

DAFTAR PUSTAKA

- Adams, P. B., J. M. Burke dan S. D. Lawson. 2006. Systematic analysis of *Dendrobium* Swartz section Dendrocoryne in the Australian region. *Plant Systematics and Evolution* 260(1): 65–80.
- Agisimanto, D. 2015. *Thin Cell Layer* Mempercepat Pembuatan Populasi Genotip Unggul. *Hortikultura. Iptek Hortikultura* 11: 67-72.
- Akbar, M. A., E. Faridah., S. Indrioko dan T. Herawan. 2017. Induksi Tunas, multiplikasi dan Perakaran *Gyrinops versteegii* (Gilg.) Domke secara *in vitro*. *Jurnal Pemuliaan Tanaman Hutan* 11(1):1–13.
- Alarcon, M. V., J. Salguero dan P. G. Lloret. 2019. Auxin Modulated Initiation of Lateral Roots Is Linked to Pericycle Cell Length in Maize. *Frontiers in plant science* 10(11):1-10. <https://dx.doi.org/10.3389/fpls.2019.00011>
- Amente, G dan E. Chimdessa. 2021. Control of browning in plant tissue culture: A review. *Journal of Scientific Agriculture* 5: 67-71. <https://dx.doi.org/10.25081/jsa.2021.v5.7266>
- Andri, K. B dan W. J. F. A. Tumbuan. 2015. Potensi Pengembangan Agribisnis Bunga Anggrek Di Kota Batu Jawa Timur. *Jurnal LPPM Bidang EkoSosBudKum* 2(1): 19-30.
- Aprinda, O., Lizawati dan Eliyanti. 2022. Induksi Akar Pada Eksplan Tunas Anggrek (*Dendrobium* var. Airy Beauty) Secara *In Vitro* dengan Penambahan Naphtalene Acetic Acid (NAA) dan 6-Benzyl Amino Purin (BAP). *Journal Agroecotenia* 5(1): 27-39. <https://dx.doi.org/10.22437/agroecotania.v5i1.22825>
- Arum, D. A. P dan E. Semiarti. 2022. In Vitro Culture of *Phalaenopsis amabilis* (L.) Blume Orchid for Seedling Production with Banana Extract Supplementation and Light Treatment for Ex Situ Conservation. *Journal of Tropical Biodiversity and Biotechnology* 7(3): 1-13. <https://dx.doi.org/10.22146/jtbb.70868>
- Astuti, A.T., Z. A. Noli dan S. Suwirman. Induksi Embriogenesis Somatik Pada Anggrek Vanda *Sumatrana* Schltr. dengan Penambahan Beberapa Konsentrasi Asam 2,4-Diklorofenoksiasetat (2,4-D). *Jurnal Biologi Universitas Andalas* 7(1): 6-13.

- Aswathi, N. V dan D. T. Thomas. 2022. Transverse Thin Cell Layer (tTCL) Technology: Apromising Tool for Micropropagation of *Centratherum punctatum* Cass. *Research Square* 1-29.
- Atkinson, J. A., A. Rasmussen., R. Traini., U. Voß., C. Sturrock., S. J. Mooney., D.M. Wells dan M.J Bennett. 2014. Branching out in roots: uncovering form, function, and regulation. *Plant Physiology* 166(2):538–550. <https://dx.doi.org/10.1104/pp.114.245423>
- Balilashaki, K., M. Vahedi dan R. Karimi. 2015. In vitro Direct Regeneration from Node and Leaf Explants of *Phalaenopsis* cv. ‘Surabaya. *Plant Tissue Culture & Biotechnology* 25(2): 193-205. <https://dx.doi.org/10.3329/ptcb.v25i2.26254>
- Basuchaudhuri, P. 2016. 1-Naphthaleneacetic acid in rice cultivation. *Current Science* 110(1):52-56.
- Barbeza, E., K. Dünserb., A. Gaidoraa., T. Lendla dan W. Buscha. 2017. Auxin steers root cell expansion via apoplastic pH regulation in *Arabidopsis thaliana*. *PNAS* 114(24):4884–4893. <https://dx.doi.org/10.1073/pnas.1613499114>
- Bhatia, S., T. Bera., R. Dahiya dan K. Sharma. 2015. *Modern Applications of Plant Biotechnology in Pharmaceutical Sciences*. Academic Press. Burlington. Kanada.
