

## CURRICULUM-VITAE

**Sadhna Babbar (née Dhingra)**

### **Personal Information:**

Date of Birth: June 15, 1959

Citizenship: Indian

Present Position: Associate Professor  
Department of Botany,  
Swami Shraddhanand College, Alipur, Delhi-36

Address for Correspondence: 164 (2<sup>nd</sup> Floor), Tagore Park, Delhi 110009

E-mail address: sadhanababbar@gmail.com

### **Educational Qualification:**

<b>Degree</b>	<b>University</b>	<b>Year of Passing</b>	<b>Division/Grade</b>
B.Sc. (Hons) Botany	University of Delhi	1978	First
M.Sc. Botany	University of Delhi	1980	First
M.Phil.	University of Delhi	1981	'O' grade with Distinction
Ph.D.	University of Delhi	1986	

### **Thesis approved by the University of Delhi:**

- Thesis on Sunflower (*Helianthus annuus*) submitted for the partial fulfillment of the degree of Master of Science.
- Thesis entitled, "Some aspects of Ultrastructure of Mosses" submitted for the partial fulfillment of the degree of Master of Philosophy.
- Ph.D. thesis entitled, "Experimental Studies on Some Bryophytes".

**Research Interest:** Physiology of Growth and Development with special reference to Lower Plants

**Fellowships:**

- All India Merit Scholarship from the Ministry of Education & Social welfare, Government of India (1978-1980).
- Junior Research Fellowship awarded by the University Grants Commission, New Delhi (1981-1984).
- Senior Research Fellowship awarded by the University Grants Commission, New Delhi (1984-1986).
- Research Scientist (in a PL-480 Project, December 1985-May 1986, June 1, 1987-June 21, 1987).
- Pool Officer of the Council of Scientific & Industrial research, New Delhi (June 22, 1987- June 20, 1989).
- Research Associate of the Council of Scientific & Industrial research, New Delhi (June 21, 1989- October 15, 1989).

**LIST OF PUBLICATION:**

1. Dhingra S and Chopra RN (1983) Prtotonemal gemmae in the moss *Trematodon brevicalyx* Dixon. Journal of Bryology **12**: 571-573. ISSN: 17432820, 03736687, **Impact Factor 1.647.**
2. Chopra RN and Dhingra-Babbar S (1984) Studies on bud induction in the moss *Trematodon brevicalyx*. New Phytologist **97**: 613-620. ISSN: 0028646X, 14698137, **Impact Factor 7.672.**
3. Dhingra –Babbar S and Chopra RN (1985) Production of protonemal gemmae in the moss *Semibarbula orientalis* (Web.) Wijk. & Marg. Journal of Bryology **13**: 533-535. ISSN: 17432820, 03736687, **Impact Factor 1.647.**
4. Dhingra –Babbar S and Chopra RN (1985) Induction of callus in the liverwort *Marchantia palmata* Nees. Journal of Bryology **13**: 585-590. ISSN: 17432820, 03736687, **Impact Factor 1.647.**
5. Chopra RN and Dhingra-Babbar S (1986) Studies on callus induction, its growth and differentiation in *Marchantia palmata* Nees. I. effect of some amino acids, complex organic substances and activated charcoal. Journal of Hattori Botanical Laboratory **60**: 193-202. ISSN: 0073-0912 (Print), **Impact Factor 0.46.**
6. Dhingra –Babbar S (1986) Influence of *Aerobacter aerogenase* on *in vitro* morphogenetic behavior of *Philonotis lancifolia* Mitt. Current Science **55**: 1097-1098. ISSN 0011-3891, **Impact Factor 0.926.**

