

Bibliography

1. Abdalla, N. A., Ragab, M. E., El-Miniawy, S. M., Arafa, N. M., and Taha, H. S. (2021). A new aspect for *in vitro* propagation of *Jerusalem artichoke* and molecular assessment using rapd, issr and scot marker techniques. *Egyptian Journal of Botany*, 61(1). <https://doi.org/10.21608/ejbo.2020.40297.1541>
2. Abdalla, N., Arafa, N., Taha, H., Ragab, M. I., El-Miniawy, S., Tóth, I., Kovacs, S., and El-Ramady, H. (2021). An Overview on Anatomy of Jerusalem Artichoke (*Helianthus tuberosus L.*). *Environment, Biodiversity and Soil Security*, 5(1). <https://doi.org/10.21608/jenvbs.2021.74585.1136>
3. Afreen, F. (2005). Physiological and Anatomical Characteristics of *in vitro* Photoautotrophic Plants. In T. Kozai, F. Afreen, and S. M. A. Zobayed (Eds.), *Photoautotrophic (sugar-free medium) Micropropagation as a New Micropropagation and Transplant Production System* (pp. 61–90). Springer Netherlands.
4. Afreen, F., Zobayed, S. M. A., and Kozai, T. (2002). Photoautotrophic Culture of *Coffea arabusta* Somatic Embryos: Development of a Bioreactor for Large-scale Plantlet Conversion from Cotyledonary Embryos. *Annals of Botany*, 90(1), 21–29. <https://doi.org/10.1093/aob/mcf151>
5. Agarwal, T., Gupta, A. K., Patel, A. K., and Shekhawat, N. S. (2015). Micropropagation and validation of genetic homogeneity of *Alhagi maurorum* using SCoT, ISSR and RAPD markers. *Plant Cell, Tissue and Organ Culture*, 120(1), 313–323. <https://doi.org/10.1007/S11240-014-0608-Z/METRICS>
6. Agrawal, D. C., Chang, H. C., Chen, C. C., Kuo, C. L., Chen, E. C. F., and Tsay, H. S. (2016). Biotechnology of medicinal plants in Taiwan: Studies on *in vitro* propagation and influence of ventilation closures on hyperhydricity in cultures. In *Medicinal Plants - Recent Advances in Research and Development*. https://doi.org/10.1007/978-981-10-1085-9_9
7. Aguilar, M. E., Garita, K., Kim, Y. W., Kim, J.-A., and Moon, H. (2019). Simple Protocol for the Micropropagation of Teak (*Tectona grandis L.*) in Semi-Solid and Liquid Media in RITA® Bioreactors and *ex vitro* Rooting.

American Journal of Plant Sciences, null.

<https://doi.org/10.4236/AJPS.2019.107081>

8. Aguilar, M. E., Wang, X. Y., Escalona, M., Yan, L., and Huang, L. F. (2022). Somatic embryogenesis of *Arabica coffee* in temporary immersion culture: Advances, limitations, and perspectives for mass propagation of selected genotypes. In *Frontiers in Plant Science* (Vol. 13). Frontiers Media S.A. <https://doi.org/10.3389/fpls.2022.994578>
9. Ahmad, Z., Shahzad, A., and Sharma, S. (2018). Enhanced multiplication and improved *ex vitro* acclimatization of *Decalepis arayalpathra*. *Biologia Plantarum*, 62(1). <https://doi.org/10.1007/s10535-017-0746-3>
10. Ahmadian, M., Babaei, A., Shokri, S., and Hessami, S. (2017). Micropropagation of carnation (*Dianthus caryophyllus* L.) in liquid medium by temporary immersion bioreactor in comparison with solid culture. *Journal of Genetic Engineering and Biotechnology*, 15(2), 309–315. <https://doi.org/10.1016/J.JGEB.2017.07.005>
11. Akdemir, H., Süzerer, V., Onay, A., Tilkat, E., Ersali, Y., and Çiftçi, Y. O. (2013). Micropropagation of the pistachio and its rootstocks by temporary immersion system. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 117, 65–76. <https://doi.org/10.1007/s11240-013-0421-0>
12. Aldrey, A., Blanco, B., Bogo, B., Cuenca, B., Sánchez, C., Luquero, L., Ocaña, L., Mandujano, M., and Vidal, N. (2018). Photomixotropic and photoautotrophic micropropagation of *Phytophthora* resistant chestnut genotypes using liquid media. *Acta Horticulturae*, 1220. <https://doi.org/10.17660/ActaHortic.2018.1220.25>
13. Alghamdi, S. S., Migdadi, H. M., Khan, M. A., El-Harty, E. H., and Dewir, Y. H. (2021). Assessment of somaclonal variations in embryo-derived axillary shoots of chickpea using molecular markers. *Legume Research*, 44(5). <https://doi.org/10.18805/LR-580>
14. Alphonse, M., and Thiagarajan, K. (2021). Optimisation of gentiopicroside production in *Gentiana kurroo* Royle from adventitious root cultures in a liquid culture system. In *vitro Cellular and Developmental Biology - Plant*, 57(2), 179–189. <https://doi.org/10.1007/S11627-021-10168-2/METRICS>

15. Amare, K., and Dugassa, G. (2022). Plant tissue culture challenges in *Ethiopia* and alternative options for low-cost media. *F1000Research*, 11, 828.
16. Amiteye, S. (2021). Basic Concepts and Methodologies of DNA Marker Systems in Plant Molecular Breeding. *Heliyon*, 7(10).
<https://doi.org/10.1016/j.heliyon.2021.e08093>
17. Andrea-Kodym, F. and Zapota-Arias, J. 2001. Low-cost alternatives for the micropropagation of banana. *Plant Cell Tiss. Org. Cult.* 66:67–71.
18. Aragón, C. E., Escalona, M., Rodriguez, R., Cañal, M. J., Capote, I., Pina, D., and González-Olmedo, J. (2010). Effect of sucrose, light, and carbon dioxide on plantain micropropagation in temporary immersion bioreactors. *In vitro Cellular and Developmental Biology - Plant*, 46(1).
<https://doi.org/10.1007/s11627-009-9246-2>
19. Aragón, C. E., Sánchez, C., Gonzalez-Olmedo, J., Escalona, M., Carvalho, L., and Amâncio, S. (2014). Comparison of plantain plantlets propagated in temporary immersion bioreactors and gelled medium during *in vitro* growth and acclimatization. *Biol. Plant.*, 58(1), 29–38.
<https://doi.org/10.1007/s10535-013-0381-6>
20. Arano-Avalos, S., Gómez-Merino, F. C., Mancilla-Álvarez, E., Sánchez-Páez, R., and Bello-Bello, J. J. (2020). An efficient protocol for commercial micropropagation of malanga (*Colocasia esculenta* L. Schott) using temporary immersion. *Scientia Horticulturae*, 261, 108998.
<https://doi.org/https://doi.org/10.1016/j.scienta.2019.108998>
21. Arencibia, A. D., Gómez, A., Poblete, M. A., Orellana, F., Alarcón, J. E., Cortez, N., and Valenzuela, M. A. (2018). Establishment of photomixotrophic cultures for high-scale micropropagation by temporary immersion bioreactors (TIBs) in plant commercial species. *Acta Horticulturae*, 1224.
<https://doi.org/10.17660/ActaHortic.2018.1224.27>
22. Arigita, L., Cañal, M. J., Tamés, R. S., and González, A. (2010). CO₂-enriched microenvironment affects sucrose and macronutrients absorption and promotes autotrophy in the *in vitro* culture of kiwi (*Actinidia deliciosa* Chev. Liang and Ferguson). *In vitro Cellular and Developmental Biology - Plant*, 46(3), 312–322. <https://doi.org/10.1007/S11627-009-9267-X/METRICS>

23. Arigundam, U., Variyath, A. M., Siow, Y. L., Marshall, D., and Debnath, S. C. (2020). Liquid culture for efficient *in vitro* propagation of adventitious shoots in wild *Vaccinium vitis-idaea* ssp. minus (lingonberry) using temporary immersion and stationary bioreactors. *Scientia Horticulturae*, 264, 109199. <https://doi.org/10.1016/J.SCIENTA.2020.109199>
24. Arnon, D.I. 1949. Copper enzyme in isolated chloroplasts: Polyphenoloxidase in *Beta vulgaris*. *Plant Physiol.* 24:1–15. Bates, L.S., Waldren, R.P. and Jeare, I.D. 1973. Rapid determination of free proline for water-stress studies. *Plant Soil* 39:205–207.
25. Ashraf, M., and Foolad, M. R. (2007). Roles of glycine betaine and proline in improving plant abiotic stress resistance. *Environmental and Experimental Botany*, 59(2), 206–216. <https://doi.org/https://doi.org/10.1016/j.envexpbot.2005.12.006>
26. Babu, K. N., Sheeba, T. E., Minoo, D., Rajesh, M. K., Samsudeen, K., Suraby, E. J., and Kumar, I. P. V. (2021). Random Amplified Polymorphic DNA (RAPD) and Derived Techniques. In *Methods in Molecular Biology* (Vol. 2222). https://doi.org/10.1007/978-1-0716-0997-2_13
27. Bach, A., Kapczyńska, A., Dziurka, K., and Dziurka, M. (2015). Phenolic compounds and carbohydrates in relation to bulb formation in *Lachenalia* “Ronina” and “Rupert” *in vitro* cultures under different lighting environments. *Scientia Horticulturae*, 188. <https://doi.org/10.1016/j.scienta.2015.02.038>
28. Bag, N., Palni, L. M. S., and Nandi, S. K. (2019). An efficient method for acclimatization: *In vitro* hardening of tissue culture-raised tea plants (*Camellia sinensis* (L.) O. Kuntze). *Current Science*, 117(2). <https://doi.org/10.18520/cs/v117/i2/288-293>
29. Bajaj, Y.P.S. 1986. Biotechnology of tree improvement for rapid propagation and biomass energy production. In: “Biotechnology in Agriculture and Forestry. vol I. Trees I”. Y.P.S. Bajaj (Ed.) pp 1–23. Springer, New York, USA.
30. Bajaj, Y.P.S., Furmanova, M. and Olszowska, O. 1988. Biotechnology of the micropropagation of medicinal and aromatic plants. In: “Biotechnology in

- Agriculture and Forestry, Vol. 4. Medicinal and Aromatic Plants 1". Y.P.S. Bajaj (Ed.) pp 60–103. Springer, New York, USA.
31. Bajpai, R., and Chaturvedi, R. (2021). Recurrent secondary embryogenesis in androgenic embryos and clonal fidelity assessment of haploid plants of Tea, *Camellia assamica* ssp. *assamica* and *Camellia assamica* ssp. *lasiocaylx*. *Plant Cell, Tissue and Organ Culture*, 145(1). <https://doi.org/10.1007/s11240-020-01997-x>
32. Batista, D. S., de Castro, K. M., Koehler, A. D., Porto, B. N., da Silva, A. R., de Souza, V. C., Teixeira, M. L., das Graças Cardoso, M., de Oliveira Santos, M., Viccini, L. F., and Otoni, W. C. (2017). Elevated CO₂ improves growth, modifies anatomy, and modulates essential oil qualitative production and gene expression in *Lippia alba* (Verbenaceae). *Plant Cell, Tissue and Organ Culture*, 128(2). <https://doi.org/10.1007/s11240-016-1115-1>
33. Batista, D. S., de Castro, K. M., Koehler, A. D., Porto, B. N., da Silva, A. R., de Souza, V. C., Teixeira, M. L., das Graças Cardoso, M., dhe Oliveira Santos, M., Viccini, L. F., and Otoni, W. C. (2017). Elevated CO₂ improves growth, modifies anatomy, and modulates essential oil qualitative production and gene expression in *Lippia alba* (Verbenaceae). *Plant Cell, Tissue and Organ Culture*, 128(2). <https://doi.org/10.1007/s11240-016-1115-1>
34. Batista, D. S., Felipe, S. H. S., Silva, T. D., de Castro, K. M., Mamedes-Rodrigues, T. C., Miranda, N. A., Ríos-Ríos, A. M., Faria, D. V., Fortini, E. A., Chagas, K., Torres-Silva, G., Xavier, A., Arencibia, A. D., and Otoni, W. C. (2018). Light quality in plant tissue culture: does it matter? *In vitro Cellular and Developmental Biology - Plant*, 54(3), 195–215. <https://doi.org/10.1007/s11627-018-9902-5>
35. Beauchamp, C.O. and Fridovich, I. 1971. Superoxide dismutase: improved assay and an assay applicable to acrylamide gels. *Anal. Biochem.* 44:276–287.
36. Bello-Bello, J., Cruz-Cruz, C., and Pérez-Guerra, J. (2019). A new temporary immersion system for commercial micropropagation of banana (*Musa AAA* cv. Grand Naine). *In vitro Cellular and Developmental Biology - Plant*, 55, 313–320. <https://doi.org/10.1007/s11627-019-09973-7>

37. Benelli, C., and Carlo, A. De. (2018). *In vitro* multiplication and growth improvement of *Olea europaea* L. cv Canino with temporary immersion system (PlantformTM). *3 Biotech*, 8, 1–5. <https://doi.org/10.1007/s13205-018-1346-4>
38. Bhojwani, S. S., and Dantu, P. K. (2013). Plant tissue culture: An introductory text. In *Plant Tissue Culture: An Introductory Text*. <https://doi.org/10.1007/978-81-322-1026-9>
39. Biswas, P., and Kumar, N. (2023). Application of Molecular Markers for the Assessment of Genetic Fidelity of *In vitro* Raised Plants: Current Status and Future Prospects. In *Molecular Marker Techniques*. https://doi.org/10.1007/978-981-99-1612-2_12
40. Bobadilla Landey, R., Cenci, A., Guyot, R., Bertrand, B., Georget, F., Dechamp, E., Herrera, J. C., Aribi, J., Lashermes, P., and Etienne, H. (2015). Assessment of genetic and epigenetic changes during cell culture ageing and relations with somaclonal variation in *Coffea arabica*. *Plant Cell, Tissue and Organ Culture*, 122(3). <https://doi.org/10.1007/s11240-015-0772-9>
41. Brutti, C.B., Rubio, E.J., Llorente, B.E. and Apostolo, N.M. 2002. Artichoke leaf morphology and surface features in different micropropagation stages. *Biol.-Plant* 45:197–204.
42. Bulbarela-Marini, J. E., Gómez-Merino, F. C., Galindo-Tovar, M. E., Solano-Rodríguez, L. A., Murguía-González, J., Pastelín-Solano, M. C., Núñez-Pastrana, R., and Castañeda-Castro, O. (2019). The *in vitro* propagation system of *Citrus × latifolia* (Yu. Tanaka) Yu. Tanaka (Rutaceae) affects the growth and depletion of nutriments. *In vitro Cellular and Developmental Biology - Plant*, 55(3), 290–295. <https://doi.org/10.1007/S11627-019-09976-4/METRICS>
43. Businge, E., Trifonova, A., Schneider, C., Rödel, P., and Egertsdotter, U. (2017). Evaluation of a New Temporary Immersion Bioreactor System for Micropropagation of Cultivars of *Eucalyptus*, Birch and Fir. *Forests 2017, Vol. 8, Page 196*, 8(6), 196. <https://doi.org/10.3390/F8060196>
44. Caetano, A. P., Damiana Souza Guanais, D., Pedro Guerra, M., and Cesar Poeta Fermino Junior, P. (2022). Leaf anatomy plasticity of *Acca sellowiana* (O. Berg) Burret *in vitro* cultured in natural ventilation system and *ex vitro*

- acclimatized. *Plant Cell Culture and Micropagation*, 17.
<https://doi.org/10.46526/pccm.2021.v17.173>
45. Cai, Y.F., Zhang, S.B., Hu, H. and Li, S.Y. 2010. Photosynthetic performance and acclimation of *Incarvillea delavayi* to water stress. *Biol. Plant.* 54:89–96.
46. Capellades, M., Fontarnau, R., Carulla, C. and Debergh, P. 1990. Environment influences anatomy of stomata and epidermal cells in tissue cultured *Rosa multiflora*. *J. Am. Soc. Hort. Sci.* 115:141–145.
47. Cardoso, J. C., Rossi, Mô. L., Rosalem, I. B., and Teixeira da Silva, J. A. (2013). Pre-acclimatization in the greenhouse: An alternative to optimizing the micropagation of gerbera. *Scientia Horticulturae*, 164. <https://doi.org/10.1016/j.scienta.2013.10.022>
48. Cardoso, J. C., Sheng Gerald, L. T., and Teixeira da Silva, J. A. (2018). Micropropagation in the Twenty-First Century. In V. M. Loyola-Vargas and N. Ochoa-Alejo (Eds.), *Plant Cell Culture Protocols* (pp. 17–46). Springer New York. https://doi.org/10.1007/978-1-4939-8594-4_2
49. Carvalho, L. C., and Amâncio, S. (2019). Cutting the Gordian Knot of abiotic stress in grapevine: From the test tube to climate change adaptation. *Physiologia Plantarum*, 165(2). <https://doi.org/10.1111/ppl.12857>
50. Carvalho, L. C., Osório, M. L., Chaves, M. M., and Amâncio, S. (2001). Chlorophyll fluorescence as an indicator of photosynthetic functioning of *in vitro* grapevine and chestnut plantlets under *ex vitro* acclimatization. *Plant Cell, Tissue and Organ Culture*, 67(3), 271–280. <https://doi.org/10.1023/A:1012722112406/METRICS>
51. Carvalho, L., Santos, P., and Amâncio, S. (2002). Effect of light intensity and CO₂ concentration on growth and the acquisition of *in vivo* characteristics during acclimatization of grapevine regenerated *in vitro*. *Vitis*, 41(1).
52. Casanova, E., Moysset, L., and Trillas, M. I. (2008). Effects of agar concentration and vessel closure on the organogenesis and hyperhydricity of adventitious carnation shoots. *Biologia Plantarum*, 52(1), 1–8. <https://doi.org/10.1007/s10535-008-0001-z>
53. Cassells, A. C. (2012). Pathogen and biological contamination management in plant tissue culture: Phytopathogens, vitro pathogens, and vitro pests.