- Bhattacharyya, P., P. Paul., S. Kumaria dan P. Tandon. 2018. Transverse Thin Cell Layer (t-TCL) Mediated Improvised Micropropagation Protocol for Endangered Medicinal Orchid *Dendrobium aphyllum* Roxb: an Integrated Phytomolecular Approach. *Acta Physiologiae Plantarum* 40(8):137-150. <https://dx.doi.org/10.1007/s11738-018-2703-y>
- Bhattacharyya, P., S. Kumaria., R. Diengdoh dan P. Tandon. 2014. Genetic stability and phytochemical analysis of the in vitro regenerated plants of *Dendrobium nobile* Lindl., an endangered medicinal orchid. *Meta Gene*:489–504. <https://doi.org/10.1016/j.mgene.2014.06.003>
- Bing, H. Y. N., D. T. Tham., T. T. Vinh., Q. V. Hoi., V. K. Cong dan N. V. Duy. 2018. In Vitro Propagation Of The New Orchid *Dendrobium trankimianum* T. Yukawa. *Journal of Biotechnology* 16(4): 649-657. <https://doi.org/10.15625/1811-4989/16/4/11155>
- Cetin, N., B Guler dan A. Gurel. 2021. In Vitro Regeneration Potential of Thin Cell Layer Explants of Lentisk (*Pistacia lentiscus* var. Chia) Plant. *Bilecik Seyh Edebali Universitasi Fen Bilimleri Dergisi* 8(2): 960-977. <http://dx.doi.org/10.35193/bseufbd.947888>

- Chattopadhyaya, B., J. Banerjee., A. Basu., S. K. Sen dan M. K. Maiti. 2010. Shoot Induction and Regeneration Using Internodal Transverse Thin Cell Layer Culture in *Sesamum indicum* L. *Plant Biotechnol Rep* 4(2): 173–178. <http://dx.doi.org/10.1007/s11816-010-0133-4>
- Chin Lo, K., J. A. Gansau., C. H. Shih dan C. Y. Kao. 2022. Shoot Development through Modified Transverse Thin Cell Layer (tTCL) Culture of *Phalaenopsis Hybrid* Protocorms. *Horticulturae* 8(3): 206-215. <https://dx.doi.org/10.3390/HORTICULTURAE8030206>
- CITES. 2022. *Dendrobium mussauense* <https://checklist.cites.org/#/en>. 7 Desember 2022
- Cribb, P. J. 1986. A Revision of *Dendrobium* sect. Spatulata (Orchidaceae). Kew Bulletin 41(3): 615-692. <https://doi.org/10.2307/4103119>
- Dendrobium mussauense* Ormerod in GBIF Secretariat (2022). GBIF Backbone Taxonomy. Checklist dataset <https://doi.org/10.15468/39omei> accessed via GBIF.org on 2022-12-26.
- Du, Y dan Scheres, B. 2018. Lateral root formation and the multiple roles of auxin. *Journal of Experimental Botany* 69(2):155–167. <https://doi.org/10.1093/jxb/erx223>
- Dwiyani, R. 2015. *Kultur Jaringan Tumbuhan*. Pelawa Sari. Denpasar. Indonesia.
- Ekmekcigil, M., M. Bayraktar., O. Akkus dan A. Gurel. 2019. High Frequency Protocorm Like Bodies and Shoot Regeneration through a Combination of Thin Cell Layer and RITA Temporary Immersion Bioreactor in *Cattleya forbesii* Lindl. *Plant Cell, Tissue and Organ Culture* 136(4): 451-464. <https://dx.doi.org/10.1007/s11240-018-1526-2>
- Ferreira, D. L., E. D. C. Smidt dan L. L. F. Ribas. 2015. Efficient Micropropagation of *Epidendrum secundum* Jacq. From Leaves and protocorms. *African Journal of Biotechnology* 14(13): 1122-1128. <http://dx.doi.org/10.5897/AJB2015.14467>
- Fithriyandini, A., M.D. Maghfoer dan T. Wardiyati. 2015. Pengaruh Media Dasardan 6 -Benzylaminopurine (BAP) terhadap Pertumbuhan dan PerkembanganNodus Tangkai Bunga Anggrek Bulan (*Phalaenopsis amabilis*) dalamPerbanyakan secara in vitro. *Jurnal Produksi Tanaman* 3(1): 43 -49.
- Fochi, V., N. Falla., M. Girlanda., S. Perotto dan R. Balestrini. 2017. Cell-specific expression of plant nutrient transporter genes in orchid mycorrhizae. *Plant Science* 26: 39-45. <https://dx.doi.org/10.1016/j.plantsci.2017.06.015>

- George, E. F dan P. D. Sherrington. 1984. *Plant Propagation by Tissue Culture. Handbook and Directory of Comercial Laboratories.* Basingtoke. England.
