



DESHBANDHU COLLEGE
(UNIVERSITY OF DELHI)
KALKAJI, NEW DELHI - 110019

Title	Dr.	First Name	Ashish Kumar	Last Name	Choudhary	Photograph
Designation		Assistant Professor				
Address		Department of Botany, Deshbandhu College (University of Delhi), Kalkaji, New Delhi 110019				
Phone No. Office						
Residence Mobile		+91-9891063081				
Email		akchoudhary@db.du.ac.in				
Web-Page						
Educational Qualifications						
Degree		Institution				Year
Ph.D.		Department of Botany, University of Delhi.				2018
M.Sc.		Lalit Narayan Mithila University.				2008
PGDIPR		Indira Gandhi National Open University (IGNOU).				2013
Fellowships/Awards		NET and GATE qualified				
Career Profile						
Administrative Assignments						
<ol style="list-style-type: none">1. Worked as a Postdoctoral Researcher at Institute of Plant and Microbial Biology, Sinica Academia, Taiwan (March 2022 – January 2023).2. Worked as a Senior Project Associate at CSIR-NIScPR, New Delhi (December 2021-March 2022).3. Worked as Assistant Professor (Ad-hoc) at Swami Shraddhanand College, University of Delhi (October 2019 – February 2020).4. Worked as Assistant Professor (Guest) at Swami Shraddhanand College, University of Delhi (February 2018 – April 2018, August 2018 – November 2018 & January 2019 – April 2019).5. Worked as Research Fellow in DBT funded project on “Phosphatidic acid-Protein interactions: molecular mechanism and role during abiotic stress in Arabidopsis” under Dr. Girish Mishra (PI) at Department of Botany, University of Delhi (May 2019 – July 2019).6. Worked as a Research Fellow in DBT funded project on “Understanding plant lipids metabolism and its role in signaling: Using basic science models to enhance oil crops” under Prof. Girish Mishra (PI) at Department of Botany, University of Delhi (February 2011 – February 2015).7. Worked as a Research Fellow in DBT funded project on “Restoration Ecology Environmental						

Biotechnology” under Prof. C.R. Babu (PI) at CEMDE and Prof. Suman Lakhanpaul (Co-PI) at Department of Botany, University of Delhi, Delhi (July 2009 – January 2011).
Areas of Research Interest/Specialization
Lipid Biochemistry, Abiotic stress, Plant Physiology, Plant Biotechnology, Nanobiotechnology
Subjects Taught
Plant Biotechnology, Plant Metabolism, Plant Physiology and Metabolism, Plant Systematics
Research Guidance
NA
Publications Profile
<i>Research papers published in Refereed/Peer Reviewed Journals</i>
<ol style="list-style-type: none"> 1. E. Berry, Ashish Kumar Choudhary, R. Geeta (2022) Why do some funneliform flowers have petal folds accompanied with hierarchical surface microstructure? <i>Evolutionary Ecology</i>, 1-15.10.1007/s10682-022-10217-1 (Impact factor: 2.074). 2. R. Puri*, Ashish Kumar Choudhary*, P. Barman, G. Mishra, R. Geeta (2022) Two unusual conjugated fatty acids, parinaric acid and α-eleostearic acid, are present in several <i>Impatiens</i> species, but not in congener <i>Hydrocera trifloral</i>, <i>Physiology and Molecular Biology of Plants</i> 28(5), 1-10, (Impact factor: 3.02) (*First and corresponding Author). 3. A. Adit, M. Koul, Ashish kumar Choudhary, R. Tandon (2022) Interaction between <i>Cymbidium aloifolium</i> and <i>Apis cerana</i>: incidence of an outlier in modular pollination network of oil-flowers. <i>Ecology and Evolution</i>, (2022) 12 (3), e8697, 1-11, (Impact factor: 3.167). 4. Ashish Kumar Choudhary, G. Mishra (2021) Functional characterization and expression profile of microsomal FAD2 and FAD3 genes involved in linoleic and α-linolenic acid production in <i>Leucas cephalotes</i>. <i>Physiology and Molecular Biology of Plants</i> (2021), 1233-44. https://doi.org/10.1007/s12298-021-01016-z, (Impact factor: 3.02). 5. Ashish Kumar Choudhary, S. Singh, N. Khatri, R. Gupta (2021) Hydrogen Sulfide: An Emerging Regulator of Plant Defence Signaling. <i>Plant Biology</i>, 1-8, https://doi.org/10.1111/plb.13376, (Impact factor: 3.877). 6. M. Gogna, Ashish Kumar Choudhary, G. Mishra, R. Kapoor, S C Bhatla (2020) Changes in lipid composition in response to salt stress and its possible interaction with intracellular Na^+-K^+ ratio in sunflower (<i>Helianthus annuus L.</i>). <i>Environmental and Experimental Botany</i>, 178, 1-17. https://doi.org/10.1016/j.envexpbot.2020.104147, (Impact factor: 6.028). 7. E. Berry, Ashish Kumar Choudhary, G. Mishra, R. Tandon, Geeta R. (2020) Evidence for two morphotypes indicating adaptive variation in <i>Justicia adhatoda L.</i> <i>Journal of Plant Research</i>, 133 (6), 783-805. https://doi.org/10.1007/s10265-020-01224-w, (Impact factor: 3.00). 8. A. Gupta, S. Kumar, R. Kumar, Ashish Kumar Choudhary*, K. Kumari, P. Singh, V. Kumar* (2020) COVID-19: Emergence of Infectious Diseases, Nanotechnology Aspects, Challenges and Future

