

PANEL OF EXPERTS: 5

Name	:Dr. U.Sivakumar	No. of Publication	: 165
Designation	: Professor	No. of Publication	: 75
		(for last five years)	
Address	: Department of Agri. Microbiology, Tamil Nadu Agricultural University, Coimbatore – 641 003	Specialization	:Fermentation, Bioconversion, Plant Microbiome and their Metabolites
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List of publication for last five years:

1. Jayani Tilak, S. Marimuthu, and Sivakumar Uthandi.2020. Bacterial Cellulose Nano Fiber (BCNF) as carrier support for the immobilization of probiotic, *Lactobacillus acidophilus* 016. Carbohydrate Polymers. 116965. <https://doi.org/10.1016/j.carbpol.2020.116965>
2. Shobana Narayanasamy, Sugitha Thangappan and Sivakumar Uthandi.2020. Plant Growth-Promoting *Bacillus* sp. Cahoots Moisture Stress Alleviation in Rice Genotypes by Triggering Antioxidant Defense System. Microbiological Research. 239: 126518. <https://doi.org/10.1016/j.micres.2020.126518>
3. Joshi JB, Arul L, Ramalingam J, Uthandi S. 2020. Advances in the *Xoo*-rice pathosystem interaction and its exploitation in disease. *Journal of Biosciences* 45 :112DOI: 10.1007/s12038-020-00085-8
4. Archana Sornakili, Sugitha Thankappan, Sridharan, A. P, Nithya P, and Sivakumar Uthandi.2020. Antagonistic Fungal Endophytes and their Metabolite-Mediated Interactions Against Phytopathogens in Rice. Physiology and Molecular Plant Pathology. 112. 101525. <https://doi.org/10.1016/j.pmpp.2020.101525>
5. Aswini K, Gopal N O, and Sivakumar Uthandi.2020. Optimized culture conditions for bacterial cellulose production by *Acetobacter senegalensis* MA1.BMCBiotechnology.20:46.<https://doi.org/10.1186/s12896-020-00639-6>
6. Brundha Annadurai, Z John Kennedy, and Sivakumar Uthandi.2020.Drought tolerant *Rhizobium* sp. VRE1 induced osmotic stress tolerance, seed germination and seedling vigor in blackgram (*Vigna mungo* L.). International Journal of Ecology and Environmental Sciences. 2(3): 37-42
7. Meena Ganesan, Remitha M V, Sugitha Thankappan, Iniyakumar Muniraj, and Sivakumar Uthandi.2020. Enhanced saccharification of HCR-laccase pretreated corncob biomass by thermophilic *Bacillus aerius* CMCP51. Biotechnol Biofuels 13:124. 2-14. <https://doi.org/10.1186/s13068-020-01764-2>
8. Nakkeeran S & R. Priyanka S. Rajamanickam & U. Sivakumar.2020. *Bacillus amyloliquefaciens* alters the diversity of volatile and non-volatile metabolites and

- induces the expression of defence genes for the management of Botrytis leaf blight of *Lilium* under protected conditions. *Journal of Plant Pathology*. <https://doi.org/10.1007/s42161-020-00602-6>
9. Geetha Thanuja, K., Annadurai, B., Thankappan, S. Uthandi, S. Non-rhizobial endophytic (NRE) yeasts assist nodulation of *Rhizobium* in root nodules of blackgram (*Vigna mungo* L.). *Arch Microbiol* (2020). <https://doi.org/10.1007/s00203-020-01983-z>
 10. Kiruthika Thangavelu; Pugalendhi Sundararaju; Naganandhini Srinivasan; Iniyakumar Muniraj; Sivakumar Uthandi. 2020. Simultaneous lipid production for biodiesel feedstock and decontamination of sago processing wastewater using *Candida tropicalis* ASY2" *Biotechnology for Biofuels*. 13:35. <https://doi.org/10.1186/s13068-020-01676-1> (NAAS rating : 11.45)
 11. Anandakumar, S., T.Kalaiselvi and Sivakumar Uthandi. 2019. Arbuscular mycorrhizal fungi (*Glomus intraradices*) and diazotrophic bacterium *Rhizobium* (BMBS) primed defense in blackgram against herbivores insect (*Spodoptera litura*). *Microbiological Research*, 126355; doi.org/10.1016/j.micres.2019. (NAAS rating : 9.7)
 12. Sridharan, A.P., Sugitha Thankappan, Karthikeyan, G and Sivakumar Uthandi. 2020. Comprehensive profiling of the VOCs of *Trichoderma longibrachiatum* EF5 while interacting with *Sclerotium rolfsii* and *Macrophomina phaseolina*. *Microbiological Research*: 126436 <https://doi.org/10.1016/j.micres.2020.126436> (NAAS rating : 9.7).
 13. Karthick Marimuthu Kamalakannan Ayyanar Malathi Varagur Ganesan Paranidharan Vaikuntavasan Sivakumar Uthandi Kavino Mathiyazhagan Gowrisri Nagaraj. 2020. Loop-mediated isothermal amplification assay for the detection of *Plasmopara viticola* infecting grapes. *J. Phytopatho.* doi.org/10.1111/jph.12866 (NAAS rating : 7.1)
 14. Anusuya, R.S., R. Anandham, K. Kumutha, G. Gayathry, M. Vellaisamy and S. Uthandi*. 2020. Characterization and optimization of bacterial cellulose produced by *Acetobacter* spp. *J. Environ. Biol.*, 41:2017-215 <http://doi.org/10.22438/jeb/>
 15. Tamilnayagan, T., M R Srinivasan, R Selvarajan1, S Subramanian, P A Saravanan, M Muthuswami, U Sivakumar and K M Kumaranag. 2020. Designing of rt-lamp primers and detection of sac brood virus from indian honey bee *Apis cerana indica* (F.). *Indian Journal of Entomology*, 82(1): 162-166. DOI: 10.5958/0974-8172.2020.00037.1
 16. Shobana Narayanasamy, and Sivakumar Uthandi. 2020. Impact of Moisture Stress and *Bacillus altitudinis* FD48 on Physiological Modulation and Seed Germination in Rice (*Oryza sativa* L.). *Madras Agric.J.* 107:1-3. doi: 10.29321/MAJ 2020.000331
 17. Anandakumar S, Kalaiselvi T, and Sivakumar U 2020. Impact of *Spodoptera litura* Attack on Chlorophyll and Biomass Content of *Vigna mungo* Colonized with

