

DAFTAR PUSTAKA

- Alemu, D., Tafesse, M., & Mondal, A. K. (2022a). Mycelium-Based Composite: The Future Sustainable Biomaterial. *International Journal of Biomaterials*, 2022. <https://doi.org/10.1155/2022/8401528>
- Alemu, D., Tafesse, M., & Mondal, A. K. (2022b). Mycelium-Based Composite: The Future Sustainable Biomaterial. *International Journal of Biomaterials*, 2022, 1–12. <https://doi.org/10.1155/2022/8401528>
- Almpani-Lekka, D., Pfeiffer, S., Schmidts, C., & Seo, S. il. (2021a). A review on architecture with fungal biomaterials: the desired and the feasible. *Fungal Biology and Biotechnology*, 8(1), 1–9. <https://doi.org/10.1186/s40694-021-00124-5>
- Almpani-Lekka, D., Pfeiffer, S., Schmidts, C., & Seo, S. (2021b). A review on architecture with fungal biomaterials: the desired and the feasible. *Fungal Biology and Biotechnology*, 8(1), 17.
- Andrews, B. J., & Moore, L. A. (1992). Interaction of the yeast Swi4 and Swi6 cell cycle regulatory proteins in vitro. *Proceedings of the National Academy of Sciences of the United States of America*, 89(24), 11852–11856. <https://doi.org/10.1073/pnas.89.24.11852>
- Appels, F. V. W., & Wösten, H. A. B. (2021). Mycelium Materials. *Encyclopedia of Mycology: Volume 1,2, 2*, V2-710-V2-718. <https://doi.org/10.1016/B978-0-12-809633-8.21131-X>
- Apuke, O. D. (2017). Quantitative Research Methods: A Synopsis Approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(11), 40–47. <https://doi.org/10.12816/0040336>
- Archer, M., & Xu, J. (2021). Current practices for reference gene selection in rt-qpcr of aspergillus: Outlook and recommendations for the future. In *Genes* (Vol. 12, Issue 7). <https://doi.org/10.3390/genes12070960>
- Atkins, S. D., & Clark, I. M. (2004). Fungal molecular diagnostics: A mini review. *Journal of Applied Genetics*, 45(1), 3–15.
- Attias, N., Danai, O., Abitbol, T., Tarazi, E., Ezov, N., Pereman, I., & Grobman, Y. J. (2020). Mycelium bio-composites in industrial design and architecture: Comparative review and experimental analysis. *Journal of Cleaner Production*, 246, 119037.
- Bachman, J. (2013). Reverse-transcription PCR (RT-PCR). In *Methods in Enzymology* (1st ed., Vol. 530). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-420037-1.00002-6>
- Baedker, S., Karalay, O., Fernandez-gonzalez, A., Busby, E. J., Pfaffl, W.,

