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Field of Specialization : Biotechnology (Plant Sciences)



Name of Institute from where obtained M.Sc. degree:

Tamil Nadu Agricultural University (TNAU), Coimbatore

Name of Institute from where obtained Ph.D. degree:

Tamil Nadu Agricultural University (TNAU), Coimbatore

Joining date in ICAR : 1/7/2008

Publications (Top 10 Publications with first or corresponding author only):

1. Muthukumar, M., Anju Bajpai and S. Rajan. (2018). Chloroplast genes reveal hybridity in mango (*Mangifera indica* L.). *J. Appl. Horti.* 20(1): 54-59.
2. Damodaran T. Shailendra Rajan, Muthukumar M., Ram Gopal, Kavita Yadav, Sandeep Kumar, Nidhi Kumari, Israr Ahmad, Vinay Kumar Mishra, Sunil Kumar Jha. (2020). Biological Management of Banana Fusarium Wilt caused by *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 using Antagonistic fungal isolate CSR-T-3 (*Trichoderma reesei*). *Frontiers in Microbiology*, 11: article595845: 1-19.
3. Muthukumar, M., Sasikala, R., Vijayalakshmi, C., and Raveendran, M. (2016). Drought responses in improved drought tolerant versions of a popular rice variety Improved White Ponni. *Indian Res. J. Genet. & Biotech.*, 8(4): 305-315.
4. Muthukumar, M., Sasikala, R., Robin, S. and Raveendran, M. (2017). Developing improved versions of a popular rice variety (Improved White Ponni) through marker assisted backcross breeding. *Green Farming: Int. J. Appl. Agric. Horti. Sci*, 8(3): 1-6.
5. Muthukumar, M., Anju Bajpai, V.K. Singh and S. Rajan. (2017). Present status, prospects and scope of in vitro mutant selection: simple mutation breeding approach for improving crop plants with enhanced abiotic stress tolerance. *Res. Environ. Lif. Sci.*, 10(12): 921-924.
6. Bheemanahallia, R., Sathishraj, R, Muthukumar, M., Sumanth, H.N., Raveendran, M., Tsutomu Ishimaru, and, Jaagadish S.V. Krishna. (2017). Is early morning flowering an effective trait to minimize heat stress damage during flowering in rice?. *Field Crops Research*, 203(1): 238-242.

7. Pandey, A., B.K. Pandey, M. Muthukumar, L.P. Yadava and U.K. Chauhan. (2012). Histopathological study of infection process of *Colletotrichum gloeosporoides* Penz. and Sacc. on *Mangifera indica* L. *Plant Pathology Journal*, 1-7.
8. Srivastava, N., Bajpai, A., Chandra, R., Rajan, S., Muthukumar, M., and Manoj Kumar Srivastava. (2012). Comparison of PCR based marker systems for genetic analysis in different cultivars of mango. *J. Environ. Biol.*, 33: 159-166.
9. Muthukumar, M., M. Rabeeth, Rajesh Pati, K. Sujatha, Navin Srivastav and Madhu Kamle. (2009). Isolation, purification and biochemical characterization of lectin from oyster mushroom, *Pleurotus sajor-caju*, *Plant Archives*, 9(1): 41-46.

Patent / Technologies / Varieties / Methodologies / System etc.:

2

No. of Students Guided (M.Sc.) : 3

No. of Students Guided (Ph.D.) :

Awards / Recognitions / Fellowship:

1. Awarded Young Scientist Award, 2013 by GERFBB, Green Earth Research Foundation.
2. Awarded Aufau International Young Scientist Award 2019 by Aufau Science Forum.
3. Awarded ARS – NET, 2006.
4. Awarded Joint CSIR-UGC JRF and NET, June 2002.
5. Awarded Jawaharlal Nehru University Fellowship for M.Sc Biotech. (2000-2002).