# **SNEHANGSHU DAS**

Curriculum vitae

Date of Birth: 25th March 1997

Phone: +91-7407769210 +91-8600669379

171-0000007317

E-mail: <a href="mailto:snehangshudas3@gmail.com">snehangshudas3@gmail.com</a>

RG profile: https://www.researchgate.net/profile/Snehangshu\_Das

Google Scholar citations: 2 Google Scholar h-index:1



#### **EDUCATION**

MSc Botany November 2020

University: Shivaji University, Kolhapur

Score: 82.27%

BSc Botany June 2018

Fergusson College, Pune

University: Savitribai Phule Pune University

Project: "Talking about Beans, Banes and Biocrimes: Colour,

Concentration and India's Outlook on Ricin"

Score: 81.60%

AISSCE (12<sup>th</sup>) All India Senior School Certificate Examination May 2015

Delhi Public School, Siliguri

Board: CBSE Score: 91.33%

AISSE (10<sup>th</sup>) All India Secondary School Examination May 2013

Delhi Public School, Siliguri

Board: CBSE CGPA: 9.8/10

# **RESEARCH INTERESTS**

Botany, plant ecology and taxonomy, ecological niche modelling, GIS & RS, conservation science, urban biodiversity

**Laboratory Skills:** Spectrophotometry, Titrations, Ultracentrifugation, Thin Layer Chromatography

**Software**: GitHub, QGIS (2.14, 3.0 & higher), MaxEnt, R (basic level usage), DIVA-GIS, Google Earth Pro, Minitab 18, Statistica and PAST with proficiency in **Multivariate Statistical Tools.** 

## INTERNSHIP

# CSIR-North East Institute of Science and Technology, Jorhat, Assam

Tenure: June-August 2020

Supervisor: Dr. M. Arunjit Singh and Dr. Salam Sonia Devi

Project: "Familiarizing local plants (genus Ceropegia L.) and tapping its present and

future potential habitat areas in India."

Insight: Using the techniques of ecological niche modelling and data obtained from biodiversity databases (like iNaturalist, GBIF and many more), prediction regarding its potential habitats are being made. Also, a dedicated database for *Ceropegia* is being developed at GitHub, using which a webmap has already been published through the use of ArcGIS Online.

# Salim Ali Centre for Ornithology and Natural History, Coimbatore, Tamil Nadu

Tenure: May-July 2019

Supervisor: Dr. Santanu Gupta

Project: "Ecological exploration and socio-economic valuation of pit lakes in Eastern

coal fields, India: implications for conservation and sustainable use"

Insight: I have contributed in building species distribution models of certain local migratory bird species, vegetation quantification, studying change of vegetation using NDVI, map preparation of study areas and surveying socio-economic importance of the pit lakes.

#### **ACHIEVEMENTS AND GRANTS**

# Awarded the Dr. G.V Joshi Gold Medal in MSc Botany at Shivaji University (2018-2020)

Insight: For being meritorious in the academic tenure of MSc Botany from 2018-2020

# Awarded the Shivaji University Merit Scholarship (2019-2020)

Funds received: INR 10,000

Insight: For being meritorious in the year 2018-2019

Mini Project Scheme under Model for Arts and Science Teachers (MAST) Program for UG students under 'College of Excellence' 2017-18

Funds Received: INR 2,500

Project: "Talking about beans, banes and biocrimes: Colour, Concentration and

India's Outlook on Ricin"

Advisor: Dr. Minakshi C. Mahajan

Insight: I extracted the highly poisonous protein Ricin according to *US Pat 3060165A* and noted down its color change and safe disposal methods. Also, I added a review on how it can be used as a futuristic biowarfare weapon by relating it to its uses in past instances as well as an overview of ricin uses in India.

#### PROJECTS UNDERTAKEN

# Fergusson College Long Term Vegetation Monitoring Project, Pune

Tenure: June 2018 – Till present

Team: Ashish Nerlekar, Snehangshu Das, Akshay Onkar, Pranav Mhaisalkar, M.

Bhagwat, S.A. Lapalikar and Dr. V.D. Chavan

Advisors: Dr. Harini Nagendra and Dr. Minakshi C. Mahajan

Insight: I am contributing in establishment and maintenance of 50 long-term vegetation transects for the subsequent 10 years with an analysis of the changes in campus biodiversity and functional traits over time with focus on fluctuations in the urban ecology context.

### **PUBLICATIONS**

#### Published Booklet

**Das, S.**, Mukherjee, A., Gupta S. 2020. <u>Plants From Pitlakes: An inventory of plants from Eastern Coalfields, India</u>. Salim Ali Centre for Ornithology and Natural History, Coimbatore, India.