- & Nolan, T. (2020). *Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ' s public news and information . January.*
- Barbara, D., Ph, D., Hellemans, J., & Ph, D. (2010). D'haene-2010-The importance of quality control. *International Drugdiscovery*, September, 18–31. <https://www.gene-quantification.de/dhaene-hellemans-qc-data-2010.pdf>
- Barua, E., Deoghare, A. B., Deb, P., & Lala, S. Das. (2018). Naturally derived biomaterials for development of composite bone scaffold: A review. *IOP Conference Series: Materials Science and Engineering*, 377(1). <https://doi.org/10.1088/1757-899X/377/1/012013>
- Bijalwan, A., Bahuguna, K., Vasishth, A., Singh, A., Chaudhary, S., Dongariyal, A., Kumar Thakur, T., Kaushik, S., Javed Ansari, M., Alfarraj, S., Ali Alharbi, S., Skalicky, M., & Brestic, M. (2021). Growth performance of *Ganoderma lucidum* using billet method in Garhwal Himalaya, India. *Saudi Journal of Biological Sciences*, 28(5), 2709–2717. <https://doi.org/10.1016/j.sjbs.2021.03.030>
- Buh Gašparić, M., Tengs, T., La Paz, J. L., Holst-Jensen, A., Pla, M., Esteve, T., Žel, J., & Gruden, K. (2010). Comparison of nine different real-time PCR chemistries for qualitative and quantitative applications in GMO detection. *Analytical and Bioanalytical Chemistry*, 396(6), 2023–2029. <https://doi.org/10.1007/s00216-009-3418-0>
- Butu, A., Rodino, S., Miu, B., & Butu, M. (2020). Mycelium-based materials for the ecodesign of bioeconomy. *Digest Journal of Nanomaterials and Biostructures*, 15(4), 1129–1140.
- Butz, H., & Patócs, A. (2019). Brief Summary of the Most Important Molecular Genetic Methods (PCR, qPCR, Microarray, Next-Generation Sequencing, etc.) *BT - Genetics of Endocrine Diseases and Syndromes* (P. Igaz & A. Patócs (eds.); pp. 33–52). Springer International Publishing. https://doi.org/10.1007/978-3-030-25905-1_4
- Campbell, N., Urry, L. A., Cain, M. L., Minorsky, P. V., Wasserman, S. A., & Orr, R. B. (2020). *Biologi* 12th Edition. In *Biology*.
- Cerimi, K., Akkaya, K. C., Pohl, C., Schmidt, B., & Neubauer, P. (2019). Fungi as source for new bio-based materials: A patent review. *Fungal Biology and Biotechnology*, 6(1), 1–10. <https://doi.org/10.1186/s40694-019-0080-y>
- Chan, S. W., Tomlinson, B., Chan, P., & Lam, C. W. K. (2021). The beneficial effects of *Ganoderma lucidum* on cardiovascular and metabolic disease risk. *Pharmaceutical Biology*, 59(1), 1161–1171.

<https://doi.org/10.1080/13880209.2021.1969413>

- Chang, J., Chan, P. L., Xie, Y., Lee Ma, K., Kit Cheung, M., & Kwan, H. S. (2019). Modified recipe to inhibit fruiting body formation for living fungal biomaterial manufacture. *PLoS ONE*, 14(5), 1–12. <https://doi.org/10.1371/journal.pone.0209812>
- Chen, R., Huang, W., Lin, Z., Zhou, Z., Yu, H., & Zhu, D. (2004). Development of a novel real-time RT-PCR assay with LUX primer for the detection of swine transmissible gastroenteritis virus. *Journal of Virological Methods*, 122(1), 57–61. <https://doi.org/10.1016/j.jviromet.2004.08.003>
- Cong, H., Li, C., Wang, Y., Zhang, Y., Ma, D., Li, L., & Jiang, J. (2023). The Mechanism of Transcription Factor Swi6 in Regulating Growth and Pathogenicity of *Ceratocystis fimbriata*: Insights from Non-Targeted Metabolomics. *Microorganisms*, 11(11). <https://doi.org/10.3390/microorganisms11112666>
- Cortina-Escribano, M., Velez, P., Linnakoski, R., Aaina, J., & Vanhanen, H. (2020). Effect of wood residues on the growth of *Gonoderma lucidum*. *Karstenia*, 58(1), 16–28. <https://doi.org/10.29203/ka.2020.486>
- DeFrates, K. G., Moore, R., Borgesi, J., Lin, G., Mulderig, T., Beachley, V., & Hu, X. (2018). Protein-based fiber materials in medicine: A review. *Nanomaterials*, 8(7). <https://doi.org/10.3390/nano8070457>
- Doug Chung, D. W., & Le Roch, K. G. (2013). Genome-wide analysis of gene expression. In *Encyclopedia of Biological Chemistry: Second Edition* (2nd ed.). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-378630-2.00634-4>
- Edelstein, S., Sudri, M., Tanous, S., Ben Amram, H., Sharabi-Nov, A., Rozenfeld, I., Halal, H., & Zarka, S. (2022). Cycle threshold responses in SARS-CoV2 PCR tests depend on the method by which the samples were obtained and require strict global standardization. *Infection*, 50(4), 959–963. <https://doi.org/10.1007/s15010-022-01772-4>
- El-Gendi, H., Saleh, A. K., Badierah, R., Redwan, E. M., El-Maradny, Y. A., & El-Fakharany, E. M. (2022). A Comprehensive Insight into Fungal Enzymes: Structure, Classification, and Their Role in Mankind's Challenges. *Journal of Fungi*, 8(1). <https://doi.org/10.3390/jof8010023>
- Elfatma, O., Aji, W. A., Na'imah, K., & Setyawan, H. (2022). Penentuan Tingkat Akurasi Metode Waypoint Rata-rata Garmin 64 S Untuk Pembuatan Titik Koordinat Dilapangan. *Prosiding Seminar Nasional Instiper*, 1(1), 217–224. <https://doi.org/10.55180/pro.v1i1.257>