Perspectives. *ChemistrySelect* (*Corresponding Author) (Impact factor: 2.307) (Most Accessed Article).

9. Bhawna, **Ashish Kumar Choudhary**, A. Gupta, S. Kumar, P. Kumar, P. Singh, V. Kumar (2020) Synthesis, Antimicrobial Activity and Photocatalytic Performance of Ce doped SnO₂ Nanoparticles. *Frontiers in Nanotechnology*, 10.3389/fnano.2020.595352.
10. V. Kumar, **Ashish Kumar Choudhary**, P. Kumar, S. Sharma (2019) Nanotechnology: Nanomedicine, nanotoxicity and future challenges. *Nanoscience & Nanotechnology-Asia*, 9(1) 64-78.
11. **Ashish Kumar Choudhary**, P. Sunojkumar, G. Mishra (2017) Fatty acid profiling and multivariate analysis in the genus *Leucas* reveals its nutritional, pharmaceutical and chemotaxonomic significance. *Phytochemistry*, 143: 72-80. <https://doi.org/10.1016/j.phytochem.2017.07.007>, (Impact factor: 4.004).
12. P. Kumar, P. Kesari, S. Dhindwal, **Ashish Kumar Choudhary**, et al. (2017) A novel function for globulin in sequestering plant hormone: Crystal structure of *Wrightia tinctoria* 11S globulin in complex with auxin. *Scientific Reports*, 7: 4705. <https://doi.org/10.1038/s41598-017-04518-7>, (Impact factor: 4.996).
13. P. Barman, **Ashish Kumar Choudhary**, R. Geeta (2017) A modified protocol yields high-quality RNA from highly mucilaginous *Dioscorea* tubers. *3Biotech*, 2: 150. doi: 10.1007/s13205-017-0775-9. (Impact factor: 2.89).

Published Book Chapters

1. **Ashish Kumar Choudhary**, R. Riyazuddin, A. K. Maurya, R. Gupta (2021) Advancements in High-Throughput Omics-Technologies for understanding the biology of neglected and underutilized crops. In *Neglected and Underutilized Crops-Towards Nutritional Security and Sustainability* (pp. 203-236). Springer, Singapore. https://doi.org/10.1007/978-981-16-3876-3_10.
2. R. Riyazuddin, **Ashish Kumar Choudhary**, N. Khatri, A. Sarkar, G. K. Agrawal, S. T. Kim, R. Gupta, R. Rakwal (2022). Proteomics and their applications to understand the biology of agricultural crops. In: Pradeep Sharma, Dinesh Yadav, R.K. Gaur (eds) *Bioinformatics in Agriculture*, 1st Edition. Elsevier, ISBN: 9780323897785.

