# **Dr. Hemanta Saha** (Ph.D.)

# Associate Professor

Department of Botany Suri Vidyasagar College Suri, Birbhum, West Bengal, India- 731101



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# **Academic Qualification:**

- 2019 Ph.D. in Botany, Visva-Bharati
- 2006 WBCSC SLET
- 2002 M.Sc. in Botany, Visva-Bharati
- 2000 B.Sc. in Botany, Visva-Bharati

### **♣** Area of Specialization: Microbiology (in PG Level)

### **♣Area of Research Work: Pollination Biology**

### **Teaching Experience: 20 Years**

- ➤ 28.8.2004-28.4.2005: Assistant Teacher (Kirnahar Shib Chandra High School) (Deputation)
- ➤ 29.4.2005-28.8.2008 : Assistant Teacher (Gokulbati N B S Vidyapith, Labpur, Birbhum)
- ➤ 2008-22: Dept. of Botany at Suri Vidyasagar College as Assistant Professor (WBCSC)
- ➤ 2022- till day: Dept. of Botany at Suri Vidyasagar College as Associate Professor (WBCSC)

#### **Administrative Positions:**

- **Programme Officer**, National Service Scheme (NSS) (2008-2013).
- ➤ Care Taker Officer (NCC, 15 Bengal BN) Suri Vidyasagar College (2013-2015)
- > Associate NCC Officer (ANO), NCC, SVC (15 Bengal BN, under NCC Gp HQ Burdwan (2015 –Till date)
- ➤ **Head of The Department**, Department of Botany, Suri Vidyasagar College, Suri, Birbhum (2018-20).
- ➤ Assistant Co-Ordinator, Netaji Subhas Open University of Suri Vidyasagar College Study Centre (C-03). (2019-2024).
- ➤ Co-Ordinator, Netaji Subhas Open University of Suri Vidyasagar College Study Centre (C-03). (2024- till day).
- ➤ **Member Governing Body** Rajnagar Mahavidyalaya, Nominee of Wet Bengal State Council of Higher Education, Govt. of West Bengal (2018- till day).
- ➤ **Member Governing Body** Suri Vidyasagar College, Nominee of Teacher Representative (2024- till day)
- ➤ Member of UGBS in Defence Studies, Burdwan University (2021- till day)
- ➤ **Nodal officer** Kanahree Prakalpo (2018 till day).
- Nodal officer Students credits Cards (2022- till day)
- ➤ Assistant Secretary of Teacher Council, Suri Vidyasagar College (2014-2015)

- > Secretary of Teacher Council, Suri Vidyasagar College (2015-2016)
- ➤ **Joint Convener** Development Committee, GB Suri Vidyasagar College (2019-2024)
- ➤ Convenor practical CBCS (Science) 2022-2023
- ➤ **Member**, Green Energy & Environment Audit Committee, Suri Vidyasagar College, Suri, Birbhum (2020 to till date).
- **Convenor**, Purchase Committee, Suri Vidyasagar College, Suri, Birbhum (2024-).
- ➤ Member of Laboratory Equipments (from 2019), Purchase Committee(from 2019),, S & S Welfare committee (from 2019), Admission committee(from 2019), Hostel Subcommittee (from 2019), Development Committee(from 2019), Finance Committee (from 2024-) Suri Vidyasagar College.

#### **Extension and Dissemination activities:**

- ➤ Judge of the district level science exhibition for school students on 31.08.2010. (D.I. of School, Birbhum).
- ➤ Judge of the district level science exhibition for school students on 09.09.2013. (D.I. of School, Birbhum).
- ➤ Judge of the district level science exhibition for school students on 12.08.2015 (D.I. of School, Birbhum).
- ➤ Member of the Appointment Sub Committee for the selection of Guest Lecturers of the Suri Vidyasagar College (Botany) on 07.08.2015.
- ➤ Judge on Municipal Level Science Fair on 20<sup>th</sup> September 2019 (Youth Service & Sports Dept, Govt. of west Bengal).
- Associated with Professional Organization: (LIFE MEMBER): Indian Aerobiological Society & Indian Science Congress.

### **Academic Recognitions:**

- ➤ Joint Convenor One day International Seminar on "Emerging Trends in Biological Sciences" on 8th November, 2022 organized by Department of Botany, Suri Vidyasagar College, Suri,
- ➤ Examination related engagements (Paper setter, Examiner, Scrutineer) with The University of Burdwan, Kazi Nazrul University, Visva-Bharati, Netaji Subhas Open University.
- ➤ Delivered **special lecture** on NSS on 06.03.2019 (NSS special camp) at Rajnagar Mahavidyalaya.
- ➤ Class taken as Counsellor of Netaji Subhas Open University on BDP course.

