

DAFTAR PUSTAKA

- Adil, M., Haider Abbasi, B., & ul Haq, I. 2019. Red Light Controlled Callus Morphogenetic Patterns and Secondary Metabolites Production in *Withania somnifera* L. *Biotechnology Reports* 24(e00380): 3–8. <https://doi.org/10.1016/j.btre.2019.e00380>
- Ajjjah, N., Darwati, I., Yudiwanti, & Roostika. 2010. Pengaruh Suhu Inkubasi Terhadap Pertumbuhan dan Perkembangan Embrio Somatik Purwoceng (*Pimpinella pruatjan* Molk.). *Jurnal Penelitian Tanaman Industri* 16(2): 49–89.
- Ambarwati, E., Maya, G. A. P., Trisnowati, S., & Murti, R. H. 2014. Mutu Buah Tomat Dua Galur Harapan Keturunan 'Gm3' dengan "Gondol Putih." *Prosiding Seminar Nasional Hasil Penelitian Pertanian* 273–279.
- Ananda, D. N. P., Raka, I. G. N., & Mayadewi, N. N. A. 2016. Uji efektivitas teknik ekstraksi dan Dry Heat Treatment terhadap kesehatan bibit tomat (*Lycopersicum esculentum* Mill.). *E-Jurnal Agroekoteknologi Tropika* 5(1): 31–39. <http://ojs.unud.ac.id/index.php/JAT>
- Astuti, M. E., & Achamar, T. 2022. Pemanfaatan Buah Tomat Selain Sebagai Konsumsi Rumah Tangga ddalam Kehidupan Sehari-hari. *Journal of Hulonthalo Service Society* 1(1): 22–27.
- Aziz, M. M., Ratnasari, E., & Rahayu, Y. S. 2014. Induksi Kalus Umbi Iles-Iles (*Amorphophallus muelleri*) dengan Kombinasi Konsentrasi 2,4-D dan BAP Secara In Vitro. *Lentera Biologi* 3(2): 109–114. <http://ejournal.unesa.ac.id/index.php/lenterabio>
- Bhatia, S. 2015. Application of Plant Biotechnology. In *Modern Applications of Plant Biotechnology in Pharmaceutical Sciences*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-802221-4.00005-4>
- Chandran, H., Meena, M., Barupal, T., & Sharma, K. 2020. Plant Tissue Culture as A Perpetual Source for Production of Industrially Important Bioactive Compounds. *Biotechnology Reports* 26: e00450. <https://doi.org/10.1016/j.btre.2020.e00450>
- Cheng, J., Yu, K., Zhang, M., Shi, Y., Duan, C., & Wang, J. 2020. The Effect of Light Intensity on the Expression of Leucoanthocyanidin Reductase in Grapevine Calluses and Analysis of its Promoter Activity. *Genes* 11(1156): 1–18. <https://doi.org/10.3390/genes11101156>
- Chouhan, S., Sharma, K., Zha, J., Guleria, S., & Koffas, M. A. G. 2017. Recent advances in the recombinant biosynthesis of polyphenols. *Frontiers in Microbiology* 8(2259): 1–16. <https://doi.org/10.3389/fmicb.2017.02259>
- Coimbra, M. C., Chagas, R. C. R., Duarte-Almeida, J. M., & Castro, A. H. F. 2017. Influence of Plant Growth Regulators and Light on Callus Induction and Bioactive Phenolic Compounds Production in *Pyrostegia venusta* (Bignoniaceae). *Indian Journal of Experimental Biology* 55(8): 584–590.

- Collins, E. J., Bowyer, C., Tsouza, A., & Chopra, M. 2022. Tomatoes : An Extensive Review of the Associated Health Their Cultivation. *Biology* 11(239): 1–44.
- Dambreville, A., Lauri, P. É., Normand, F., & Guedon, Y. 2015. Analysing growth and development of plants jointly using developmental growth stages. *Annals of Botany* 115(1): 93–105. <https://doi.org/10.1093/aob/mcu227>
- Dias, M. C., Pinto, D. C. G. A., & Silva, A. M. S. 2021. Plant Flavonoids: Chemical Characteristics and Biological Activity. *Molecules* 26(17): 1–16. <https://doi.org/10.3390/molecules26175377>
- Dwivedi, M. K., Sonter, S., Mishra, S., Patel, D. K., & Singh, P. K. 2020. Antioxidant, antibacterial activity, and phytochemical characterization of *Carica papaya* flowers. *Beni-Suef University Journal of Basic and Applied Sciences* 9(3):.