7. Dhingra –Babbar S and Chopra RN (1986) Studies on callus induction, its growth and differentiation in *Marchantia palmata* Nees. II. Effect of some growth regulators. *Beitrage zur Biologie der Pflanzen* **61**: 467-476. **ISSN**: 0005-8041.
8. Dhingra –Babbar S (1986) Studies on bud induction in the moss *Hymenostomium edentulum* (Mitt.) Besch. *Journal of Hattori Botanical Laboratory* **61**: 93-99. **ISSN**: 0073-0912 (Print), **Impact Factor 0.46**.
9. Dhingra –Babbar S (1988) *In vitro* behavior of gemmae in *Trematodon brevicalyx* and *Semibarbula orientalis*. I. Effect of light and some growth regulators. *Journal of Hattori Botanical Laboratory* **64**: 411-427. **ISSN**: 0073-0912 (Print), **Impact Factor 0.46**.
10. Chopra RN and Dhingra-Babbar S (1988) Studies on protonemal differentiation and bud formation in *Philonotis lancifolia* Mitt. I. Effect of some growth regulators. *Cryptogamie Bryologie et Lichenologie* **9**: 241-254. **ISSN**, 1290-0796, **Impact Factor 1.5**.
11. Dhingra –Babbar S (1988) Effect of some growth regulators on protonemal growth and bud induction in two mosses: *Pholonotis lancifolia* and *Trematodon brevicalyx*. *Phytomorphology* **38**: 299-307. **ISSN**: 00319449.
12. Dhingra –Babbar S (1989) *In vitro* behavior of gemmae in *Trematodon brevicalyx* and *Semibarbula orientalis*. II. Effect of activated charcoal, coconut milk, octopine and tryptophan. *Journal of Hattori Botanical Laboratory* **66**: 299-306. **ISSN**: 0073-0912 (Print), **Impact Factor 0.46**.
13. Dhingra –Babbar S and Chopra RN (1990) Studies on protonemal differentiation, bud and gemmae formation in *Trematodon brevicalyx*: effect of interaction of kinetin with tryptophan and PCIB. *Phytomorphology* **40**: 65-68. **ISSN**: 00319449.
14. Dhingra –Babbar S (1991) Effect of sucrose on morphogenesis of isolated cells of *Marchantia palmata* Nees. *Phytomorphology* **41**: 129-132. **ISSN**: 00319449.
15. Chopra RN and Dhingra-Babbar S (1992) Studies on protonemal differentiation and bud formation in *Philonotis lancifolia* Mitt. and *Trematodon brevicalyx* Dixon: effect of some purine derivatives. *Journal of Hattori Botanical Laboratory* **71**: 37-45. **ISSN**: 0073-0912 (Print), **Impact Factor 0.46**.

#### Articles in Edited Books:

1. Bhatla SC and Dhingra-Babbar S (1990) Growth regulating substances in mosses. **In**: Chopra RN and Bhatla (Eds) *Bryophyte Development: Physiology and Biochemistry*. Pp. 79-102. CRC Press, Florida.

2. Malik S, Babbar S and Babbar SB (2018) DNA Barcoding: species identification sans physical presence In: *Advances in Life Sciences*. S R Scientific Publications, pp.1-11.
3. Malik S, Babbar S and Babbar SB. (2020) DNA Barcoding of Medicinal Plants, Chapter-1 pp. 1-36 in *New Vistas in Indian Flora*, edited by Dr. L. J. Singh and Y. Ranjan, published by M/S Bishen Singh Mahendra Pal Singh, Dehradun, India. ISBN: 978-00-000-0000-0

**International and national conferences/workshops organized:**

- Convener the Organizing Committee of a two-day NEAC workshop on “Biodiversity” sponsored by the Ministry of Environment & Forests, Government of India and held at Swami Shradhanand College, University of Delhi from February 8 – 9, 1993.
- Member of the Organizing Committee of a two-day NEAC workshop on “Environmental Education: Montreal Protocol”, sponsored by the Ministry of Environment & Forests, Government of India and held at Swami Shraddhanand College, University of Delhi from January 9 – 10, 1995.

**Computer Literacy:** MS word, MS Power Point.

- Attended a Training Course on “Internet Concepts & Its Applications” organized by the Delhi University Computer Centre, University of Delhi from October 4 – 8, 1999.
- Attended a Training Course on “Windows 95, MS Word, Power Point” organized by the Delhi University Computer Centre, University of Delhi from October 4 – 8, 1999.