- Ghahremani, R., S. D. Daylami., M. Mirmasoumi., N. Askari dan K. Vahdati. 2021. Refining a Protocol for Somatic Embryogenesis and Plant Regeneration of *Phalaenopsis amabilis* cv. Jinan from Mature Tissues. *Turkish Journal of Agriculture and Forestry* 45(3): 356-364. <http://dx.doi.org/10.3906/tar-2004-107>
- Gomes, L. R. P., C. D. R. B. Franceschi dan L. L. F Ribas. 2015. Micropropagation of *Brasilidium forbesii* (Orchidaceae) through Transverse and Longitudinal Thin Cell Layer Culture. *Acta Scientiarum Biological Sciences* 37(2): 143–149, <http://dx.doi.org/10.4025/actas.cibiolsci.v37i2.27276>
- Hager, A. 2003. Role of the plasma membrane H⁺-ATPase in auxin-induced elongation growth: Historical and new aspects. *Journal Plant Research* 116(6):483–505. <http://dx.doi.org/10.1007/s10265-003-0110-x>
- Handayani E., M. B. Irsyadi., R. L. M. N Alawiyah dan I. Aris. 2022. Effect of Explants Sterilization and Plant Growth Regulators on Embryo Culture of Kepel (*Stelechocarpus burahol*). *International Conference on Sustainable Agriculture*
- Harahap, F., I. Hariyadi., M. Silitonga., C. Suryani., S. Edi dan A. P. Ningsih. 2023. In vitro Growth of *Cattleya* sp Orchid from Leaf Explants with Growth Regulators. *Jurnal Pembelajaran Dan Biologi Nukleus* 9(1): 192-200. <https://doi.org/10.36987/jpbn.v9i1.3945>
- Hartati, S., A. Budiyono dan O. Cahyono. 2016. Pengaruh NAA dan BAP terhadap pertumbuhan subkultur anggrek hasil persilangan *Dendrobium biggibum* X *Dendrobium liniale*. *Caraka Tani Journal of Sustainable Agriculture* 31(1): 33-37. <http://dx.doi.org/10.20961/carakatani.v31i1.11938>
- Hartati, S., R. Arniputri., L. A. Soliah dan O. Cahyono. 2017. Effects Of Organic Additives And Naphthalene Acetid Acid (NAA) Application On The In Vitro Growth Of Black Orchid Hybrid (*Coelogyne Pandurata* Lindley). *Bulgarian Journal Of Agricultural Science* 23(6): 951–957.
- Hasnu, S dan B. Tanti. 2021. Multiple shoot induction and regeneration of *Vanilla borneensis* Rolfe-a critically endangered orchid of Assam, India. *Plant Science Today* 9(1): 96-104. <https://dx.doi.org/10.14719/pst.1292>
- Hayati, S. K., Y. Nurchayati dan N. Setiari. 2010. Induksi Kalus dari Hipokotil Alfalfa (*Medicago Sativa* L.) secara In Vitro dengan Penambahan Benzyl Amino Purine (BAP) dan A-Naphthalene Acetic Acid (NAA). *Bioma* 1(12): 6-12.

- Hendaryono, D. P. S dan A. Wijayani. 1994. *Teknik Kultur Jaringan*. Kanisius. Yogyakarta. Indonesia.
- Hidayati, N. Z., D. Saptadi dan L. Soetopo. 2016. Analisis Hubungan Kekerabatan 20 Spesies Anggrek *Dendrobium* Berdasarkan Karakter Morfologi. *Jurnal Produksi Tanaman* 4 (4) 291-297.
- Holderbaum, D. F., T. Kon., T. Kudo dan M.P. Guerra. 2010. Enzymatic browning, polyphenol oxidaseactivity, and polyphenols in four apple culti vars: Dynamics during fruit development. *Horticultural Science* 45(8):1150–1154. <http://dx.doi.org/10.21273/HORTSCI.45.8.1150>
- Horstman A., M. Bemer dan K. Boutilier. 2017. A Transcriptional View on Somatic Embryogenesis. *Regeneration* 4(4): 201-216. <https://dx.doi.org/10.1002/reg.291>
- Hossain, M dan Z. Urbi. 2016. Effect of Naphthalene Acetic Acid on the Adventitious Rooting in Shoot Cuttings of *Andrographis paniculata* (Burm.f.) Wall. ex Nees: An Important Therapeutical Herb. 1: 1-6 *International Journal of Agronomy*. <https://dx.doi.org/10.1155/2016/1617543>
- Hossain, M.M., R. Kant., V. Pham., B. Winarto., S. Zeng dan J.A. Taxiera da Silva. 2013. The application of biotechnology to orchids. *Critical Reviews in Plant Sciences* 32(2): 69–139. <https://dx.doi.org/10.1080/07352689.2012.715984>
- Illahi, A. K., E. Ratnasari dan S.K. Dewi. 2022. Pengaruh 2,4-D terhadap Pertumbuhan Kalus Daun *Diospyros discolor* Willd pada Media MS secara in Vitro. *LenteraBio* 11 (3): 369-37.
