

SANJAY SHANMUGHASUNDARAM

CONTACT

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- Wageningen, Netherlands

LAB TECHNIQUES

- Agarose Gel electrophoresis
- DNA/RNA Extraction
- Agroinfiltration
- Tissue culture
- Polymerase chain reaction (PCR)
- Primer designing

TECHNICAL SKILLS

- Microsoft office
- RStudio
- Bioinformatics tools (BLAST)

SOFT SKILLS

- Team player
- Multitasking
- Critical thinking
- Active Listening
- Detail oriented
- Innovative thinking
- Time management

PERSONAL PROFILE

MSc Plant Science student specializing in plant breeding and genetics, with a strong foundation in molecular breeding techniques. Skilled in Marker-Assisted Selection (MAS), PCR, and agroinfiltration, with hands-on experience in developing early blight-resistant potato cultivars through glycoalkaloid-based resistance introgression. Passionate about leveraging molecular tools to enhance crop genetics, improve food security, and drive sustainable agricultural practices. Seeking an internship starting in June 2025 to contribute to cutting-edge breeding programs that enhance crop resilience and promote global food sustainability. Excited to collaborate with research teams dedicated to innovation in plant genetics and agricultural biotechnology.

EDUCATION

MSc Plant Sciences

09/2023 - Present / Wageningen University & Research, Wageningen

- Specialization:** Plant Breeding and Genetic Resources
- Relevant courses:** Design of Plant Breeding Programmes, Breeding for Stress Tolerance & Quality, Seed Science and Technology, Molecular Aspects of Bio-interactions, Plant Breeding, Pre-Breeding, Host-Parasite interactions, Bioresources and Principles of Entrepreneurship.
- Thesis:** "Developing early blight-resistant potato cultivars by Introgression of Glycoalkaloid-Based Resistance from Wild Potato Species into Cultivated Varieties".

Techniques : PCR, Primer designing, Gel electrophoresis, Tissue culture, DNA isolation

BSc(Hons) Agriculture

07/2019 - 05/2023 / Lovely Professional University, Punjab, India

- Relevant Courses:** Fundamentals of Plant Biochemistry and Biotechnology, Fundamentals of crop Physiology, Fundamentals of Genetics, Principles of Seed Technology, Fundamentals of Plant Breeding, Fundamentals of Plant Pathology, Agricultural Microbiology, Farming systems and Sustainable Agriculture, Principles of Integrated Pest and Disease management, Diseases of Field and Horticultural Crops and their management, Quality seed production of field crops.
- Publications:** Article - 'Organic Seed Production: Prospect and Challenges'. Agriculture & Food: E-Newsletter Volume 5 – Issue 1 – January 2023

WORK EXPERIENCE

Internship - Jay Blossoms Bio-Tech

01/ 2023 - 04/ 2023 / Hosur, India

- Laboratory assistant in a Tissue culture lab and major roles were cell isolation, culturing and maintenance. I had a hands on experience in maintaining cell line and secondary meristem culture of Banana.

ADDITIONAL INFORMATION

- Interests:
 - Motorcycling
 - Travelling
 - Gardening
 - Bonsai cultivation
 - Cycling
- Flexible to move

LANGUAGES

- English
- Tamil (Native)
- Hindi

REFERENCES

- References will be provided on request
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EXTRACURRICULAR ACTIVITIES

Product developer at a startup Cleafy

10/2023 - Present / Enactus Wageningen

- At Cleafy, we have a mission to revolutionize the way people handle their food by enabling them to grow healthy vegetables directly in their own kitchens. Our household-scale hydroponic system eliminates the need to use soil, allowing you to grow fresh produce effortlessly and efficiently, without the limitations of traditional methods.

Participated in HDOR Virtual event

10/2021 / Erode, Tamil Nadu

- Successfully completed a virtual cycling challenge, covering 1,600 kilometers in 30 days. This accomplishment showcases my discipline, strong goal-setting, and endurance, reflecting my ability to remain committed and consistent in both challenging and routine conditions.

Member of Erode district cycling association

09/2020 - Present / Erode, Tamil Nadu, India

- Through my cycling association, we have organized numerous awareness rides to promote human health. For example, we have conducted rides focused on raising awareness about cardiovascular health, diabetes prevention, and mental well-being.