**Contribution in International Conferences/Seminars/Workshops :**

- Participated as the Member of Infrastructure Committee of the International Conference on “Environment and Development: Challenges & Opportunities”, organized by Swami Shraddhanand College, University of Delhi from March 4 – 6, 2005.
- Attended the International symposium on “Plant Taxonomy and Ethnobotany” organized by the Botanical Survey of India, Ministry of Environment Forest and Climate Change (MOEF), Government of India in Kolkata, West Bengal from 13<sup>th</sup> to 14<sup>th</sup> February 2020.

### **National Conferences Seminars/Workshops Attended:**

- Participated in a Professional Development Program entitled “Non-Conventional Energy in Educational Curriculum” conducted by the Centre for Professional Development in Higher Education, University of Delhi from March 19 to 24, 1990.
- Attended a Four-week orientation course ( CODE-OR 12, General and Subject-specific), conducted by the Center for Professional Development in Higher Education, University of Delhi from December 16, 1991 – January 11, 1992.
- Attended a Four-week orientation course ( CODE-OR 18, General and Subject-specific) conducted by the Centre for Professional Development in Higher Education, University of Delhi from March 30, 1993 – April 26, 1993.
- Attended a Three-week Professional Development Refresher Course in Life Sciences, conducted by the Centre for Professional Development in Higher Education, University of Delhi from December 23, 1998 – January 12, 1999. Presented a paper on “Alternative Gelling Agents” during the Course.
- Attended the National Symposium on “Microbes in Plant Development and Environmental Protection” organized by the Department of Botany, University of Delhi from December 23 – 24, 1997.
- Attended the National Symposium on “Sustainable Aquaculture” held at the Department of Botany, University of Delhi from February 20 – 21, 1998.
- Attended a Seminar on “Biodiversity and Environmental Management” held at Kirorimal College, University of Delhi from December 2 – 4, 1998.
- Attended a 3-week Professional Development Programme, Refresher Course in Life Sciences entitled “Microbial Biotechnology” conducted by the Center for Professional Development in Higher Education, University of Delhi from December 23, 1999 – January 12, 1999.
- Attended a Seminar on “Colonialism, Post-Colonialism, Neo-Colonialism: Interdisciplinary Perspectives” organized by Swami Shradhdhanda College, University of Delhi on January 23, 2001.
- Participated in a NEAC Campaign on “Clean Green Earth”, held at Department of Botany, Daulat Ram College, University of Delhi from February 5 – 6, 2001.
- Attended a 3-week Professional Development Programme, Refresher Course in Life Zoology (Z-1), conducted by the Center for Professional Development in Higher Education, University of Delhi from April 12 - May 2, 2001.
- Attended a National Seminar on “Water for Life”, organized by the Eco-transformation Center, Delhi and University of Jammu, Jammu at the University of Jammu (September 1995).
- Attended a National Seminar on “Orchid Diversity in India: Science and Commerce and Orchid Show” held in Institute of Himalayan Bioresource Technology, Palampur, H.P. from October 11-13, 2001.
- Attended an Orientation Programme for the Academic Counselors of CPLT, organized by the Regional Centre, Indira Gandhi National Open University, from July 16- 17, 2001.