- Iqbal, A., R.S. Khan., M.A. Khan., K. Gul., M.Aizaz., M. Usman dan M. Arif. 2022. Efficient Regeneration in Sugarcane Using Thin Cell Layer (TCL) Culture System. *Sugar Tech* 25(8):168-176. <https://dx.doi.org/10.1007/s12355-022-01162-y>
- Isda, M. N dan S. Fatonah. 2014. Induksi Akar pada Eksplan Tunas Anggrek *Grammatophyllum scriptum* var. citrinum secara In Vitro pada Media MS dengan Penambahan NAA dan BAP. *Al-Kauniyah Jurnal Biologi* 7(2): 53–57. <http://dx.doi.org/10.15408/kauniyah.v7i2.2715>
- IUCN 2022. The IUCN Red List of Threatened Species. Version 2022-2. <https://www.iucnredlist.org> ISSN 2307-8235.
- Jameson, P.E dan J. Song. 2016. Cytokinin: A keydriver of seed yield. *Journal of Experimental Botany* 67(3): 593–606. <https://doi.org/10.1093/jxb/erv461>

- Jing, G. F., W. N. Aqilla dan Z. A. R. S. Subramaniam. 2014. The Effect of Thin Cell Layer in *Vanilla planifolia* in Vitro culture. *Current Botany* 5: 22-25.
- Kaewubon, P., N. Hutadilok-Towatana., J. A. Teixeira da Silva dan U. Meesawat. 2015. Ultrastructural and Biochemical Alterations During Browning of Pigeon Orchid (*Dendrobium crumenatum* Swartz) Callus. *Plant Cell, Tissue Organ Culture* 121(1): 53-69. <https://dx.doi.org/10.1007/s11240-014-0678-y>
- Kamal, M.I., K. A. Zaied., M. K. Hussein dan A. H. A. Hady. 2021. Cytogenetic effects of Naphthalene Acetic Acid and Benzylaminopurine in Meristematic Cells of Onion Roots. *Journal of Agricultural Chemistry and Biotechnology* 12(1):11-24. <http://dx.doi.org/10.21608/jacb.2021.148055>
- Karimah, N., F. Kusmiyati dan S. Anwar. 2021. Pengaruh Penggunaan Sukrosa dan IBA Terhadap Induksi Akar Eksplan Tunas Anggrek (*Dendrobium* sp.) Secara In Vitro. *Jurnal Agrotek* 5(1): 34-44.
- Kartiman, R., D. Sukma., S. I. Aisyah dan A. Purwito. 2018. Multiplikasi invitro anggrek hitam (*Coelogyne pandurata* lindl.) pada Perlakuan Kombinasi NAA dan BAP. *Jurnal Bioteknologi & Biosains Indonesia (JBBI)* 5(1): 75-87. <http://dx.doi.org/10.29122/jbbi.v5i1.2908>
- Kasli. 2009. Upaya Perbanyak Tanaman Krisan (*Crysanthemum* sp.) Secara In Vitro. *Jerami* 2(3): 121-125.
- Khayatnezhad, M., R. Gholamin., S. Jamaati-e-Somarin dan R. Zabihi-e-Mahmoodabad. 2011. The leaf chlorophyll content and stress resistance relationship considering in Corn cultivars (*Zea mays*). *Advances in Environmental Biology* 5(1): 118-122
- Kusmana, C dan A. Hikmat. 2015. The biodiversity of Flora in Indonesia. *Journal of Natural Resources and Environmental Management* 5(2):187-198.