- Eddijanto, I., Restiani, R., & Adityarini, D. 2022. Elisitasi Flavonoid menggunakan Kitosan pada Kultur Kalus Ginseng Jawa (*Talinum paniculatum* Gaertn.). *Sciscitatio* 3(2): 90–99. <https://doi.org/10.21460/sciscitatio.2022.32.94>
- Ekawati, Y., Anggraeni, Prawestri, A. D., & Nurtjahya, E. 2022. Induksi Kalus Sisik Umbi *Lilium longiflorum* Thunb. oleh Auksin dan Sitokinin, serta Respons Pertumbuhannya Secara In Vitro. *Agrosaintek* 6(2): 28–37.
- El-Dawayati, M. M., El-Sharabasy, S., & Gantait, S. 2020. Light Intensity-Induced Morphogenetic Response and Enhanced β -Sitosterol Accumulation in Date Palm (*Phoenix dactylifera* L. cv. Hayani) Callus Culture. *Sugar Tech* 22(6): 1122–1129. <https://doi.org/10.1007/s12355-020-00844-9>
- Fitriyati, F., Ellyzarti, & Lande, M. L. 2014. Studi Variasi Morfologi Tanaman Tomat Gunung (*Lycopersicum esculentum* Mill. var. cerasiforme) di Bandar Lampung. *Biologi Eksperimen Dan Keanekaragaman Hayati* 2(1): 20–125.
- Gam, D. T., Khoi, P. H., Ngoc, P. B., Linh, L. K., Hung, N. K., Anh, P. T. L., Thu, N. T., Hien, N. T. T., Khanh, T. D., & Ha, C. H. 2020. LED Lights Promote Growth and Flavonoid Accumulation of *Anoectochilus roxburghii* and Are Linked to the Enhanced Expression of Several Related Genes. *Plants* 9(1344): 1–15. <https://doi.org/10.3390/plants9101344>
- Ghasemzadeh, A., Jaafar, H. Z. E., Rahmat, A., Wahab, P. E. M., & Halim, M. R. A. 2010. Effect of different light intensities on total phenolics and flavonoids synthesis and anti-oxidant activities in young ginger varieties (*Zingiber officinale* Roscoe). *International Journal of Molecular Sciences* 11(10): 3885–3897. <https://doi.org/10.3390/ijms11103885>
- Hapsari, R., Indradewa, D., & Ambrawati, E. 2017. Pengaruh Pengurangan Jumlah Cabang dan Jumlah Buah terhadap Pertumbuhan dan Hasil Tomat (*Solanum Lycopersicum* L.) The Effect of Pruning and Thinning on the Growth and Yield of Tomato. *Journal Vegetalika* 6(3): 37–49.
- Harahap, F., Djulia, E., Purnama, D., Nusyirwan, Altio, V., Rahayu, S., Rosmayati, Poerwanto, R., & Hasibuan, R. F. M. 2020. Pineapple callus induction from Sipahutar North Sumatera Indonesia (*Ananas comosus* L.) with bud as a source explant. *Journal of Physics: Conference Series* 1462(1):. <https://doi.org/10.1088/1742-6596/1462/1/012008>

- Harnelly, E., Thomy, Z., & Hallaby, S. 2006. Pengaruh NAA 2,4-D dan Pencahayaan terhadap Pembentukan Kalus pada Kultur Jaringan Daun Nilam (*Pogostemon cablin* Benth.). *Agrista* 10(3): 129–135.
- Herawati, M. M., Purwantoro, A., Sulistyarningsih, E., & Pramono, S. 2014. Callus induction and proliferation of *Artemisia cina* Berg ex Poljakov. *Prosiding Seminar Nasional Sumber Daya Genetik Dan Pemuliaan Tanaman* 616–621.