### **Publications:** Research articles published in International Journals

#### **List of Publications: 15**

Saha, H., Pollination And Flower- Visitors Interaction Of Cocos Nucifera L
 International Journal of All Research Education and Scientific Methods (IJARESM),
 ISSN: 2455-6211, Volume 12, Issue 3, March-2024, Available online at: www.ijaresm.com.

- Saha, H., Studies on *In vitro* Pollen Germination and Tube Development of *Lens culinaris* Medik Volume 15; Issue 01 (Jan–Feb 2024); pp 278–281Centre for Advanced Research in Agricultural Sciences Research Journal of Agricultural Science. ISSN: 0976-1675 (P) ISSN: 2249-4538 (E).
- Paul, A., **Saha, H.,** Malakar, C. and Mal, K. (2023). *In vitro* generation of pharmaceutically important medicinal plants using Silver Nanoparticles: A concise Review *Eco. Env. & Cons. 29 (August Suppl. Issue) : 2023; pp. (S146-S153)* (Received 27 February, 2023; Accepted 23 April, 2023) *ISSN 0971–765X*
- Das, D., **Saha, H.** and Malakar, C. Conjoining Nanoparticles and Provisional Medicines in Ayurveda *Indian Journal of Natural Sciences Vol.14 / Issue 81 / D* Received: 19 July 2023*ec / 2023*Revised: 21 Sep 2023 Accepted: 06 Nov 2023 *ISSN*: 0976 0997
- Das, D., **Saha, H.** and Malakar, C. Unveiling Susruta's Legacy: Ancient Anatomy and the Concept of Sira *International Journal of Zoological Investigations Vol. 9, No. 2, 512-515 (2023)* ISSN: 2454-3055.
- Paul, A., Chatterjee, S., Malakar, C. and **Saha, H.** (2023). Role of Plants for Evaluation of Air Pollution Tolerance Index on the Basis of Some Biochemical Parameters: A Concise Review, *Ecology, Environment and Conservation*, 29: S27-S30. [ISSN: 0971–765X, DOI: http://doi.org/10.53550/EEC.2023.v29i03s.006; Peer-Reviewed; **UGC-CARE** listed (Group-II): Scopus H index 15, NAAS Rating-5.41, **Web of Science** Journal]
- Saha, H., Chatterjee, S. and Paul, A. (2023). Role of pollinators in plant reproduction and food security: A concise review, *Research Journal of Agricultural Sciences*, 14(1): 72-79. [P-ISSN: 0976-1675, E-ISSN: 2249-4538, Peer-Reviewed; UGC-CARE listed (Group-I) & Indexed Journal]
- **Saha, H.,** Paul, A., Biswas, D. and Malakar, C. (2022). An overview on bio-pollinators in present scenario, *International Journal of Entomology Research*, 7(12): 97-100. [ISSN: 2455-4758, Peer-Reviewed; **UGC-CARE** listed (Group-II): **Web of Science** Journal]
- Saha, H., Paul, A. and Malakar, C. (2022). Entomophilic pollination of *Foeniculum vulgare* Gaertn, *International Journal of Entomology Research*, 7(10): 79-81. [ISSN: 2455-4758, Peer-Reviewed; UGC-CARE listed (Group-II): Web of Science Journal].
- Saha, H., Studies on Esterase and Peroxidase activity of *Lens culinaris* Medik. in relation to Stigma Receptivity. Page-1-5. July 2020, Volume 7, Issue 7 Journal of Emerging Technologies and Innovative Research (JETIR) www.jetir.org(ISSN-2349-5162
- Saha, H., Sen, U.K., Das, D., Malakar, C. and Biswas, D. A review of Combining Ayurvedic Therapy with Nanoparticles and Temporary Drugs. Page 592-595. September 2019, Volume 6, Issue 3 International Journal of Research and Analytical Reviews (IJRAR) www.ijrar.org(E-ISSN 2348-1269, P- ISSN 2349-5138)

- **Saha, H.,** Floral Biology And Pollination of *Vigna Catjang* Endl (Volume 7, Issue 3 September 2019 | Page 116-121. ISSN: 2320-2882, International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org. Peer Review
- Saha, H., Mondal, S. and Mandal, S. 2016. Studies on *In Vitro* Pollen Germination And Tube Development Of *Borassus Flabellifer* L. International Journal of Recent Scientific Research. Vol. 7, Issue, 6, pp. 11985-11989, ISSN: 0976-3031.
- Saha, H., Mondal S and Mandal S. 2017. Flower-Visitors Interaction, Pollen Dispersal And Pollination of *Borassus Flabellifer* L. International Journal of Development Research. Vol. 07, Issue, 01, pp.10919-10923,ISSN: 2230-9926.