- Laukkanen, H., H. Häggman., S. Kontunen-Soppela dan A. Hohtola. 2002. Tissue browning of in vitro cultures of Scots pine: role of peroxidase and polyphenol oxidase. *Physiologia Plantarum* 106(3): 337:343. <https://dx.doi.org/10.1034/j.1399-3054.1999.106312.x>
- Li, Y., X. Wang., J. Chen.,N. Cai., H. Zeng., Z. Qiao dan X. Wang. 2015. A method for micropropagationof *Cornus wilsoniana*: An important biofuelplant. *Industrial Crops and Products* 76:49–54. <https://doi.org/10.1016/j.indcrop.2015.06.042>

- MacDonald, M. J dan G. B. D'Cunha, G. 2007. A modern view of phenylalanine ammonia-lyase. *Biochemistry and Cell Biology* 85(6): 273-282. <https://doi.org/10.1139/o07-018>
- Maharjan, S., S. Pradhan., B. B. Thapa dan B. Pant. 2019. In Vitro Propagation of Endangered Orchid, *Vanda pumila* Hook.f. through Protocorms Culture. *American Journal of Plant Sciences* 10(7): 1220-1232. <http://dx.doi.org/10.4236/ajps.2019.107087>
- Mambro, R. D., M. D. Ruvo., E. Pacifici., E. Salvi., R. Sozzani., F. N. Benfey., W. Busch., O. Novak., K. Ljung., L. D. Paola., A. F. M. Marée., P. Costantino., V. A. Grieneisen dan S. Sabatini. 2017. Auxin minimum triggers the developmental switch from cell division to cell differentiation in the *Arabidopsis* root. *Proceedings of the National Academy of Sciences of the United States of America* 114 (36): 7641-7649. <http://dx.doi.org/10.1073/pnas.1705833114>
- Mandal, S., N. Pal., T. Mondal dan N. Banarjer. 2020. Comparative Efficiency Analysis of Different Explants and Contribution of Polyamines on in vitro Propagation of *Dendrobium Hybrid Sonia*. *Plant tissue Culture and Biotechnology* 30(1):77-86. <http://dx.doi.org/10.3329/ptcb.v30i1.47793>
- Marlin, M., Y. Yulian dan H. Hermansyah. 2012. Inisiasi Kalus Embriogenik pada Kultur Jantung Pisang Curup dengan Penambahan Sukrosa, BAP, dan 2,4-D. *Jurnal Agrivigor* 11(2): 275–283.
- Martinez, M.V dan J.K. Whitaker. 1995. The biochemistry and control of enzymatic browning. *Trends in Food Science & Technology* 6(6):195–200. [https://doi.org/10.1016/S0924-2244\(00\)89054-8](https://doi.org/10.1016/S0924-2244(00)89054-8)
- Martins, J. P. R., L. C. D. A. Rodrigues., Tiexiera da Silva., A. B. P. L. Gontijo dan A. R. Falqueto. 2020. Modulation of the anatomical and physiological responses of in vitro grown *Alcantarea imperialis* induced by NAA and residual effects of BAP. *Ornamental Horticulture* 26(2): 283-297. <http://dx.doi.org/10.1590/2447-536x.v26i2.2138>
- Mayer, A. M. 2006. Polyphenol oxidases in plants and fungi: going places? a review. *Phytochemistry* 67(21): 2318-2331. <http://dx.doi.org/10.1016/j.phytochem.2006.08.006>
- Media, M., Z.A. Noli., M. idris. An Overview: Effect of Plant Growth Regulatory on Orchid Propagation through the thin cell layer technique. *International Journal of Progressive Sciences and Technologies* 30(2): 340-345
- Mehraj, H., T. Taufique., M. R. Ali., R. K. Sikder dan A. F. M. J. Uddin. 2015. Impact of GA3 and NAA on horticultural traits of *Abelmoschus esculentus*. *World Applied Sciences Journal* 33(11):1712–1717. <http://dx.doi.org/10.5829/idosi.wasj.2015.33.11.12590>

- Mirani, A. A., A. A. A. Soad dan G. S. Markhand. 2017. In Vitro Rooting of *Dendrobium nobile* Orchid: Multiple Responses to Auxin Combination. *Notulae Scientia Biologicae* 9(1):84-88. <https://dx.doi.org/10.15835/nsb919894>
- Mukherjee, P. K., R. Mondal., S. Dutta., K. Meena., M. Roy dan A. B. Mandal. 2018. In vitro micropropagation in *Boehmeria nivea* to generate safe planting materials for largescale cultivation. *Czech Journal of Genetics and Plant Breeding* 54(4):183–189. <https://dx.doi.org/10.17221/79/2017-CJGPB>
- Noli, Z.A., S. Suwirmen., I. Izmiarti., R. Oktavia dan P. Aliyyanti5. 2021. Respon Padi Gogo (*Oryza Sativa L.*) Terhadap Pemberian Biostimulan Dari Ekstrak Rumput Laut *Padina minor*. *Bioscientist* 9(2): 412-419.
- Novitasari, B., M. Meiriani dan H. Haryati. 2015. Pertumbuhan Setek Tanaman Buah Naga (*Hylocereus costaricensis* (Web.) Britton & Rose) dengan Pemberian Kombinasi Indole Butyric Acid (IBA) dan Naphthalene Acetic Acid (NAA). *Jurnal Agroteknologi* 4(1) : 1735-1740. <https://dx.doi.org/10.32734/jaet.v4i1.12336>
- Nurhanifah, R.A., A. Supriyatna dan A. Adawiyah. 2021. Induksi Tunas Anggrek (*Dendrobium* Sp) Var. Kumala Menggunakan BAP Dan Air Kelapa Secara *In Vitro*. *Gunung Djati Conference Series* 6:156-162.