- Hussain, A., Ahmed, I., Nazir, H., & Ullah, I. 2012. Plant Tissue Culture: Current Status and Opportunities. *Recent Advances in Plant in Vitro Culture* 1–28. <https://doi.org/10.5772/50568>
- Indah, P. N., & Ermavitalini, D. 2013. Induksi Kalus Daun Nyamplung (*Calophyllum inophyllum* Linn.) pada Beberapa Kombinasi Konsentrasi 6-Benzylaminopurine (BAP) dan 2,4-Dichlorophenpxyacetic Acid (2,4-D). *Jurnal Sains Dan Seni Pomits* 2(1): 1–6.
- ITIS. 2023. *Solanum lycopersicum* L. https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=521671#null
- Joniyas, A., Surif, M., & Dehgahi, R. 2016. Effect of Nutrient and Light Intensity on Nutrient Uptakes of *Gracilaria manilaensis*. *International Journal of Scientific Research in Environmental Sciences* 4(6): 173–185. <https://doi.org/10.12983/ijres-2016-p0173-0185>
- Julianti, R. F., Nurchayati, Y., & Setiari, N. 2021. Produksi Flavonoid Pada Kalus Tomat (*Lycopersicon esculentum* Mill.) Secara In Vitro Dalam Medium MS Dengan Konsentrasi Sukrosa Yang Berbeda. *Metamorfosa: Journal of Biological Sciences* 8(1): 141. <https://doi.org/10.24843/metamorfosa.2021.v08.i01.p15>
- Junnaeni, Mahati, E., & Maharani, N. 2019. Ekstrak Tomat (*Lycopersicon Esculentum* Mill.) Menurunkan Kadar Glutation Darah Tikus Wistar Hiperurisemia. *Jurnal Kedokteran Diponegoro* 8(2): 758–767.
- Kementerian Pertanian Republik Indonesia. 2014. *Outlook Komoditi Tomat*. <http://pusdatin.setjen.pertanian.go.id>.
- Keryanti, Faizal, A., & Suhardi, S. H. 2020. Pengaruh Variasi pH Medium terhadap Perolehan Biomassa Sel dan Laju Konsumsi Substrat Amonium pada Kultur Suspensi Sel Wortel (*Daucus carota* L.). *Reka Buana : Jurnal Ilmiah Teknik Sipil Dan Teknik Kimia* 5(2): 28. <https://doi.org/10.33366/rekabuana.v5i2.1764>
- Khurshid, R., Ullah, M. A., Tungmunthum, D., Drouet, S., Shah, M., Zaeem, A., Hameed, S., Hano, C., & Abbasi, B. H. 2020. Lights Triggered Differential Accumulation of Antioxidant and Antidiabetic Secondary Metabolites in Callus Culture of *Eclipta alba* L. *PLoS ONE* 15(6): 1–17. <https://doi.org/10.1371/journal.pone.0233963>
- Kim, D., Jeong, S., & Lee, C. 2003. Antioxidant capacity of phenolic phytochemicals from various cultivars of plums. *Food Chemistry* 81: 321–326.
- Kumar, K., Debnath, P., Singh, S., & Kumar, N. 2023. An Overview of Plant

- Phenolics and Their Involvement in Abiotic Stress Tolerance. *Stresses* 3(3): 570–585. <https://doi.org/10.3390/stresses3030040>
- Kumar, S. 2020. Impact of ploidy changes on secondary metabolites productions in plants. In *Evolutionary Diversity as a Source for Anticancer Molecules*. Academic Press. <https://doi.org/10.1016/B978-0-12-821710-8.00002-3>
- Kumar, S., & Pandey, A. K. 2023. Chemistry and Biological Activities of Flavonoids: An Overview. *The Scientific World Journal* 2013: 73–105. https://doi.org/10.1007/978-3-031-18587-8_4
- Kumar, V., Suman, U., Rubal, & Yadav, S. K. 2018. Flavonoid secondary metabolite: Biosynthesis and role in growth and development in plants. In *Recent Trends and Techniques in Plant Metabolic Engineering* (pp. 19–45). https://doi.org/10.1007/978-981-13-2251-8_2
- Kuntorini, E. M., Nugroho, L. H., Maryani, & Nuringtyas, T. R. 2019. Anatomical structure, flavonoid content, and antioxidant activity of *Rhodomyrtus tomentosa* leaves and fruits on different age and maturity level. *Biodiversitas* 20(12): 3619–3625. <https://doi.org/10.13057/biodiv/d201221>
- Kurnia, A., Rahma, D., Fadhilah, H., Sari, M., & Putri, P. A. 2022. Effect of IAA and BAP Differences on Patchouli Plant Growth (*Pogestemon cablin* Benth) In-Vitro. *Prosiding SEMNAS BIO*. 1(2): 758–765.
