

CURRICULUM VITAE

DR. NILOFER (Ph.D. Biological Sciences)

Assistant Professor

Department of Biosciences

Integral University, Lucknow, UP, India

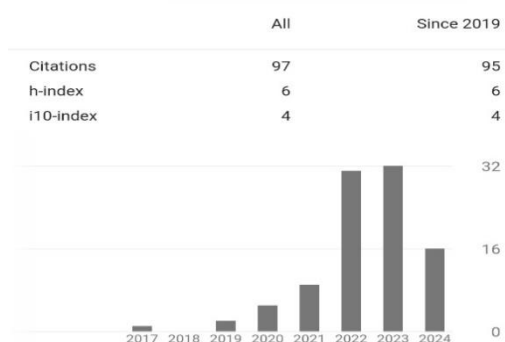
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Google Scholar Profile



ACADEMIC QUALIFICATIONS

- Ph.D. in Biological Sciences from **CSIR-Central Institute of Medicinal and Aromatic Plants**, on the topic entitled “**Enhancing productivity and quality of *Cassia angustifolia* Vahl. through agro-technological interventions under sub-tropical plains of North India**” in the year 2021.
- Qualified **ASRB-NET (Plant Physiology)** in 2017.
- **Master of Sciences (M.Sc.) in Plant Sciences (Botany)** from Lucknow University in 2011.
- Bachelor of Sciences (B.Sc.) from **Ewing Christian College (Allahabad University)** in 2009.

RESEARCH AREA

Plant environment interaction, Plant stress physiology, Secondary metabolite synthesis in Medicinal and aromatic plants, Post-harvest processing of Medicinal plants.

ACADEMIC AWARDS/ MEDALS

- **BEST POSTER PRESENTATION AWARD**
MAPSI (National convention and seminar on Leveraging Aromatic and Medicinal Plants & Product)
- **SENIOR RESEARCH FELLOWSHIP (SRF) from Council of Scientific and Industrial Research (CSIR), Govt. of India. 2017-2020**
- Awarded with **Young scientist award-2022 (Plant Science)**, by Science and Tech Society for integrated rural improvement (S & T SIRI), Telangana.
- **Best Ph.D. Thesis award- 2023** by Agricultural Technology Development Society (ATDS) on the occasion of 6th International conference in Strategies and challenges in Agricultural and life science for food security and sustainable environment (SCALFE-2023).
- Dr. Mitra memorial medal for scoring **highest marks in BTSP** (Biological Technique and Specimen Preparation) in B.Sc. part I.
- Dr. Mitra memorial medal for scoring **highest marks in Botany** in B.Sc. part I.
- Man Mandir Gill Memorial medal for scoring **highest marks in Bio Group** in B.Sc. part I.
- Mary Rice Memorial medal for scoring **highest marks in Biology** at B.Sc. part I, II.
- Secured **First place in order of merit** in the examination of B.Sc. II.
- Dr. S.N. Bhattacharya memorial medal for scoring **highest marks in Botany** at B.Sc. part I, and II.
- Dudgeon Memorial medal for securing **highest marks in Botany** in B.Sc. Part I, II and III.
- Sri Ayodhya Nath Srivastava Memorial medal for **topper in Botany** in B.Sc. I, II, and III.

RADIO TALK

Delivered a radio talk on “**Village in Central Budget 2020-2021**”

(Broadcasted on All India Radio on 6th February, 2020 at 6.20 pm.)

RESEARCH EXPERIENCE

- Worked as project assistant in **CSIR Project** entitled “**Introduction, Domestication, Improvement and Cultivation of Economically Important Medicinal and Aromatic Plants**” from March 2013-March 2017.
- **CSIR-SRF** from April 2017- April 2020.

- Worked as Project associate in **CSIR Project** entitled “**Aroma mission, Phase II**” from February 2021-February 2022.

VARIETY RELEASED:

CIM-Sunahari: A high-yielding, yellow satawar variety of *Asparagus adscendens* Roxb. (2016).

CIM-Shikhar: Lemon grass variety.