- Orchidroots. 2022. *Dendrobium mussauense*. <https://orchidroots.com/detail/photos/58477/?tab=sum&gen=56967&att. 22 Desember 2022.>
- Ordas, R. J., B. Fernández dan R. Rodriguez. 1992. Banzyl Adenin Controled Protein Synthesis and Growth in Apple Cell suspension. *Physiologis Plantarum*. 84(2): 229-235. <https://doi.org/10.1111/j.1399-3054.1992.tb04658.x>
- Ormerod, P. 1997. Australian Orchid Review 62(3):13.
- Park, S. H., M. A. Elhiti., H. Wang., A. Xu., D. Brown dan A. Wang. 2017. Adventitious root formation of in vitro peach shoots is regulated by auxin and ethylene. *Scientia Horticulturae* 226(226): 250–260. <http://dx.doi.org/10.1016/j.scienta.2017.08.053>
- Parthibhan, S., M. V. Rao., J. A. Teixeira da Silva dan T. S. Kumar. 2018. Somatic Embryogenesis from Stem Thin Cell Layers of *Dendrobium aqueum*. *Biologia Plantarum* 62(3): 439-450. <http://dx.doi.org/10.1007/s10535-018-0769-4>
- Peer, W. A. 2013. From perception to attenuation: Auxin signalling and responses. *Current Opinion in Plant Biology* 16(5):561–568. <http://dx.doi.org/10.1016/j.pbi.2013.08.003>

- Pharmawati, M dan M. R. Defiani. 2021. Pembentukan Kalus, Tunas, dan Akar Pada Kultur anggur Bali (*Vitis vinifera* Cv *alphonse lavallee*) Dengan Pemberian NAA Dan BAP. *Jurnal Biologi dan Konservasi* 3(1): 1-10.
- Pradhan, S., Y. P. Paudel dan B. Pant. 2013. Efficient regeneration of plants from shoot tip explants of *Dendrobium densiflorum* Lindl., a medicinal orchid. *African Journal of Biotechnology* 12(12): 1378-1383. <http://dx.doi.org/10.5897/AJB12.2731>
- Puccio, P. 2022. *Dendrobium mussauense* <https://www.monaconatureencyclopedia.com/dendrobium-mussauense-2/?lang=en> 20 Desember 2022.
- Putra, R. R dan M. Shofi. 2015. Pengaruh hormon Napthalena Acetic Acid terhadap inisiasi akar tanaman kangkung air (*Ipomoea aquatica* Forssk.). *Jurnal Wiyata* 2(2): 108-113.
- Putri, V. A., S. Sugiyono., L. Prayoga., R. Prasetyo dan S. Hilary. 2022. The Application Of Two Steps Culture In agarwood, *Aquilaria Malaccensis*, In vitro culture Improves Microshoots induction And Development. *Scripta Biologica* 9(1): 1-5. <https://doi.org/10.20884/1.sb.2022.9.1.1373>
- Rahman, M. M., N. A. Ivy., M. A Mian., M. G Rasul., M. M. Hossain dan M. A. Rahman. 2018. Effect of Auxin (NAA, IBA and IAA) in Root Regeneration through In vitro Culture of Sugarcane. *International Journal Plant Biology Research* 6(6): 1109-1114.
- Ramirez-Mosqueda, M. A. R., L. G. Iglesias-Andreu., A. A. Armas-Silva., E. J. Cruz-Gutierrez.m J. F. D. L. Torre-Sanchez., O. R. Leyva-Ovalle dan C. M Galan-Paez. 2018. The Effect of Thin Cell Layer Technique in the Induction Of Somatic Embryo in *Pinus patula* Schl. et Cham. *Journal Forestry Research* 30(4): 1535-1539. <https://dx.doi.org/10.1007/s11676-018-0663-0>
- Raomai, S., S. Kumaria., M. Kehie dan P. Tandon. 2015. Plantlet Regeneration of *Paris polyphylla* Sm. via Thin Cell Layer Culture and Enhancement of Steroidal Saponins in Mini-rhizome Cultures Using Elicitors. *Plant Growth Regulation* 75(1): 341-353. <https://dx.doi.org/10.1007/s10725-014-9957-1>
- Reddy, J., Niveshika., A. Shaju., A. Jose., A. Betty dan H. Yarmichon. 2020. Plant Growth Regulators Used For In Vitro Micropropagation Of Orchids: A Research Review. *International Journal of Biological Research* 8(1): 37-42.

- Reinert, J dan M. M. Yeoman. 1982. *Plant Cell and Tissue Culture: A Laboratory Manual*. Springer Verlag Berlin Heidelberg. New York. Amerika Serikat
- Rineksane, I. A., dan M. Sukarjan. 2015. Regenerasi Anggrek Vanda tricolor Pasca Erupsi Merapi Melalui Kultur *In Vitro*. Seminar Nasional. Universitas PGRI. Yogyakarta. Pp: 378-384.