- Febriani, S. (2022). Analisis Deskriptif Standar Deviasi. *Jurnal Pendidikan Tambusai*, 6(1), 910–913. <https://jptam.org/index.php/jptam/article/view/8194>
- Gandia, A., van den Brandhof, J. G., Appels, F. V. W., & Jones, M. P. (2021). Flexible Fungal Materials: Shaping the Future. *Trends in Biotechnology*, 39(12), 1321–1331. <https://doi.org/10.1016/j.tibtech.2021.03.002>
- Ginzinger, D. G. (2002). Gene quantification using real-time quantitative PCR: An emerging technology hits the mainstream. *Experimental Hematology*, 30(6), 503–512. [https://doi.org/10.1016/S0301-472X\(02\)00806-8](https://doi.org/10.1016/S0301-472X(02)00806-8)
- Gressel, J., Michaeli, D., Kappel, V., Amsellem, Z., & Warshawsky, A. (2002). Ultralow calcium requirements of fungi facilitate use of calcium regulating agents to suppress host calcium dependent defenses, synergizing infection by a mycoherbicide. *Journal of Agricultural and Food Chemistry*, 50(22), 6353–6360. <https://doi.org/10.1021/jf0201780>
- Hadi, M., Jahromi, R., & Mozafari, M. (2021). *Ganoderma lucidum* and Antimicrobial Activity. 2(2), 35–41. <https://www.researchgate.net/publication/360619269>
- Hayashi, M. T., Takahashi, T. S., Nakagawa, T., Nakayama, J. I., & Masukata, H. (2009). The heterochromatin protein Swi6/HP1 activates replication origins at the pericentromeric region and silent mating-type locus. *Nature Cell Biology*, 11(3), 357–362. <https://doi.org/10.1038/ncb1845>
- He, M. Q., Zhao, R. L., Liu, B. M., Denchev, T. T., Begerow, D., Yurkov, A., Kemler, M., Millanes, A. M., Wedin, M., McTaggart, A. R., Shivas, R. G., Buyck, B., Chen, J., Vizzini, A., Papp, V., Zmitrovich, I. V., Davoodian, N., & Hyde, K. D. (2022). Species diversity of Basidiomycota. In *Fungal Diversity* (Vol. 114, Issue 1). Springer Netherlands. <https://doi.org/10.1007/s13225-021-00497-3>
- Hernandez, H., & Martinez, L. R. (2018). Relationship of environmental disturbances and the infectious potential of fungi. *Microbiology (United Kingdom)*, 164(3), 233–241. <https://doi.org/10.1099/mic.0.000620>
- Houette, T., Maurer, C., Niewiarowski, R., & Gruber, P. (2022). Growth and Mechanical Characterization of Mycelium-Based Composites towards Future Bioremediation and Food Production in the Material Manufacturing Cycle. *Biomimetics*, 7(3). <https://doi.org/10.3390/biomimetics7030103>
- Jang, M. H., Piao, X. L., Kim, J. M., Kwon, S. W., & Park, J. H. (2008).