TEACHING EXPERIENCE

Working as Assistant Professor at Department of Biosciences, Integral University, Lucknow Since April, 2022.

PROFESSIONAL MEMBERSHIP

- Life membership of **Uttar Pradesh Academy of Agricultural Sciences (UPAAS)**.
11.11.2022
- Life membership of **Agricultural Technology Development Society (ATDS)**.
29.04.2023

BOOK AUTHORED:

Plant Pathology: A comprehensive study of Phytopathogens and it's management strategies. 2024. Mahjabi Hashmi, **Nilofer**, Anand Milan, Anoop Kumar. 2024. ISBN: **978-3-96492-552-7**. Weser Books, Germany.

BOOK EDITED

Glimpse of Genetics and Plant Breeding. Sujit Kumar, Divya Srivastava, **Nilofer**, Mayank Srivastava. Weser Books, Germany ISBN: 9783964924469

RESEACH PUBLICATIONS

1. **Nilofer**, Yashdeep Srivastava, Anuj Kumar, Puja Khare, Anil Kumar Singh, Saudan Singh. 2022. Variation in morphophysiological responses and differential expression of sennoside biosynthesis pathway genes under water stress in *Cassia angustifolia* Vahl. **Industrial Crops and Products**. 184:115047. **(IF 6.44)**
2. **Nilofer**, Anil Kumar Singh, Parminder Kaur, Devendra Kumar, Kirti Verma, Rakesh Kumar, Anandkumar TM, C.S. Chanotiya, Saudan Singh, 2021. Productivity and quality of *Cymbopogon martinii* (Roxb.) Wats. as influenced by harvesting at different phenological stages. **Industrial Crops and Products**. 174: 114215. **(IF 6.44)**
3. **Nilofer**, Anil Kumar Singh, Devendra Kumar, Parminder Kaur, Anuj Kumar, Anjali Singh, Puja Khare, Neelam Singh Sangwan, Alok Kalra, Saudan Singh (2018). A novel method for survival of rose scented geranium (*Pelargonium graveolens* L.) mother plants under extreme climate conditions. **Industrial Crops and Products**, 126 (2018); 227-237. **(IF 6.44)**
4. **Nilofer**, Anil Kumar Singh, Anjali Singh, Saudan Singh (2018). Impact of sowing and harvest times and irrigation regimes on the sennoside content of *Cassia angustifolia* Vahl. **Industrial Crops and Products** 125 (2018); 482-490. **(IF 6.44)**
5. **Nilofer**, Parminder Kaur, Anil Kumar Singh, Nidaf Khan, Saudan Singh (2016) Optimization of seed rate and seedling establishment technique for raising the nursery of French Basil (*Ocimum basilicum* L.) **Industrial crops and products**. 85: 190-197. **(IF 6.44)**
6. **Nilofer**, Kushal Pal Singh, Kirti Verma, Devendra Kumar, Anil Kumar Singh, Puja Khare, C.S. Chanotiya, Saudan Singh (2020). Quality assessment of menthofuran rich essential oil of *Mentha piperita* (CIMAP-Patra) stored at different temperatures and containers" **Journal of Pharmacognosy and Phytochemistry**. 9(5): 1603-1610. **(NAAS: 5.21)**
7. **Nilofer**, Anil K Singh, Namita Singh, Birendra Kumar, Saudan Singh (2020). Effect of seed heteromorphism and seed collection time on germination of the medicinal plant *Centella asiatica* (L.) Urban in sub-tropical plains of north India. **Journal of Medicinal and Aromatic Plant Sciences**. 42 (3-4): 229-233. **(NAAS: 4.49)**
8. **Nilofer**, Anil Kumar Singh, Rakesh Kumar, Devendra Kumar, Parminder Kaur, Anjali Singh, Karuna Shankar, Saudan Singh (2021). Optimization of primary post-harvest techniques for *Cassia angustifolia* Vahl. **Journal of Pharmacognosy and Phytochemistry** 10(5): 197-204. **(NAAS: 5.21)**
9. **Nilofer**, Saudan Singh, Anil Kumar Singh, Parminder Kaur, Aman Siddiqui, Devendra Kumar, Raj Kishori Lal, Chandan Singh Chanotiya. (2023). Influence of the season on the quantity and chemical composition of the essential oil and synthesis of secondary metabolites in *Cymbopogon martini* (Roxb.) Wats. **Agrotechniques in Industrial Crops**. 3(4): 180-191.