- Rineksane, I. A., S. S. Nafi'ah dan S. S. Dewi. 2018. The Combination of Rice Water and BAP Enhances the Multiplication of *Grammatophyllum speciosum*. *Journal of Agro Science*, 6(2): 92–99. <https://dx.doi.org/10.18196/pt.2018.085.92-99>
- Ruzin, S. 1999. *Plant microtechnique and microscopy*. Oxford University Press. New York. Amerika Serikat
- Sabooni, N dan A. Shekafandeh. 2017. Somatic Embryogenesis and Plant Regeneration of Blackberry Using the Thin Cell Layer technique. *Plant Cell Tissue Organ Culture* 130(2): 313–321. <https://dx.doi.org/10.1007/s11240-017-1225-4>
- Sakina, S., S. Anwar dan F. Kusmiyati. 2019. In vitro *Dendrobium* orchid (*Dendrobium* sp.) plantlet growth in different concentration of BAP and NAA. *Jurnal Pertanian Tropik* 6(3): 430- 437. <https://dx.doi.org/10327.34/jpt.v6i3.3192>
- Schaller, G. E., I. H. Street dan J. J. Kieber. 2014. "Cytokinin and the cell cycle." *Current opinion in plant biology* 21: 7 - 15.
- Silalahi, M. 2015. Pengaruh Modifikasi Media Murashige-Skoog (MS) Dan Zat Pengatur Tumbuh BAP terhadap Pertumbuhan Kalus *Centella asiatica* L. (Urban.). *Jurnal ProLife* 2(1):14-23.
- Singh, C. R. 2018. Review on problems and its remedy in plant tissue culture. *Asian Journal of Biological Sciences* 11(4): 165–172.
- Sofian, A. A., E. Prihastanti dan S. W. A. Suedy. 2018. Effect of IBA and BAP on shoot growth of *Tawangmangu tangerine* (*Citrus reticulata*) by in-vitro. *Biosaintifika* 10(2): 379–387. <https://dx.doi.org/10.15294/biosaintifika.v10i2.14977>
- Sudiyanti, S., T. B. Rusbana, dan S. Susiyanti. 2017. Inisiasi Tunas Kokoleceran (*Vatica bantamensis*) pada Berbagai Jenis Media Tanam dan Konsentrasi BAP (Benzyl Amino Purine) Secara In Vitro. *Jurnal Agro* 4(1): 1-14. <https://doi.org/10.15575/1069>

- Sutriana, S., H. B. Jumin dan M. Mardaleni. 2014. Interaksi BAP dan NAA terhadap pertumbuhan eksplan anggrek *vanda* secara *in vitro*. *Jurnal Dinamika Pertanian* 29(1): 1–8. <https://dx.doi.org/10.25299/dp.v29i1.854>
- Taiz, L dan E. Zeiger. 2012. Plant Physiology 5th Edition. Sinauer Associates Inc., Sunderland, Massachusetts, USA.
- Teixeira da Silva, J. A. 2003. Thin Cell Layer Technology in Ornamental Plant Micropropagation and Biotechnology. *African Journal Biotechnol* 2(12): 683–69. <http://dx.doi.org/10.5897/AJB2003.000-1125>
- Teixeira da Silva, J. A dan Dobranszki, J. 2015. Plant Thin Cell Layers: Update and Perspectives. *Folia Horticultae* 27(2): 183–190. <https://dx.doi.org/10.1515/fhort-2015-0029>
- Teixeira da Silva, J. A dan Dobranszki, J. 2013. Plant thin cell layers: A 40-year celebration. *Journal Plant Growth Regulator* 32(4): 922–943. <http://dx.doi.org/10.1007/s00344-013-9336-6>
- Teixeira da Silva, J. A dan J. Dobranszki. 2014. Dissecting the concept of the thin cell layer: Theoretical basis and practical application of the plant growth correction factor to apple, *cymbidium*, and *chrysanthemum*. *Journal of Plant Growth Regulation* 33(4): 881–895. <http://dx.doi.org/10.1007/s00344-014-9437-x>
- Teixeira da Silva, J. A. 2013. The Role of Thin Cell Layers in Regeneration and Transformation in Orchids. *Plant Cell Tissue Organ Culture* 113(2): 149–161. <http://dx.doi.org/10.1007/s11240-012-0274-y>
- Teixeira da Silva, J. A., M. M. Hossain., M. Sharma., J. Dobranszki., J. C. Cardoso dan Z. Songjun. 2017. Acclimatization of in Vitro-derived *Dendrobium*. *Horticultural Plant Journal* 3(3): 110–124. <http://dx.doi.org/10.1016/j.hpj.2017.07.009>
