

Name : Dr. (Mrs.) Pushpa Dahiya
Designation : Professor and Head
Office Address : Department of Botany

Maharshi Dayanand University Rohtak, Haryana –124001.

Academic Achievements: M.Sc Botany, Ph.D ("Aerobiological and Clinico-immunological Studies on Pollen Allergens") from Dept. of Botany, Delhi University, Qualified CSIR JRF/SRF in 1987. Awarded Charles Richet Prize for the year 1999 by the Indian College of Allergy and Applied Immunology on account of original work on the subjects of allergy, applied immunology and related subjects.

Joined Dept. of Bio-Sciences, M.D.University in 1991 and presently serving the Dept. of Botany as Professor and Chairperson. Have 25 years of teaching and research experience, Specializes in the field of pollen/fungal allergy, also working on medicinal applications of nanocurcumin and antimicrobial and anti oxidative activity of weeds and other plant species.

Projects completed:

U.G.C minor research project on "Fungal Allergens of Rohtak city."

U.G.C major research project on "Assessment of allergenicity to outdoor fungal allergens of Rohtak and its suburbs".

Mentor/Co-PI in project entitled "Synthesis, Characterization of nanocurcumin and its medicinal applications" funded by DBT

Book published:

Environmental Science: A new Approach. 2012, Narosa Publishing House, Delhi

Research Contribution:

Review articles

Singh, A.B., Malik, P. Pollen aerobiology and allergy: An integrated approach. Ind J Aerobiol. 5: 1-19, 1992.

Dahiya, P. and Singh, A.B. Scope and relevance of genetically modified plants. Ind. J. Aerobiol. 18 (2): 88-94, 2005.

Singh, A.B. and Dahiya, P. Transgenic plants: Benefits and risks. Proc. A.P. Academy of Sciences, Hyderabad, Vol.10 (3 & 4): 223-224, 2006.

Singh, A. B. and Dahiya, P. Aerobiological researches on pollen and fungi in India during last fifty years: An overview. J.Allergy, Asthma & Immunology.Vol. 22: No. 1, 27-38, 2008. Dahiya, P. and Kochar, S. Exposure to fungi as a driver for respiratory allergy. The Botanica. 57: 45-53, 2009.

S.Singh., G.Raza., S.N.Mishra and P.Dahiya. Mapping gender differences in understanding about HIV/AIDS Journal of Science communication 8 (3), 2009. ISSN- 1824-2049 Ahlawat,M. and Dahiya, P. Pollen – A wonder dust. The Botanica. 2010. ISSN-0045-26-29

Dahiya, P. and Kochar, S. Indoor molds and health hazards. The Botanica. 59-61: 96-103, 2012. ISSN-0045-2629

Dheeraj K.Gahlawat, Savita Jakhar and Pushpa Dahiya, *Murraya koenigii* (L.) spreng: An ethnobotanical, phytochemical and pharmacological review. Journal of Pharmacognasy and phytochemistry 2014; 3(3): 10-16

Dheeraj Gahlawat and Pushpa Dahiya, Ethnomedicinal uses of *Ocimum sanctum* Linn.: An overview: *Journal of Basic Sciences*, 2015, 1, 1-5

Priyanka, Pushpa Dahiya and Manu Bhambhi "Recent advances in curcumin nano formulations" Nanoscience and nanotechnology: An Indian journal, , Volume 8, Issue 12, pages 458-474, 2015

Chapters in book:

Singh, A.B. and Malik, P. Pollen as aeroallergens. In Advances in Mycology and Aerobiology. Ed. U.K. Talde. 249-259, 1994

Singh, A.B. and Dahiya, P. Allergens in India – We are different from the west! In Principles and Practice of tropical allergy and asthma. ed. W. Shaikh. 61-92, 2006.

Pooja Suneja Jakhar Madan, Savita and Pushpa Dahiya, Plants as potential source of antimicrobials. In Promotion and Globalization of Indian herbal products Ed. Munish Garg, Lambert Academic publishing pp. 63-75, 2014

Research publications:

Malik, P., Singh A.B., Babu, C.R. and Gangal, S.V. Head-high airborne pollen grains from different areas of Metropolitan Delhi. Allergy 45: 298-305, 1990.

Malik, P., Singh, A.B., Gangal, S.V. and Babu, C.R. Comparison of antigenic and allergenic components of *Holoptelea integrifolia* pollen. Allergy 46: 284-291, 1991.

Malik, P., Singh, A.B., Gangal, S.V. and Babu, C.R. Atmospheric concentration of pollen grains at human height. Grana 30: 129-135, 1991.

Singh, A.B., Malik, P., Gangal, S.V. and Babu, C.R. Intraspecific variations in the antigenic extract of *Ricinus communis* (castor bean) prepared from different source material. Grana 31: 229-235, 1992.

Singh, A.B., Malik, P., Prakash, D. and Gangal, S.V. Identification of specific IgE binding proteins in castor bean (*Ricinus commuis*) obtained from different source materials. Grana 31: 376-380, 1993.

Singh, A.B., Malik P., Prakash, D. and Gangal, S.V. Biological standardization of pollen allergens from India. Asian Pacific Journal of Allergy & Immunology 10: 103-109, 1992. Singh, A.B., Dahiya, P. and Gangal, S.V. Volumetric survey of airborne pollen allergens in Delhi: Diurnal and Seasonal variations. Ind J Aerobiol. 6: 10-18, 1993.

Singh, A.B. and Dahiya, P. Castor bean (*Ricinus communis*) pollen allergy in India. J. Allergy & Appl. Immunol. 13: 51-58, 1999.