- Methods in Molecular Biology*, 877, 57–80. [https://doi.org/10.1007/978-1-61779-818-4_6/COVER](https://doi.org/10.1007/978-1-61779-818-4_6)
54. Caverzan, A., Casassola, A., and Patussi Brammer, S. (2016). Reactive Oxygen Species and Antioxidant Enzymes Involved in Plant Tolerance to Stress. In *Abiotic and Biotic Stress in Plants - Recent Advances and Future Perspectives*. <https://doi.org/10.5772/61368>
55. Chaari-Rkhis, A., Maalej, M., Chelli-Chaabouni, A., Fki, L., and Drira, N. (2015). Photosynthesis parameters during acclimatization of *in vitro*-grown olive plantlets. *Photosynthetica*, 53(4). <https://doi.org/10.1007/s11099-015-0138-x>
56. Chakrabarty, D., and Datta, S. K. (2008). Micropropagation of gerbera: lipid peroxidation and antioxidant enzyme activities during acclimatization process. *Acta Physiologiae Plantarum*, 30(3), 325–331. <https://doi.org/10.1007/s11738-007-0125-3>
57. Chandana, B., HC, N., Kumari, D., L., Kolakar, S. S., and MS, H. (2018). Role of plant tissue culture in micropropagation, secondary metabolites production and conservation of some endangered medicinal crops. *Journal of Pharmacognosy and Phytochemistry*, 7(3), 246–251.
58. Chandra, S., Bandopadhyay, R., Kumar, V., and Chandra, R. (2010). Acclimatization of tissue cultured plantlets: From laboratory to land. *Biotechnology Letters*, 32(9), 1199–1205. [https://doi.org/10.1007/S10529-010-0290-0/METRICS](https://doi.org/10.1007/S10529-010-0290-0)
59. Chauhan, U., Singh, A. K., Godani, D., Handa, S., Gupta, P. S., Patel, S., and Joshi, P. (2018). Some natural extracts from plants as low-cost alternatives for synthetic PGRs in rose micropropagation. *Journal of Applied Horticulture*, 20(2), 103–111. www.horticultureresearch.net
60. Chaves, M. C., Freitas, J. C. E., Nery, F. C., Paiva, R., Prudente, D. de O., Costa, B. G. P., Daubermann, A. G., Bernardes, M. M., and Grazul, R. M. (2020). Influence of colorful light-emitting diodes on growth, biochemistry, and production of volatile organic compounds *in vitro* of *Lippia filifolia* (Verbenaceae). *Journal of Photochemistry and Photobiology B: Biology*, 212. <https://doi.org/10.1016/j.jphotobiol.2020.112040>

61. Chen, J. and Ziv, M. 2003. Carbohydrate, metabolic, and osmotic changes in scaled-up liquid cultures of *Narcissus* leaves. *In vitro Cell. Dev. Biol.—Plant* 39:645–650.
62. Chen, S., Xiong, Y., Yu, X., Pang, J., Zhang, T., Wu, K., Ren, H., Jian, S., Teixeira da Silva, J. A., Xiong, Y., Zeng, S., and Ma, G. (2020). Adventitious shoot organogenesis from leaf explants of *Portulaca pilosa* L. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-60651-w>
63. Chen, Y. M., Huang, J. Z., Hou, T. W., and Pan, I. C. (2019). Effects of light intensity and plant growth regulators on callus proliferation and shoot regeneration in the ornamental succulent *Haworthia*. *Botanical Studies*, 60(1). <https://doi.org/10.1186/s40529-019-0257-y>
64. Cioć, M., Kalisz, A., Zupnik, M., and Pawłowska, B. zena. (2019). Different LED Light Intensities and 6-Benzyladenine Concentrations in Relation to Shoot Development, Leaf Architecture, and Photosynthetic Pigments of *Gerbera jamesonii* Bolus in vitro. *Agronomy*, 9(7). <https://doi.org/10.3390/agronomy9070358>
65. Cioć, M., Tokarz, K., Dziurka, M., and Pawłowska, B. (2021). Energy-saving led light affects the efficiency of the photosynthetic apparatus and carbohydrate content in *gerbera jamesonii* bolus ex hook. F. axillary shoots multiplied in vitro. *Biology*, 10(10). <https://doi.org/10.3390/biology10101035>
66. Corrêa, J. P. O., Vital, C. E., Pinheiro, M. V. M., Batista, D. S., Azevedo, J. F. L., Saldanha, C. W., da Cruz, A. C. F., DaMatta, F. M., and Otoni, W. C. (2015). In vitro photoautotrophic potential and ex vitro photosynthetic competence of *Pfaffia glomerata* (Spreng.) Pedersen accessions. *Plant Cell, Tissue and Organ Culture*, 121(2). <https://doi.org/10.1007/s11240-014-0700-6>
67. Correa-Hernández, L., Baltazar-Bernal, O., Sánchez-Páez, R., and Bello-Bello, J. J. (2022). In vitro multiplication of *Agave tobala* (*Agave potatorum* Zucc.) using Ebb-and-Flow bioreactor. *South African Journal of Botany*, 147. <https://doi.org/10.1016/j.sajb.2022.03.009>
68. Cuenca, B., Sánchez, C., Aldrey, A., Bogo, B., Blanco, B., Correa, B., and Vidal, N. (2017). Micropropagation of axillary shoots of hybrid chestnut (*Castanea sativa* × *C. crenata*) in liquid medium in a continuous immersion

- system. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 131, 307–320. <https://doi.org/10.1007/s11240-017-1285-5>
69. da Silva, J. D., Solís-Gracia, N., Jifon, J., Souza, S. C., and Mandadi, K. (2020). Use of bioreactors for large-scale multiplication of sugarcane (*Saccharum* spp.), energy cane (*Saccharum* spp.), and related species. *In vitro Cellular and Developmental Biology - Plant*, 1–11. <https://doi.org/10.1007/s11627-019-10046-y>
70. Daneshvar Royandazagh, S. (2019). Efficient approaches to *in vitro* multiplication of *Lilium candidum* L. with consistent and safe access throughout year and acclimatization of plant under hot-summer Mediterranean (Csa Type) climate. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, 47(3), 734–742. <https://doi.org/10.15835/NBHA47311486>
71. Dantu, P.K. and Bhojwani, S.S. 1992. *In vitro* propagation of *Gladiolus*: Optimization of shoot multiplication. *J. Plant Biochem. Biotechnol.* 1: 115–1
72. Das, A. K., Choudhary, M., Kumar, P., Karjagi, C. G., KR, Y., Kumar, R., Singh, A., Kumar, S., and Rakshit, S. (2021). Heterosis in Genomic Era: Advances in the Molecular Understanding and Techniques for Rapid Exploitation. *Critical Reviews in Plant Sciences*, 40(3). <https://doi.org/10.1080/07352689.2021.1923185>
73. de Jesus Santana, M., Barbosa-Júnior, S. M., Dias, L. L. L., Silva, L. A. S., da Silva, G. Z., Fortini, E. A., Batista, D. S., Otoni, W. C., da Costa Netto, A. P., and Rocha, D. I. (2022). A novel *in vitro* propagation system for West Indian elm [*Guazuma ulmifolia* Lam. (Malvaceae)]: a valuable medicinal woody species. *In vitro Cellular and Developmental Biology - Plant*, 58(6), 865–875. <https://doi.org/10.1007/s11627-022-10275-8>
74. de la Viña, G., Barceló-Muñoz, A. and Pliego-Alfaro, F. 2001. Effect of culture media and irradiance level on growth and morphology of *Persea americana* Mill microcuttings. *Plant Cell Tiss. Org. Cult.* 65:229–237.
75. De Moraes, M. G., De Carvalho, M. A. M., Franco, A. C., Pollock, C. J., and Figueiredo-Ribeiro, R. D. C. L. (2016). Fire and Drought: Soluble Carbohydrate Storage and Survival Mechanisms in Herbaceous Plants from the Cerrado. *BioScience*, 66(2). <https://doi.org/10.1093/biosci/biv178>

76. de Souza, R. R., de Oliveira Paiva, P. D., de Souza, A. R., da Silva, R. R., da Silva, D. P. C., dos Reis, M. V., and Paiva, R. (2021). Morpho-anatomical changes and antioxidant enzyme activity during the acclimatization of *Genipa americana*. *Acta Physiologiae Plantarum*, 43(6). <https://doi.org/10.1007/s11738-021-03263-9>
77. Deb, C. R., and Pongener, A. (2022). Use of low-cost agar alternative for *in vitro* propagation of commercially viable orchids is an attractive way for commercialization. *South African Journal of Botany*, 150, 789–796. <https://doi.org/10.1016/J.SAJB.2022.08.028>
78. Debnath, S. C. (2016). Temporary immersion and stationary bioreactors for mass propagation of true-to-type highbush, half-high, and hybrid blueberries (*Vaccinium* spp.). *The Journal of Horticultural Science and Biotechnology*, 92(1), 72–80. <https://doi.org/10.1080/14620316.2016.1224606>
79. Dhanalakshmi, S., and Stephan, R. (2014). Low-cost media options for the production of banana (*Musa paradisiaca* L.) through plant tissue culture. *Journal of Academia and Industrial Research (JAIR)*, 2(9), 509–512.
80. Dhawan, V. and Bhojwani, S.S. 1987. Hardening *in vitro* and morphophysiological changes in the leaves during acclimatization of micropropagated plants of *Leucaena leucocephala* (Lam)de wit. *Plant Sci.* 53:65–72.
81. DiMario, R. J., Machingura, M. C., Waldrop, G. L., and Moroney, J. V. (2018). The many types of carbonic anhydrases in photosynthetic organisms. In *Plant Science* (Vol. 268). <https://doi.org/10.1016/j.plantsci.2017.12.002>
82. Doi, M., Oda, H. and Asahira, T. 1989. *In vitro* atmosphere of cultured C₃ and CAM plants in relation to day-lengths. *Environ. Control. Biol.* 27:9–13.
83. Domblides, E., Ermolaev, A., Belov, S., Kan, L., Skaptsov, M., and Domblides, A. (2022). Efficient Methods for Evaluation on Ploidy Level of *Cucurbita pepo* L. Regenerant Plants Obtained in Unpollinated Ovule Culture *In vitro*. *Horticulturae*, 8(11). <https://doi.org/10.3390/horticulturae8111083>
84. Duan, J. X., Duan, Q. X., Zhang, S. F., Cao, Y. M., Yang, C. D., and Cai, X. D. (2020). Morphological, physiological, anatomical and histochemical responses of micropropagated plants of *Trichosanthes kirilowii* to hydroponic

- and soil conditions during acclimatization. *Plant Cell, Tissue and Organ Culture*, 142(1). <https://doi.org/10.1007/s11240-020-01851-0>
85. Dubey, R. K., and Babel, P. (2022). 12 Arctic Phyto-Technology. *Climate Change in the Arctic: An Indian Perspective*, 219.
86. Dunn, M. D., Belur, P. D., and Malan, A. P. (2020). *In vitro* liquid culture and optimization of *Steinernema jeffreyense* using shake flasks. *BioControl*, 65(2), 223–233. <https://doi.org/10.1007/S10526-019-09977-7/METRICS>
87. Dutta Gupta, S. (2006). *Matrix-supported liquid culture systems for efficient micropropagation of floricultural plants*. <https://www.researchgate.net/publication/260256151>
88. Dutta Gupta, S. and Prasad, V. S. S. 2010. Shoot multiplication kinetics and hyperhydric status of regenerated shoots of *Gladiolus* in agar-solidified and matrix-supported liquid cultures. *Plant Biotechnol. Rep.* 4:85–94.
89. Ebile, P. A., Opata, J., and Hegele, S. (2022). Evaluating suitable low-cost agar substitutes, clarity, stability, and toxicity for resource-poor countries' tissue culture media. *In vitro Cellular and Developmental Biology-Plant*, 58(6), 989–1001.
90. Eckstein, A., Zieba, P., and Gabryś, H. (2012). Sugar and Light Effects on the Condition of the Photosynthetic Apparatus of *Arabidopsis thaliana* Cultured *in vitro*. *Journal of Plant Growth Regulation*, 31(1). <https://doi.org/10.1007/s00344-011-9222-z>
91. Emrey, T. M. (2022). The Application of Molecular Marker on Crop Heterosis Development: A Review Paper. *Global Journal of Arts, Humanities and Social Sciences*, 10(5). <https://doi.org/10.37745/gjahss.2013/vol10n5pp5160>
92. Esyanti, R., Adhitama, N., Manurung, R., and Esyanti, R. R. (2016). Efficiency Evaluation of Vanda Tricolor Growth in Temporary Immerse System Bioreactor and Thin Layer Culture System. <https://doi.org/10.18178/joaat.3.1.63-66>
93. Etienne, H. and Berthouly, M. 2002. Temporary immersion systems in plant micropropagation. *Plant Cell Tiss.Org. Cult.* 69:215–231.
94. Faisal, M., and Anis, M. (2010). Effect of light irradiations on photosynthetic machinery and antioxidative enzymes during *ex vitro* acclimatization of