10. Kirti Verma, Kushal Pal Singh, Anjali Singh, Nikhil Bhaskar Lothe, **Nilofer**, Devendra Kumar, Anil Kumar Singh, Rakesh Kumar, Puja Khare, Saudan Singh (2021). Co- cultivation of medicinal plant kalmegh [*Andrographis paniculata* (Burm. F.) Wall ex. Nees]with food crops for enhancing field productivity and resource use efficiency. **Industrial Crops and products**. 159: 113076. (IF 6.44)
11. Devendra Kumar, Rakesh Kumar, Anil Kumar Singh, Kirti Verma, Kushal Pal Singh, **Nilofer**, Anuj Kumar, Vivek Singh, Parminder Kaur, Anjali Singh, Anandkumar T M, PujaKhare, Saudan Singh. (2021). A novel and economically viable agro-technique for enhancing productivity and resource use efficiency in menthol mint (*Mentha arvensis* L.) **Industrial Crops and products**. 162: 113233. (IF 6.44)
12. Anjali Singh, Kirti Varma, Devendra Kumar, **Nilofer**, Nikhil Bhaskar Lothe, Anuj Kumar, Archana Chaudhary, Parminder Kaur, Kushal Pal Singh, Anil Kumar Singh, Rakesh Kumar, Anandakumar T.M., Saudan Singh. (2021). Optimized irrigation regime and planting technique improve yields and economics in aloe vera [*Aloe barbadensis* (Miller)]. **Industrial Crops and Products**. 167: 113539. (IF 6.44)
13. A. Saroj, A. Kumar, A.K. Srivastava, A. Khaliq, **N. Absar**, M. Alam, A. Samad (2014). New Report of Black Leaf Spot Mold (*Pseudocercospora fuligena*) on *Withania somnifera* from India. **Disease Notes**. 89 (9). (IF 4.438)
14. Ved Ram Singh, R.S. Verma, Rakesh K. Upadhyay, R.K. Lal, Rajendra C. Padalia, Chandan S. Chanotiya, **Nilofer**. (2017). Stable variety selection over location and recommendation for rose-scented geranium (*Pelargonium graveolense* L' Herit. ex Aiton.). **Journal of essential oil research**. (IF 1.96)
15. **Nilofer** and Saudan Singh (2018). Senna (*Cassia angustifolia* Vahl.): Recent advances in pharmacognosy and prospects of cultivation in India. **Bioved**, 29(2): 399-408, 2018. (NAAS: 4.54)
16. **Nilofer**, Anil Kumar Singh, Saudan Singh, S P Gangwar, Man Singh, Rupal Singh, Anju Yadav (2015). Effect of weather conditions on growth, yield and quality of Menthol mint (*Mentha arvensis* L.) cultivars transplanted in different years on different dates under sub-tropical climate of north India. **International Journal of Agronomy and Agriculture Research**.6 (2):82-88.
17. Namita Singh, Arvind Kumar Singh, **Nilofer**, Ved Ram Singh, Veerendra Pratap Singh (2018). Importance of endangered/rare Astavarga medicinal plants in traditional systemof medicine in Ayurveda. **International journal of agricultural Sciences**. 14 (258-265).(NAAS: 4.82)
18. Kumar, D., Kumar, R., Singh, A.K., **Nilofer**, Kumar, A., Kaur, P., Singh, A., Pandey, J., Khare, P., Singh, S. (2020). Influence of planting methods of suckers, (rhizome or propagative material), essential oil yield, and quality of menthol mint (*Mentha*

*arvensis*L.). **Inter. J. Curre. Microbio. App. Sci.** 9(7). (NAAS: 5.38)

