

# Murugash Manavalan

## *Personal Information:*

Nationality: Indian

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## *Research Interest:*

Currently I'm investigating flowers and their responses to global anthropogenic change with a specific focus on how these responses go on to influence plant-pollinator relationships. On a broader scale, I'm interested in usage of functional traits as tools in deriving insights on plant population and community dynamics.

## *Education:*

PhD Scholar: Department of Botany, Charles University, Prague (Botany, 2023 – Present)

M.Sc.: Bishop Heber College, Bharathidasan University, Tamil Nadu, India (Botany, 2020–2022)

B.Sc.: Madras Christian College, University of Madras, Tamil Nadu, India (Plant Biology and Plant Biotechnology, 2017–2020)

## *Experience:*

2022: M.Sc. Academic Project; Goa University

Conducted Phenological Studies of Trees in Socorro Plateau, Goa. The project involved studying the phenological patterns of various trees in Socorro plateau, by plotting their flowering, fruiting and leafing growth patterns and also understanding the various inter-connections which exist in between the different flora of the region.

2022: Internship; project run by Institute of Botany, Czech Academy of Sciences

Assisted in the sampling of plant material from high elevations of Western Himalayas for belowground and aboveground trait measurements, soil sampling and processing of collected samples. The research work was conducted as part of a Horizon 2020 project entitled “Functional differentiation in response to environmental variability in two contrasting shrub line species of high-altitude Himalaya.”

## *Research Publications:*

Murugash Manavalan, Dinesh Thakur, Andreas Schaumberger, Michael Bahn, Zuzana Münzbergová, Elevated CO<sub>2</sub>, warming and drought differentially impact reproductive and vegetative economic traits in two grassland species, *Annals of Botany*, 2025;, mcaf214, <https://doi.org/10.1093/aob/mcaf214>

C. Sathya, M. Murugash (2022) Investigation into the Phenological Patterns of Trees in Socorro Plateau, Goa. *bioRxiv* 2022.11.14.516458; Doi: <https://doi.org/10.1101/2022.11.14.516458>

*Presentation at Conferences:*

54<sup>th</sup> Annual Meeting of the Ecological Society of Germany, Austria and Switzerland (GfÖ) hosted by the Julius-Maximilians-University Würzburg, held from 1<sup>st</sup> to 4<sup>th</sup> September 2025; Presented a paper titled “Global Change Factors differentially impact Floral and Leaf Economic Traits” under session “Plant Traits”.

37<sup>th</sup> Conference of the Plant Population Biology Section of the Ecological Society of Germany, Austria and Switzerland (GfÖ) organized the Faculty of Science of the Charles University and Institute of Botany of the CAS, held from 22<sup>nd</sup> to 24<sup>th</sup> May 2025; Presented a paper titled “Floral Economic Traits show varied Response to Global Change Factors in Long-Term FACE Experiment” and was award Third best Oral Presentation.

EMBO Workshop on High Elevation Plant Adaptation in a Changing Climate (HEPACC) organized by the CSIR – Institute of Himalayan Bioresource Technology, Palampur, India, held from 25<sup>th</sup> to 28<sup>th</sup> February, 2025; Presented a paper titled “Floral Traits show varied Response to Climatic Factors in Long-Term Climate Change Experiment”.

52<sup>nd</sup> Annual conference of the Ecological Society of Germany, Austria and Switzerland (GfÖ) hosted by the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig; Presented a poster entitled “Effects of Changes in Soil Nutrient and Water Availability on Floral Economic Spectrum” under session “Traits and Stability” on 12<sup>th</sup> & 13<sup>th</sup> September, 2023.

International Conference on Climate Change Adaptation for Sustainable Biodiversity and Food Security organized by the Department of Zoology and Research Centre, Scott Christian College (Autonomous), Nagercoil, Tamil Nadu, India; Presented a paper entitled “Investigation into the Phenological Patterns of Trees in Socorro Plateau, Goa” on 23<sup>rd</sup> & 24<sup>th</sup> June, 2022 and was awarded Best Oral Presentation Award under the subtheme “Biodiversity”.

National Seminar on Innovative Research Approaches in Biological Sciences organized by PG and Research Department of Botany, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu, India and presented a paper entitled “Phenological Studies of Trees in Socorro Plateau, Goa” on 25<sup>th</sup> & 26<sup>th</sup> May, 2022

International Conference on Climate Adaptation and Resilience organized by Department of Environmental Sciences, Bishop Heber College, Tiruchirappalli, Tamil Nadu, India and presented a paper entitled “Aphid – Ant Interactions in Different Plant Species” on 22<sup>nd</sup> & 23<sup>rd</sup> April, 2022.

*Teaching activities:*

Masters Student Co-Supervision: 2 finished, 1 on-going

Bachelors Student Co-Supervision: 1 finished

High School (Open Science) Student Supervision: 4 finished.