- Tylophora indica* plantlets. *Journal of Plant Interactions*, 5(1), 21–27.
<https://doi.org/10.1080/17429140903137652>
95. Fan, W., Zhang, M., Zhang, H., and Zhang, P. (2012). Improved Tolerance to Various Abiotic Stresses in Transgenic Sweet Potato (*Ipomoea batatas*) Expressing Spinach Betaine Aldehyde Dehydrogenase. *PLOS ONE*, 7(5), e37344. <https://doi.org/10.1371/JOURNAL.PONE.0037344>
96. Farahani, S., Maleki, M., Ford, R., Mehrabi, R., Kanouni, H., Kema, G. H., Naji, A. M., and Talebi, R. (2022). Genome-wide association mapping for isolate-specific resistance to *Ascochyta rabiei* in chickpea (*Cicer arietinum* L.). *Physiological and Molecular Plant Pathology*, 121. <https://doi.org/10.1016/j.pmpp.2022.101883>
97. Fehér, A. (2019). Callus, dedifferentiation, totipotency, somatic embryogenesis: What these terms mean in the era of molecular plant biology? *Frontiers in Plant Science*, 10, 442509. [https://doi.org/10.3389/FPLS.2019.00536/BIBTEX](https://doi.org/10.3389/FPLS.2019.00536)
98. Filippou, P., Bouchagier, P., Skotti, E., and Fotopoulos, V. (2014). Proline and reactive oxygen/nitrogen species metabolism is involved in the tolerant response of the invasive plant species *Ailanthus altissima* to drought and salinity. *Environmental and Experimental Botany*, 97, 1–10. <https://doi.org/https://doi.org/10.1016/j.envexpbot.2013.09.010>
99. Fujii, H., Verslues, P. E., and Zhu, J. K. (2011). Arabidopsis decuple mutant reveals the importance of SnRK2 kinases in osmotic stress responses *in vivo*. *Proceedings of the National Academy of Sciences of the United States of America*, 108(4). <https://doi.org/10.1073/pnas.1018367108>
100. Fujiwara, K., Kozai, T. and Watanabe, I. 1987. Fundamental studies on environment in plant tissue culture vessels (3). Measurements of carbon dioxide gas concentration in closed vessels containing tissue cultured plantlets and estimate of net photosynthetic rates of the plantlets. *J. Agric. Meteorol.* 43:21–30.
101. Gago, D., Bernal, M., Sánchez, C., Aldrey, A., Cuenca, B., Christie, C., and Vidal, N. (2022). Effect of Sucrose on Growth and Stress Status of *Castanea sativa* x *C. crenata* Shoots Cultured in Liquid Medium. *Plants*, 11, null. <https://doi.org/10.3390/plants11070965>

102. Gago, D., Sánchez, C., Aldrey, A., Christie, C. B., Bernal, M. Á., and Vidal, N. (2022). Micropropagation of Plum (*Prunus domestica* L.) in Bioreactors Using Photomixotrophic and Photoautotrophic Conditions. *Horticulturae* 2022, Vol. 8, Page 286, 8(4), 286. <https://doi.org/10.3390/HORTICULTURAE8040286>
103. Gago, D., Vilavert, S., Bernal, M. Á., Sánchez, C., Aldrey, A., and Vidal, N. (2021). The Effect of Sucrose Supplementation on the Micropropagation of *Salix viminalis* L. Shoots in Semisolid Medium and Temporary Immersion Bioreactors. *Forests* 2021, Vol. 12, Page 1408, 12(10), 1408. <https://doi.org/10.3390/F12101408>
104. Gangopadhyay, G., Das, S., Mitra, S.K., Poddar, R., Modak, B.K. and Mukherjee, K.K. 2002. Enhanced rate of multiplication and rooting through the use of coir in aseptic liquid culture media. *Plant Cell Tiss. Org. Cult.* 68:301–310.
105. Gao, H., Xia, X., An, L., Xin, X., and Liang, Y. (2017). Reversion of hyperhydricity in pink (*Dianthus chinensis* L.) plantlets by AgNO₃ and its associated mechanism during *in vitro* culture. *Plant Science*, 254. <https://doi.org/10.1016/j.plantsci.2016.10.008>
106. Gao, M., Jiang, W., Wei, S., Lin, Z., Cai, B., Yang, L., Luo, C., He, X., Tan, J., and Chen, L. (2015). High-efficiency propagation of Chinese water chestnut [*Eleocharis dulcis* (Burm.f.) Trin. ex Hensch] using a temporary immersion bioreactor system. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 121, 761–772. <https://doi.org/10.1007/s11240-015-0732-4>
107. Gao, Y., Li, G., Cai, B., Zhang, Z., Li, N., Liu, Y., and Li, Q. (2022). Effects of rare-earth light conversion film on the growth and fruit quality of sweet pepper in a solar greenhouse. *Frontiers in Plant Science*, 13. <https://doi.org/10.3389/fpls.2022.989271>
108. García-Caparrós, P., De Filippis, L., Gul, A., Hasanuzzaman, M., Ozturk, M., Altay, V., and Lao, M. T. (2021). Oxidative Stress and Antioxidant Metabolism under Adverse Environmental Conditions: a Review. *Botanical Review*, 87(4). <https://doi.org/10.1007/s12229-020-09231-1>

109. García-Ramírez, Y. (2023). Temporary immersion system for *in vitro* propagation via organogenesis of forest plant species. *Trees*, 37(3), 611–626. <https://doi.org/10.1007/s00468-022-02379-w>
110. García-Ramírez, Y., Barrera, G., Freire-Seijo, M., Barbón, R., Concepción-Hernández, M., Mendoza-Rodríguez, M., and Torres-García, S. (2019). Effect of sucrose on physiological and biochemical changes of proliferated shoots of *Bambusa vulgaris* Schrad. Ex Wendl in temporary immersion. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 137, 239–247. <https://doi.org/10.1007/s11240-019-01564-z>
111. Gaspar, T. (1991). Vitrification in Micropropagation. In Y. P. S. Bajaj (Ed.), *High-Tech and Micropropagation I* (pp. 116–126). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-76415-8_7
112. Gaspi, F. O. G., Foglio, M. A., Carvalho, J. C. T. E., Moreno, R. A., Bakre, A. G., Aderibigbe, A. O., Ademowo, O. G., Activity, A., The, O. F., Extract, H., Against, B., Animal, T. H. E., Of, M., Africa, S., Africa, S., Ajibade, A. J., Fakunle, P. B., Ashamu, E. A., Owolabi, S. O., ... Address, H. M. (2013). Travel Grant Application S and F - Innovation Doctoral Scholarships. *Journal of Ethnopharmacology*, 5(1).
113. Gatambia, E. K., Kihurani, A. W., Rimberia, F. K., and Waiganjo, M. M. (2016). *In vitro* Meristem Culture for Rapid Regeneration of Papaya Plantlets in Liquid Media. *Annual Research and Review in Biology*, 9(1), 1–7. <https://doi.org/10.9734/ARRB/2016/22056>
114. Gatti, E., Sgarbi, E., Ozudogru, E. A., and Lambardi, M. (2017). The effect of PlantformTM bioreactor on micropropagation of *Quercus robur* in comparison to a conventional *in vitro* culture system on gelled medium, and assessment of the microenvironment influence on leaf structure. *Plant Biosystems - An International Journal Dealing with All Aspects of Plant Biology*, 151(6), 1129–1136. <https://doi.org/10.1080/11263504.2017.1340356>
115. Gautam, N., and Bhattacharya, A. (2021). Molecular marker-based assessment of genetic homogeneity within the *in vitro* regenerated plants of *Crocus sativus* L. – a globally important high value spice crop. *South African Journal of Botany*, 140. <https://doi.org/10.1016/j.sajb.2021.03.038>

116. Genty, B., Briantais, J.M. and Barker, N.R. 1989. The relationship between the quantum yield of photosynthetic electron transport and quenching of chlorophyll fluorescence. *Biochim. Biophys. Acta* 990:87–92.
117. Georgieva, K., Yordanov, I. and Kroumova, A. 1996. Photosynthetic characteristics of transformed tobacco plants grown *in vitro* after their transplantation in natural conditions. *Bulg. J. Plant Physiol.* 22:3–13.
118. Ghasemlou, F., Amiri, H., Karamian, R., and Mirzaie-Asl, A. (2019). Alleviation of the effects of on drought stress *Verbascum nudicuale* by methyl jasmonate and titanium dioxide nanoparticles. *Iranian Journal of Plant Physiology*, 9(4).
119. Gianguzzi, V., Inglese, P., Barone, E., and Sottile, F. (2019). *In vitro* Regeneration of *Capparis spinosa* L. by Using a Temporary Immersion System. *Plants*, 8, null. <https://doi.org/10.3390/plants8060177>
120. Godoy, S., Tapia, E., Seit, P., Andrade, D., Sánchez, E., Andrade, P., Almeida, A. M., and Prieto, H. (2017). Temporary immersion systems for the mass propagation of sweet cherry cultivars and cherry rootstocks: development of a micropropagation procedure and effect of culture conditions on plant quality. *In vitro Cellular and Developmental Biology - Plant*, 53, 494–504. <https://doi.org/10.1007/s11627-017-9856-z>
121. Gómez, D., Hernández, L., Valle, B., Martínez, J., Cid, M., Escalona, M., Hernández, M., Beemster, G. T. S., Tebbe, C. C., Yabor, L., and Lorenzo, J. C. (2017). Temporary immersion bioreactors (TIB) provide a versatile, cost-effective and reproducible *in vitro* analysis of the response of pineapple shoots to salinity and drought. *Acta Physiologiae Plantarum*, 39(12). <https://doi.org/10.1007/s11738-017-2576-5>
122. Gonçalves, S., and Romano, A. (2013). *In vitro* culture of lavenders (*Lavandula* spp.) and the production of secondary metabolites. *Biotechnology Advances*, 31(2), 166–174. <https://doi.org/https://doi.org/10.1016/j.biotechadv.2012.09.006>
123. Gonçalves, S., Martins, N., and Romano, A. (2017). Physiological traits and oxidative stress markers during acclimatization of micropropagated plants from two endangered *Plantago* species: *P. algarbiensis* Samp. and *P.*

- almogravensis* Franco. *In vitro Cellular and Developmental Biology - Plant*, 53(3). <https://doi.org/10.1007/s11627-017-9812-y>
124. González, R., Ríos, D., Avilés, F., and Sánchez-Olate, M. (2011). Multiplicación *in vitro* de *Eucalyptus globulus* mediante sistema de inmersión temporal. *Bosque (Valdivia)*, 32, 147–154. <https://doi.org/10.4067/S0717-92002011000200005>
125. González-Benito, M. E., Ibáñez, M. Á., Pirredda, M., Mira, S., and Martín, C. (2020). Application of the MSAP technique to evaluate epigenetic changes in plant conservation. In *International Journal of Molecular Sciences* (Vol. 21, Issue 20). <https://doi.org/10.3390/ijms21207459>
126. Górká, B., & Wieczorek, P. P. (2017). Simultaneous determination of nine phytohormones in seaweed and algae extracts by HPLC-PDA. *Journal of Chromatography B*, 1057, 32–39. <https://doi.org/10.1016/J.JCHROMB.2017.04.048>
127. Gupta, V., Kumar, M., Brahmbhatt, H., Reddy, C. R. K., Seth, A., & Jha, B. (2011). Simultaneous determination of different endogenous plant growth regulators in common green seaweeds using dispersive liquid–liquid microextraction method. *Plant Physiology and Biochemistry*, 49(11), 1259–1263. <https://doi.org/10.1016/J.PLAPHY.2011.08.004>
128. Goswami, M., Attri, K., and Goswami, I. (2022). Applications of Molecular Markers in Fruit Crops: A Review. *International Journal of Economic Plants*, 9(May, 2), 121–126. <https://doi.org/10.23910/2/2022.0459>
129. Guan, Q.Z., Guo, Y.H., Sui, X.L., Li, W. and Zhang, Z.X. 2008. Changes in photosynthetic capacity and antioxidant enzymatic systems in micropagulated *Zingiber officinale* plantlets during their acclimation. *Photosynthetica* 46:193–201.
130. Gulzar, B., Mujib, A., Qadir Malik, M., Mamgain, J., Syeed, R., and Zafar, N. (2020). Chapter two - Plant tissue culture: agriculture and industrial applications. In U. Kiran, M. Z. Abdin, and Kamaluddin (Eds.), *Transgenic Technology Based Value Addition in Plant Biotechnology* (pp. 25–49). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-818632-9.00002-2>

131. Gupta, N., Jain, V., Rosy Joseph, M., Devi, S., and Josepeh, R. M. (2020). A Review on Micropropagation Culture Method. *Asian Journal of Pharmaceutical Research and Development*, 8(1), 86–93. <https://doi.org/10.22270/AJPRD.V8I1.653>
132. Gupta, P.K. and Timmis, R. 2005. Mass propagation of conifer trees in liquid cultures—progress towards commercialization. *Plant Cell Tiss. Org. Cult.* 81:339–346.
133. Habibi, N., and Purohit, S. D. (2019). Photosynthetic efficiency and *in vitro* growth of *Celastrus paniculatus* Willd. under varied concentrations of CO₂. *International Journal of Phytocosmetics and Natural Ingredients*, 6(1), 11–11. <https://doi.org/10.15171/IJPNI.2019.11>
134. Hahn, E.J. and Paek, K.Y. 2001. High photosynthetic photon flux and high CO₂ concentration under increased number of air exchanges promote growth and photosynthesis of four kinds of orchid plantlets *in vitro*. *In vitro Cell. Dev. Biol.-Plant* 37: 678–682
135. Halliwell, B. 1997. Introduction: free radicals and human disease – trick or treat? In: “Oxygen Radicals and the Disease Process.” C.E. Thomas and B. Kalyanaraman (Ed.) pp 1–14. Harwood Academic Publishers.
136. Hasanuzzaman, M., Bhuyan, M. H. M. B., Zulfiqar, F., Raza, A., Mohsin, S. M., Al Mahmud, J., Fujita, M., and Fotopoulos, V. (2020). Reactive oxygen species and antioxidant defense in plants under abiotic stress: Revisiting the crucial role of a universal defense regulator. In *Antioxidants* (Vol. 9, Issue 8). <https://doi.org/10.3390/antiox9080681>
137. Hasanuzzaman, M., Hossain, M. A., da Silva, J. A. T., and Fujita, M. (2012). Plant Response and Tolerance to Abiotic Oxidative Stress: Antioxidant Defense Is a Key Factor. In B. Venkateswarlu, A. K. Shanker, C. Shanker, and M. Maheswari (Eds.), *Crop Stress and its Management: Perspectives and Strategies* (pp. 261–315). Springer Netherlands. https://doi.org/10.1007/978-94-007-2220-0_8
138. Hasnain, A., Naqvi, S. A. H., Ayesha, S. I., Khalid, F., Ellahi, M., Iqbal, S., Hassan, M. Z., Abbas, A., Adamski, R., Markowska, D., Baazeem, A., Mustafa, G., Moustafa, M., Hasan, M. E., and Abdelhamid, M. M. A. (2022). Plants *in vitro* propagation with its applications in food, pharmaceuticals and

- cosmetic industries; current scenario and future approaches. *Frontiers in Plant Science*, 13, 1009395. <https://doi.org/10.3389/FPLS.2022.1009395/BIBTEX>
139. Hazarika, B. N. (2006). Morpho-physiological disorders in *in vitro* culture of plants. *Scientia Horticulturae*, 108(2), 105–120. <https://doi.org/10.1016/J.SCIENTA.2006.01.038>
140. Helaly, M. N., El-Hosieny, H. A. R., El-Sarkassy, N. M., and Fuller, M. P. (2017). Growth, lipid peroxidation, organic solutes, and anti-oxidative enzyme content in drought-stressed date palm embryogenic callus suspension induced by polyethylene glycol. *In vitro Cellular and Developmental Biology - Plant*, 53(2). <https://doi.org/10.1007/s11627-017-9815-8>
141. Hinge, V. R., Shaikh, I. M., Chavhan, R. L., Deshmukh, A. S., Shelake, R. M., Ghuge, S. A., Detha, A. M., Suprasanna, P., and Kadam, U. S. (2022). Assessment of genetic diversity and volatile content of commercially grown banana (*Musa* spp.) cultivars. *Scientific Reports*, 12(1), 7979. <https://doi.org/10.1038/s41598-022-11992-1>
142. Hoang, N. N., Kitaya, Y., Shibuya, T., and Endo, R. (2019). Development of an *in vitro* hydroponic culture system for wasabi nursery plant production—Effects of nutrient concentration and supporting material on plantlet growth. *Scientia Horticulturae*, 245. <https://doi.org/10.1016/j.scienta.2018.10.025>
143. Huang, C., and Chen, C. (2005). Physical Properties of Culture Vessels for Plant Tissue Culture. *Biosystems Engineering*, 91(4), 501–511. <https://doi.org/https://doi.org/10.1016/j.biosystemseng.2005.05.005>
144. Hung, C. D., Hong, C. H., Kim, S. K., Lee, K. H., Park, J. Y., Dung, C. D., Nam, M. W., Choi, D. H., and Lee, H. I. (2016). *In vitro* proliferation and *ex vitro* rooting of micro shoots of commercially important rabbiteye blueberry (*Vaccinium ashei* Reade) using spectral lights. *Scientia Horticulturae*, 211. <https://doi.org/10.1016/j.scienta.2016.09.003>
145. Hwang, H. D., Kwon, S. H., Murthy, H. N., Yun, S. W., Pyo, S. S., and Park, S. Y. (2022). Temporary Immersion Bioreactor System as an Efficient Method for Mass Production of *In vitro* Plants in Horticulture and Medicinal Plants. *Agronomy*, 12(2). <https://doi.org/10.3390/agronomy12020346>