- Li, H., Piao, X. C., Gao, R., Jin, M. Y., Jiang, J., & Lian, M. L. 2016. Effect of several physicochemical factors on callus biomass and bioactive compound accumulation of *R. sachalinensis* bioreactor culture. *In Vitro Cellular and Developmental Biology - Plant* 52(3): 241–250. <https://doi.org/10.1007/s11627-016-9758-5>
- Loredo-Carrillo, S. E., Santos-Díaz, M. de L., Leyva, E., & Santos-Díaz, M. D. S. 2013. Establishment of callus from *Pyrostegia venusta* (Ker Gawl.) Miers and effect of abiotic stress on flavonoids and sterols accumulation. *Journal of Plant Biochemistry and Biotechnology* 22(3): 312–318. <https://doi.org/10.1007/s13562-012-0161-y>
- Maemunah, Yusuf, R., Samudin, S., Yusran, Hawalina, & Rini, N. S. 2019. Initiation of onion callus (*Allium wakegiaraki*) varieties of lembah palu at various light intensities. *IOP Conference Series: Earth and Environmental Science* 361(1): 3–9. <https://doi.org/10.1088/1755-1315/361/1/012028>
- Manzoor, M. A., Sabir, I. A., Shah, I. H., Riaz, M. W., Rehman, S., Song, C., Gouhui, L., Malik, M. S., Ashraf, G. A., Haider, M. S., Cao, Y., & Abdullah, M. 2023. Flavonoids: a review on biosynthesis and transportation mechanism in plants. *Functional and Integrative Genomics* 23(212): 1–12. <https://doi.org/10.1007/s10142-023-01147-4>
- Mariana, L., Andayani, Y., & Gunawan, R. 2013. Analisis Senyawa Flavonoid Hasil Fraksinasi Ekstrak Diklorometana Daun Keluwih (*Artocarpus camansi*). *Chemistry Progress* 6(2): 50–55.
- Mechela, A., Schwenkert, S., & Soll, J. 2019. A Brief History of Thylakoid Biogenesis. *Open Biology* 9(180237): 1–12. <https://doi.org/10.1098/rsob.180237>

- Mishra, M. R., Srivastava, R. K., & Akhtar, N. 2019. Effect of Nitrogen, Phosphorus and Medium pH to Enhance Alkaloid Production from *Catharanthus roseus* Cell Suspension Culture. *International Journal of Secondary Metabolite* 6(2): 137–153. <https://doi.org/10.21448/ijsm.559679>
- Mohammad, S., Ali, M., Ali, A., Khan, L., Shahsawar, M., & Olive, L. 2019. Feasible Production of Biomass and Natural Antioxidants Through Callus Cultures in Response to Varying Light Intensities in Olive (*Olea europaea*. L.) cult. *Arbosana. Journal of Photochemistry & Photobiology* 193(2019): 140–147. <https://doi.org/10.1016/j.jphotobiol.2019.03.001>
- Nguyen, T. N., Son, S. H., Jordan, M. C., Levin, D. B., & Ayele, B. T. 2016. Lignin Biosynthesis in Wheat (*Triticum aestivum* L.): Its Response to Waterlogging and Association With Hormonal Levels. *BMC Plant Biology* 16(1): 1–16. <https://doi.org/10.1186/s12870-016-0717-4>
- Ningsih, I. Y. 2014. Pengaruh Elisitor Biotik dan Abiotik pada Produksi Flavonoid Melalui Kultur Jaringan Tanaman. *Pharmacy* 11(2): 117–132. <http://dx.doi.org/10.1016/j.biochi.2015.03.025><http://dx.doi.org/10.1038/nature10402><http://dx.doi.org/10.1038/nature21059><http://journal.sta.inkudus.ac.id/index.php/equilibrium/article/view/1268/1127><http://dx.doi.org/10.1038/nrmicro2577>
- Ozyigit, I. I., Dogan, I., Hocaoglu-Ozyigit, A., Yalcin, B., Erdogan, A., Yalcin, I. E., Cabi, E., & Kaya, Y. 2023. Production of Secondary Metabolites Using Tissue Culture-based Biotechnological Applications. *Frontiers in Plant Science* 14(June): 1–28. <https://doi.org/10.3389/fpls.2023.1132555>
- Panche, A. N., Diwan, A. D., & Chandra, S. R. 2016. Flavonoids: An overview. *Journal of Nutritional Science* 5(e47): 1–15. <https://doi.org/10.1017/jns.2016.41>
- Patmala, D. 2023. *Pengaruh Elisitor Nanokitosan Terhadap Pertumbuhan dan Kandungan Flavonoid dari Kultur Kalus Tomat (Solanum lycopersicum L.)*. Universitas Diponegoro.
