**Brief Biodata**

Dr. Damodaran Thukkaram, born on October 2nd, 1973 in Chennai, did his M.Sc. and Ph.D. from Tamil Nadu Agricultural University, Coimbatore (1998-2003). Joined the Agricultural Research Service (ARS) of ICAR at Central Agricultural Research Institute, Port Blair in 1999 as a Scientist, later got selected as Senior Scientist at ICAR-Central Soil Salinity Research Institute (CSSRI), Regional Research Station (RRS), Lucknow, in the year 2008. Further, placed as Principal Scientist in the same institute and later served as Head In-Charge of the station since 2020. On 23rd January 2023, he assumed charge as the regular Director of ICAR Central Institute for Subtropical Horticulture, Lucknow, and is currently leading the institute.

His research frequently focuses on developing climate-resilient, heat-tolerant mango varieties, such as **Awadh Abhaya and Awadh Samridhi**, **as well as a techno-receptive digital mango orchard management** system and related aspects in the sub-tropical fruit production of the country, particularly in Uttar Pradesh, Bihar, and West Bengal, which are large mango-producing states in India. His initiatives to improve the **mango value chain**, from farm production to marketing, with a focus on sustainability through the development of technologies such as fruit **bagging**, **FRUITWASH**, and Good Agricultural Practices, were highly successful in transforming the mango economy of the region. He has also contributed to the development of **SAGARIKKA**, the first salt-tolerant rootstock variety released in mango.

Development of a novel secondary metabolite-based formulation, **METWASH**, along with the creation of export clusters in mango, resulted in promoting the export from India to the elite premium markets through sea route with an increased shelf life of 30 to 35 days. His research accomplishments also lie in addressing the outbreak of the contagious banana *Fusarium* wilt disease in the Indian sub-continent through a holistic research approach of mapping the hotspots and developing a **bio-fungicide ICAR-FUSICONT** using a unique *Trichoderma* isolate on a patent-protected dynamic media. The product is currently being granted a **global license for marketing internationally to address the devastation of the disease in the Southeast and Latin American countries, apart from the Indian sub-continent. Also, patented and developed** an **innovative *in-vitro* bio-immunization** product based on antifungal biomolecules and a protocol **for inducing disease tolerance in tissue culture banana plantlets** at the cell culture stage. The product was found to boost the tolerance of the banana cell culture plantlets against Fusarium wilt disease. The product was also licensed and is in the commercial seed chain. Other microbiome-based technologies, such as biostimulants, include **CSR GROWSURE** and **CSRBIO** for enhancing and enabling the production of fruits and vegetables in soils of higher pH up to 9.2 through the use of salt-tolerant, zinc and potassium solubilizing bacterial consortia.

He was the recipient of several national awards like the **Jawaharlal Nehru Award from the Ministry of Agriculture, New Delhi, for his work on banana resistance breeding, Biotech Product & Process Development and Commercialization Award from Ministry of Science and Technology,** New Delhi, **Girdharilal Chadha Award** for pioneering work in fruit science from Indian Academy of Horticultural Science and **Young Scientist Award** by the Indian Science Congress for his pioneering work in horticulture and eco-safety initiatives in research. He is also the **National Fellow** of the Indian Academy of Horticultural Science and an **Honorary Fellow** of the Uttar Pradesh Academy of Agricultural Science. He has published more than 90 research papers in high-impact journals and has **four published patents with 8 commercialized products** to his credit.