146. Isah, T. (2015). Adjustments to *in vitro* culture conditions and associated anomalies in plants. *Acta Biologica Cracoviensis Series Botanica*, 57(2), 9–28. <https://doi.org/10.1515/abcsb-2015-0026>
147. Islam, Md. T., Dembele, D. P., and Keller, E. R. J. (2005). Influence of explant, temperature and different culture vessels on *in vitro* culture for germplasm maintenance of four mint accessions. *Plant Cell, Tissue and Organ Culture*, 81(2), 123–130. <https://doi.org/10.1007/s11240-004-3307-3>
148. Jagiełło-Kubiec, K., Nowakowska, K., Łukaszewska, A. J., and Pacholczak, A. (2021). Morpho-anatomical and biochemical changes associated with rooting of micropropagated ninebark cuttings. *Plant Cell, Tissue and Organ Culture*, 147(2). <https://doi.org/10.1007/s11240-021-02119-x>
149. James, A. C., Peraza-Echeverria, S., Peraza-Echeverria, L., and Herrera-Valencia, V. A. (2007). Variation in micropropagated plants. *Acta Horticulturae*, 748. <https://doi.org/10.17660/ActaHortic.2007.748.4>
150. Jayappa, M. D., Ramaiah, C. K., Kumar, M. A. P., Suresh, D., Prabhu, A., Devasya, R. P., and Sheikh, S. (2020). Green synthesis of zinc oxide nanoparticles from the leaf, stem and *in vitro* grown callus of *Mussaenda frondosa* L.: characterization and their applications. *Applied Nanoscience*, 10(8), 3057–3074. <https://doi.org/10.1007/s13204-020-01382-2>
151. Jiang, M., Jian, J., Zhou, C., Li, L., Wang, Y., Zhang, W., Song, Z., and Yang, J. (2023). Does integument arise de novo or from pre-existing structures? Insights from the key regulatory genes controlling integument development. *Frontiers in Plant Science*, 13. <https://doi.org/10.3389/fpls.2022.1078248>
152. Jiménez, J. A., Alonso-Blázquez, N., López-Vela, D., Celestino, C., Toribio, M., and Alegre, J. (2011). Influence of culture vessel characteristics and agitation rate on gaseous exchange, hydrodynamic stress, and growth of embryogenic cork oak (*Quercus suber* L.) cultures. *In vitro Cellular and Developmental Biology - Plant*, 47(5), 578–588. <https://doi.org/10.1007/s11627-011-9399-7>
153. Jogam, P., Sandhya, D., Shekhawat, M. S., Alok, A., M, M., Abbagani, S., and Allini, V. R. (2020). Genetic stability analysis using DNA barcoding and molecular markers and foliar micro-morphological analysis of *in vitro*

- regenerated and *in vivo* grown plants of *Artemisia vulgaris* L. *Industrial Crops and Products*, 151, 112476.
<https://doi.org/https://doi.org/10.1016/j.indcrop.2020.112476>
154. Johnson, K., Cao Chu, U., Anthony, G., Wu, E., Che, P., and Jones, T. J. (2023). Rapid and highly efficient morphogenic gene-mediated hexaploid wheat transformation. *Frontiers in Plant Science*, 14, 1151762.
155. José, M. S. S., Blázquez, N., Cernadas, M., Janeiro, L. V., Cuenca, B., Sánchez, C., and Vidal, N. (2020). Temporary immersion systems to improve alder micropropagation. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 143, 265–275. <https://doi.org/10.1007/s11240-020-01937-9>
156. Joshi, N., and Purohit, S. D. (2012). Optimization of factors influencing shoot multiplication during micropropagation of *chlorophytum borivilianum* Sant. et fernand. *Proceedings of the National Academy of Sciences India Section B - Biological Sciences*, 82(3).
<https://doi.org/10.1007/s40011-012-0028-y>
157. Joshi, N., Dave, A., Vyas, S. and Purohit, S.D. 2009. Growth and shoot proliferation in *Chlorophytum borivilianum* Sant. Et. Fernand. *in vitro* under different carbon dioxide environment. Indian J. Biotechnol. 8:323–327.
158. Joshi, P., Joshi, N., and Purohit, S. D. (2006). Stomatal characteristics during micropropagation of *Wrightia tomentosa*. *Biologia Plantarum*, 50(2), 275–278. <https://doi.org/10.1007/s10535-006-0019-z>
159. Joshi, P., Trivedi, R., and Purohit, S. D. (2009). Micropropagation of *Wrightia tomentosa*: Effect of gelling agents, carbon source and vessel type. *Indian Journal of Biotechnology*, 8(1).
160. Joshi, P., Vyas, S., and Purohit, S. D. (2010). Photosynthetic performance of shoots of *Feronia limonia* grown *in vitro* under carbon dioxide enriched environment. *Acta Horticulturae*, 865, 225–230.
<https://doi.org/10.17660/ACTAHORTIC.2010.865.28>
161. Jyoti Sahu, and Ram Kumar Sahu. (2013). A Review on Low-Cost Methods for *In vitro* Micropagation of Plant Through Tissue Culture Technique. *Pharmaceutical and Biosciences Journal*.
<https://doi.org/10.20510/ukjpb/1/i1/91115>

162. Karalija, E., Ćavar Zeljković, S., Tarkowski, P., Muratović, E., and Parić, A. (2017). The effect of cytokinins on growth, phenolics, antioxidant and antimicrobial potential in liquid agitated shoot cultures of *Knautia sarajeensis*. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 131(2), 347–357. <https://doi.org/10.1007/s11240-017-1288-2>
163. Karyanti, K., Khairiyah, H., Sukarnih, T., Rudiyan, Y., Nasrifah, I., Wulansari, A., Septiani, S. M., and Dasumiati, D. (2022). Micropropagation of Potato (*Solanum tuberosum* L.) Cv. Granola in Liquid Medium Using Aeration System for G0 Seed production. *Jurnal Biotehnologi and Biosains Indonesia (JBBI)*, 9(2), 158–169. <https://doi.org/10.29122/JBBI.V9I2.4713>
164. Kaur, H., Manna, M., Thakur, T., Gautam, V., and Salvi, P. (2021). Imperative role of sugar signaling and transport during drought stress responses in plants. *Physiologia Plantarum*, 171(4), 833–848. <https://doi.org/https://doi.org/10.1111/ppl.13364>
165. Kaur, R., and Minhas, J. (2016). Effect of supporting medium on photoautotrophic microplant survival and growth of potato (*Solanum tuberosum*). *Current Advances in Agricultural Sciences (An International Journal)*, 8(2). <https://doi.org/10.5958/2394-4471.2016.00041.1>
166. Kepenek, K. (2019). Photosynthetic Effects of Light-emitting Diode (LED) on *in vitro*-derived Strawberry (*Fragaria x Ananassa* cv. Festival) Plants Under *in vitro* Conditions. *Erwerbs-Obstbau*, 61(2). <https://doi.org/10.1007/s10341-018-00414-0>
167. Khan, N., Bano, A., Rahman, M. A., Guo, J., Kang, Z., and Babar, M. A. (2019). Comparative Physiological and Metabolic Analysis Reveals a Complex Mechanism Involved in Drought Tolerance in Chickpea (*Cicer arietinum* L.) Induced by PGPR and PGRs. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-019-38702-8>
168. Khan, W., Rayirath, U. P., Subramanian, S., Jithesh, M. N., Rayorath, P., Hodges, D. M., Critchley, A. T., Craigie, J. S., Norrie, J., & Prithiviraj, B. (2009). Seaweed Extracts as Biostimulants of Plant Growth and Development. *Journal of Plant Growth Regulation 2009* 28:4, 28(4), 386–399. <https://doi.org/10.1007/S00344-009-9103-X>

- 169.
170. Kim, E.K. 2002. Propagation of multiple shoots and microbulbs using bioreactor system in garlic (*Allium sativum L.*). M.Sc. Dissertation, Chungbuk National University, Cheongju, Korea.
171. Kim, N., Hwang, H.-D., Kim, J.-H., Kwon, B., Kim, D., and Park, S.-Y. (2020). Efficient production of virus-free apple plantlets using the temporary immersion bioreactor system. *Horticulture, Environment, and Biotechnology*, 61, 779–785. <https://doi.org/10.1007/s13580-020-00257-3>
172. Kitaya, Y., Fukuda, O., Kozai, T. and Kirdmanee, C. 1995. Effects of light intensity and lighting direction on the photoautotrophic growth and morphology of potato plantlets *in vitro*. *Sci. Hort.* 62:15–24.
173. Koch, K.E., 1996. Carbohydrate modulated gene expression in plants. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* 47:509–540.
174. Kodym, A., and Leeb, C. J. (2019). Back to the roots: protocol for the photoautotrophic micropropagation of medicinal Cannabis. *Plant Cell, Tissue and Organ Culture*, 138(2). <https://doi.org/10.1007/s11240-019-01635-1>
175. Kozai, T. (1991). Photoautotrophic micropropagation. *In vitro Cellular and Developmental Biology - Plant*, 27(2), 47–51. <https://doi.org/10.1007/BF02632127/METRICS>
176. Kozai, T. 1991. Micropropagation under photoautotrophic conditions. In: “Micropropagation – Technology and Application”. P.C. Debergh and R.H. Zimmerman, (Eds.) pp 447–469. Kluwer Academic Publishers, Dordrecht, The Netherlands.
177. Kozai, T., Fujiwara, K., Hayashi, M. and Aitken-Christie, J. 1992. The *in vitro* environment and its control in micropropagation. In: “Transplant Production System”. K. Kurata and T. Kozai (Eds.) pp 247–282. Kluwer Academic Publisher, Dordrecht, The Netherlands.
178. Kozai, T., Oki, H. and Fujiwara, K. 1990. Photosynthetic characteristics of *Cymbidium* plantlets *in vitro*. *Plant Cell Tiss. Org. Cult.* 22:205–211.
179. Kozai, T., Xiao, Y., Nguyen, Q. T., Afreen, F., and Zobayed, S. M. A. (2005). Photoautotrophic (Sugar-Free Medium) Micropropagation Systems

- for Large-Scale Commercialization. *Propagation of Ornamental Plants*, 5, 23–34.
180. Kozai, T. 2005. Closed systems for high quality transplants using minimum resources. In: “Plant Tissue Culture Engineering”. S.D. Gupta and Y. Ibaraki (Eds.) pp 275– 312. Springer, The Netherlands.
181. Kshirsagar, P. R., Mohite, A., Suryawanshi, S., Chavan, J. J., Gaikwad, N. B., and Bapat, V. A. (2021). Plant regeneration through direct and indirect organogenesis, phyto-molecular profiles, antioxidant properties and swertiamarin production in elicited cell suspension cultures of *Swertia minor* (Griseb.) Knobl. *Plant Cell, Tissue and Organ Culture*, 144(2). <https://doi.org/10.1007/s11240-020-01962-8>
182. Kumar*, K. P. S., Bhowmik, D., S.Duraivel, and M.Umadevi. (2012). Traditional and Medicinal Uses of Banana. *Journal of Pharmacognosy and Phytochemistry*, 1(3), 51–63. <https://www.phytojournal.com/archives/2012.v1.i3.22/traditional-and-medicinal-uses-of-banana>
183. Kumar, N., and Reddy, M. P. (2011). *In vitro* Plant Propagation: A Review. *Journal of Forest Science*, 27(2).
184. Kumar, R. (2017). Banana tissue culture in India; status, opportunities and challenges. *Trends Biosci*, 10(45), 9237–9241.
185. Kumari, N., Gupta, A., Pandey, B. C., Kushwaha, R., and Yaseen, M. (2023). *In vitro* Cultures: Challenges and Limitations. In M. K. Mishra and N. Kumari (Eds.), *Plants for Immunity and Conservation Strategies* (pp. 371–383). Springer Nature Singapore. https://doi.org/10.1007/978-981-99-2824-8_17
186. Lai, C. C., Lin, H. M., Nalawade, S. M., Fang, W., and Tsay, H. S. (2005). Hyperhydricity in shoot cultures of *Scrophularia yoshimurae* can be effectively reduced by ventilation of culture vessels. *Journal of Plant Physiology*, 162(3), 355–361. <https://doi.org/10.1016/j.jplph.2004.07.015>
187. Lazova, G. N., Naidenova, T., and Velinova, K. (2004). Carbonic anhydrase activity and photosynthetic rate in the tree species *Paulownia tomentosa* Steud. Effect of dimethylsulfoxide treatment and zinc

- accumulation in leaves. *Journal of Plant Physiology*, 161(3), 295–301.
<https://doi.org/https://doi.org/10.1078/0176-1617-00900>
188. Le, K.-C., Dedicova, B., Johansson, S., Lelu-Walter, M., and Egertsdotter, U. (2021). Temporary immersion bioreactor system for propagation by somatic embryogenesis of hybrid larch (*Larix × eurolepis* Henry). *Biotechnology Reports*, 32, null.
<https://doi.org/10.1016/j.btre.2021.e00684>
189. Lee, T. J., Zobayed, S. M. A., Firmani, F., and Park, E. J. (2019). A novel automated transplanting system for plant tissue culture. *Biosystems Engineering*, 181, 63–72.
<https://doi.org/10.1016/J.BIOSYSTEMSENG.2019.02.012>
190. Li, X., Zhang, L., Ahammed, G. J., Li, Z. X., Wei, J. P., Shen, C., Yan, P., Zhang, L. P., and Han, W. Y. (2017). Stimulation in primary and secondary metabolism by elevated carbon dioxide alters green tea quality in *Camellia sinensis* L. *Scientific Reports* 2017 7:1, 7(1), 1–12.
<https://doi.org/10.1038/s41598-017-08465-1>
191. Li, Y., Xin, G., Liu, C., Shi, Q., Yang, F., and Wei, M. (2020). Effects of red and blue light on leaf anatomy, CO₂ assimilation and the photosynthetic electron transport capacity of sweet pepper (*Capsicum annuum* L.) seedlings. *BMC Plant Biology*, 20(1), 318. <https://doi.org/10.1186/s12870-020-02523-z>
192. Lin, W., Xiao, X., Sun, W., Liu, S., Wu, Q., Yao, Y., Zhang, H., and Zhang, X. (2022). Genome-Wide Identification and Expression Analysis of Cytosine DNA Methyltransferase Genes Related to Somaclonal Variation in Pineapple (*Ananas comosus* L.). *Agronomy*, 12(5).
<https://doi.org/10.3390/agronomy12051039>
193. Liu, F., Xing, S., Ma, H., Du, Z., and Ma, B. (2013). Cytokinin-producing, plant growth-promoting rhizobacteria that confer resistance to drought stress in *Platycladus orientalis* container seedlings. *Applied Microbiology and Biotechnology*, 97(20), 9155–9164. <https://doi.org/10.1007/S00253-013-5193-2>
194. Llanes, A., Andrade, A., Alemano, S., and Luna, V. (2018). Metabolomic Approach to Understand Plant Adaptations to Water and Salt Stress. In