- Phillips, G. C., & Garda, M. 2019. Plant Tissue Culture Media and Practices: An Overview. *In Vitro Cellular and Developmental Biology - Plant* 55(3): 242–257. <https://doi.org/10.1007/s11627-019-09983-5>
- Pogson, B. J., Ganguly, D., & Albrecht-Borth, V. 2015. Insights Into Chloroplast Biogenesis and Development. *Biochimica et Biophysica Acta - Bioenergetics* 1847(9): 1017–1024. <https://doi.org/10.1016/j.bbabi.2015.02.003>
- Purba, R. V., Yuswanti, H., & Astawa, I. N. G. 2017. Induksi Kalus Eksplan daun Tanaman Anggur (*Vitis vinifera* L.) dengan Aplikasi 2,4-D Secara in Vitro. *Jurnal Agroteknologi Tropika* 6(2): 218–228. <http://ojs.unud.ac.id/index.php/JAT>
- Purwaningrum, Y. 2013. Kultur Kalus Sebagai Penghasil Metabolit Sekunder Berupa Pigmen. *Agriland* 2(2): 117–127. <http://penelitian.uisu.ac.id/wp-content/uploads/2019/09/16.-Kultur-Kalus.pdf>
- Purwanto, I. 2019. *Kandungan Asam Askorbat, Karotenoid dan Pertumbuhan Kalkus Tomat (Lycopersicon esculentum Mill.) Varietas Permata dengan Perbedaan Eksplan dan Perlakuan Subkultur*. Universitas Diponegoro.

- Rasud, Y., Basri, Z., & Sahiri, N. 2020. Induksi Kalus Cengkeh Dari Ekspan Daun Menggunakan 2,4-D Secara in Vitro. *J-PEN Borneo : Jurnal Ilmu Pertanian* 2(2): 52–59. <https://doi.org/10.35334/jpen.v2i3.1533>
- Rismayanti, A. Y., & Nafi'ah, H. H. 2021. Modifikasi Media Pada Induksi Kalus Kopi Arabika (*Coffea Arabica* L.) Berbuah Kuning. *Agro Wiralodra* 4(2): 42–49. <https://doi.org/10.31943/agrowiralodra.v4i2.60>
- Rosyidah, M. C., & Habibah, N. A. 2023. Pengaruh Cahaya serta Kombinasi NAA dan 2,4-D terhadap Induksi Kalus Cabai Merah Varietas Lotanbar. *Prosiding Semnas Biologi XI Tahun 2023 FMIPA Universitas Negeri Semarang* 157–163.
- Roy, A., Khan, A., Ahmad, I., Alghamdi, S., Rajab, B. S., Babalghith, A. O., Alshahrani, M. Y., Islam, S., & Islam, M. R. 2022. Flavonoids a Bioactive Compound from Medicinal Plants and Its Therapeutic Applications. *BioMed Research International* 2022: 1–9. <https://doi.org/10.1155/2022/5445291>
- Sari, M., Ibrahim, D., & Rostiana, O. 2010. Pengaruh Umur Eksplan terhadap Keberhasilan Pembentukan Kalus Embriogenik pada Kultur Meristem Jahe (*Zingiber officinale* Rose). *Jurnal Littri* 16(1): 37–42.