- Participated in a NEAC Campaign on “Water and Sustainable Development” held at Department of Botany, Daulat Ram College, University of Delhi from December 3 – 4, 2001.
- Participated in the National Convention on “Transgenic Rapeseed Mustard: An Assessment” organized by Mustard Research and Promotion Consortium, New Delhi at India International Centre, New Delhi, from January 16 – 17, 2002.
- Participated in a NEAC Campaign on “Water: The Elixir of Life” held at Department of Botany, Daulat Ram College, University of Delhi from December 3 – 4, 2001.
- Attended a National Seminar on “Climate Change in India and its Impact on Plant Diversity and Productivity” organized by the Delhi University Botanical Society, Department of Botany, University of Delhi from December 22 – 23, 2003.
- Attended a National Seminar on “Genetically Modified Organisms – Biosafety Aspects” organized by the Delhi University Botanical Society, Department of Botany, University of Delhi from March 10 – 11, 2005.
- Attended the “Ist Himalayan Conclave: An IBSD Initiative” organized jointly by Institute of Bioresource and Sustainable Development (ISBD), Imphal, Manipur; Department of Botany, University of Delhi; Himalayan Environmental Studies and Conservation Organization (HESCO), Dehradun and Institute of Himalayan Bioresource Technology (IHBT, CSIR), Palampur at the Conference Centre, University of Delhi from September 9 -10, 2005.
- Participated in the National Conference on “New Developments in Rapeseed-Mustard” organized by Mustard Research and Promotion Consortium, New Delhi at India International Centre, New Delhi, on January 21, 2006.
- Attended a National Seminar on “Current Trends in Plant Sciences” organized by the Delhi University Botanical Society, Department of Botany, University of Delhi from February 15 – 16, 2007.
- Attended a workshop on “Biology Laboratory Course (Course Code: BY 106) organized by the Institute of Lifelong Learning and Daulatram College, University of Delhi from September 2 – 4, 2008.
- Attended the National Conference on “Orchid Systematics and Diversity Analysis for Conservation and Sustainable Utilization” at GBPIHED, Kosi-Katarmal, Almora, Uttarakhand, organized by the Orchid Society of India (TOSI) from March 19 – 21, 2010.
- Attended the conference on “National Dialogue on Orchid Conservation & Sustainable Development for Community Lively hood’ organized by NRC for Orchids, ICAR, Pakyong in collaboration with TOSI, Chandigarh at Chintan Bhawan, Gangtok, Sikkim from March 8-9, 2013
- Co-chaired the session on Botany in 8<sup>th</sup> Uttarakhand State Science and Technology Congress (USSTC)-2013 held at Doon University, Dehradun from December 26-28, 2013.
- Attended and acted as a Judge for the Orchid painting competition in the National Conference on “Orchids Science and Commerce: Integration of Medicinal Orchids, Sustainable Development and societal Benefits” organized by the Orchid Society of India at Shri Mata Vaishno Devi University, Katra, Jammu from February 13 to 14, 2015.

- Attended the 9<sup>th</sup> Uttarakhand State Science and Technology Congress held at Vigyan Dham, Dehradun from February 26-28, 2015.

### **Professional Association and Membership of Learned Bodies**

- Life Member, Delhi University Botanical Society, Delhi.

### **Any Other information:**

- Co-chaired the session on Botany in 8<sup>TH</sup> Uttarakhand State Science and Technology Congress held at Doon University, Dehradun from December 26-28, 2013.
- Jury Member for the On the spot drawing Competition of Orchids in National Conference cum Workshop on “ Advances in Orchid Biology with focus on Climate Change, Medicinal and Floricultural Plants and Sustainable Economic Utilization” organized by TOSI jointly with Dr. Y.S.R. Horticultural University, West Godavari District, Andhra Pradesh, February 26-28, 2016.
- One of the judges for the 59<sup>th</sup> Annual flower show organized by University of Delhi in February , 2017.
- Judged the poster session in National Seminar on Understanding Himalayan Phytodiversity in Changing Climate held on 9-10 March 2017 at Gangtok.
- Acted as a judge for the 60<sup>th</sup> Annual flower show organized by University of Delhi in February, 2018.
- Acted as an expert member of project review/evaluation committee of Uttarakhand State Council of Science and Technology, Department of Science and Technology, Government of Uttarakhand held on December 17-18, 2019 at Vigyan Dham, Jhajra, Dehradun.

### **Administrative responsibilities:**

- Teacher-in-Charge, Department of Botany, Swami Shraddhanand College, University of Delhi (April 1992- March 1993).
- Teacher-in-Charge, Department of Botany, Swami Shraddhanand College, University of Delhi (May 2016- April 2017).
- Deputy Surintendent, Annual Examinations (Theory), Swami Shraddhanand College, University of Delhi (1994).
- Member, Library Committee, Swami Shraddhanand College, University of Delhi (1998-1999).
- Member, Science Admission Committee, Swami Shraddhanand College, University of Delhi (1999).

- Member, B.Sc. (H) Botany Admission Committee, Swami Shradhanand College, University of Delhi (1992).