molecules22122111>
- Loi, M., Villani, A., Paciolla, F., Mule, G., dan Paciolla, C. 2020. Challenges and Opportunities of Light-Emitting Diode (LED) as Key to Modulate Antioxidant Compounds in Plants. A Review. *Antioxidants*, 10(42). <https://doi.org/10.3390/antiox10010042>
- Monostori, I., Heilmann, M., Kocsy, G., Rakszegi, M., Simon-sarkadi, L., Harnos, N., Galiba, G., Darko, É., dan Gioia, F. Di. 2018. *LED Lighting – Modification of Growth , Metabolism , Yield and Flour Composition in Wheat by Spectral Quality and Intensity*. 9(May), 1–16. <https://doi.org/10.3389/fpls.2018.00605>
- Morrow, R. 2008). LED lighting in horticulture. *HortScience*, 43(7), 1947–1950. <https://doi.org/10.21273/HORTSCI.43.7.1947>
- Mukaromah, S. L., Prasetyo, J., dan Argo, B. D. 2019. Pengaruh Pemaparan Cahaya Led Merah Biru dan Sonic Bloom Terhadap PRODUKTIVITAS TANAMAN SAWI SENDOK (*BRASSICA RAPA L.*) Effect of Monochromatic Light Exposure and Sonic Bloom on Growth and Productivity of Brassica Rapa L . *Jurnal Keteknik Pertanian Tropis dan Biosistem*, 7(2), 185–192. <https://doi.org/10.21776/ub.jkptb.2019.007.02.8>
- Mulyaningsih, T., Muspiah, A., Hidayati, E., Faturahman, dan Hidayat, W. 2022. Tumpangsari Tanaman Porang (*Amorphophallus muelleri* Blume) dengan Pohon Ketimun (*Gynops versteegii*) di HKM Desa Pusuk Lestari, Kabupaten Lombok Barat. *Jurnal Abdi Insani*, 9(192–107).
- Naznin, M., Lefsrud, M., Gravel, V., dan Azad, M. 2019. Blue light added with red LEDs enhance growth characteristics, pigments content, and antioxidant capacity in lettuce, spinach, kale, basil, and sweet pepper in a controlled environment. *Plants*, 8(93).
- Olle, M., dan Virs ile, A. 2013. The effects of light-emitting diode lighting on greenhouse plant growth and quality. *Agric. Food Sci*, 22(2), 223–234.
- Ouzounis, T., dan Alle, H. 2015. *Spectral Effects of Artificial Light on Plant Physiology and Secondary Metabolism : A Review*. 50(8), 1128–1135.
- Palgunadi, S., dan Almandatya, Y. 2014. Klasifikasi Kualitas Kesehatan Daun Mangga Berdasarkan Warna Citra Daun. *Prosiding SNST*, 1(1), 56–61.
- Paradiso, R., Proietti, S., dan Far, F. R. 2022. Light - Quality Manipulation to Control Plant Growth and Photomorphogenesis in Greenhouse Horticulture : The State of the Art and the Opportunities of Modern LED Systems. *Journal of Plant Growth Regulation*, 41(2), 742–780. <https://doi.org/10.1007/s00344-021-10337-y>
- Piovene, C., Orsini, F., Bosi, S., Sanoubar, R., Bregola, V., Dinelli, G., dan G, G. 2015. Optimal red:blue ratio in led lighting for nutraceutical indoor horticulture. *Sci Hortic*, 193, 202–208.
- Poorter, H., Niinemets, Ü., Ntagkas, N., Siebenkäs, A., Mäenpää, M., Matsubara,

- S., dan Pons, T. L. 2019. A meta-analysis of plant responses to light intensity for 70 traits ranging from molecules to whole plant performance. *New Phytologist*, 223(3), 1073–1105. <https://doi.org/10.1111/nph.15754>
- Pracaya, I. 2007. *Bertanam Sayuran Organik di Kebun, Pot dan Polibag*. Penebar Swadaya.
- Putra, F., Saparso, S., Rohadi, dan Ismoyojati, R. 2018. Respon tanaman kentang (*Solanum tuberosum* L.) pada berbagai ketebalan media cocopeat dan waktu pemberian nutrisi sundstrom. *Jurnal Ilmiah Pertanian*, 15(2).
- Rahayu, M., Harjoko, D., Sakya, A. T., dan Samanhudi. 2013. Identifikasi Morfologi dan Variabel Agronomi *Amorphophallus oncophyllus* di Beberapa Wilayah Jawa Tengah dan Jawa Timur. *Prosiding Seminar Nasional: Akselerasi Pembangunan Berkelanjutan Menuju Kemandirian Pangan dan Energi*, 262–268.
- Ranal, M. ., dan De Santa, D. 2006. How and Why to Measure the Germination Process? *Revista Brasil*, 29(1), 1–11.
- Rohandi, A., dan Widayani, N. 2007. Pengaruh tingkat devigorasi dan k erapatan biji krasikarpa terhadap pertumbuhan semainya. *Jurnal Penelitian Hutan Tanaman*, 4(1), 13–26.
- Runkle, E. 2017. Effects of blue light on plants. *International Research Journal of Engineering and Technology. IRJET*, 4(6).