#### **❖ Seminar / Conference: 16**

- Kundu S, **Saha, H**. and Chattaopadhya K K. 2008. Effect of Climatic Changes on Liberation of Airborne Pollen Grains which causes Health Hazards among the people of Birbhum, "Global Worming and Climate Change: Issues and Challenges in 21<sup>st</sup> Century India" IQAC, Suri Vidyasagar College (in collaboration with Paschimbanga Vigyan Mancha, Birbhum). 23<sup>rd</sup> and 24<sup>th</sup> November, 2008.
- Saha, H., Mondal, S. and Mandal, S. 2012. Pollen release and dispersal of two members of Asteraceae, Impact of Airborne Microbes. Indian Aerobiological Society& MAEER's Arts, Commerce & Sciene College, Pune and MAEER's Maharashtra Institute of Pharmacy, Pune13<sup>th</sup>-15<sup>th</sup> December, 2012.
- Saha, H., Mondal, S. and Mandal, S. 2014. Pollination biology of *Borassus flabellifer* L. International Symposium on Conservation and Management of Pollinators for Sustainable Agriculture and Ecosystem Services(ISCMP-2014). V Sivaram Research Foundation 24<sup>th</sup> to 26<sup>th</sup> September, 2014.
- Saha, H., Mondal, S. and Mandal, S. 2014. Flower-visitor interaction with reference to pollen dispersal and pollination of *Sesamum indicum* L. International Conference on Nonlinear and its Applications in Physical and Biological Sciences (CNDAPBS-14), Darjeeling Govt. College in collaboration with Bose Institute & St. Joseph's College., November 01-03,2014.
- Saha, H., Mondal, S. and Mandal, S. 2015. Pollen dispersal, flower-visitor interaction and pollination of *Cocos nucifera* L. 18th National Conference on Impact of Aerosols on Health, Heritage and Environment (NCIAHHE-2015), held at Tumkur University, Tumkur, Karnataka, during 28th 30th September, 2015.
- Saha, H., Mondal, S. and Mandal, S. 2015. Floral biology, flower-visitor interaction and pollination of *Foeniculum vulgare* Gaertn. National Symposium on Bioresources and

- Sustainable Development & 2nd National Bioresources and Sustainable Development Summit, held at North-Eastern Hill University, Shilling during 28th -29th October, 2015
- Saha, H., Mondal, S. and Mandal, S. 2016. Studies on *in vitro* pollen germination and tube development of *Trichosanthes anguina* L. National Conference on Harmony with Nature in Context of Resouece Conservation and Climate Change, held at Vinoba Bhave University, Hazaribagh during 24th -24th October, 2016.
- Saha, H.2016. Sustainability of Agriculture & deforestation in India, UGC National level seminar, Dr. B.N Dutta Smriti Mahavidyalaya, Hatgobindopur, WB, 26-27 Sept 2016.
- Saha, H., Mondal, S. and Mandal, S. 2017. Flower-visitor interaction and pollination of *Benincasa hispida* (Thunb.) Cong. National seminar on Plant and Microbial Resources: Utilization and Conservation, held at the Department of Botany, Visva-Bharati, Santiniketan, during 15th-16th March, 2017.
- Saha, H., Mondal, S. and Mandal, S. 2018. Floral biology and pollen dispersal of *Capsicum annum* L. XX National Conference of Aerobiology held Sant Gadge Baba Amaravati University, Amaravati, during 29th -31st January, 2018.
- Saha, H., Mondal, S. and Mandal, S. 2018. Floral biology and pollination of *Vigna mungo* (L.) Hepper. National seminar on Trends in Contemporary Research in Plant Science held at the Department of Botany, Vidyasagar University, Midnapore, during 29th-30th March, 2018.
- Saha, H., Mondal, S. and Mandal, S. 2019. Flower- visitor interaction and pollination of *Luffa acutangula* (L.) Roxb. National seminar on Current Trends and Future Prospects In Plant Science Research, CAS, Dept. of Botany, Banaras Hindu University, February 1-3, 2019.
- Saha, H., Mondal, S. and Mandal, S. 2019 Floral biology and pollination of *Nigella sativa* L. 4th Regional Science & Technology Congress (Western Region), 2019 [4 th RSTC (WR), 2019] The University of Burdwan and Dept.of Science & Technology and Biotechnology, December 09-10, 2019.
- Saha, H.,2022. Sustainable Development and Pollination. International Seminar on Emerging Trends in Biological Science. Dept. of Botany, Suri Vidyasagar College, Date-08 November 2022.
- Saha, H.,2023. Floral Biology and Pollination of *Linum usitatissicum* L5<sup>th</sup> Regional Science and Technology Congress, 2022-23 Bankura University and Department of Science and Technology and biotechnology, Govt. of West Bengal..