- Singh, A.B. and Dahiya, P. Antigenic and allergenic properties of *Amaranthus spinosus* pollen A commonly growing weed in India. Ann. Agric Environ. Med. 9: 147-151, 2000. Singh, A.B., Pandit, T. and Dahiya, P. Changes in airborne pollen concentrations in Delhi, India. Grana 42: 168-177, 2003.
- Dahiya, P. and Gupta, R. Aeromycoflora of Rohtak city, Haryana (A preliminary report). Ind. J. Aerobiol. 16: 46-50, 2003.
- Dahiya, P. and Singh, A.B. Skin reactivity to the antigenic extracts of pollen (*Ricinus communis*) obtained from diverse source material. J. Allergy, Asthma & Immunology. 17(2): 49-54, 2003.
- Dahiya P. and Singh A.B. Cross reactivity between different organs of *Ricinus communis* (Castor bean). Ind. J. Aerobiol. 17: 32-37. 2004.
- Ahlawat, M., Dahiya, P and Chaudhary, D. Prevalence of airborne pollen in the atmosphere of Rohtak city: A one year study. Ind J. Aerobiol. 23 No. 1&2, 1-6, 2010.
- Kochar, S., Dahiya, P and Chaudhary, D. Fungal spectrum of Rohtak city: A two year survey. Ind J. Aerobiol. 24(No.2): 82-99, 2011.
- P. Dahiya, S. Jhakar and P. Madan: Mold Allergy: An Overview: Proc. of National Seminar on "Promising trends in Science galaxy" (PTSG), 157-167, 2013 ISBN No. 978-91-920945-3-3
- P. Dagar, M. Bhambhi and P. Dahiya: Nanotechnology: Role in Theranostics: Proc. of National Seminar on "Promising trends in Science galaxy" (PTSG), 44-54, 2013 ISBN No. 978-91-920945-3-3
- Ahlawat,M., Dahiya,P and Chaudhary, D: Aeropalynological study in Rohtak city, Haryana, India: A 2 year survey. Aerobiologia DOI: 10.1007/s10453-012-9268-9 Aerobiologia 29:121–129, 2013
- Pooja Suneja Madan and Pushpa Dahiya: Diversity and effectivity of Mesorhizobia nodulating lines of chick pea in comparison to the normal cultivar *Plant Archives* Vol. 13 No. 2, pp. 929-935, 2013
- Ahlawat,M., Dahiya,P and Chaudhary, D: Allergenic pollen in the atmosphere of Rohtak city, Haryana (India): a pioneer study: Aerobiologia DOI 10.1007/s10453-013-9323-1
- Ahlawat,M and Dahiya,P: Risk of pollen allergy in Rohtak city (Haryana), India: Plant Archives 2014 vol 14 No. 1
- Pooja Suneja, Ajit Kumar and Pushpa Dahiya: Characterisation of epiphytic bacteria isolated from chickpea (*Cicer arietinum* L.) nodules: African Journal of Microbiology Research, vol. 8, 2014 ISSN 1996-0808
- Ahlawat,M., Kochar, S., Dahiya,P and Chaudhary,D: "Assessment of allergenicity to fungal allergens of Rohtak city, Haryana, India" Allergy and Rhinology 2014, Vol. 5, No. 2 e56-e65
- Vasim Ahmeda, Jitendra Kumara, Manoj Kumara, Manu Bhambi Chauhanab, Pushpa Dahiyab & Nar Singh Chauhan; Functionalised iron nanoparticle-penicilin G conjugates: a novel strategy to combat the rapid emergence of B lactamase resistance among infectious microorganism Journal of Experimental Nanoscience (Impact Factor: 1.04). 01/2014; OI: 10.1080/17458080.2014.881570
- An Approach to Reconfirm Transgenic "Cry" Protein Sequences as Safe for Use in Genetic Engineering by Bioinformatic Tools: C. Mathuri, P. Dahiya2 and A.B. Singh

Global Journal of Immunology and Allergic Diseases, 2014, 2, 13-18 13 Chandni Mathur, Pooran C Kathuria, Pushpa Dahiya, Anand B Singh; Lack of detectable allergenicity in genetically modified maize containing "cry" proteins as compared to native maize based on in silico & in vitro analysis. PLoS ONE 01/2015; 10(2):e0117340. DOI:10.1371/journal.pone.0117340 ISSN No. 1932-6203

S. Jakhar , D. K. Gahlawat , S. Dahiya , U. Swami , M. Verma1 and P. Dahiya; Antibacterial and Antioxidant Potential of Leaf and Seed Extracts of *Murraya koenigii* (Linn.) Spreng British Microbiology Research Journal 10(6): 1-7, 2015, Article no.BMRJ.21571 ISSN: 2231-0886, NLM ID: 101608140 SCIENCEDOMAIN international P. Suneja1*, S. Piplani2 , P. Dahiya3 , and S. S. Dudeja4Molecular Characterization of Rhizobia from Revertants of Non-nodulating Cultivar and Normal Cultivar of Chickpea J. Agr. Sci. Tech. (2016) Vol. 18: 763-773

OTHER INFORMATION:

Former Director Center for Medical Biotechnology

Director, Women's studies centre, M.D.University, Rohtak

Chairperson UGBOS in Botany, PGBOS in Botany

Chairperson UGBOS in Botany, UGBOS in Botany

Convener, Standing committee for use of unfair means

Member of Academic council of the university

Member of selection committee of the university and affiliated colleges

Member of standing committee on sexual harassment and violence against women at work place, M.D.University, Rohtak

Out side expert in P.G.B.O.S, CBLU, Bhiwani

Reviewer for Journal of Basic Microbiology and Aerobiologia, Journal of Medical and Biological Science Research

Examiner for practicals / M.Sc dissertation/ Ph.D thesis evaluation in different universities.