- Plant Metabolites and Regulation under Environmental Stress.*
<https://doi.org/10.1016/B978-0-12-812689-9.00006-6>
195. Lopez-Guerrero, M. G., Wang, P., Phares, F., Schachtman, D. P., Alvarez, S., and van Dijk, K. (2022). A glass bead semi-hydroponic system for intact maize root exudate analysis and phenotyping. *Plant Methods*, 18(1). <https://doi.org/10.1186/s13007-022-00856-4>
196. Louback, E., Batista, D. S., Pereira, T. A. R., Mamedes-Rodrigues, T. C., Silva, T. D., Felipe, S. H. S., Rocha, D. I., Steinmacher, D. A., and Otoni, W. C. (2021). CO₂ enrichment leads to altered cell wall composition in plants of *Pfafia glomerata* (Spreng.) Pedersen (Amaranthaceae). *Plant Cell, Tissue and Organ Culture*, 145(3). <https://doi.org/10.1007/s11240-021-02031-4>
197. Lu, J., Ali, A., He, E., Yan, G., Arak, T., and Gao, S.-J. (2020). Establishment of an open, sugar-free tissue culture system for sugarcane micropropagation. *Sugar Tech*, 22, 8–14.
198. Lucchesini, M., Monteforti, G., Mensuali-Sodi, A. and Serra, G. 2006. Leaf ultrastructure, photosynthetic rate and growth of myrtle plantlets under different *in vitro* culture conditions. *Biol. Plant.* 50:161–168
199. Luis, S. J., and Jabín, B. J. (2023). CO₂-enriched air in a temporary immersion system induces photomixotrophism during *in vitro* multiplication in vanilla. *Plant Cell, Tissue and Organ Culture (PCTOC)*. <https://doi.org/10.1007/s11240-023-02546-y>
200. Ma, X., Wang, Y., Liu, M., Xu, J., and Xu, Z. (2015). Effects of green and red lights on the growth and morphogenesis of potato (*Solanum tuberosum* L.) plantlets *in vitro*. *Scientia Horticulturae*, 190, 104–109. <https://doi.org/https://doi.org/10.1016/j.scienta.2015.01.006>
201. Maciej Serda, Becker, F. G., Cleary, M., Team, R. M., Holtermann, H., The, D., Agenda, N., Science, P., Sk, S. K., Hinnebusch, R., Hinnebusch A, R., Rabinovich, I., Olmert, Y., Uld, D. Q. G. L. Q., Ri, W. K. H. U., Lq, V., Frxqwu, W. K. H., Zklfk, E., Edvhg, L. V, ... (2019). فاطمی، ح. Comprehensive Analysis of Liquid and Semisolid Culture System For *In vitro* Propagation and Conservation of *Caralluma edulis*: An Appetite Suppressant Medicinal Succulent of The Indian Thar Desert. *Plant Cell*

- Biotechnology and Molecular Biology*, 7(1), 1020–1031.
<Https://Doi.Org/10.2/Jquery.Min.Js>
202. Madi Waheed Al-Mayahi, A., and Hussian Ali, A. (2021). Effects of different types of gelling agents on in vitro organogenesis and some physicochemical properties of date palm buds, *Showathy* cv. 48(1), 110–117. <https://doi.org/10.2478/foecol-2021-0012>
203. Madiyah Mohd, N., Dalila Zawawi, D., and Alias, N. (2017). *In vitro* Somatic Embryos Multiplication of *Eurycoma longifolia* Jack using Temporary Immersion System RITA ® (Multiplikasi *In vitro* Embrio Somatik daripada *Eurycoma longifolia* Jack Menggunakan Sistem Rendaman Sementara RITA®). *Sains Malaysiana*, 46(6), 897–902. <https://doi.org/10.17576/jsm-2017-4606-08>
204. Maitra, S., Bhadra, P., Yadav, A. N., Palai, J. B., Jena, J., and Shankar, T. (2021). The Omics Strategies for Abiotic Stress Responses and Microbe-Mediated Mitigation in Plants. https://doi.org/10.1007/978-3-030-73507-4_12
205. Majada, J. P., Tadeo, F., Fal, M. A., and Sánchez-Tamés, R. (2000). Impact of culture vessel ventilation on the anatomy and morphology of micropropagated carnation. *Plant Cell, Tissue and Organ Culture*, 63(3), 207–214. <https://doi.org/10.1023/A:1010650131732>
206. Makunga, N. P., Jäger, A. K., and van Staden, J. (2006). Improved *in vitro* rooting and hyperhydricity in regenerating tissues of *Thapsia garganica* L. *Plant Cell, Tissue and Organ Culture*, 86(1), 77–86. <https://doi.org/10.1007/s11240-006-9100-8>
207. Malik, M., Warchał, M., and Pawłowska, B. (2018). Liquid Culture Systems Affect Morphological and Biochemical Parameters during *Rosa canina* Plantlets *In vitro* Production. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, 46(1), 58–64. <https://doi.org/10.15835/NBHA46110880>
208. Malik, M., Warchał, M., Kwaśniewska, E., and Pawłowska, B. (2017). Biochemical and morphometric analysis of *Rosa tomentosa* and *Rosa rubiginosa* during application of liquid culture systems for *in vitro* shoot production. *The Journal of Horticultural Science and Biotechnology*, 92(6), 606–613. <https://doi.org/10.1080/14620316.2017.1324744>

209. Mancilla-Álvarez, E., Pérez-Sato, J., Núñez-Pastrana, R., Spinoso-Castillo, J. L., and Bello-Bello, J. (2021). Comparison of Different Semi-Automated Bioreactors for *In vitro* Propagation of Taro (*Colocasia esculenta* L. Schott). *Plants*, 10, null. <https://doi.org/10.3390/plants10051010>
210. Mani, M., and Shekhawat, M. S. (2017). Foliar Micromorphology of *In vitro*-cultured Shoots and Field-grown Plants of *Passiflora foetida*. *Horticultural Plant Journal*, 3(1), 34–40. <https://doi.org/https://doi.org/10.1016/j.hpj.2017.01.009>
211. Mani, M., Rasangam, L., Selvam, P., and Shekhawat, M. S. (2021). Micro-morpho-anatomical mechanisms involve in epiphytic adaptation of micropropagated plants of *Vanda tessellata* (Roxb.) Hook. ex G. Don. *Microscopy Research and Technique*, 84(4). <https://doi.org/10.1002/jemt.23630>
212. Manivannan, A., Soundararajan, P., Halimah, N., Ko, C. H., and Jeong, B. R. (2015). Blue LED light enhances growth, phytochemical contents, and antioxidant enzyme activities of *Rehmannia glutinosa* cultured *in vitro*. *Horticulture Environment and Biotechnology*, 56(1). <https://doi.org/10.1007/s13580-015-0114-1>
213. Manokari, M., Badhepuri, M. K., Cokulraj, M., Dey, A., Rajput, V. D., Minkina, T., and Shekhawat, M. S. (2022a). Differential morphometric and micro-morpho-anatomical responses toward types of culture vessels used in micropropagation of *Hemidesmus indicus* (L.) R. Br. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 148(2), 439–446. <https://doi.org/10.1007/s11240-021-02189-x>
214. Manokari, M., Priyadharshini, S., and Shekhawat, M. S. (2021). Microstructural and histochemical variations during *in vitro* to *in vivo* plant developments in *Aloe vera* (L.) Burm.f (Xanthorrhoeaceae). *Industrial Crops and Products*, 160. <https://doi.org/10.1016/j.indcrop.2020.113162>
215. Manokari, M., Priyadharshini, S., and Shekhawat, M. S. (2022). Repairing mechanism of foliar micro-morphological anomalies during acclimatization and field transfer of *in vitro* raised plantlets of *Aerva lanata* (L.) Juss. ex Schult.: a medicinally important plant. *Vegetos*, 35(2). <https://doi.org/10.1007/s42535-021-00317-8>

216. Mansinhos, I., Gonçalves, S., Rodríguez-Solana, R., Ordóñez-Díaz, J. L., Moreno-Rojas, J. M., and Romano, A. (2022). Impact of Temperature on Phenolic and Osmolyte Contents in *In vitro* Cultures and Micropropagated Plants of Two Mediterranean Plant Species, *Lavandula viridis* and *Thymus lotoccephalus*. *Plants*, 11(24). <https://doi.org/10.3390/plants11243516>
217. Markovic, M., Trifunovic Momcillov, M., Uzelac, B., Cingel, A., Milosevic, S., Jevremovic, S., and Subotic, A. (2020). Breaking the dormancy of snake's head fritillary (*Fritillaria meleagris* L.) *in vitro* bulbs—part 1: Effect of ga3, ga inhibitors and temperature on fresh weight, sprouting and sugar content. *Plants*, 9(11). <https://doi.org/10.3390/plants9111449>
218. Martins, J. P. R., Verdoodt, V., Pasqual, M., and De Proft, M. (2015). Impacts of photoautotrophic and photomixotrophic conditions on *in vitro* propagated *Billbergia zebrina* (Bromeliaceae). *Plant Cell, Tissue and Organ Culture*, 123(1). <https://doi.org/10.1007/s11240-015-0820-5>
219. Maxwell, K. and Johnson, G.N. 2000. Chlorophyll fluorescence – A Practical Guide. *J. Exp. Bot.* 51:659–668.
220. Mehrotra, S., Kumar Goel, M., Kumar Kukreja, A., and Nath Mishra, B. (2007). Efficiency of liquid culture systems over conventional micropropagation: A progress towards commercialization. *African Journal of Biotechnology*, 6(13), 1484–1492. <http://www.academicjournals.org/AJB>
221. Mehta, R., Sharma, V., Sood, A., Sharma, M., and Sharma, R. K. (2011). Induction of somatic embryogenesis and analysis of genetic fidelity of *in vitro*-derived plantlets of *Bambusa nutans* Wall., using AFLP markers. *European Journal of Forest Research*, 130(5). <https://doi.org/10.1007/s10342-010-0462-4>
222. Melaku, T., Belaynesh, A., and Kassahun, B. (2016). *In vitro* Shoot Multiplication of Elite Sugarcane (*Saccharum officinarum* L.) Genotypes Using Liquid Shake Culture System. *Journal of Biology, Agriculture and Healthcare*, 6(1), 35–40.
223. Mendoza, D., Cuaspud, O., Arias, J. P., Ruiz, O., and Arias, M. (2018). Effect of salicylic acid and methyl jasmonate in the production of phenolic

- compounds in plant cell suspension cultures of *Thevetia peruviana*. *Biotechnology Reports*, 19. <https://doi.org/10.1016/j.btre.2018.e00273>
224. Michael, E.C, Breda, L. and Pierson, J.E. 2001. Staub. Micropropagation for recovery of *Cucumis hystrix*. *Plant Cell Tiss. Org. Cult.* 64:63–67.
225. Minchala-Buestán, N., Hoyos-Sánchez, R. A., and Correa-Londoño, G. A. (2023). Micropropagation of iraca palm (*Carludovica palmata* Ruiz y Pav) using a temporary immersion system. *In vitro Cellular and Developmental Biology - Plant*. <https://doi.org/10.1007/s11627-023-10362-4>
226. Mitra, A., Bhattacharya, P. S., Dey, S., Sawarkar, S. K., and Bhattacharyya, B. C. (1998). Photoautotropic *in vitro* culture of *Chrysanthemum* under CO₂ enrichment. *Biotechnology Techniques*, 12(4), 335–337. <https://doi.org/10.1023/A:1008837919556>
227. Modi, A. R., Patil, G., Kumar, N., Singh, A. S., and Subhash, N. (2012). A Simple and Efficient *In vitro* Mass Multiplication Procedure for *Stevia rebaudiana* Bertoni and Analysis of Genetic Fidelity of *In vitro* Raised Plants Through RAPD. *Sugar Tech*, 14(4). <https://doi.org/10.1007/s12355-012-0169-6>
228. Modi, P., Sinha, A., and Kothari, • S L. (2009). Floriculture and Ornamental Biotechnology Reduction of Hyperhydricity in Micropropagated French Marigold (*Tagetes patula* L.) Plants by Modified Medium Parameters.
229. Mohamed, M. A. H., and Alsadon, A. A. (2011). Effect of vessel type and growth regulators on micropropagation of *Capsicum annuum*. *Biologia Plantarum*, 55(2). <https://doi.org/10.1007/s10535-011-0057-z>
230. Mohamed, M. R., Ahmed, S. A., and Hussein, E. G. (2021). Advance Studies on Micropropagation of Date Palm. *Menoufia Journal of Plant Production*, 6(5), 313–314. <https://doi.org/10.21608/mjppf.2021.175594>
231. Mohapatra, P. P., and Batra, V. K. (2017). Tissue Culture of Potato (*Solanum tuberosum* L.): A Review. *International Journal of Current Microbiology and Applied Sciences*, 6(4), 489–495. <https://doi.org/10.20546/IJCMAS.2017.604.058>
232. Molinaria, H.B.C., Marura, C.J., Darosb, E., Freitas de Camposa, M.K., Portela de Carvalhoa, J.F.R., Filhob, J.C.B., Pereirac, L.F.P. and Vieiraa, L.G.E. 2007. Evaluation of the stress-inducible production of proline in

- transgenic sugarcane (*Saccharum* spp.): osmotic adjustment, chlorophyll fluorescence and oxidative stress. *Physiol. Plant.* 130 : 218–229.
233. Monja-Mio, K. M., Olvera-Casanova, D., Herrera-Alamillo, M. A., Sanchez-Teyer, F., and Robert, M. (2021). Comparison of conventional and temporary immersion systems on micropropagation (multiplication phase) of *Agave angustifolia* Haw. ‘Bacanora.’ 3 *Biotech.*, 11, 1–8. <https://doi.org/10.1007/s13205-020-02604-8>
234. Monja-Mio, K. M., Olvera-Casanova, D., Herrera-Herrera, G., Herrera-Alamillo, M. A., Sanchez-Teyer, F., and Robert, M. (2020). Improving of rooting and *ex vitro* acclimatization phase of *Agave tequilana* by temporary immersion system (BioMINTTM). *In vitro Cellular and Developmental Biology - Plant*, 56, 662–669. <https://doi.org/10.1007/s11627-020-10109-5>
235. Morini, S., and Melai, M. (2003). CO₂ dynamics and growth in photoautotrophic and photomixotrophic apple cultures. *Biologia Plantarum*, 47(2), 167–172. <https://doi.org/10.1023/B:BIOP.0000022246.09161.63/METRICS>
236. Mori, I. C., Ikeda, Y., Matsuura, T., Hirayama, T., & Mikami, K. (2017). Phytohormones in red seaweeds: A technical review of methods for analysis and a consideration of genomic data. *Botanica Marina*, 60(2), 153–170. <https://doi.org/10.1515/BOT-2016-0056>
237. Muhammet Dogan. (2022). *In vitro* Micropropagation of *Pogostemon erectus* (Dalzell) Kuntze in Liquid Culture Medium. *Journal*, 7(1), 80–88.
238. Murashige, T. and Skoog, F. 1962. A revised medium for rapid growth and bioassays with tobacco tissue culture. *Physiol. Plant.* 15:473–497.
239. Muthee, A. I., Gichimu, B. M., and Nthakanio, P. N. (2019). Analysis of banana production practices and constraints in Embu County, Kenya. *Asian Journal of Agriculture and Rural Development*, 9(1), 123.
240. Nápoles Borrero, L., Cid Ruiz, M., Escalona Morgado, M., Marrero Sánchez, P., Vásquez Morera, N., and Concepción Laffitte, O. (2017). Histological characterization of sugarcane shoots *in vitro* rooting in liquid culture medium. *Biotecnología Vegetal*, 17(2), 113–123.
241. Nazir, M., Tungunnithum, D., Bose, S., Drouet, S., Garros, L., Giglioli-Guivarc'h, N., Abbasi, B. H., and Hano, C. (2019). Differential Production