19. Parminder Kaur, **Nilofer**, Anil K Singh, Devendra Kumar, Anuj Kumar, Kirti Verma, Anjali Singh, Kushal P Singh, Archana Chaudhary, Anandkumar TM, Rakesh Kumar, Saudan Singh. 2021. Evaluation of productivity and quality of *Withania somnifera* (L.) Dunal under different plant populations, irrigation levels, and moisture conservation practices in sub-tropical plains of north India. **Journal of Medicinal and Aromatic Plant Sciences.** 43(1-2), 37-48. (NAAS: 4.49)
20. Devendra Kumar, Anuj Kumar, **Nilofer**, Anil Kumar Singh, Archana Chaudhary, Rakesh Kumar, Santosh C. Kedar, Chandan Singh Chanotiya, Puja Khare, Saudan Singh. (2024). Maximizing Essential Oil Yield and Quality in Menthol Mint (*Mentha arvensis* L.) by Reducing Water Requirement through Deficit Irrigation Practices. **Agrotechniques in Industrial Crops.** 4(1): 24-27
21. Anuj Kumar, Neha Verma, **Nilofer**, Parminder Kaur, Devendra Kumar, Dipayan Ghosh, Anjali Singh, Aman Siddiqui, Narendra Kumar, Anil Kumar Singh, Puja Khare, Saudan Singh, 2022. Physiological and chemical changes induced by transparent polythene + green net shed on *Pelargonium graveolens* L. mother plants during monsoon season. **Industrial Crops and products.** 188: 115686. (IF 6.44)

CONFERENCE, SYMPOSIUM ATTENDED/ ORAL PRESENTATION

1. Saudan Singh, S. P. Gangwar, **Nilofer**, Anil Kumar Singh, S. K. Sharma, Israr Ali and V. R. Singh (2013) Benefits of postponement of harvesting date during rainy season to avoid lethal yellowing in citronella under sub-tropical climate of north-India. Presented in National Conference on Microbes Promoting Crop Health, Productivity and Sustainability held at CSIR-CIMAP on October 26&27, **2013**
2. **Nilofer**, S. P. Gangwar Anil Kumar Singh, S. K. Sharma, Israr Ali and Saudan Singh, (2014) Optimization of seed rate and growing conditions for raising seedlings of *Ocimum basilicum* L. presented in National convention and seminar on Leveraging Aromatic and Medicinal Plants & Product (MAPSI) held at CSIR- CIMAP on March 8&9, **2014**.
3. **Nilofer**, Rupal Singh, Anil kumar Singh and Saudan Singh. Development of *in-situ* moisture conservation practices for enhancing productivity of the crops under moisture stress conditions: A potential R & D area for Ashwagandha. (Review presented in JIGYASA-**2014**)
4. **Nilofer**, S.P. Gangwar, Anil Kumar Singh and Saudan Singh. Effect of age of seedling and planting time on growth and yield of sweet basil (*Ocimum basilicum*) under sub- tropical climate of North-India. (Paper presented in GSBC – **2014** in North

MaharashtraUniversity)