Organization/Presentations

1. E Berry, **Ashish Kumar Choudhary**, G. Mishra, R. Tandon, R. Geeta. Evidence reveals two morphotypes of *Justicia adhatoda* in India with possible functional significance, *Young Systematists' Forum 2021*, 19th November 2021.
2. P. Barman, R. Puri, G. Mishra, **Ashish Kumar Choudhary*** “Fatty acid profiling and multivariate analysis of *Dioscorea* species reveal their nutritional significance” *Young Scientists Conference 2020, India International Science Festival* organized by NISCAIR and NISTAD, 22-25 December, 2020 (*Paper Presented).
3. **Ashish Kumar Choudhary***, Sunoj Kumar P., Girish Mishra (2016) “Isolation and functional Characterization of membrane desaturase from *Leucas* species” National conference on *Plant Science Research: Looking Beyond 21st Century for Environmental & Agricultural Revolution*, organized by *Society for Plant research*, Department of Botany, University of Delhi, February 5-7, 2016 (Best Poster; *Poster Presented).
4. **Ashish Kumar Choudhary***, G. Mishra (2017) “Substrate Specificity of membrane desaturases isolated from *Leucas cephalotes*” International conference on Technological Advancement for Sustainable Agriculture and Rural development (TASARD-India, 2017), organized by *Society for Plant research & African Asian Rural Development Organization (AARDO)*, NASC, IARI, New Delhi, February 20-22, 2017. (*Poster Presented).
5. R. Puri, **Ashish Kumar Choudhary**, P. Barman, R. Geeta, G. Mishra (2017), “Parinaric acid, An unusual conjugated fatty acid, Occurs in several Indian species of *Impatiens* L., but not in *Hydrocera triflora* (L.) Wight & Arn. (Balsaminaceae)” *XXVII Annual conference of Indian Association Taxonomy & International Symposium on Plant Systematics: Priorities and Challenges*, organized by Delhi University Botanical Society, Department of Botany, University of Delhi, Delhi, November 10-12, 2017.
6. Participated in the Instrumental Workshop on “Proteomics and genomics: Hands-on Protein Identification and Gene Discovery from Mass Spectrometry Data” conducted by NNMCB and ANDC, University of Delhi from October 10-12, 2015.
7. Participated in the Instrumental Workshop on “Gene Expression Analysis: Hands-on using Microarray and Next Generation Sequencing Data” conducted by NNMCB and ANDC, University of Delhi from March 7-9, 2015.
8. Completed Twelve-week on-line course on “Bioinformatics: Introduction and Method” conducted by Peking University from 2nd October 2014 to 25th December 2014.
9. Completed Six-week on-line course on “Introduction to Bioinformatics” conducted by The Saint-Petersburg State University from 17th November 2014 to 27th January 2015.
10. Completed short-term training course on “Microbial Biotechnology” from TIFAC-CORE, Thapar University, Punjab, 2007.

Research Projects (Major Grants/Research Collaboration)

NA

Awards and Distinctions

<ol style="list-style-type: none"> 1. Qualified NET (National Eligibility Test). 2. Qualified GATE (Graduate Aptitude Test in Engineering) organized by Indian Institute Technology, Delhi, India.
Association With Professional Bodies
<ol style="list-style-type: none"> 1. Member of Delhi University Botanical Society (DUBS)
Other Activities
<ol style="list-style-type: none"> 1. NCC B and C certificates 2. Worked as a science translator for CSIR-NIScPR, Gubbi Labs and Department of Science and Technology (DST). 3. Member of organizing committee of the national conference on “Emerging Environment Challenges and Sustainable Development” jointly organized Swami Shraddhanand College, University of Delhi and Society for Environment and Development, New Delhi (March 21-23, 2018).

Ajish Kumar choudhary

Signature of faculty Member