- Tian, J., W. Jiang., J. Si, Z. Han., C. Li dan D. Chen. 2022. Developmental Characteristics and Auxin Response of Epiphytic Root in *Dendrobium catenatum*. *Frontiers in Plant Science* 3(11):1-20. <http://dx.doi.org/10.3389/fpls.2022.935540>
- Vudala, S. M., A. A. Padial dan L. L. F. Ribas. 2019. Micropropagation of *Hadrolaelia grandis* through Transverse and Longitudinal Thin Cell Layer Culture. *South African Journal of Botany* 121: 76-82. <http://dx.doi.org/10.1016/j.sajb.2018.07.017>

- Wattanapan N., C. Nualsri dan U. Meesawat. 2018. In Vitro Propagation through Transverse Thin Cell Layer (tTCL) Culture System of Lady's Slipper Orchid: *Paphiopedilum callosum* var. sublaeve. *Songklanakarin Journal of Science and Technology* 40(2): 306-313. <http://dx.doi.org/10.14456/sjst-psu.2018.48>
- Wei, K., L. Ruan., L. Wang dan H. Cheng. 2019. Auxin-Induced Adventitious Root Formation in Nodal Cuttings of *Camellia sinensis*. *International Journal of Molecul Sciences* 20(19): 4817-4826. <http://dx.doi.org/10.3390/ijms20194817>
- Xing, X., X. Ma., Z. Deng., J. Cuan., F. Wu dan S. Guo. 2013. Specificity and preference of mycorrhizal associations in two species of genus *Dendrobium* (Orchidaceae). *Mycorrhiza* 23(4): 317-324. <http://dx.doi.org/10.1007/s00572-012-0473-8>
- Yam, T.W dan Lee, Y.I. 2013. Chromosome pairing behaviourin the interspecific hybrids of *Dendrobium* section Spatulata. *Acta Horticulturae* 977: 109–113.[doi:10.17660/actahortic.2013.977.11](https://doi.org/10.17660/actahortic.2013.977.11).
- Yang, Z., G. Liu., J. Liu., B. Zhang., W. Meng., B. Muller., K. Hayashi., X. Zhang., Z. Zhao., I. D. Smet dan Z. Ding. 2017. Synergistic action of auxin and cytokinin mediates aluminum-induced root growth inhibition in *Arabidopsis*. *The European Molecular Biology Organization Reports* 18(7): 1213–1230. <http://dx.doi.org/10.15252/embr.201643806>
- Yanti, D dan M. N. Isda. 2021. Shoots Induction of nodes (*Citrus microcarpa* Bunge.) with addition 6-Benzyl Amino Purine (BAP) by In Vitro. *Biospecies* 14(1):53 – 58.
- Yulia, E., N. Baiti., Rd. S. Handayani dan N. Nilahayati. 2020. Respon Pemberian Beberapa Konsentrasi BAP dan IAA terhadap Pertumbuhan Sub-Kultur Anggrek *Cymbidium* (*Cymbidium finlaysonianum* Lindl.) secara *In-Vitro*. *Jurnal Agrium* 17(2): 156-165. <http://dx.doi.org/10.29103/agrium.v17i2.5870>
- Yulianti, F., H. Arisah dan D. Agisimanto. 2017. Pengujian Stabilitas Genetik Planlet Citrumelo Hasil TCL dari Kultur *In Vitro* dengan Menggunakan Teknik Sekuen Berulang. *Jurnal Hortikultura* 27(2):165-172. <http://dx.doi.org/10.21082/jhort.v27n2.2017.p165-172>
- Zhang, Y., J. Zhou., T. Wu dan Cao, J. 2008. Shoot regeneration and the relationship between organogenic capacity and endogenous hormonal contents in pumpkin. *Plant Cell, Tissue and Organ Culture* 93(3):323-331. <http://dx.doi.org/10.1007/s11240-008-9380-2>

- Zhao, P., W. Wang., F. Feng., F. Wu., Z.Q. Yang dan W. Wang. 2007. High-frequency Shoot Regeneration through Transverse Thin Cell Layer Culture in *Dendrobium candidum* Wall Ex Lindl. *Plant Cell, Tissue and Organ Culture* 90(2): 131-139. <http://dx.doi.org/10.1007/s11240-006-9181-4>
- Zhao, S., H. Wang., K. Liu., L. Li., J. Yang., X. An., P. Li., L. Yun dan Z. Zhang. 2021. The role of JrPPOs in the browning of walnut explants. *Plant Biology* 21(9):1-12
- Zotz, G dan U. Winkler. 2013. Aerial roots of epiphytic orchids: the velamen radicum and its role in water and nutrient uptake. *Oecologia* 171(3) 733–741. <http://dx.doi.org/10.1007/s00442-012-2575-6>