- Sari, R., Paserang, A. P., Pitopang, R., & Suwastika, I. N. 2019. Induksi Kalus Tanaman Kentang Dombu (*Solanum tuberosum* L.) Secara In Vitro Dengan Penambahan Ekstrak Tomat Dan Air Kelapa. *Natural Science: Journal of Science and Technology* 8(1): 20–27. <https://doi.org/10.22487/25411969.2019.v8.i1.12632>
- Sawwan, J. S., Al-Abdallat, A. M., Al-Qudah, T. S., Kushad, M., & Zucoloto, M. 2016. Hawthorn (*Crataegus aronia* L.) callus growth dynamics and polyphenol production under different light intensities. *Journal of Food, Agriculture and Environment* 14(1): 40–45.
- Schaller, G. E., Street, I. H., & Kieber, J. J. 2014. Cytokinin and The Cell Cycle. *Current Opinion in Plant Biology* 21: 7–15. <https://doi.org/10.1016/j.pbi.2014.05.015>
- Setiawati, T., Arofah, A., & Nurzaman, M. 2020. Induksi Kalus Krisan (*Chrysanthemum morifolium* Ramat var. Tomohon Kuning) dengan 2,4-Dichlorophenoxyacetic Acid (2,4-D) dan 6-Benzylaminopurine (BAP) Pada Kondisi Pencahayaan Berbeda. *Jurnal Pro-Life* 7(1): 13–26.
- Setiawati, T., Astuti, A. L., Nurzaman, M., Ratningsih, N., & Biologi, D. 2021. Analisis Pertumbuhan dan Kandungan Total Flavoniod Kultur Kalus Krisan (*Chrysanthemum morifolium* Ramat) dengan Pemberian Asam 2,4-Diklorofenoksiasetat (2,4-D) dan Air Kelapa. *Jurnal Pro-Life* 8(1): 32–44.
- Shofiyani, A., & Damajanti, N. 2017. Pengaruh 2,4-D (Asam Diklorofenoksi Asetat) dan BAP (Benzyl Amino Purin) terhadap Proliferasi Kalus dan Produksi Metabolit Sekunder dari Kalus Kencur (*Kaemferia galanga* L.). *Jurnal Ilmu Kefarmasian Indonesia* 15(2): 180–185. <http://jifi.farmasi.univpancasila.ac.id/index.php/jifi/article/download/514/326>
- Shomali, A., Das, S., Arif, N., Sarraf, M., Zahra, N., Yadav, V., Aliniaiefard, S., Chauhan, D. K., & Hasanuzzaman, M. 2022. Diverse Physiological Roles of Flavonoids in Plant Environmental Stress Responses and Tolerance. *Plants*

- 11(22):. <https://doi.org/10.3390/plants11223158>
- Silva-Beltrán, N. P., Ruiz-Cruz, S., Cira-Chávez, L. A., Estrada-Alvarado, M. I., Ornelas-paz, J. D. J., López-mata, M. A., Del-toro-Sánchez, C. L., Ayala-Zavala, J. F., & Márquez-ríos, E. 2015. Tomatidine Contents and Antioxidant and Antimicrobial Activities of Extracts of Tomato Plant. *International Journal of Analytical Chemistry* 1–10.