Arbuscular Mycorrhizal Fungi and *Rhizobium*. Madras Agric.J.107:1-3. DOI:10.29321/MAJ 2020.000332

18. Shobana Narayanasamy, Sugitha Thangappan and Sivakumar Uthandi.2020.Physiological Adaptation and Plant Growth Promoting Functional Traits of *Bacillus altitudinis* FD48 under In vitro Osmotic Stress. International Journal of Plant & Soil Science. DOI: 10.9734/ijpss/2020/v32i130238, 2019
19. Dharmadurai Chennappan, Sugitha Thankappan, Ramalingam Nachimuthu and Sivakumar Uthandi.2019. Impact of Nitrogen Amendments on Soil Enzyme Dynamics under Simulated Wetland Ecosystem. International Journal of Plant & Soil Science, DOI: 10.9734/ijpss/2019/v30i430181 (NAAS : 4.77)
20. Kiruthika Thangavelu, Pugalendhi Sundararaju, Naganandhini Srinivasan, Sivakumar Uthandi. 2019. Amylolytic Potential of Oleaginous Yeast in Sago Processing Wastewater (SWW) under Submerged Fermentation. Curr. J. Appl. Sc and Tech. DOI: 10.9734/cjast/2019/v38i430374 (NAAS: 5.32)
21. Kiruthika Thangavelu, Pugalendhi Sundararaju, Naganandhini Srinivasan, Sivakumar Uthandi. 2019. Rheology analysis of sago processing waste water with variable starch content. Madras Agricultural Journal, MAJ2019.000311.
22. Periyasamy Panneerselvam, Ansuman Senapati, Upendra Kumar, Sugitha Thangappan, Utthandi Sivakumar.2019. Antagonistic and plant-growth promoting novel *Bacillus* species from long-term organic farming soils from Sikkim, India. 3Biotech: 9:416. Doi:10.1186/s13568-018-0690-4
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26. Vibithabala, B., Gopal N O and Sivakumar Uthandi. 2019. Assessment of endophytic guard cell bacterial strains *Klebsiellaoxytoca* and *Acinetobactersp* of rice

for abiotic stress tolerance. *International Journal of Microbiology Research*, 11(5): 1580-1583.DOI:

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32. Vegnesh R., Sugitha Thankappan, Z. John Kennedy, Ratul Zakia, Sivakumar Uthandi. 2019. Glycosyl Hydrolases producing bacterial endophytes from Perennial grass species (*Neyraudia reynaudiana*) for biomass deconstruction. *Madras Agric. J.*106(7-9):143-149.doi:10.29321/MAJ.2019.000290.
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36. Ramesh Desikan, Kiruthika Thangavelu, and Sivakumar Uthandi.2019. Hydrodynamic Cavitation- A promising Technology For biomass Pretreatment. *International Journal of Environmental Sciences and Natural Resources*, 19(3). IJESNR. MS. ID. 556015..DOI:10.19080/IJESNR.2019.19.556015

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39. KiruthikaThangavelu, Ramesh Desigan, Oxana P.Taran and Sivakuma rUthandi. 2018. Delignification of corncob via combined hydrodynamic cavitation and enzymatic (HCE) pretreatment: process optimization by response surface methodology. *Biotechnology for Biofuels*, 11:203 doi:10.1186/s13068-018-1204-y
40. Sowmya Kumarvel, R. Sridar and Sivakumar Uthandi. 2018. Characterization of Exopolysaccharide produced by drought alleviating bacterium *Bacillus altitudinis* FD48 at elevated levels of PEG. *Journal of Soil Biology and Ecology* ,38: 44-56.
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