

DAFTAR PUSTAKA

- Arditti, J. 1992. *Fundamentals of Orchid Biology*. John Wiley and Sons, Inc. New York. pp:550-557.
- Asghar, S., Ghori, N., Hyat, F., Li, Y. and Chen, C. 2023. Use of auxin and cytokinin for somatic embryogenesis in plant: a story from competence towards completion. *Plant Growth Regulation*. 99(3): 413–428. <https://doi.org/10.1007/s10725-022-00923-9>.
- Biswas, S. S., Singh, D. R., De, L. C., Kalaivanan, N. S., Pal, R., & Janakiram, T. 2021. A comprehensive scenario of orchid nutrition—a review. In *Journal of Plant Nutrition*. 44 (6): 905–917. Bellwether Publishing, Ltd. <https://doi.org/10.1080/01904167.2021.1871758>.
- Bowman, J. L., & Eshed, Y. 2000. Formation and maintenance of the shoot apical meristem. *Trends in plant science*. 5(3): 110-115.
- Cavallaro, V., Pellegrino, A., Muleo, R., & Forgione, I. 2022. Light and Plant Growth Regulators on *In Vitro* Proliferation. In *Plants*. 11 (7). <https://doi.org/10.3390/plants11070844>.
- Chen, T. Y., Chen, J. T., & Chang, W. C. 2002. Multiple shoot formation and plant regeneration from stem nodal explants of *Paphiopedilum* orchids. In *In Vitro Cellular and Developmental Biology - Plant*, 38(6): 595–597. <https://doi.org/10.1079/IVP2002332>.
- Chen, C., Wu, X.M., Pan, L., Yang, Y.T., Dai, H.B., Hua, B., Miao, M.M. and Zhang, Z.P. 2022. Effects of Exogenous α -Naphthaleneacetic Acid and 24-Epibrassinolide on Fruit Size and Assimilate Metabolism-Related Sugars and Enzyme Activities in Giant Pumpkin. *International Journal of Molecular Sciences*. 23(21): p.13157. <https://doi.org/10.3390/ijms232113157>.
- Cheruvathur, M. K., Abraham, J., Mani, B., & Thomas, T. D. 2010. Adventitious shoot induction from cultured internodal explants of *Malaxis acuminata* D. Don, a valuable terrestrial medicinal orchid. *Plant Cell, Tissue and Organ Culture*. 101(2): 163–170. <https://doi.org/10.1007/s11240-010-9673-0>.
- Chugh, S., Guha, S. & Rao, I.U. 2009. Micropropagation of Orchids : A Review on The Potential of Different Explants. *Scientia Horticulture*. 122(4): 507-520. <https://doi.org/10.1016/j.scienta.2009.07.016>.
- Cox, A. V et al. 1997. Phylogenetics of the slippers orchids (Cypripedioideae, Orchidaceae): Nuclear DNA ITS sequences. *America*, 208: 197-223.
- Cokrowati, N., & Diniarti, N. 2019. Komponen *Sargassum aquifolium* sebagai hormon pemacu tumbuh untuk *Eucheuma cottonii*. *Jurnal Biologi Tropis*, 19(2), 316-321.
- Cybularz-Urban, T., Hanus-Fajerska, E., & Bach, A. 2015. Callus induction and organogenesis *in vitro* of *Cattleya* from Protocorm-Like Bodies (PLBs) under different light conditions. *Acta Scientiarum Polonorum. Hortorum Cultus*. 14(6): 29-38.
- Dahlia. 2016. *Paphiopedilum* flowering induction with light intensity and growth regulator substance. *AIP Conference Proceedings*. 1744. <https://doi.org/10.1063/1.4953484>.
- Davies, P.J. 1995. *Plant Hormones : Physiology, Biochemistry, and Molecular Biology*. London. Kluwer Academic Publisher.
- Dhalawil, A. 2013. DNA Extraction And Purification. *Mater Method*. 3.191.
- Duclercq, J., Sangwan-Norreel, B., Catterou, M., & Sangwan, R. S. 2011. *De*

- novo* shoot organogenesis: From art to science. *Trends in Plant Science*. 16(11): 597–606. <https://doi.org/10.1016/j.tplants.2011.08.004>.
- Dutta Gupta, S., & Jatothu, B. 2013. Fundamentals and applications of light-emitting diodes (LEDs) in *in vitro* plant growth and morphogenesis. *In Plant Biotechnology Reports*. 7 (3): 211–220. <https://doi.org/10.1007/s11816-013-0277-0>.
- Espinosa-Leal, C. A., Puente-Garza, C. A., & García-Lara, S. 2018. *In vitro* plant tissue culture: means for production of biological active compounds. *In Planta*. 248 (1). <https://doi.org/10.1007/s00425-018-2910-1>.