5. **Nilofer** and Saudan Singh. Non chemical methods of weed management: The eco-friendly and sustainable approach. (Paper presented in Jigyasa-**2015**)
6. Saudan Singh, Anil Kumar Singh, **Nilofer** and Rupal Singh Farming of medicinal crops in water stress prone areas: Scientific, Environmental, Societal and Industrial prospective. (Poster presented in ICOMP- **2015**)
7. Anil Kumar Singh, **Nilofer**, Perminder Kaur, Raghubind Kumar, S.K.Sharma and Saudan Singh. Uttar bharat me varsha ki kami: prachalit faslo ke liye samyik samasya wahi aus faslo ke liye vardaana. (Poster presented in Rashtriya vaigyanic sangoshthi- **2015**)
8. Attended **International water Forum 2016 at Delhi**.
9. **Nilofer**, Anuj Kumar, Parminder Kaur, Devendra Kumar, Anil Kumar Singh, Saudan Singh. Biosynthesis of Sennosides, Proline and MDA in *Cassia angustifolia* Vahl. as influenced by water stress. (poster presented in International Conference on Functional Biology and Molecular Interactions: Application in Health and Agriculture FBMI 2017 December 20-22, **2017**)
10. **Nilofer**, Anuj Kumar, Anjali Singh, Parminder Kaur, Saudan Singh. Post-harvest quality assessment of *Cassia angustifolia* Vahl. under different drying methods, packaging material and storage period. (poster presented in International Conference on translational approaches in clinical, environmental & biotechnological research. Genopro-2019. October 11-12, **2019**).
11. Attended **National seminar on healthy soil for healthy life**. December 5, 2017. ICAR-IISR, Lucknow.
12. Parminder Kaur, A. Singh, D. Kumar, A. Kumar, K. Verma, KP Singh, R Kumar, SK Sharma, AK Singh, S. Singh and **Nilofer** (2019) Adoption of Early Mint Technology (EMT) by menthol mint farmers in Uttar Pradesh. Poster presented in National Conference on “Mint- Prospects, Challenges and Threats” held at CSIR- CIMAP On February 24&26, **2019**.
13. Parminder Kaur, **Nilofer**, Saudan Singh (2021). Co-cultivation of medicinal and Aromatic plants with traditional crops for better productivity in Northern Indian plains.
14. Participated in National conference on **Digital and Organic Interventions sustainable Agriculture, Horticulture and Animal Husbandry (DOISHA-2022)**. October 15-16, 2022 at ICAR-Indian Institute of Rice Research (IIRR), Telangana.
15. **Delivered an invited lecture titled** “Seasonal fluctuation affects essential oil yield from *Cymbopogon martinii* (roxb.) Wats' leaves and inflorescence differently” in national conference on **Emerging trends in Biological Sciences, January 27-28, 2023** held at Department of Biochemistry, Dr. Rammanohar Lohia Awadh University, Ayodhya.

WORKSHOP/EXPERT LECTURE

- Attended two weeks' international workshop on “Teaching

competency through micro-teaching skills” organized by **Integral University**, from 14th February to 2nd March, 2023.

- Attended two days Workshop on **“Cycad Biology”** organized by **CSIR-National Botanical Research Institute** on 19-20 December, 2022.
- Attended expert lecture on **“Role of intestinal microbiota and probiotics in Health and Disease”** by Dr. Neerja Hajela held in Department of Biosciences, Integral University on 4th July, 2023.
- Two week workshop on **“Computational Strategies for Drug Discovery and Sustainable Development”** organized by Department of Chemistry and Human Resource Development Centre of Integral University in collaboration with Department of applied sciences, IIT, Allahabad. 9th August to 14th October, 2023.
- Two days workshop on **“Artificial Intelligence in teaching and research”** organized by MSME-Technology Development Centre (PPDC), Govt. of India Society at Integral University. 29th November to 30th November, 2023.
- Two week International workshop on **“Higher Education Quality Enhancement: Pedagogical Reforms”** organized by Faculty of Education in collaboration with IQAC, Integral University. 28th August-14th September, 2023.

List of Programmed Organized

Departmental Educational Tour: Worked and joined as team member in **Departmental Educational Tour to Punjab and Himanchal Pradesh** from 7th to 14th January, 2024. (Total 120 Students of B.Sc. Final year and M.Sc. First year students).

FDP: Recent Advancement in Biotechnology for Sustainable Development, organized by Department of Bioengineering and Biosciences, from 7th October-4th November, 2023.

Seminar: One Day international Seminar on **Application of microbes in synthetic biology and sciences**, held on 18th September, 2023 at Integral University.

Symposium: One Day International Symposium on **Artificial Intelligence in Biological sciences: Recent Trends**, held on 23rd April, 2024.

World Science Day Activity: Online Photography competition

VAC: Micropropagation and In Vitro Germplasm Conservation (BSV19) Feb 2024 onwards.

Guest Lecture: **“Potential Application of Nutraceuticals Guggulsterone in Neurological**

Dysfunction” by **Prof. (Dr.) Sidharth Mehan**, Professor, ISF College of Pharmacy, Moga, Punjab Organized by department of Biosciences, Integral University on 4th April, 2024