- of Phenylpropanoid Metabolites in Callus Cultures of *Ocimum basilicum* L. With Distinct *in vitro* Antioxidant Activities and *in vivo* Protective Effects against UV stress. *Journal of Agricultural and Food Chemistry*, 67(7). <https://doi.org/10.1021/acs.jafc.8b05647>
242. Nazir, R., Gupta, S., Dey, A., Kumar, V., Yousuf, M., Hussain, S., Dwivedi, P., and Pandey, D. K. (2021). *In vitro* propagation and assessment of genetic fidelity in *Dioscorea deltoidea*, a potent diosgenin yielding endangered plant. *South African Journal of Botany*, 140. <https://doi.org/10.1016/j.sajb.2020.07.018>
243. Nedjimi, B., Daoud, Y. and Touati, M. 2006. Growth, water relations, proline and ion content of *in vitro* cultured *Atriplex halimus* subsp. *schweinfurthii* as affected by CaCl₂. *Comm. Biom. Crop Sci.* 1:79–89.
244. Neto, A. R., Chagas, E. A., Costa, B. N. S., Chagas, P. C., and Vendrame, W. A. (2020). Photomixotrophic growth response of sugarcane *in vitro* plantlets using different light intensities and culture vessel types. *In vitro Cellular and Developmental Biology - Plant*, 56(4), 504–514. <https://doi.org/10.1007/s11627-020-10057-0>
245. Neumann, K.-H., Kumar, A., and Imani, J. (2020). Plant Propagation: Meristem Cultures, Somatic Embryogenesis Micropropagation, and Transformation of Somatic Embryos in Bioreactors. In K.-H. Neumann, A. Kumar, and J. Imani (Eds.), *Plant Cell and Tissue Culture – A Tool in Biotechnology: Basics and Application* (pp. 107–183). Springer International Publishing. https://doi.org/10.1007/978-3-030-49098-0_7
246. Nguyen, Q. T., Kozai, T., and Van Nguyen, U. (1999). Effects of sucrose concentration, supporting material and number of air exchanges of the vessel on the growth of *in vitro* coffee plantlets. *Plant Cell, Tissue and Organ Culture*, 58(1), 51–57. <https://doi.org/10.1023/A:1006310328743/METRICS>
247. Nhut, D. T., Tung, H. T., and Tanaka, M. (2018). Enhanced Growth and Development of *Cymbidium* and *Phalaenopsis* Plantlets Cultured In vitro Under Light-Emitting Diodes. https://doi.org/10.1007/978-1-4939-7771-0_10

248. Niedz, R. P., and Marutani-Hert, M. (2018). A filter paper-based liquid culture system for citrus shoot organogenesis—a mixture-amount plant growth regulator experiment. *In vitro Cellular and Developmental Biology - Plant*, 54(6), 658–671. <https://doi.org/10.1007/S11627-018-9940-Z>/METRICS
249. Nirmal, D., Teraiya, S., and Joshi, P. (2023). Liquid Culture System: An Efficient Approach for Sustainable Micropropagation. *Current Agriculture Research Journal*, 11(1), 28–42. <https://doi.org/10.12944/CARJ.11.1.03>
250. Norikane, A., Takamura, T., Morokuma, M., and Tanaka, M. (2010). *In vitro* growth and single-leaf photosynthetic response of *Cymbidium* plantlets to super-elevated CO₂ under cold cathode fluorescent lamps. *Plant Cell Reports*, 29(3), 273–283. <https://doi.org/10.1007/s00299-010-0820-1>
251. Okoroafor, U. E. (2022). Microbial Contamination in Plant Tissue Culture and Elimination Strategies. *Nigeria Agricultural Journal*, 53(2), 348–355. <https://www.ajol.info/index.php/naj/article/view/243321>
252. Olhoft, P. M., and Phillips, R. L. (2018). Genetic and Epigenetic Instability in Tissue Culture and Regenerated Progenies. In *Plant Responses to Environmental Stresses*. <https://doi.org/10.1201/9780203743157-7>
253. Osório, M.L., Osório, J. and Romano, A. 2010. Chlorophyll fluorescence in micropropagated *Rhododendron ponticum* subsp. *baeticum* plants in response to different irradiances. *Biol. Plant.* 54:415–422.
254. Pan, T., Ding, J., Qin, G., Wang, Y., Xi, L., Yang, J., Li, J., Zhang, J., and Zou, Z. (2019). Interaction of Supplementary Light and CO₂ Enrichment Improves Growth, Photosynthesis, Yield, and Quality of Tomato in Autumn through Spring Greenhouse Production. *HortScience Horts*, 54(2), 246–252. <https://doi.org/10.21273/HORTSCI13709-18>
255. Pandey, A., Belwal, T., Tamta, S., Bhatt, I. D., and Rawal, R. S. (2019). Phenolic compounds, antioxidant capacity and antimutagenic activity in different growth stages of *in vitro* raised plants of *Origanum vulgare* L. *Molecular Biology Reports*, 46(2). <https://doi.org/10.1007/s11033-019-04678-x>
256. Pania, M., Senaratna, T., Bunn, E., Dixon, K.W. and Sivasithamparam, K. 2000. Micropropagation of the critically endangered western Australian

- species, *Symanthus bancroftii* (F. Muell.) L. Haegi (Solanaceae). *Plant Cell Tiss. Org. Cult.* 63:23–39.
257. Parida, A.K. and Das, A.B. 2005. Salt tolerance and salinity effects on plants: A review. *Ecotoxicology and Environmental Safety* 60: 324–349.
258. Park, J. E., Park, Y. G., Thi, L. T., Soundararajan, P., and Jeong, B. R. (2018). Effect of sucrose concentration, photosynthetic photon flux density, and CO₂ concentration on growth and development of micropropagated Mountain ash. *Propagation of Ornamental Plants*, 18(2).
259. Pasternak, T., Potters, G., Caubergs, R., and Jansen, M. A. K. (2005). Complementary interactions between oxidative stress and auxins control plant growth responses at plant, organ, and cellular level. *Journal of Experimental Botany*, 56(418), 1991–2001. <https://doi.org/10.1093/jxb/eri196>
260. Patil, S. M., Kumari, V. B. C., Sumana, K., Sujay, S., Tejaswini, M., Shirahatti, P. S., and Ramu, R. (2021). Sustainable development of plant tissue culture industry: The Indian scenario. *Journal of Applied Biology and Biotechnology*, 9(2), 18–27. <https://doi.org/10.7324/JABB.2021.9202>
261. Paul, A., Thapa, G., Basu, A., Mazumdar, P., Kalita, M. C., and Sahoo, L. (2010). Rapid plant regeneration, analysis of genetic fidelity and essential aromatic oil content of micropropagated plants of *Patchouli*, *Pogostemon cablin* (Blanco) Benth. - An industrially important aromatic plant. *Industrial Crops and Products*, 32(3). <https://doi.org/10.1016/j.indcrop.2010.05.020>
262. Pepe, M., Leonardos, E. D., Marie, T. R. J. G., Kyne, S. T., Hesami, M., Jones, A. M. P., and Grodzinski, B. (2022). A Noninvasive Gas Exchange Method to Test and Model Photosynthetic Proficiency and Growth Rates of *In vitro* Plant Cultures: Preliminary Implication for Cannabis sativa L. *Biology*, 11(5). <https://doi.org/10.3390/biology11050729>
263. Pérez-Jiménez, M., Bayo-Canha, A., López-Ortega, G., and del Amor, F. M. (2017). Growth, plant quality, and survival of sweet cherry (*Prunus avium* L.) seedlings are enhanced by CO₂ enrichment. *HortScience*, 52(12). <https://doi.org/10.21273/HORTSCI12337-17>
264. Pérez-Jiménez, M., López-Pérez, A. J., Otálora-Alcón, G., Marín-Nicolás, D., Piñero, M. C., and del Amor, F. M. (2015). A regime of high CO₂

- concentration improves the acclimatization process and increases plant quality and survival. *Plant Cell, Tissue and Organ Culture*, 121(3). <https://doi.org/10.1007/s11240-015-0724-4>
265. Perrier, X., De Langhe, E., Donohue, M., Lentfer, C., Vrydaghs, L., Bakry, F., Carreel, F., Hippolyte, I., Horry, J. P., Jenny, C., Lebot, V., Risterucci, A. M., Tomekpe, K., Doutrelépont, H., Ball, T., Manwaring, J., De Maret, P., and Denham, T. (2011). Multidisciplinary perspectives on (*Musa* spp.) domestication. *Proceedings of the National Academy of Sciences of the United States of America*, 108(28), 11311–11318. https://doi.org/10.1073/PNAS.1102001108/SUPPL_FILE/ST04.DOC
266. Pinheiro, M. V. M., Ríos-Ríos, A. M., da Cruz, A. C. F., Rocha, D. I., Orbes, M. Y., Saldanha, C. W., Batista, D. S., de Carvalho, A. C. P. P., and Otoni, W. C. (2021). CO₂ enrichment alters morphophysiology and improves growth and acclimatization in *Etlingera elatior* (Jack) R.M. Smith micropropagated plants. *Brazilian Journal of Botany*, 44(4), 799–809. <https://doi.org/10.1007/s40415-021-00741-9>
267. Prasad, K., Das, A. K., Oza, M. D., Brahmbhatt, H., Siddhanta, A. K., Meena, R., Eswaran, K., Rajyaguru, M. R., & Ghosh, P. K. (2010). Detection and quantification of some plant growth regulators in a seaweed-based foliar spray employing a mass spectrometric technique sans chromatographic separation. *Journal of Agricultural and Food Chemistry*, 58(8), 4594–4601. https://doi.org/10.1021/JF904500E/SUPPL_FILE/JF904500E_SI_001.PDF
268. Pirata, M. S., Correia, S., and Canhoto, J. (2022). *Ex vitro* Simultaneous Acclimatization and Rooting of *In vitro* Propagated Tamarillo Plants (*Solanum betaceum* Cav.): Effect of the Substrate and Mineral Nutrition. *Agronomy*, 12(5). <https://doi.org/10.3390/agronomy12051082>
269. Prakash, S., Hoque, M.I. and Brinks, T. 2004. Culture media and containers. In: “Low-cost options for tissue culture technology in developing countries”. Proceedings of a technical meeting organized by the joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture (26–30 August, 2002), Vienna, Austria, pp 29 – 40. International Atomic Energy Agency, Vienna, Austria.

270. Prasad, A., Shukla, S. P., Mathur, A., Chanotiya, C. S., and Mathur, A. K. (2015). Genetic fidelity of long-term micropropagated *Lavandula officinalis* Chaix.: an important aromatic medicinal plant. *Plant Cell, Tissue and Organ Culture*, 120(2). <https://doi.org/10.1007/s11240-014-0637-7>
271. Premkumar, G., Karuppanapandian, T., Sureshpandian, C., Arumugam, N., Selvam, A., and Rajarathinam, K. (2020). Optimization of a Liquid Culture System for Shoot Regeneration and Achieving an Enriched Level of Scopadulcic Acid B in the Leaf Organ Cultures of *Scoparia dulcis* L. by Response Surface Methodology. *In vitro Cellular and Developmental Biology - Plant*, 56(1), 60–71. <https://doi.org/10.1007/S11627-019-10037-Z>/METRICS
272. Purohit, S. D., Teixeira da Silva, J. A., and Habibi, N. (2011). Current approaches for cheaper and better micropropagation technologies. *Int J Plant Dev Biol*, 5, 1–36.
273. Quiala, E., Cañal, M., Meijón, M., Rodríguez, R., Chavez, M., Valledor, L., Feria, M. D., and Barbón, R. (2012). Morphological and physiological responses of proliferating shoots of teak to temporary immersion and BA treatments. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 109, 223–234. <https://doi.org/10.1007/s11240-011-0088-3>
274. Rabot, A., Henry, C., Baaziz, K. Ben, Mortreau, E., Azri, W., Lothier, J., Hamama, L., Boummaza, R., Leduc, N., Pelleschi-Travier, S., Le Gourrierec, J., and Sakr, S. (2012). Insight into the role of sugars in bud burst under light in the rose. *Plant and Cell Physiology*, 53(6). <https://doi.org/10.1093/pcp/pcs051>
275. Radochova, B. and Ticha, I. 2009. Leaf anatomy during leaf development of photoautotrophically *in vitro* grown tobacco plants as affected by growth irradiance. *Biol. Plant.* 53:21–27
276. Rahman, M. H., and Alsadon, A. A. (2007). Photoautotrophic and Photomixotrophic Micropropagation of Three Potato Cultivars. *Journal of Bio-Science*, 15, 111–116. <https://doi.org/10.3329/JBS.V15I0.2210>
277. Ramírez-Mosqueda, M. A., Cruz-Cruz, C. A., Cano-Ricárdez, A., and Bello-Bello, J. J. (2019). Assessment of different temporary immersion systems in

- the micropropagation of anthurium (*Anthurium andreanum*). *3 Biotech*, 9(8), 307. <https://doi.org/10.1007/s13205-019-1833-2>
278. Ranjha, M. M. A. N., Irfan, S., Nadeem, M., and Mahmood, S. (2022). A Comprehensive Review on Nutritional Value, Medicinal Uses, and Processing of Banana. *Food Reviews International*, 38(2), 199–225. <https://doi.org/10.1080/87559129.2020.1725890>
279. Rawat, J. M., Rawat, B., Mehrotra, S., Chandra, A., and Nautiyal, S. (2013). ISSR and RAPD based evaluation of genetic fidelity and active ingredient analysis of regenerated plants of *Picrorhiza kurroa*. *Acta Physiologiae Plantarum*, 35(6). <https://doi.org/10.1007/s11738-013-1217-x>
280. Regueira, M., Rial, E., Blanco, B., Bogo, B., Aldrey, A., Correa, B., Varas, E., Sánchez, C., and Vidal, N. (2018). Micropropagation of axillary shoots of *Salix viminalis* using a temporary immersion system. *Trees*, 32, 61–71. <https://doi.org/10.1007/s00468-017-1611-x>
281. Revathi, J., Manokari, M., Latha, R., Priyadarshini, S., Kher, M. M., and Shekhawat, M. S. (2019). *In vitro* propagation, *in vitro* flowering, *ex vitro* root regeneration and foliar micro-morphological analysis of *Hedyotis biflora* (Linn.) Lam. *Vegetos*, 32(4). <https://doi.org/10.1007/s42535-019-00066-9>
282. Rezali, N. I., Jaafar Sidik, N., Saleh, A., Osman, N. I., and Mohd Adam, N. A. (2017). The effects of different strength of MS media in solid and liquid media on *in vitro* growth of *Typhonium flagelliforme*. *Asian Pacific Journal of Tropical Biomedicine*, 7(2), 151–156. <https://doi.org/10.1016/J.APJTB.2016.11.019>
283. Rico, S., Garrido, J., Sánchez, C., Ferreiro-Vera, C., Codesido, V., and Vidal, N. (2022). A Temporary Immersion System to Improve *Cannabis sativa* Micropropagation. *Frontiers in Plant Science*, 13, null. <https://doi.org/10.3389/fpls.2022.895971>
284. Rocha, T. T., Araújo, D. X., da Silva, A. M., de Oliveira, J. P. V., de Carvalho, A. A., Gavilanes, M. L., Bertolucci, S. K. V., Alves, E., and Pinto, J. E. B. P. (2022). Morphoanatomy and changes in antioxidant defense associated with the natural ventilation system of micropropagated *Lippia*