- Fang, L., Xu, X., Li, J., Zheng, F., Li, M., Yan, J., Li, Y., Zhang, X., Li, L., Ma, G., Zhang, A., Lv, F., Wu, K., & Zeng, S. 2020. Transcriptome analysis provides insights into the non-methylated lignin synthesis in *Paphiopedilum armeniacum* seed. *BMC Genomics*, 21(1). <https://doi.org/10.1186/s12864-020-06931-1>.
- Govaerts, R., Caromel, A., Dhanda, S., Davis, F., Pavitt, A., Sinovas, P., & Vaglica, V. 2019. *CITES Appendix I Orchid Checklist*.
- Guo, B., Abbasi, B. H., Zeb, A., Xu, L. L., & Wei, Y. H. 2011. Thidiazuron: A multi-dimensional plant growth regulator. *In African Journal of Biotechnology*. 10 (45): 8984–9000. <https://doi.org/10.5897/ajb11.636>.
- Hijriyah, Y. M., Utami, R., Hasanah, U., Kurniawan, S., Putri, D. H., Nuraeni, E., & Robiansyah, I. 2024. Trade of legally protected orchids in Indonesian e-commerce markets. *Environmental Conservation*. <https://doi.org/10.1017/S0376892924000250>.
- Hake, S., Char, B. R., Chuck, G., Foster, T., Long, J., & Jackson, D. 1995. *Homeobox* genes in the functioning of plant meristems.
- Handini, E., Sianturi, R. U. D., Aprilianti, P., Isnaini, Y., Semiarti, E., Rianawati, S., & Solihah, S. M. 2023. Modification of *In Vitro* Culture Method of *Paphiopedilum glaucophyllum* for Callus Induction. *Plant Breeding and Biotechnology*, 11(4): 242–252. <https://doi.org/10.9787/PBB.2023.11.4.242>.
- Hapsari, L., & Lestari, D. A. 2016. Fruit characteristic and nutrient values of four Indonesian banana cultivars (*Musa* spp.) at different genomic groups. *Agrivita*, 38(3): 303–311. <https://doi.org/10.17503/agrivita.v38i3.696>.
- Jitsopakul, N., Thammasiri, K., & Ishikawa, K. 2013. Efficient adventitious shoot regeneration from shoot tip culture of *Vanda coerulea*, a Thai orchid. *ScienceAsia*, 39(5): 449–455. <https://doi.org/10.2306/scienceasia1513-1874.2013.39.449>.
- Kastono, D., Sawitri, H., dan Siswandono. 2005. Pengaruh Nomor Ruas Stek dan Dosis Pupuk Urea Terhadap pertumbuhan dan Hasil Kumis Kucing. *Jurnal Ilmu Pertanian*. 12 (1): 56-64.
- Kaur, S., & Bhutani, K. K. 2012. Organic growth supplement stimulants for *in vitro* multiplication of *Cymbidium pendulum* (Roxb.) Sw. *Horticultural Science*. 39(1): 47–52. <https://doi.org/10.17221/52/2011-hortsci>.
- Kaur, S., & Bhutani, K. K. 2014. *In vitro* conservation and asymbiotic propagation of *Coelogyne flaccida* (Lindl.): A threatened orchid. *Plant Biosystems*. 148(5): 935–944. <https://doi.org/10.1080/11263504.2013.801368>.
- Khatun, K., Nath, U. K., & Rahman, M. S. 2020. Tissue culture of *Phalaenopsis*: Present status and future prospects. *Journal of Advanced Biotechnology and Experimental Therapeutics*. 3(3): 273–285. <https://doi.org/10.5455/jabet.2020.d135>.

- Kiaheirati, H., Hashemabadi, D., & Kaviani, B. 2024. *In vitro* propagation of the orchid *Phalaenopsis* circus via organogenesis and somatic embryogenesis using protocorm and thin cell layer explants. *Italian Botanist*. (18): 29–50. <https://doi.org/10.3897/italianbotanist.18.123376>.
- Kumar, N., & Reddy, M. P. 2011. *In vitro* Plant Propagation: A Review. *In Journal of Forest Science*. 2 (27) .
- Lal, N., & Singh, M. 2021. Prospects of Plant Tissue Culture in Orchid Propagation: A Review. *Indian Journal of Biology*. 7(2): 103–110. <https://doi.org/10.21088/ijb.2394.1391.7220.15>.
- Lincoln, C., Long, J., Judy Yamaguchi, bil, Serikawa, K., & Hakeaibi, S. 1994. A knottedl-like Homeobox Gene in *Arabidopsis* 1s Expressed in the Vegetative Meristem and Dramatically Alters L6af Morphology When Overexpressed in Transgenic Plants. *In The Plant Cell* (6).