- Sadono, R. 2018. Prediksi Lebar Tajuk Pohon Dominan pada Pertanaman Jati Asal Kebun Benih Klon di Kesatuan Pemangkuan Hutan Ngawi, Jawa Timur. *Jurnal Ilmu Kehutanan*, 12, 127–141. <https://jurnal.ugm.ac.id/jikt>
- Saefudin, Syakir, M., Sakiroh, dan Herman, M. 2021. Pengaruh Bobot Dan Perendaman Bulbil Terhadap Viabilitas Dan Pertumbuhan Porang (*Amorphophallus muelleri* Blume) Balai Penelitian Tanaman Industri dan Penyegar Pusat Penelitian dan Pengembangan Perkebunan. *Jurnal Tanaman Industri dan Penyegar*, 8, 79–86.
- Saleh, N., Rahayuningsih, S. A., Radjit, B. S., Ginting, E., Harnowo, D., dan Mejana, I. M. J. 2015. *Tanaman Porang*. Pusat Penelitian dan Pengembangan Tanaman Pangan. <http://pangan.litbang.pertanian.go.id>
- Sanoubar, R., Calone, R., Noli, E., dan Barbanti, L. 2018. Data on Seed Germination Using LED Versus Fluorescent Light Under Growth Chamber Conditions. *Data in Brief*, 19, 594–600.
- Sari, R., dan Suhartati. 2015. Tumbuhan Porang: Prospek Budidaya Sebagai Salah Satu Sistem Agroforestry. *Info Teknis Eboni*, 12(2), 97–110.
- Sudaryono. 2004. Pengaruh Naungan Terhadap Perubahan Iklim Mikro Pada Budidaya Tanaman Tembakau Rakyat. *Jurnal Teknologi Lingkungan*, 5(1), 56–62.
- Sulistiyo, R, H., Soetopo, L., dan Damanhuri. 2015. Eksploration and identification morphological character of elephant yam (*Amorphophallus muelleri* B.) in east java. *Jurnal produksi tanaman*, 3(5), 353–361.
- Sumarwoto. 2005. Iles-iles (*Amorphophallus muelleri* Blume); Deskripsi dan Sifat-sifat Lainnya. *BIODIVERSITAS*, 6(3), 185–190.
- Sumarwoto, dan Maryana. 2011. Pertumbuhan Bulbil Iles-Iles (*Amorphophallus muelleri* Blume) Berbagai Ukuran pada Beberapa Jenis Media Tanam. *Jurnal*

- Ilmu Kehutanan*, 5(2), 91–98.
- Sutoyo. 2011. Fotoperiode dan pembungaan tanaman. *Buana Sains*, 11(2), 137–144.
- Syah, F. 2022. *Komoditi Porang, Tantangan dan Prospeknya*. Sekretariat Daerah Kabupaten Dompu. <https://setda.dompukab.go.id/komoditi-porang-tantangan-dan-prospeknya.html>
- Talib, N. S., Jamaludin, D., Sakinah, N., dan Malek, A. 2020. Effect of Light Emitting Diode (LED) Spectra on Plant Growth. *Advance in Agricultural dan Food Research Journal*, 1(2), 1–10.
- Ulnnuha, Z., dan Dinuariah, I. 2021. Respon Morfologi Cryptanthus zonatus pada Cekaman Intensitas Cahaya Rendah. *Jurnal Ilmiah Media Agrosains*, 7(1), 16–22.
- Utami. 2018. *Pengaruh Cahaya terhadap pertumbuhan tanaman (suatu kajian pustaka)*. Fakultas Pertanian, Universitas Udayana. https://simdos.unud.ac.id/uploads/file_penelitian_1_dir/d860383bd2d687fa31df0088e0450033.pdf pada 19 April 2022
- Wahyu, J., Virgota, A., Sukiman, S., Farista, B., dan Suripto, S. 2021. Preliminary Study: Habitat Characteristics of *Amorphophallus* spp. to Support Cultivation Development in East Lombok. *Jurnal Biologi Tropis*, 22(1), 62–69. <https://doi.org/10.29303/jbt.v22i1.3102>
- Wardani, R., dan Handrianto, P. 2019. Analisa Kadar Oksalat Pada Tepung Porang Setelah Perlakuan Perendaman dalam Larutan Asam (Analisis Dengan Metode Titrasi Permanganometri). *J. Res. Technology*, 5(2), 144–153.
- Wattimuri, A., Santoso, J., dan Suhardjono, H. 2021. Pengaruh Perbedaan Kuantitas Cahaya Buatan Light Emitting Diode (Led) Terhadap Pertumbuhan Dan Hasil Tanaman Basil (*Ocimum basilicum* L.) Indoor Hidroponik Wick Sistem. *Prosiding Seminar Nasional Fakultas Pertanian UNS*, 1351–1359.
- Wijayanto, N., dan Pratiwi, E. 2011. Pengaruh Naungan dari Tegakan Sengon (*Paraserianthes falcataria* (L.) Nielsen) terhadap Pertumbuhan Tanaman Porang *Amorphophallus onchophyllus* *Amorphophallus onchophyllus*). *Jurnal Silvikultur Tropika*, 02(01), 46–51.
- Wollaeger, H., dan Runkle, E. 2014. *Growing Seedling Under LEDs*.
- Zhou, C., Zhang, Y., Liu, W., Zha, L., Shao, M., dan Li, B. 2020. Light quality affected the growth and root organic carbon and autotoxin secretions of hydroponic lettuce. *Plants*, 9(11), 1–16. <https://doi.org/10.3390/plants9111542>