- dulcis* plantlets. *Plant Cell, Tissue and Organ Culture*, 151(3).
<https://doi.org/10.1007/s11240-022-02364-8>
285. Rogers, H.H., Runion, G.B. and Krupa, S.V. 1994. Plant responses to atmospheric CO₂ enrichment with emphasis on roots and the rhizosphere. *Environ. Pollution* 83:155–189.
286. Rohela, G. K., Jogam, P., Bylla, P., and Reuben, C. (2019). Indirect regeneration and assessment of genetic fidelity of acclimated plantlets by scot, issr, and rapd markers in *Rauwolfia tetraphylla* L: An endangered medicinal plant. *BioMed Research International*, 2019.
<https://doi.org/10.1155/2019/3698742>
287. Rohini, M. R. (2020). Biotechnological Interventions for Conservation and Multiplication of Threatened Medicinal Plants. *Conservation and Utilization of Threatened Medicinal Plants*, 135–158. https://doi.org/10.1007/978-3-030-39793-7_6/TABLES/5
288. Ruta, C., De Mastro, G., Ancona, S., Tagarelli, A., De Cillis, F., Benelli, C., and Lambardi, M. (2020). Large-Scale Plant Production of *Lycium barbarum* L. by Liquid Culture in Temporary Immersion System and Possible Application to the Synthesis of Bioactive Substance. *Plants* 2020, Vol. 9, Page 844, 9(7), 844. <https://doi.org/10.3390/PLANTS9070844>
289. Saha, N., and Dutta Gupta, S. (2018). Promotion of shoot regeneration of *Swertia chirata* by biosynthesized silver nanoparticles and their involvement in ethylene interceptions and activation of antioxidant activity. *Plant Cell, Tissue and Organ Culture*, 134(2). <https://doi.org/10.1007/s11240-018-1423-8>
290. Sajeevan, R. S., Nataraja, K. N., Shivashankara, K. S., Pallavi, N., Gurumurthy, D. S., and Shivanna, M. B. (2017). Expression of arabidopsis SHN1 in Indian mulberry (*Morus indica* L.) increases leaf surface wax content and reduces post-harvest water loss. *Frontiers in Plant Science*, 8. <https://doi.org/10.3389/fpls.2017.00418>
291. Salaj, T., Hazubska-Przybyl, T., Matúšová, R., Klubicová, K., and Salaj, J. (2016). Biological characterisation of *Pinus nigra* Arn. embryogenic tissues in liquid culture system. *Dendrologické Dni v Arboréte Mlyňany SAV 2016'*

- "Dreviny v Meniacom Sa Prostredí Vieska Nad Žitavou, Slovakia 2016.
Recenzovaný Zborník Prispevkov z Vedeckej Konferencie, 220–223.
292. Saldanha, C. W., Otoni, C. G., Notini, M. M., Kuki, K. N., da Cruz, A. C. F., Neto, A. R., Dias, L. L. C., and Otoni, W. C. (2013b). A CO₂-enriched atmosphere improves *in vitro* growth of Brazilian ginseng [*Pfaffia glomerata* (Spreng.) Pedersen]. *In vitro Cellular and Developmental Biology - Plant* 2013 49:4, 49(4), 433–444. <https://doi.org/10.1007/S11627-013-9529-5>
293. Salomon, M. V., Bottini, R., de Souza Filho, G. A., Cohen, A. C., Moreno, D., Gil, M., and Piccoli, P. (2014). Bacteria isolated from roots and rhizosphere of *Vitis vinifera* retard water losses, induce abscisic acid accumulation and synthesis of defense-related terpenes in *in vitro* cultured grapevine. *Physiologia Plantarum*, 151(4). <https://doi.org/10.1111/ppl.12117>
294. Salunkhe, P., Mahajan, M., Sharma, V., and Trivedi, D. (2022). Commercialization of Plant Tissue Culture in India: A Review. *Asian Biotechnology and Development Review*, 24(2).
295. Sandal, I., Bhattacharya, A. and Ahuja, P.S. 2001. An efficient liquid culture system for tea shoot proliferation. *Plant Cell Tiss. Org. Cult.* 65:75–80.
296. Santos, G. C., Cardoso, F. P., Martins, A. D., Pasqual, M., Ossani, P. C., Queiroz, J. M., Rezende, R. A. L. S., and Dória, J. (2020). Effect of light and sucrose on photoautotrophic and photomixotrophic micropropagation of physalis angulata. *Bioscience Journal*, 36(4). <https://doi.org/10.14393/BJ-v36n4a2020-47738>
297. Sasongko, A. B., Fatumi, A., and Indrianto, A. (2017). The Growth Improvement of *Grammatophyllum scriptum* (Lindl.) Bl. *In vitro* Plantlet using Photoautotrophic Micropropagation System. *Indonesian Journal of Biotechnology*, 21(2). <https://doi.org/10.22146/ijbiotech.27167>
298. Saxena, R., Singh, N. P., Balaji, S. J., Ahuja, U., Kumar, R., and Joshi, D. (2017). Doubling Farmers' Income in India by 2022–23: Sources of Growth and Approaches. *Agricultural Economics Research Review*, 30(2), 277. <https://doi.org/10.5958/0974-0279.2017.00047.7>
299. Stirk, W. A., Bálint, P., Tarkowská, D., Novák, O., Strnad, M., Ördög, V., & van Staden, J. (2013). Hormone profiles in microalgae: Gibberellins and

- brassinosteroids. *Plant Physiology and Biochemistry*, 70, 348–353.
<https://doi.org/10.1016/J.PLAPHY.2013.05.037>
300. Schmildt, O., Netto, A. T., Schmildt, E. R., Carvalho, V. S., Otoni, W. C., and Campostrini, E. (2015). Photosynthetic capacity, growth and water relations in ‘Golden’ papaya cultivated *in vitro* with modifications in light quality, sucrose concentration and ventilation. *Theoretical and Experimental Plant Physiology*, 27(1). <https://doi.org/10.1007/s40626-014-0026-y>
301. Schreiber, U., and Klughammer, C. (2021). Evidence for variable chlorophyll fluorescence of photosystem I *in vivo*. *Photosynthesis Research*, 149(1–2). <https://doi.org/10.1007/s11120-020-00814-y>
302. Shahzad, A., Sharma, S., Parveen, S., Saeed, T., Shaheen, A., Akhtar, R., Yadav, V., Upadhyay, A., and Ahmad, Z. (2017). Historical Perspective and Basic Principles of Plant Tissue Culture. In M. Z. Abdin, U. Kiran, Kamaluddin, and A. Ali (Eds.), *Plant Biotechnology: Principles and Applications* (pp. 1–36). Springer Singapore. https://doi.org/10.1007/978-981-10-2961-5_1
303. Sharma, A., Kumar, V., Shahzad, B., Ramakrishnan, M., Singh Sidhu, G. P., Bali, A. S., Handa, N., Kapoor, D., Yadav, P., Khanna, K., Bakshi, P., Rehman, A., Kohli, S. K., Khan, E. A., Parihar, R. D., Yuan, H., Thukral, A. K., Bhardwaj, R., and Zheng, B. (2020). Photosynthetic Response of Plants Under Different Abiotic Stresses: A Review. In *Journal of Plant Growth Regulation* (Vol. 39, Issue 2). <https://doi.org/10.1007/s00344-019-10018-x>
304. Sharma, S. K., Bryan, G. J., Winfield, M. O., and Millam, S. (2007). Stability of potato (*Solanum tuberosum* L.) plants regenerated via somatic embryos, axillary bud proliferated shoots, microtubers and true potato seeds: A comparative phenotypic, cytogenetic and molecular assessment. *Planta*, 226(6). <https://doi.org/10.1007/s00425-007-0583-2>
305. Sharma, S., Kaur, R., and Kumar, K. (2019). Studies on genetic fidelity of long term micropropagated culture derived plants of ofra strawberry using molecular markers. *Indian Journal of Horticulture*, 76(4). <https://doi.org/10.5958/0974-0112.2019.00096.3>
306. Shekhawat, M. S., Kannan, N., Manokari, M., and Ramanujam, M. P. (2014). An Efficient Micropropagation Protocol for High-Frequency Plantlet

- Regeneration from Liquid Culture of Nodal Tissues in a Medicinal Plant, *Turnera ulmifolia* L. *Journal of Sustainable Forestry*, 33(4). <https://doi.org/10.1080/10549811.2013.847793>
307. Shekhawat, M. S., Latha, R., Priyadharshini, S., and Manokari, M. (2022). Improved micropropagation, morphometric traits and photosynthetic pigments content using liquid culture system in *Spathoglottis plicata* Blume. *Vegetos*, 35(1), 9–18. <https://doi.org/10.1007/S42535-021-00303-0/METRICS>
308. Shekhawat, M. S., Mehta, S. R., Manokari, M., Priyadharshini, S., Badhepuri, M. K., Jogam, P., Dey, A., and Rajput, B. S. (2021). Morpho-anatomical and physiological changes of Indian sandalwood (*Santalum album* L.) plantlets in *ex vitro* conditions to support successful acclimatization for plant mass production. *Plant Cell, Tissue and Organ Culture*, 147(3). <https://doi.org/10.1007/s11240-021-02136-w>
309. Shetty, K. (2004). Role of proline-linked pentose phosphate pathway in biosynthesis of plant phenolics for functional food and environmental applications: a review. *Process Biochemistry*, 39(7), 789–804. [https://doi.org/10.1016/S0032-9592\(03\)00088-8](https://doi.org/10.1016/S0032-9592(03)00088-8)
310. Shukla, M. R., Piunno, K., Saxena, P. K., and Jones, A. M. P. (2020). Improved *in vitro* rooting in liquid culture using a two-piece scaffold system. *Engineering in Life Sciences*, 20(3–4), 126–132. <https://doi.org/10.1002/ELSC.201900133>
311. Silva, E. C. e, Sibov, S. T., Santos, F. C. A. dos, and Gonçalves, L. A. (2020). Influence of test tube sealing on the morpho-anatomy and ultrastructure of leaves of *Aechmea bromeliifolia* (Bromeliaceae) grown *in vitro*. *Rodriguésia*, 71. <https://doi.org/10.1590/2175-7860202071001>
312. Silva, S. T., Bertolucci, S. K. V., da Cunha, S. H. B., Lazzarini, L. E. S., Tavares, M. C., and Pinto, J. E. B. P. (2017). Effect of light and natural ventilation systems on the growth parameters and carvacrol content in the *in vitro* cultures of *Plectranthus amboinicus* (Lour.) Spreng. *Plant Cell, Tissue and Organ Culture*, 129(3). <https://doi.org/10.1007/s11240-017-1195-6>

313. Singh, A. (2015). Micropropagation of plants. *Plant Biology and Biotechnology: Volume II: Plant Genomics and Biotechnology*, 329–346. [https://doi.org/10.1007/978-81-322-2283-5_16/COVER](https://doi.org/10.1007/978-81-322-2283-5_16)
314. Singh, A. (2018). Efficient Micropropagation Protocol for *Jatropha Curcas* Using Liquid Culture Medium. *Journal of Crop Science and Biotechnology*, 21(1), 89–94. [https://doi.org/10.1007/S12892-017-0004-0/METRICS](https://doi.org/10.1007/S12892-017-0004-0)
315. Soni, V., Keswani, K., Bhatt, U., Kumar, D., and Singh, H. (2021). *In vitro* propagation and analysis of mixotrophic potential to improve survival rate of *Dolichandra unguiscati* under *ex vitro* conditions. *Heliyon*, 7(2). <https://doi.org/10.1016/j.heliyon.2021.e06101>
316. Sorcia-Morales, M., Gómez-Merino, F. C., Sánchez-Segura, L., Spinoso-Castillo, J. L., and Bello-Bello, J. J. (2021). Multi-walled carbon nanotubes improved development during *in vitro* multiplication of sugarcane (*Saccharum* spp.) in a semi-automated bioreactor. *Plants*, 10(10). <https://doi.org/10.3390/plants10102015>
317. Spinoso-Castillo, J. L., Chavez-Santoscoy, R. A., Bogdanchikova, N., Pérez-Sato, J. A., Morales-Ramos, V., and Bello-Bello, J. J. (2017). Antimicrobial and hormetic effects of silver nanoparticles on *in vitro* regeneration of vanilla (*Vanilla planifolia* Jacks. ex-Andrews) using a temporary immersion system. *Plant Cell, Tissue and Organ Culture*, 129(2), 195–207. <https://doi.org/10.1007/s11240-017-1169-8>
318. Sreelekshmi, R., Siril, E. A., and Muthukrishnan, S. (2021). Role of Biogenic Silver Nanoparticles on Hyperhydricity Reversion in *Dianthus chinensis* L. an *In vitro* Model Culture. *Journal of Plant Growth Regulation*, 0123456789. <https://doi.org/10.1007/s00344-020-10276-0>
319. Srivastava, V., Khan, S. A., and Banerjee, S. (2009). An evaluation of genetic fidelity of encapsulated microshoots of the medicinal plant: *Cineraria maritima* following six months of storage. *Plant Cell, Tissue and Organ Culture*, 99(2). <https://doi.org/10.1007/s11240-009-9593-z>
320. Stevens, M. E., and Pijut, P. M. (2018). Rapid *in vitro* shoot multiplication of the recalcitrant species *Juglans nigra* L. *In vitro Cellular and Developmental Biology - Plant*, 54(3), 309–317. [https://doi.org/10.1007/S11627-018-9892-3/METRICS](https://doi.org/10.1007/S11627-018-9892-3)

321. Su, Y.-H., Liu, Y.-B., and Zhang, X.-S. (2011). Auxin-Cytokinin Interaction Regulates Meristem Development. *Molecular Plant*, 4, 616–625. <https://doi.org/10.1093/mp/ssr007>
322. Suman, S. (2017). Plant tissue culture: A promising tool of quality material production with special reference to micropropagation of banana. *Biochemical and Cellular Archives*, 17(1).
323. Supuran, C. T. (2018). Carbonic anhydrases and metabolism. In *Metabolites* (Vol. 8, Issue 2). <https://doi.org/10.3390/metabo8020025>
324. Taku, M., Nagaraja, T. E., Lohithaswa, H. C., Shivakumar, K. V., and Yadav, S. (2020). *Ex vitro* hardening of sugarcane (*Saccharum* Species Hybrid) clones for rapid multiplication. *Indian Journal of Agricultural Sciences*, 90(12). <https://doi.org/10.56093/ijas.v90i12.110344>
325. Tandon, P. 1976. Further studies on the process of gall induction of *Zizyphus* and the factors involved. Ph.D. Thesis, Jodhpur University, Jodhpur, India.
326. Tarfeen, N., Nisa, Q., Khair-Ul-Nisa, and Kahlief, K. (2022). Antioxidant Defense System in Plants Against Biotic Stress. In *Antioxidant Defense in Plants: Molecular Basis of Regulation*. https://doi.org/10.1007/978-981-16-7981-0_17
327. Tascan, A., Adelberg, J., Tascan, M., Rimando, A., Joshee, N., and Yadav, A. K. (2010). Hyperhydricity and Flavonoid Content of *Scutellaria* Species *In vitro* on Polyester-supported Liquid Culture Systems. *HortScience*, 45(11), 1723–1728. <https://doi.org/10.21273/HORTSCI.45.11.1723>
328. Tejavathi, D. H., Devaraj, V. R., Murthy, S. M., Nijagunaiah, R., and Shobha, K. (2010). Effect of PEG induced osmotic stress on proline, protein and relative water content in *in vitro* plants of *Macrotyloma uniflorum* (Lam.) Verdc. *Acta Horticulturae*, 865. <https://doi.org/10.17660/actahortic.2010.865.10>
329. Thakur, M., Rakshanda, Sharma, V., and Chauhan, A. (2021). Genetic fidelity assessment of long term *in vitro* shoot cultures and regenerated plants in Japanese plum cvs *Santa rosa* and Frontier through RAPD, ISSR and SCoT markers. *South African Journal of Botany*, 140. <https://doi.org/10.1016/j.sajb.2020.11.005>