- Long, B., Niemiera, A. X., Cheng, Z. Y., & Long, C. L. 2010. *In vitro* propagation of four threatened *Paphiopedilum* species (*Orchidaceae*). *Plant Cell, Tissue and Organ Culture*. 101(2): 151–162. <https://doi.org/10.1007/s11240-010-9672-1>.
- Massaro, R., Fadin, D. A., Pedroso-de-Moraes, C., Vieira, A. S., & Marteline, M. A. 2018. Light quality *in vitro* growth and acclimatization of two varieties of *Phalaenopsis amabilis alba* Blume (*Orchidaceae*). *Iheringia - Serie Botanica*. 73(2): 208–215. <https://doi.org/10.21826/2446-8231201873113>.
- McConnell, J. and Cruz, F.J., 1996. *Growing Orchids on Guam*. Guam Cooperative Extension, College of Agriculture & Life Sciences. University of Guam.
- Müller, B. and Sheen, J. 2008. Cytokinin and auxin interaction in root stem-cell specification during early embriogenesis. *Nature*. 453(7198): 1094–1097. <https://doi.org/10.1038/nature06943>.
- Murray, M., & Thompson, W. 1980. Rapid Isolation of Higher Weight DNA. *Nucleic Acids Research*. 8: 4321-4325. <https://doi.org/10.1093/nar/8.19.4321>.
- Murthy, B.N.S., Murch, S.J. and Saxena, P.K. 1998. Thidiazuron: a potent regulator of *in vitro* plant morphogenesis. *In Vitro Cellular & Developmental Biology-Plant*. 34: 267-275.
- Naderi Boldaji, H., Dianati Daylami, S., & Vahdati, K. 2023. Use of Light Spectra for Efficient Production of PLBs in Temperate Terrestrial Orchids. *Horticulturae*, 9(9). <https://doi.org/10.3390/horticulturae9091007>.
- Nelson, H. V., Gansau, J. A., Mus, A. A., Mohammad, N. N., Shamsudin, N. A., Amin, J., & Rusdi, N. A. 2023. Developing *Paraphalaenopsis labukensis* (Shim, A. Lamb & C.L. Chan), an Orchid Endemic to Sabah, Borneo, Asymbiotic Seed Germination and In Vitro Seedling Development. *Horticulturae*, 9(6). <https://doi.org/10.3390/horticulturae9060681>.
- Nic-Can, G. I., & Loyola-Vargas, V. M. 2016. The role of the auxins during somatic embryogenesis. In *Somatic Embryogenesis: Fundamental Aspects and Applications* (171–182). https://doi.org/10.1007/978-3-319-33705-0_10.
- Perianez-Rodriguez, J., Manzano, C., & Moreno-Risueno, M. A. 2014. Post-embryonic organogenesis and plant regeneration from tissues: Two sides of the same coin? In *Frontiers in Plant Science*. 5. <https://doi.org/10.3389/fpls.2014.00219>.
- Powo.2023.<https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:649765->

- 1/general-information. Diakses Tanggal 01 Januari 2024.
- Pyati, A. N. 2022. *In vitro* Propagation of orchid (*Dendrobium ovatum* (L.) Kraenzl.) through Somatic Embryogenesis. *Plant Tissue Culture and Biotechnology*. 32(1): 53–66. <https://doi.org/10.3329/ptcb.v32i1.60472>.
- Raemakers, C. J. J. M., Jacobsen, E., & Visser, R. G. F. 1995. Secondary somatic embryogenesis and applications in plant breeding. *In Euphytica* (81).
- Rasjid, N., Kurniawan, F. Y., Putri, S. U., Linggabuwana, A., Prasajo, I. S., & Semiarti, E. 2023. *In Silico* Analysis of *Phalaenopsis Orchid Homeobox1 (POH1)* Functional Gene for Shoot Development in *Phalaenopsis* Orchid. *Journal of Tropical Biodiversity and Biotechnology*. 8(3). <https://doi.org/10.22146/jtbb.83934>.
- Reddy, J. 2016. Nutrient Media Used For Micropropagation Of Orchids: A Research Review. Reddy. *World Journal of Pharmaceutical Research*, 5. <https://doi.org/10.20959/wjpr20169-7036>.
- Reiser, L., Sanchez-Baracaldo, P., & Hake, S. 2000. Knots in the family tree: evolutionary relationships and functions of knox *homeobox* genes. *In Plant Molecular Biology* (42).
- Ruben, V., Lawrie, M. D., & Semiarti, E. 2022. Isolation and Characterization of *Vanda Orchid Homeobox* Gene from *Vanda tricolor* var. *Suavis* Lindl. form Merapi. *In 7th International Conference on Biological Science (ICBS 2021)* (pp. 255-260). Atlantis Press.