- Inhibition of cholinesterase and amyloid- β aggregation by resveratrol oligomers from *Vitis amurensis*. *Phytotherapy Research*, 22(4), 544–549. <https://doi.org/10.1002/ptr>
- Jun, S.-C., Choi, Y.-H., Lee, M.-W., Yu, J.-H., & Shin, K.-S. (2020). The Putative APSES Transcription Factor RgdA Governs Growth, Development, Toxigenesis, and Virulence in *Aspergillus fumigatus*. *MSphere*, 5(6). <https://doi.org/10.1128/msphere.00998-20>
- Jungebloud, A., Bohle, K., Göcke, Y., Cordes, C., Horn, H., & Hempel, D. C. (2007). Quantification of product-specific gene expression in biopellets of *Aspergillus niger* with real-time PCR. *Enzyme and Microbial Technology*, 40(4), 653–660. <https://doi.org/10.1016/j.enzmictec.2006.05.022>
- Kapoor, P., & Sharma, B. M. (2014). Studies of different growth parameters of *Ganoderma lucidum*. *International Journal of Science, Environment*, 3(4), 1515 – 1524.
- Karana, E., Blauwhoff, D., Hultink, E. J., & Camere, S. (2018). When the material grows: A case study on designing (with) mycelium-based materials. *International Journal of Design*, 12(2), 119–136.
- Keller, M. A., Cassel, D. L., Rappaport, E. F., McKenzie, S. E., Schwartz, E., & Surrey, S. (1993). Fluorescence-based RT-PCR analysis: Determination of the ratio of soluble to membrane-bound forms of Fc γ RIIA transcripts in hematopoietic cell lines. *Genome Research*, 3(1), 32–38. <https://doi.org/10.1101/gr.3.1.32>
- Kim, Y., & Ruedy, D. (2020). Handbook of Engaged Sustainability. *Handbook of Engaged Sustainability*, September. <https://doi.org/10.1007/978-3-319-53121-2>
- Koch, C., Schleiffer, A., Ammerer, G., & Nasmyth, K. (1996). Switching transcription on and off during the yeast cell cycle: Cln/Cdc28 kinases activate bound transcription factor SBF (Swi4/Swi6) at Start, whereas Clb/Cdc28 kinases displace it from the promoter in G2. *Genes and Development*, 10(2), 129–141. <https://doi.org/10.1101/gad.10.2.129>
- Lamien-Meda, A., Fuehrer, H. P., Leitsch, D., & Noedl, H. (2021). A powerful qPCR-high resolution melting assay with taqman probe in plasmodium species differentiation. *Malaria Journal*, 20(1), 1–8. <https://doi.org/10.1186/s12936-021-03662-w>
- Lian, L. D., Shi, L. Y., Zhu, J., Liu, R., Shi, L., Ren, A., Yu, H. S., & Zhao, M. W. (2022). GSwi6 Positively Regulates Cellulase and Xylanase Activities through Intracellular Ca²⁺ Signaling in *Ganoderma lucidum*. *Journal of Fungi*, 8(2). <https://doi.org/10.3390/jof8020187>
- Lian, L., Zhang, G., Zhu, J., Wang, Y., Wang, L., Liu, R., Shi, L., Ren, A.,