• Saha, H., 2023 Sustainable Development and Role of Pollinatorin Pollination. International Conference on Life and Environment on Life and Environment: Issues and Concern, Dept. of Botany, IQAC Vivekananda Mahavidyalaya, Purba Bardhaman 9<sup>th</sup> March 2023.

### **❖** Human Resource Development Center (HRDC)/ Academic Staff College Orientation/ Refresher Course/ NEP Course: 06

Name of the Course/ Summer	Place	Duration	Sponsoring Agency
School			
OP-76 <sup>th</sup>	ASC, Burdwan University	22 <sup>nd</sup> July 2010 To 18 <sup>th</sup> August 2010	UGC Sponsored O P Org. by ASC, University of Burdwan
RC-in Nano Science,Nano Techonology &Application.	ASC, Burdwan University.	11 <sup>th</sup> June 2014 To 1 <sup>st</sup> July 2014	UGC Sponsored RC Org. by ASC, University of Burdwan
RC-Plant	ASC, Burdwan	16 <sup>0</sup> 8.2019 to	UGC Sponsored RC Org. by ASC,
Advancement in Biological Sciences.	University.	29·08. 2019	University of Burdwan
Refresher Course ( REF/SD/PT-1-139 ) NCC	OTA (Officers Training Academy) , Kamptee, Maharastra,	19 July to 07 August 2022	DG, NCC, under Ministry of Defence, Govt. of India.
RC-Nano-Science, Nano-Techonology and Applications	UGC-HRDC, Burdwan University.	From 1 <sup>st</sup> December 2022 to 14 <sup>th</sup> December 2022.	UGC Sponsored RC Org. by ASC, University of Burdwan
Interdisciplinary Refresher Course in Advanced Research Methodology	Teaching Learning Centre, Ramanujan College, University of Delhi Under Aegis of Moe, Pandit Madan Mohon Malaviya Mission on Teachers and Teaching.	22 September-06 October 2022.	Teaching Learning Centre, Ramanujan College
NEP 2020 Orientation & Sensitization Programme-(Online)	Malaviya Mission Teacher Training Centre (MMTTC)	04 March to 13 March 2024	Erswhile UGC Human Resource Development Centre, Aligarh Muslim University, Aligarh

#### **Workshop Demonstration / Participation: 03**

**Attended** Workshop on 'Wildlife conservation of today's youth in West Bengal, India, with a focus on Monitor Lizards'; organized by Monitor Lizard Special Group (MLSG) International Union for Conservation of Nature and Natural Resources (IUCN) and Environmental, Agriculture and Education Society (EAES), Bareilly, India; held from 29th July-2nd August, 2019.

**Faculty Development Programme** (FDP, Online ) ON DEVELOPMENT OF COURSE FOR SWAYAM (MOOCs) , offered by Netaji Subhas Open University collaboration with Commonweaith Education Media Centre for Asia. (Certificate No : 17 <sup>th</sup> August to 31 <sup>st</sup> August 2021)

# **Let Extra-Curricular Activity**

- ✓ Adhoc Adventure Course, at-Jawahar Institute Of Mountaineering & Winter Sports, Pahalgam-J&K. From 8.6.2011 to 17.6.2011. Sponsored by- Ministry of Affairs and Sports, Government of India.& NSS.
- ✓ Training Orientation & Research Center (Sponsored by Deptt. Of Youth Affairs & Sports, Govt. of India) Ramakrishna Mission Ashrama Narendrapur, Kolkata 700 103, West Bengal Orientation course held at this centre from 1<sup>st</sup> March to 6<sup>th</sup> March, 2012.
- ✓ Training of Trainers on Social Harmony, National Unity and Human Rights, Rajiv Gandhi National Institute of Youth Development (RGNIYD) (An Institute of National Importance by an Act of Parliament No.35/2012) Ministry of Affairs and Sports, Government of India Sriperumbudur 602105, from 27th December2012 to 2nd January 2013.
- ✓ Pre-Commission Cadet Course (PRCN/SD-159) from 14.12.2015 to 12.3.2016 at Officer Training Academy (OTA, NCC) Kamttee, Maharashtra under the Ministry of Defence, Govt. of India.
- ✓ Contingent Leader- Nalanda (Bihar) Trek-2017, from 19 Nov to 28 Nov 2017 Conducted by NCC Gp HQ, Gaya (Bihar) under NCC Dte. Bihar & Jharkhand.

Dr. Hemanta Saha June, 2024