#### **Published Papers**

**Das, S.** & Mahajan, M. (2021). Role of plants in a pandemic: learning from the COVID-19 situation. Global Journal of Medical Research. 20(14). p 43-51

**Das S**, Mukherjee A, Gupta S. (2020) <u>Spatial prioritization of selected mining pitlakes from Eastern Coalfields region, India: A species distribution modelling approach. *Conservation Science and Practice*, 8(2), Wiley Online. e216. https://doi.org/10.1111/csp2.216</u>

Nerlekar, A.N., **Das, S.,** Onkar, A.A., Bhagwat, M., Mhaisalkar, P., Lapalikar, S.A., Chavan, V.D. and Mahajan, M.C. (2019). <u>India needs long-term biodiversity</u> monitoring in urban landscapes. *CURRENT SCIENCE*, *117*(2), p.181.

**Das, S.** & Mahajan, M. (2020). <u>Numerical intraspecific morphometric study of Actinodaphne Hookeri Meisn. (Magnoliopsida: Laurales: Lauraceae) from Mahabaleshwar, Maharashtra, India. *Ecology, Environment and Conservation*. 26(4). p 1775-1778</u>

Mahajan, M. & **Das, S**. (2020). <u>Diversity and importance of the genus Ficus L. from an urban forest: The case study of Fergusson College Campus, Pune, India</u>. *International Research Journal of Environmental Sciences*. 9(4). p 74-79

Terdalkar, S., **Das, S**., Patil, P. & Mahajan, M. (2019). <u>A comprehensive study of the relationship between Euploea core and Nerium indicum present in Fergusson College, Pune, India</u>. *International Research Journal of Biological Sciences* 8(1). p 27-31

**Das, S.** & Mahajan, M. (2019). <u>Talking about Beans, Banes and Biocrimes: Colour, Concentration and India's Outlook on Ricin</u>. *Research Journal of Recent Sciences*. 8(2). 52-59.

**Das, S.,** Patil, R. and Mahajan, M. (2018). <u>Numerical Taxonomy of the genus</u> <u>Euphorbia L. from Pune, Maharashtra, India</u>. *International Journal of Researches in Biosciences, Agriculture and Technology*. 2(6). 51-57.

#### Journal Papers/Abstracts under Review

**Das, S.**, Mukherjee, A. and Gupta, S. (2020). India needs inventorisation of mining pit lakes. Submitted to: Current Science

#### PRESENTATIONS AND TALK

**Power Point Presentation**, "<u>Do Plants Show Primitive Neural Actions?</u>," *FLORA*, Fergusson College, Pune. 29<sup>th</sup>-30<sup>th</sup> December 2016.

**Oral Presentation**, "Plant Neurosciences and its Applications" *BOTANICA*, Nowrosjee Wadia College, Pune. 23<sup>rd</sup>-24<sup>th</sup> January 2017.

**Student's Keynote Speech**, "<u>Is Coral Bleaching reaching a tipping point?</u>," *Conference on Environment, Climate Change and Pollution*, Board of Student Welfare, Savitribai Phule Pune University and Sir Parshurambhau College, Pune. 6<sup>th</sup>-7<sup>th</sup> February 2017.

# **Certificate in R Programming**

KES' B K Shroff College of Arts & M H Shroff College of Commerce, Mumbai (remotely hosted by Indian Institute of Technology, Bombay), 27<sup>th</sup> April-4<sup>th</sup> May, 2020

# **Hands-on training on Plant Taxonomy**

Department of Botany, Shivaji University, Kolhapur, 5<sup>th</sup>-10<sup>th</sup> September, 2019

#### **Orientation Lectures' on AVISHKAR-2017**

Savitribai Phule Pune University and Fergusson College, Pune, 10<sup>th</sup> October 2017

# **Advanced Green Revolution Global Certification Program**

United Nations Framework Convention on Climate Change, Pune, 2017 Grade: A

# **Basic Green Revolution Global Certification Program**

United Nations Framework Convention on Climate Change, Pune, 2016 Grade: A

#### **OTHER AFFILIATION**

#### **Content Translator (English-Hindi)**

FoodBook Online Services Pvt. Ltd. Hyderabad, September-December 2017

#### **COMMUNITY SERVICE**

#### **Teaching Volunteer**

Doorstep School, Pune, June 2016-March 2017

#### LANGUAGES

Bengali: Native Language

**English**: Distinguished listener and speaker with notable reading and scientific writing skills.

**Hindi**: Distinguished listener and speaker with efficient reading and writing skills.

**Nepali**: Intermediate listener and speaker, Novice reading and writing skills.

**Marathi**: Distinguished listener and speaker with efficient reading and novice writing skills.

German: Intermediate listener and speaker, Novice reading and writing skills.

- German Language Proficiency Certificate (Level-A<sub>1</sub>)
  Goethe Institute, Kolkata, 2012
- German Language Proficiency Certificate (Level-A2) Goethe Institute, Kolkata, 2014