- & Zhao, M. (2021). Swi6B, an alternative splicing isoform of Swi6, mediates the cell wall integrity of *Ganoderma lucidum*. *Environmental Microbiology*, 23(8), 4405–4417. <https://doi.org/10.1111/1462-2920.15627>
- Liu, C. M., Kachur, S., Dwan, M. G., Abraham, A. G., Aziz, M., Hsueh, P. R., Huang, Y. T., Busch, J. D., Lamit, L. J., Gehring, C. A., Keim, P., & Price, L. B. (2012). FungiQuant: a broad-coverage fungal quantitative real-time PCR assay. *BMC Microbiology*, 12(1), 1. <https://doi.org/10.1186/1471-2180-12-255>
- Liu, Y. W., Gao, J. L., Guan, J., Qian, Z. M., Feng, K., & Li, S. P. (2009). Evaluation of antiproliferative activities and action mechanisms of extracts from two species of ganoderma on tumor cell lines. *Journal of Agricultural and Food Chemistry*, 57(8), 3087–3093. <https://doi.org/10.1021/jf900011f>
- Livak, K. J., & Schmittgen, T. D. (2001). Analysis of relative gene expression data using real-time quantitative PCR and the 2- $\Delta\Delta$ CT method. *Methods*, 25(4), 402–408. <https://doi.org/10.1006/meth.2001.1262>
- Lu, X., Liu, Y., Zhao, L., Liu, Y., & Zhao, M. (2018). Selection of reliable reference genes for RT-qPCR during methyl jasmonate, salicylic acid and hydrogen peroxide treatments in *Ganoderma lucidum*. *World Journal of Microbiology and Biotechnology*, 34(7), 0. <https://doi.org/10.1007/s11274-018-2476-x>
- Luard, E. J., & Griffin, D. M. (1981). Effect of water potential on fungal growth and turgor. *Transactions of the British Mycological Society*, 76(1), 33–40. [https://doi.org/10.1016/s0007-1536\(81\)80006-x](https://doi.org/10.1016/s0007-1536(81)80006-x)
- Lyall, F. (2016). Cell and molecular biology. *MRCOG Part One*, 53–74. <https://doi.org/10.1017/cbo9781107587519.005>
- Minchin, S., & Lodge, J. (2019). Understanding biochemistry: Structure and function of nucleic acids. *Essays in Biochemistry*, 63(4), 433–456. <https://doi.org/10.1042/EBC20180038>
- Muhammad, B., Hopkins, T., & Powell, M. (2022). *Nontimber Forest Products for Small Woodland Owners: Reishi Mushroom Growing Guide*. September, 1–6.
- Mukherjee, S., & Ghorai, S. (2022). Fungal biology. In *Current Developments in Biotechnology and Bioengineering: Filamentous Fungi Biorefinery*. <https://doi.org/10.1016/B978-0-323-91872-5.00017-X>
- Mustafa, G., & Jamil, A. (2013). Cloning and phylogenetic analysis of an actin encoding DNA fragment from filamentous fungus trichoderma

- harzianum. *International Journal of Agriculture and Biology*, 15(5), 1013–1016.
- MYCL. (2020). Mycotech Lab - Mycotech. In *Mylea*. <https://mycl.bio/>
- Navarro, E., Serrano-Heras, G., Castaño, M. J., & Solera, J. (2015). Real-time PCR detection chemistry. *Clinica Chimica Acta*, 439, 231–250. <https://doi.org/10.1016/j.cca.2014.10.017>
- Negură, L., & Negură, A. (2012). Limits and Pitfalls of Sybr Green Detection in Quantitative PCR. *Secțiunea Genetică Și Biologie Moleculară*, 13(April), 13–18.
- Pasanen, A. L., Kasanen, J. P., Rautiala, S., Ikäheimo, M., Rantamäki, J., Kääriäinen, H., & Kallioikoski, P. (2000). Fungal growth and survival in building materials under fluctuating moisture and temperature conditions. *International Biodeterioration and Biodegradation*, 46(2), 117–127. [https://doi.org/10.1016/S0964-8305\(00\)00093-7](https://doi.org/10.1016/S0964-8305(00)00093-7)
- Paterson, R. R. M. (2006). Ganoderma - A therapeutic fungal biofactory. *Phytochemistry*, 67(18), 1985–2001. <https://doi.org/10.1016/j.phytochem.2006.07.004>
- Pattanayak, S., Das, S., & Biswal, G. (2020). Ganoderma: The wild mushroom with wonderful health benefits. *Journal of Pharmacognosy and Phytochemistry*, 9(2S), 313–316. <https://doi.org/10.22271/phyto.2020.v9i2sf.11695>
- Pavlovic, M. (2015). Bioengineering: A conceptual approach. *Bioengineering: A Conceptual Approach*, 1–299. <https://doi.org/10.1007/978-3-319-10798-1>
- Pelley, J. W. (2007). Recombinant DNA and Biotechnology. *Elsevier's Integrated Biochemistry*, 159–167. <https://doi.org/10.1016/b978-0-323-03410-4.50024-9>
- Poojari, S., Alabi, O. J., Okubara, P. A., & Naidu, R. A. (2016). SYBR® Green-based real-time quantitative reverse-transcription PCR for detection and discrimination of grapevine viruses. *Journal of Virological Methods*, 235, 112–118. <https://doi.org/10.1016/j.jviromet.2016.05.013>
- Poyedinok, N. L., Mykchaylova, O. B., Buchalo, A. S., & Negriyko, A. M. (2008). Світлова регуляція росту та біосинтетичної активності *Ganoderma lucidum* у чистій культурі. *Український Ботанічний Журнал*, 65(5), 711–722.
- Răut, I., Călin, M., Vuluga, Z., Oancea, F., Paceagiu, J., Radu, N., Doni, M., Alexandrescu, E., Purcar, V., Gurban, A. M., Petre, I., & Jecu, L. (2021). Fungal based biopolymer composites for construction materials. *Materials*, 14(11). <https://doi.org/10.3390/ma14112906>