- Silvina, F., Isnaini, & Ningsih, W. 2021. Induksi Kalus Daun Binahong Merah (*Basella rubra* L.) dengan Pemberian 2,4-D dan Kinetin. *Jurnal Agro* 8(2): 274–285. <https://doi.org/10.15575/14273>
- Simamora, A. N., Erwin Nazri, & Faizah, R. 2021. Pengaruh Intensitas Dan Filter Cahaya Terhadap Perkembangan Kultur Kelapa Sawit. *WARTA Pusat Penelitian Kelapa Sawit* 26(1): 1–6. <https://doi.org/10.22302/iopri.war.warta.v26i1.42>
- Slimestada, R., & Verheulb, M. 2009. Review of Flavonoids and Other Phenolics From Fruits of Different Tomato (*Lycopersicon esculentum* mill.) Cultivars. *Journal of the Science of Food and Agriculture* 89(8): 1255–1270. <https://doi.org/10.1002/jsfa.3605>
- Sudheer, W. N., Praveen, N., Al-Khayri, J. M., & Jain, S. M. 2022. Role of Plant Tissue Culture Medium Components. *Advances in Plant Tissue Culture: Current Developments and Future Trends* 51–83. <https://doi.org/10.1016/B978-0-323-90795-8.00012-6>
- Sugiyarto, L., & Kuswandi, P. C. 2014. Pengaruh 2, 4-Diklorofenoksiasetat (2, 4-D) Dan Benzyl Aminopurin (BAP) Terhadap Pertumbuhan Kalus Daun Binahong (Anredera. *Jurnal Penelitian Saintek* 19(1): 23–30. <http://journal.uny.ac.id/index.php/saintek/article/view/2322>
- Suhartanto, B., Astutik, M., Umami, N., Suseno, N., & Haq, M. S. 2022. The Effect of Explants and Light Conditions on Callus Induction of Srikandi Putih Maize (*Zea mays* L.). *IOP Conference Series: Earth and Environmental Science* 1001(012006): 1–5. <https://doi.org/10.1088/1755-1315/1001/1/012006>
- Sui, L., Peng, M., Kong, L., Que, W., Yuan, H., & Zhang, Y. 2021. Effects of Light on Callus Multiplication of *Actinidia Arguta*. *IOP Conference Series: Earth and Environmental Science* 784((2021)012027): 1–4. <https://doi.org/10.1088/1755-1315/784/1/012027>
- Sulichantini, E. D. 2015. Produksi Metabolit Sekunder Melalui Kultur Jaringan. *Prosiding Seminar Nasional Kefarmasian Ke-1* 206–212.
- Tank, J. G., Pandya, R. V., & Thaker, V. S. 2014. Phytohormones in Regulation of the Cell Division and Endoreduplication Process in the Plant Cell Cycle. *RSC Advances* 4(24): 12605–12613. <https://doi.org/10.1039/c3ra45367g>
- Ullah, A., Munir, S., Badshah, S. L., Khan, N., Ghani, L., Poulson, B. G., Emwas, A., & Jaremko, M. 2020. Important Flavonoids and Their Role as a Therapeutic Agent. *Molecules* 25(5243): 1–39.
- Ulva, M., Nurchayati, Y., Prihastanti, E., & Setiari, N. 2019. Pertumbuhan Kalus Tomat (*Lycopersicon esculentum* Mill.) Varietas Permata F1 dari Jenis Eksplan dan Konsentrasi Sukrosa yang Berbeda secara In Vitro. *Life Science*

8(2): 160–169.

- Usman, H., Ullah, M. A., Jan, H., Siddiquah, A., Drouet, S., Anjum, S., Giglioli-guviarc, N., Hano, C., & Abbasi, B. H. 2020. Interactive Effects of Wide-Spectrum Monochromatic Lights on Phytochemical Production, Antioxidant and Biological Activities of *Solanum xanthocarpum* Callus Cultures. *Molecules* 25(9): 1–25.
- Van Staden, J., Fennell, C. W., & Taylor, N. J. 2006. Plant stress in vitro: The role of phytohormones. *Acta Horticulturae* 725: 55–61. <https://doi.org/10.17660/actahortic.2006.725.2>
- Wardani, D. P., Solichatun, & Setyawan, A. D. 2004. Growth and saponin production of *Talinum paniculatum* Gaertn. callus culture on various addition with 2,4-dichlorophenoxy acetic acid (2,4-D) and kinetin. *Biofarmasi Journal of Natural Product Biochemistry* 2(1): 35–43. <https://doi.org/10.13057/biofar/f020106>
- Xie, M., Zhang, J., Tschaplinski, T. J., Tuskan, G. A., Chen, J. G., & Muchero, W. 2018. Regulation of Lignin Biosynthesis and its Role in Growth-Defense Tradeoffs. *Frontiers in Plant Science* 9(September): 1–9. <https://doi.org/10.3389/fpls.2018.01427>
- Xu, J., Guo, Z., Jiang, X., Ahammed, G. J., & Zhou, Y. 2021. Light Regulation of Horticultural Crop Nutrient Uptake and Utilization. *Horticultural Plant Journal* 7(5): 367–379. <https://doi.org/10.1016/j.hpj.2021.01.005>
- Zou, Y., Lu, Y., & Wei, D. 2004. Antioxidant activity of a flavonoid-rich extract of *Hypericum perforatum* L. in vitro. *Journal of Agricultural and Food Chemistry* 52(16): 5032–5039. <https://doi.org/10.1021/jf049571r>