330. Thaniarasu, R., Senthil Kumar, T., and Rao, M. V. (2018). Rapid *in vitro* propagation by liquid culture system and genetic homogeneity assessment of *Plectranthus bourneae* Gamble, an endemic plant species to South India. *Indian Journal of Plant Physiology*, 23(2), 376–384. [https://doi.org/10.1007/S40502-018-0369-5/METRICS](https://doi.org/10.1007/S40502-018-0369-5)
331. Thorne, H. B., Axtens, J., and Best, T. (2022). Perceptual Factors Influencing the Adoption of Innovative Tissue Culture Technology by the Australian Avocado Industry. *Agriculture 2022, Vol. 12, Page 1288*, 12(9), 1288. <https://doi.org/10.3390/AGRICULTURE12091288>
332. Tisarum, R., Samphumphung, T., Theerawitaya, C., Prommee, W., and Chatum, S. (2018). *In vitro* photoautotrophic acclimatization, direct transplantation and *ex vitro* adaptation of rubber tree (*Hevea brasiliensis*). *Plant Cell, Tissue and Organ Culture*, 133(2). <https://doi.org/10.1007/s11240-017-1374-5>
333. Tisserat, B. and Silman, R. 2000. Interactions of culture vessels, media volume, culture density and carbon dioxide levels of lettuce and spearmint shoot growth *in vitro*. *Plant Cell Rep.* 19:464–471.
334. Trentini, G. E., Rojas, M., Gajardo, D., Alburquerque, D., Villagra, E., Gómez, A., Arru, L., and Arencibia, A. D. (2021). Elicitation of phenylpropanoids in maqui (*Aristotelia chilensis* [Mol.] Stuntz) plants micropropagated in photomixotrophic temporary immersion bioreactors (TIBs). *Plant Cell, Tissue and Organ Culture*, 146(3). <https://doi.org/10.1007/s11240-021-02097-0>
335. Twaij, B. M., Jazar, Z. H., and Hasan, M. N. (2020). Trends in the Use of Tissue Culture, Applications and Future Aspects. *International Journal of Plant Biology 2020*, Vol. 11, Page 8385, 11(1), 8385. <https://doi.org/10.4081/PB.2020.8385>
336. Uma, S., Karthic, R., Kalpana, S., Backiyarani, S., and Saraswathi, M. (2021). A novel temporary immersion bioreactor system for large scale multiplication of banana (*Rasthali* AAB—Silk). *Scientific Reports*, 11, null. <https://doi.org/10.1038/s41598-021-99923-4>

337. Us-Camas, R., Rivera-Solís, G., Duarte-Aké, F., and De-la-Peña, C. (2014). *In vitro* culture: An epigenetic challenge for plants. *Plant Cell, Tissue and Organ Culture*, 118(2). <https://doi.org/10.1007/s11240-014-0482-8>
338. Uzelac, B., Stojičić, D., and Budimir, S. (2021). Glandular Trichomes on the Leaves of *Nicotiana tabacum*: Morphology, Developmental Ultrastructure, and Secondary Metabolites. https://doi.org/10.1007/978-3-030-30185-9_1
339. Vahdati, K., Asayesh, Z. M., Aliniaefard, S., and Leslie, C. (2017). Improvement of *Ex vitro* Desiccation through Elevation of CO₂ Concentration in the Atmosphere of Culture Vessels during *In vitro* Growth. *HortScience*, 52(7), 1006–1012. <https://doi.org/10.21273/HORTSCI11922-17>
340. Vaidya, B. N., Asanakunov, B., Shahin, L., Jernigan, H. L., Joshee, N., and Dhekney, S. A. (2019). Improving micropropagation of *Mentha piperita* L. using a liquid culture system. *In vitro Cellular and Developmental Biology - Plant*, 55(1), 71–80. <https://doi.org/10.1007/S11627-018-09952-4/METRICS>
341. Valero–Aracama, C., Wilson, S.B., Kane, M.E. and Philman, N. 2007. Influence of *in vitro* growth conditions on *in vitro* and *ex vitro* photosynthetic rates of easy– and difficult–to–acclimatize sea oats (*Uniola paniculata* L.) genotypes. *In vitro Cell. Dev. Biol.– Plant* 43:237–246.
342. Van Huylenbroeck, J.M. and Riek, J.D. 2005. Sugar and starch metabolism during *ex vitro* rooting and acclimatization of micropropagated *Spathiphyllum 'Petite'* plantlets. *Plant Sci.* 111:19–25.
343. van Rossum, M. W. P. C., Alberda, M., and van der Plas, L. H. W. (1997). Role of oxidative damage in tulip bulb scale micropropagation. *Plant Science*, 130(2), 207–216. [https://doi.org/https://doi.org/10.1016/S0168-9452\(97\)00215-X](https://doi.org/https://doi.org/10.1016/S0168-9452(97)00215-X)
344. Varutharaju, K., Thilip, C., Raja, P., Thiagu, G., Aslam, A., and Shajahan, A. (2021). An Improved liquid Culture System for Efficient Shoot Multiplication in *Aerva lanata* (L.) Juss. Ex Schult. *Plant Tissue Culture and Biotechnology*, 31(1), 35–42. <https://doi.org/10.3329/PTCB.V31I1.54109>
345. Vendrame, W. A., Xu, J., and Beleski, D. G. (2023). Micropropagation of *Brassavola nodosa* (L.) Lindl. using SETIS™ bioreactor. *Plant Cell, Tissue*

- and *Organ Culture (PCTOC)*, 153(1), 67–76.
<https://doi.org/10.1007/s11240-022-02441-y>
346. Venkatesan, J., Ramu, V., Sethuraman, T., Sivagnanam, C., and Doss, G. (2022). Assessing the genetic fidelity of somatic embryo-derived plantlets of finger millet by random amplified polymorphic DNA analysis. *Biotechnology Letters*, 44(12). <https://doi.org/10.1007/s10529-022-03305-3>
347. Verma, S., Modgil, M., and Patidar, S. (2021). *In vitro* screening of apple rootstock MM106 somaclones with *Phytophthora cactorum* culture filtrate. *Journal of Plant Pathology*, 103(1). <https://doi.org/10.1007/s42161-020-00722-z>
348. Vidal, N., and Sánchez, C. (2019). Use of bioreactor systems in the propagation of forest trees. *Engineering in Life Sciences*, 19, 896–915. <https://doi.org/10.1002/elsc.201900041>
349. Vives, K., Andújar, I., Lorenzo, J. C., Concepción, O., Hernández, M., and Escalona, M. (2017). Comparison of different *in vitro* micropropagation methods of *Stevia rebaudiana* B. including temporary immersion bioreactor (BIT®). *Plant Cell, Tissue and Organ Culture (PCTOC)*, 131(1), 195–199. <https://doi.org/10.1007/s11240-017-1258-8>
350. Vinoth, S., Gurusaravanan, P., and Jayabalan, N. (2012). Effect of seaweed extracts and plant growth regulators on high-frequency *in vitro* mass propagation of *Lycopersicon esculentum* L (tomato) through double cotyledonary nodal explant. *Journal of Applied Phycology*, 24(5), 1329–1337. <https://doi.org/10.1007/S10811-011-9717-9/METRICS>
351. Voelker, S. L., Brooks, J. R., Meinzer, F. C., Anderson, R., Bader, M. K.-F., Battipaglia, G., Becklin, K. M., Beerling, D., Bert, D., Betancourt, J. L., Dawson, T. E., Domec, J.-C., Guyette, R. P., Körner, C., Leavitt, S. W., Linder, S., Marshall, J. D., Mildner, M., Ogée, J., ... Wingate, L. (2016). A dynamic leaf gas-exchange strategy is conserved in woody plants under changing ambient CO₂: evidence from carbon isotope discrimination in paleo and CO₂ enrichment studies. *Global Change Biology*, 22(2), 889–902. <https://doi.org/https://doi.org/10.1111/gcb.13102>
352. Vyas, K. D., Ranawat, B., and Singh, A. (2021). Development of high frequency cost-effective micropropagation protocol for *Juncus rigidus* using

- liquid culture medium and extraction of cellulose from their *in vitro* shoots - An important rush. *Biocatalysis and Agricultural Biotechnology*, 35, 102099. <https://doi.org/10.1016/j.bcab.2021.102099>
353. Wang, G., Xu, C., Yan, S., and Xu, B. (2019). An efficient somatic embryo liquid culture system for potential use in large-scale and synchronic production of *Anthurium andraeanum* seedlings. *Frontiers in Plant Science*, 10, 29. [https://doi.org/10.3389/FPLS.2019.00029/BIBTEX](https://doi.org/10.3389/FPLS.2019.00029)
354. Wangdi, K., and Sarethy, I. P. (2016). Evaluation of Micropropagation System of *Bacopa monnieri* L. in Liquid Culture and Its Effect on Antioxidant Properties. *Journal of Herbs, Spices and Medicinal Plants*, 22(1), 69–80. <https://doi.org/10.1080/10496475.2015.1020404>
355. Wardhan, H., Das, S., and Gulati, A. (2022). Banana and Mango Value Chains. In A. Gulati, K. Ganguly, and H. Wardhan (Eds.), *Agricultural Value Chains in India: Ensuring Competitiveness, Inclusiveness, Sustainability, Scalability, and Improved Finance* (pp. 99–143). Springer Nature Singapore. https://doi.org/10.1007/978-981-33-4268-2_4
356. Welander, M., Persson, J., Asp, H., and Zhu, L. H. (2014). Evaluation of a new vessel system based on temporary immersion system for micropropagation. *Scientia Horticulturae*, 179, 227–232. <https://doi.org/10.1016/j.scienta.2014.09.035>
357. Wetzstein, H.Y. and Sommer, H.E. 1982. Leaf anatomy of tissue cultured *Liquidamber styraciflua* during acclimatization. Amer. J. Bot. 69:1579–1586.
358. WILBUR, K. M., and ANDERSON, N. G. (1948). Electrometric and colorimetric determination of carbonic anhydrase. *The Journal of Biological Chemistry*, 176(1). [https://doi.org/10.1016/s0021-9258\(18\)51011-5](https://doi.org/10.1016/s0021-9258(18)51011-5)
359. Wilson, S. B., Rajapakse, N. C., and Young, R. E. (2001). Carbohydrate status and post storage recovery of micropropagated hosta plantlets stored at varying temperatures in light or darkness. *Acta Horticulturae*, 543. <https://doi.org/10.17660/actahortic.2001.543.32>
360. Wu, H. C., and Lin, C. C. (2013). Carbon dioxide enrichment during photoautotrophic micropropagation of *Protea cynaroides* L. Plantlets

- improves *in vitro* growth, net photosynthetic rate, and acclimatization. *HortScience*, 48(10). <https://doi.org/10.21273/hortsci.48.10.1293>
361. Wu, Y., Ren, Z., Gao, C., Sun, M., Li, S., Min, R., Wu, J., Li, D., Wang, X., Wei, Y., and Xia, Y. (2021). Change in Sucrose Cleavage Pattern and Rapid Starch Accumulation Govern Lily Shoot-to-Bulblet Transition *in vitro*. *Frontiers in Plant Science*, 11. <https://www.frontiersin.org/articles/10.3389/fpls.2020.564713>
362. Wu, Y., Sun, M. Y., Zhang, J. P., Zhang, L., Ren, Z. M., Min, R. H., Wang, X. Y., and Xia, Y. P. (2019). Differential Effects of Paclobutrazol on the Bulblet Growth of Oriental Lily Cultured *In vitro*: Growth Behavior, Carbohydrate Metabolism, and Antioxidant Capacity. *Journal of Plant Growth Regulation*, 38(2). <https://doi.org/10.1007/s00344-018-9844-5>
363. Wu, Y., Xia, Y. ping, Zhang, J. ping, Du, F., Zhang, L., Ma, Y. di, and Zhou, H. (2016). Low humic acids promote *in vitro* lily bulblet enlargement by enhancing roots growth and carbohydrate metabolism. *Journal of Zhejiang University: Science B*, 17(11). <https://doi.org/10.1631/jzus.B1600231>
364. Xiao, Y., Niu, G., and Kozai, T. (2011). Development and application of photoautotrophic micropropagation plant system. *Plant Cell, Tissue and Organ Culture*, 105(2), 149–158. <https://doi.org/10.1007/S11240-010-9863-9/METRICS>
365. Yanyou, W., Xiteng, L., Pingping, L., and Xinzheng, Z. (2006). Comparison of carbonic anhydrase activity among various species of plantlets. *Plant Cell, Tissue and Organ Culture*, 84(1), 124–127. <https://doi.org/10.1007/s11240-005-9005-y>
366. Zafar, N., Mujib, A., Ali, M., Tonk, D., Gulzar, B., Malik, M., Sayeed, R., and Mamgain, J. (2019). Genome size analysis of field grown and tissue culture regenerated *Rauvolfia serpentina* (L) by flow cytometry: Histology and scanning electron microscopic study for *in vitro* morphogenesis. *Industrial Crops and Products*, 128, 545–555. <https://doi.org/https://doi.org/10.1016/j.indcrop.2018.11.049>
367. Zarei, A., Behdarvandi, B., Tavakouli Dinani, E., and Maccarone, J. (2021a). *Cannabis sativa* L. photoautotrophic micropropagation: a powerful tool for industrial scale *in vitro* propagation. *In vitro Cellular and Developmental*

- Biology - Plant*, 57(6), 932–941. <https://doi.org/10.1007/s11627-021-10167-3>
368. Zayova, E., Nedev, T., Petrova, D., Zhiponova, M., Kapchina, V., and Chaneva, G. (2020). Tissue Culture Applications of *Artemisia annua* L. Callus for Indirect Organogenesis and Production Phytochemical. *Plant Tissue Culture and Biotechnology*, 30(1). <https://doi.org/10.3329/ptcb.v30i1.47795>
369. Zein El Din, A. F. M., Ibrahim, M. F. M., Farag, R., Abd El-Gawad, H. G., El-Banhawy, A., Alaraidh, I. A., Rashad, Y. M., Lashin, I., Abou El-Yazied, A., Elkelish, A., and Abd Elbar, O. H. (2020). Influence of polyethylene glycol on leaf anatomy, stomatal behavior, water loss, and some physiological traits of date palm plantlets grown *in vitro* and *ex vitro*. *Plants*, 9(11). <https://doi.org/10.3390/plants9111440>
370. Zhang, B., Song, L., Bekele, L., Shi, J., Jia, Q., Zhang, B., Jin, L., Duns, G., and Chen, J. (2018). Optimizing factors affecting development and propagation of *Bletilla striata* in a temporary immersion bioreactor system. *Scientia Horticulturae*, 232, 121–126. <https://doi.org/10.1016/J.SCIENTA.2018.01.007>
371. Zhang, H., Xie, X., Kim, M. S., Kornyeyev, D. A., Holaday, S., and Paré, P. W. (2008). Soil bacteria augment *Arabidopsis* photosynthesis by decreasing glucose sensing and abscisic acid levels in planta. *Plant Journal*, 56(2), 264–273. <https://doi.org/10.1111/j.1365-313X.2008.03593.x>
372. Zhang, Z., Li, R., Chen, D., Chen, J., Xiao, O., Kong, Z., and Dai, X. (2021). Effect of paclobutrazol on the physiology and biochemistry of *ophiopogon japonicus*. *Agronomy*, 11(8). <https://doi.org/10.3390/agronomy11081533>
373. Zhao, X., Li, W. F., Wang, Y., Ma, Z. H., Yang, S. J., Zhou, Q., Mao, J., and Chen, B. H. (2019). Elevated CO₂ concentration promotes photosynthesis of grape (*Vitis vinifera* L. cv. 'Pinot noir') plantlet *in vitro* by regulating RbcS and Rca revealed by proteomic and transcriptomic profiles. *BMC Plant Biology*, 19(1), 1–16. <https://doi.org/10.1186/S12870-019-1644-Y/FIGURES/5>
374. Zhou, J., Guo, F., Fu, J., Xiao, Y., and Wu, J. (2020). *In vitro* polyploid induction using colchicine for *Zingiber Officinale Roscoe* cv. 'Fengtou'

- ginger. *Plant Cell, Tissue and Organ Culture*, 142(1).
<https://doi.org/10.1007/s11240-020-01842-1>
375. Ziv, M. 2005. Simple bioreactors for mass propagation of plants. *Plant Cell Tiss. Org. Cult.* 81:277–285.
376. Zobayed, S. M. A. (2005). Ventilation in micropropagation. *Photoautotrophic (Sugar-Free Medium) Micropropagation as a New Micropropagation and Transplant Production System*, 147–186.
https://doi.org/10.1007/1-4020-3126-2_9/COVER
377. Zobayed, S. M. A., Afreen, F., and Kozai, T. (2001). Physiology of Eucalyptus plantlets grown photoautotrophically in a scaled-up vessel. *In vitro Cellular and Developmental Biology - Plant*, 37(6), 807–813.
<https://doi.org/10.1007/S11627-001-0134-7/METRICS>
378. Zobayed, S.M.A., Armstrong, J. and Armstrong, W. 2001a. Leaf anatomy of *in vitro* tobacco and cauliflower plantlets as affected by different types of ventilation. *Plant Sci.* 161:537–548.