- Ren, F., Zhang, Y., Yu, H., & Zhang, Y. A. (2020). Ganoderma lucidum cultivation affect microbial community structure of soil, wood segments and tree roots. *Scientific Reports*, 10(1), 1–9. <https://doi.org/10.1038/s41598-020-60362-2>
- Rocha, A. J., Miranda, R. de S., Sousa, A. J. S., & da Silva, A. L. C. (2016). Guidelines for Successful Quantitative Gene Expression in Real- Time qPCR Assays. *Polymerase Chain Reaction for Biomedical Applications, December*. <https://doi.org/10.5772/65850>
- Rodríguez-Lázaro, D., & Hernández, M. (2014). Identification Methods: Real-Time PCR. *Encyclopedia of Food Microbiology: Second Edition*, 2, 344–350. <https://doi.org/10.1016/B978-0-12-384730-0.00437-7>
- Ruijter, J. M., Pfaffl, M. W., Zhao, S., Spiess, A. N., Boggy, G., Blom, J., Rutledge, R. G., Sisti, D., Lievens, A., De Preter, K., Derveaux, S., Hellemans, J., & Vandesompele, J. (2013). Evaluation of qPCR curve analysis methods for reliable biomarker discovery: Bias, resolution, precision, and implications. *Methods*, 59(1), 32–46. <https://doi.org/10.1016/j.meth.2012.08.011>
- Ruiz-Villalba, A., Ruijter, J. M., & van den Hoff, M. J. B. (2021). Use and misuse of cq in qpcr data analysis and reporting. *Life*, 11(6), 1–22. <https://doi.org/10.3390/life11060496>
- Sanodiya, B., Thakur, G., Baghel, R., Prasad, G., & Bisen, P. (2009). Ganoderma lucidum: A Potent Pharmacological Macrofungus. *Current Pharmaceutical Biotechnology*, 10(8), 717–742. <https://doi.org/10.2174/138920109789978757>
- Sikand, K., Singh, J., Ebron, J. S., & Shukla, G. C. (2012). Housekeeping Gene Selection Advisory: Glyceraldehyde-3-Phosphate Dehydrogenase (GAPDH) and β -Actin Are Targets of miR-644a. *PLoS ONE*, 7(10), 1–9. <https://doi.org/10.1371/journal.pone.0047510>
- Singh, K. P., Miaskowski, C., Dhruva, A. A., Flowers, E., & Kober, K. M. (2018). Mechanisms and Measurement of Changes in Gene Expression. *Biological Research for Nursing*, 20(4), 369–382. <https://doi.org/10.1177/1099800418772161>
- Subedi, K., Basnet, B. B., Panday, R., Neupane, M., & Tripathi, G. R. (2021). Optimization of Growth Conditions and Biological Activities of Nepalese Ganoderma lucidum Strain Philippine. *Advances in Pharmacological and Pharmaceutical Sciences*, 2021. <https://doi.org/10.1155/2021/4888979>
- Sulistyaningtyas, A. R., & Supriyadi, A. (2017). Produksi Miselium Jamur Ling ZHI (Ganoderma lucidum) Dalam Medium Air Kelapa Tua Dan Tauge Extract Broth Dengan Metode Kultur Terendam Teragitasi. *Bioma : Berkala Ilmiah Biologi*, 19(1), 58.