- Safitri, Yalampusita, D. C., Handini, E., Aprilianti, P., Isnaini, Y., & Semiarti, E. 2024. Improvement of Growth Rate in *In Vitro* Culture of *Paphiopedilum primulinum* M. W. Wood & P. Taylor and *Paphiopedilum glaucophyllum* J. J. Smith using Banana Enrichment Media. *Tropical Life Sciences Research*. 35(3): 109–120. <https://doi.org/10.21315/tlsr2024.35.3.5>.
- Sarmah, D., Kolukunde, S., Sutradhar, M., Singh, B. K., Mandal, T., & Mandal, N. 2017. A Review on: *In Vitro* Cloning of Orchids. *International Journal of Current Microbiology and Applied Sciences*. 6(8): 1909–1927. <https://doi.org/10.20546/ijcmas.2017.609.235>.
- Semiarti, E., Ishikawa, T., Yoshioka, Y., Ikezakki, M., Machida, Y., & Machida, C. 2008. Isolation and characterization of *PHALAENOPSIS ORCHID HOMEBOX1 (POH1)* cDNAs, KNOTTED1-LIKE HOMEBOX family of genes in *Phalaenopsis amabilis* orchid. *International Conference On Mathematics And Natural Sciences (ICMNS)*, 28-30.
- Semiarti, E., Purwantoro, A., & Indrianto, A. 2014. *In Vitro* Culture of Orchids : The Roles of *CLASS-1 KNOX* Gene In Shoot Development. *Berkala Penelitian Hayati*. 20(1):18-27.
- Setiaji, A., Annisa, R. R. R., Santoso, A. D., Kinasih, A., & Riyadi, A. D. R. 2021. *In vitro* propagation of *Vanda* orchid: a review. *In Comunicata Scientiae*. (12). <https://doi.org/10.14295/CS.v12.3427>.
- Tian, F., Wang, J. C., Bai, X. X., Yang, Y. B., Huang, L., & Liao, X. F. 2023. Symbiotic seed germination and seedling growth of mycorrhizal fungi in *Paphiopedilum hirsutissimum* (Lindl.Ex Hook.) Stein from China. *Plant Signaling and Behavior*, 18(1). <https://doi.org/10.1080/15592324.2023.2293405>.
- Tsai, C.C., Liao, P.C., Ko, Y.Z., Chen, C.H. and Chiang, Y.C. 2020. Phylogeny and historical biogeography of *Paphiopedilum Pfitzer* (Orchidaceae) based on nuclear and plastid DNA. *Frontiers in plant science*. 11 (126) doi: 10.3389/fpls.2020.00126.

- Untari, R., & Puspitaningtyas, D. M. 2006. Pengaruh bahan organik dan NAA terhadap pertumbuhan anggrek hitam (*Coelogyne pandurata* Lindl.) dalam kultur *in vitro*. *Biodiversitas*. 7(3): 344-348.
- Utami, E. S. W., & Hariyanto, S. 2020. Organic Compounds: Contents and Their Role in Improving Seed Germination and Protocorm Development in Orchids. *International Journal of Agronomy*. <https://doi.org/10.1155/2020/2795108>.
- Viola, I.L., dan Gonzalez, D.H. 2016. Structure and Evolution of Plant *Homeobox* Genes. *Plant Transcription Factors : Evolutionary, Structural and Functional Aspects*. 101-112. <https://doi.org/10.1016/B978-0-12-800854-6.00006-3>
- Yu, H., Yang, S. H., & Goh, C. J. 2000. *DOH1*, a *Class 1 knox Gene*, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid. *In The Plant Cell* (12).
- Yu, H., Yang, S. H., & Goh, C. J. 2001. *Agrobacterium*-mediated transformation of a *Dendrobium* orchid with the class 1 knox gene *DOH1*. *Plant Cell Reports*. 20(4): 301–305. <https://doi.org/10.1007/s002990100334>.
- Yulia, N.D., 2007. Kajian fenologi fase pembungaan dan pembuahan *Paphiopedilum glaucophyllum* J.J Sm. var. *glaucophyllum*. *Biodiversitas*. 8(1): 58-62.
- Zahara, M., Datta, A., Boonkorkaew, P., & Mishra, A. 2017. The effects of different media, sucrose concentrations and natural additives on plantlet growth of *Phalaenopsis* hybrid “pink.” *Brazilian Archives of Biology and Technology*. 60: 1–15. <https://doi.org/10.1590/1678-4324-2017160149>.
- Zeng, S., Huang, W., Wu, K., Zhang, J., Teixeira Da Silva, J. A., & Duan, J. 2016. *In vitro* propagation of *Paphiopedilum* orchids. *In Critical Reviews in Biotechnology*. 36 (3): 521–534. <https://doi.org/10.3109/07388551.2014.993585>.
- Zhang, S., & Lemaux, P. G. 2004. Molecular analysis of *in vitro* shoot organogenesis. *In Critical Reviews in Plant Sciences*. 23(4): 325–335). <https://doi.org/10.1080/07352680490484569>.