

List of publications (2010 onwards)

1. Rajeswari Gopal Geetha, Sivakumar Krishnankutty Nair Chandrika, Gayathri G. Saraswathy, Asha Nair Sivakumari and **Manjula Sakuntala** .2021.ROS Dependent Antifungal and Anticancer Modulations of Piper colubrinum Osmotin. *Molecules* doi: 10.3390/molecules26082239.
2. Nair D. S and **S.Manjula**. 2020. Induction of root endosymbiosis as a highly sustainable and efficient strategy for overproduction of the medicinally important diterpenoid lactone-andrographolide in *Andrographis paniculata* (Burm. F.) Wall. ex Nees. *Industrial Crops and Products*. 156 (2020)112835.
3. S. Jisha , P.R. Gouri , **S. Manjula** , K.N. Anith , K.K. Sabu. 2020. Piriformospora indica cell wall extract as the best elicitor for asiaticoside production in *Centella asiatica* (L.) Urban, evidenced by morphological, physiological and molecular analyses. *Plant Physiology and Biochemistry*. 148(2020)62
4. Tomson Mani and **S.Manjula**.2020. Cloning and in silico analysis of promoter elements of a Ser/Thr protein kinase gene homologue from Piper colubrinum Link. *Indian Journal of Biotechnology*. 19(1).
5. Jisha S, Sabu KK and **S.Manjula**. 2020. Multifunctional aspects of *Piriformospora indica* in plant endosymbiosis. *Mycology*. doi: 10.1080/21501203.2020.1808288
6. S. Jisha , **S.Manjula**, KN Anith and KK Sabu. 2019. The protective role of *Piriformospora indica* colonization in *Centella asiatica* (L.) *in vitro* under phosphate stress. *Biocatalysis and Agricultural Biotechnology*. 19 (2019)101088.
7. Sankar Jagadeeshan , Diana David , Jisha S, **Manjula S** and Asha Nair S.2017. *Solanum nigrum* Unripe fruit fraction attenuates Adriamycin resistance by down-regulating multi-drug resistance protein (Mdr)-1 through Jak-STAT pathway. *BMC Complement Altern Med*. 17:370 (2017) doi: 10.1186/s12906-017-1872-3

8. Mahadevan C, Krishnan A, Saraswathy GG, Surendran A, Jaleel A and **Sakuntala M** (2016). Transcriptome- Assisted Label-Free Quantitative Proteomics Analysis Reveals Novel Insights into Piper nigrum—Phytophthora capsici Phytopathosystem. Front. Plant Sci. 7:785. doi: 10.3389/fpls.2016.00785
9. Mahadevan, C., Jaleel, A., Deb, L., Thomas, G., & **Sakuntala, M.** 2015. Development of an efficient virus induced gene silencing strategy in the non-model wild ginger-Zingiber zerumbet and investigation of associated proteome changes. PLoS One. 2015; 10(4): e0124518.
10. Anu Krishnan, Chidambareswaren Mahadevan, Tomson Mani, and **Manjula Sakuntala.** 2015."Virus-induced gene silencing (VIGS) for elucidation of pathogen defense role of serine/threonine protein kinase in the non-model plant Piper colubrinum Link." Plant Cell, Tissue and Organ Culture: DOI 10.1007/s11240-015-0764-9
11. Anu K, Jessymol K K, Chidambareswaren M, Gayathri GS and **Manjula S.** 2015. "Downregulation of osmotin (PR5) gene by virus-induced gene silencing (VIGS) leads to susceptibility of resistant Piper colubrinum Link. to the oomycete pathogen Phytophthora capsici Leonian. " Indian Journal of Experimental Biology 53 (2015): 329-334.
12. R. Nisha Nair, M, Chidambareswaren and **S. Manjula.** 2014. Enhanced Heterologous Expression of Biologically Active Human Granulocyte Colony Stimulating Factor in Transgenic Tobacco BY-2 Cells by Localization to Endoplasmic Reticulum. Mol Biotechnol DOI10.1007/s12033-014-9765-x
13. Tomson Mani, K.C.Sivakumar and **S.Manjula.** 2012. Expression and Functional Analysis of Two Osmotin (PR5) Isoforms with Differential Antifungal Activity from Piper colubrinum: Prediction of Structure–Function Relationship by Bioinformatics Approach. Mol.Biotechnol.DOI 10.1007/s12033-011-9489-0.

14. Jisha S, Anith KN and **S.Manjula** 2012. Induction of root colonization by Piriformospora indica leads to enhanced asiaticoside production in Centella asiatica. Mycorrhiza 22:195-202 .
15. Tomson Mani and **S.Manjula**. 2011. Optimization of Agrobacterium mediated transient gene expression and endogenous gene silencing in Piper colubrinum Link. by vacuum infiltration. Plant Cell Tissue and Organ Culture 105:113-119 DOI: 10.1007/s11240-010-9836-z.
16. S.Jisha, S.Sreeja and **S.Manjula**. 2011. In vitro & in vivo estrogenic activity of glycoside fractions of Solanum nigrum fruit. Indian J Med Res 134, September 2011, pp 369-374.
17. T. Mani and **S. Manjula**.2010.Cloning and characterization of two osmotin isoforms from Piper colubrinum. Biol.Plantarum 54 (2): 377-380.