<https://doi.org/10.14710/bioma.19.1.58-61>

- Suvaneeth, P., & Nair, N. D. (2018). Biomaterials and biocompatibility. *World J Pharm Res*, 7(10), 161–171.
- Swinnen, J. V., & Ku, J. D. (2022). *Beginner 's Guide A beginner 's guide to lipidomics Beginner 's Guide*. 0(February), 20–24.
- Syafrani, F. Z., Dewi, H. A., Ginting, R., Ridhwan, M., Witadi, A., Intan, N., Sari, P., & Farah, N. (2023). *Current State , Future Prospect and Challenges on Fungal Biomaterials : A Review*. 1(2), 73–86.
- Toker-Bayraktar, M., Erenay, B., Altun, B., Odabaş, S., & Garipcan, B. (2023). Plant-derived biomaterials and scaffolds. *Cellulose*, 30(5), 2731–2751. <https://doi.org/10.1007/s10570-023-05078-y>
- van der Velden, V. H. J., Szczepański, T., & van Dongen, J. J. M. (2001). *Polymerase Chain Reaction, Real-Time Quantitative* (S. Brenner & J. H. B. T. E. of G. Miller (eds.); pp. 1503–1506). Academic Press. <https://doi.org/https://doi.org/10.1006/rwgn.2001.1726>
- Vennapusa, A. R., Somayanda, I. M., Doherty, C. J., & Jagadish, S. V. K. (2020). A universal method for high-quality RNA extraction from plant tissues rich in starch, proteins and fiber. *Scientific Reports*, 10(1), 1–13. <https://doi.org/10.1038/s41598-020-73958-5>
- Wan-Mohtar, W. A. A. Q. I., Ab Kadir, S., & Saari, N. (2016). The morphology of *Ganoderma lucidum* mycelium in a repeated-batch fermentation for exopolysaccharide production. *Biotechnology Reports*, 11, 2–11. <https://doi.org/10.1016/j.btre.2016.05.005>
- Wannasawang, N., Luangham, T., Thawthong, A., Charoensup, R., Jaidee, W., Tongdeesoontorn, W., Hyde, K. D., & Thongklang, N. (2023). Study of Optimal Conditions to Grow Thai *Ganoderma*, Fruiting Test, Proximate and Their Alpha Glucosidase Inhibitory Activity. *Life*, 13(9). <https://doi.org/10.3390/life13091887>
- Xing, J. H., Song, J., Decock, C., & Cui, B. K. (2016). Morphological characters and phylogenetic analysis reveal a new species within the *Ganoderma lucidum* complex from South Africa. *Phytotaxa*, 266(2), 115–124. <https://doi.org/10.11646/phytotaxa.266.2.5>
- Yao, G., Zhang, F., Nie, X., Wang, X., Yuan, J., Zhuang, Z., & Wang, S. (2017). Essential APSES transcription factors for mycotoxin synthesis, fungal development, and pathogenicity in *Aspergillus flavus*. *Frontiers in Microbiology*, 8(NOV), 1–15. <https://doi.org/10.3389/fmicb.2017.02277>
- Zhang, G., Ren, A., Shi, L., Zhu, J., Jiang, A., Shi, D., & Zhao, M. (2018). Functional analysis of an APSES transcription factor (GISwi6) involved in fungal growth, fruiting body development and ganoderic-

acid biosynthesis in *Ganoderma lucidum*. *Microbiological Research*, 207(1), 280–288. <https://doi.org/10.1016/j.micres.2017.12.015>

Zhou, J. H., Sahin, A. A., & Myers, J. N. (2015). Biobanking in genomic medicine. *Archives of Pathology and Laboratory Medicine*, 139(6), 812–818. <https://doi.org/10.5858/arpa.2014-0261-RA>

Zhou, X. W., Su, K. Q., & Zhang, Y. M. (2012). Applied modern biotechnology for cultivation of *Ganoderma* and development of their products. *Applied Microbiology and Biotechnology*, 93(3), 941–963. <https://doi.org/10.1007/s00253-011-3780-7>

