

- Name: **Dr Aparajita Mohanty**
- Department: Botany
- Designation: Assistant Professor
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Educational Qualifications			
Qualification	Title/Course	University/Institute	Year
Undergraduate	BSc (H) Botany	University of Delhi	1989
Postgraduate	MSc Botany	University of Delhi	1991
Ph.D.	Wide hybridization between crop brassicas and some of their wild relatives		1997
Postdoctoral Experience	1. Post Doctoral Fellow in Rockefeller foundation project	ICGEB, New Delhi	Jan 2002 – Jan 2003
	2. CSIR Pool Scientist	ICGEB, New Delhi	Aug 2001 –Dec 2001
	3. Post Doctoral Fellow in the European Community Multinational Project	Universidad Politecnica de Madrid, University of Madrid, Spain	Feb 1998 –July 2001

Research Interest

Population genetics of plants, DNA barcoding in plants, Bioinformatics analyses with special reference to Chloroplast genomes

Projects/Research Undertaken
1. Investigator in Innovation Project funded by University of Delhi (2015-16) <u>Project Title:</u> DNA barcoding for grasses of Aravalli range in Delhi region and subsequent creation of database of DNA barcode sequence information: An essential study for formulating future conservation strategies
2. Principal Investigator in DST Project under Fast track scheme for young scientists (2010-2013) <u>Project title:</u> Phylogenetics and population genetics of <i>Prunus</i> genetic resources in India, by analysing chloroplast DNA diversity
3. Co-coordinator of Bioinformatics Infrastructure Facility (BIF) funded by DBT (2008- continuing till date) Responsibilities: Bioinformatics research and managing the facility

S. No.	Selected Publications (* Communicating Author)
1.	Sarin B, Martin JP, Chrungu B, Mohanty A* (2015) Chloroplast DNA variation in wild Brassicas and their implication in breeding and population genetics studies. Scientifica. doi.org/10.1155/2015/952395
2.	Babuta P and Mohanty A* (2014) <i>In Silico</i> Analysis of Rhamnosyltransferase Sequences from Green Plants Journal of Agroecology and Natural Resource Management 1: 118-123.
3.	Sarin, B., Martín, J. P., and Mohanty, A* (2014). Differences in population genetic structure of two ethnomedicinal herbs of the genus <i>Phyllanthus</i> from India: a consequence of anthropogenic intervention?. <i>Plant Systematics and Evolution</i> , doi.10.1007/s00606-014-1104-y
4.	Sarin B, Verma N, Clemente JPM and Mohanty A* (2014) An overview of important ethnomedicinal herbs of <i>Phyllanthus</i> species: Present status and future prospects. <i>The Scientific World Journal</i> . Article ID 839172, doi.org/10.1155/2014/839172

5.	Sarin B, Clemente JPM and Mohanty A* (2013) PCR-RFLP to distinguish three <i>Phyllanthus</i> sp., commonly used in herbal medicines. <i>South African Journal of Botany</i> 88: 455-458.
6.	Verma N, Mohanty A , Lal A (2010) Pomegranate Genetic Resources and Germplasm Conservation: A Review. <i>Fruit, Vegetable, Cereal Science and Biotechnology</i> . 4: 120-125
7.	Mohanty A* , Chrungu B, Verma N, Shivanna KR (2009) Broadening the genetic base of crop brassicas by production of new intergeneric hybrid. <i>Czech Journal of Genetics and Plant Breeding</i> . 45: 117-122.
8.	Mohanty A* , Chrungu B, Verma N, Shivanna KR (2007) Wide Hybridization Between <i>Hirschfeldia incana</i> L. (Lagrece Fossat) and <i>Brassica carinata</i> Braun. : Towards Development of New Genetic Resource. <i>Journal of Plant Genetic Resources: An International Journal</i> . 3: 208-210
9.	Aguinagalde I, Hampe A, Mohanty A , Martin JP, Duminil J, Petit RJ (2005). Effects of life history traits and species distribution on genetic structure at maternally inherited markers in European trees and shrubs. <i>Journal of Biogeography</i> 32: 329-339.
10.	Mohanty A* , J. P. Martin, I. Aguinagalde (2003). Associations between chloroplast DNA and mitochondrial DNA haplotypes in <i>Prunus spinosa</i> (Rosaceae) populations across Europe. <i>Annals of Botany</i> 92(6): 749-755.
11.	Petit RJ, Aguinagalde I, Beaulieu JL, Bittkau C, Brewer S, Cheddadi R, EnnosR, Fineschi S, Grivet D, Lascoux M, Mohanty A , Muller- Starck G, Musch BD, Palme A, Martin JP, Rendell S, Vendramin GG (2003). Glacial Refugia: Hotspots but not melting pots of genetic diversity. <i>Science</i> 300: 1563-1565.
12.	Panda S, Martin JP, Aguinagalde I, Mohanty A (2003). Chloroplast DNA variation in cultivated and wild <i>Prunus avium</i> L : a comparative study. <i>Plant Breeding</i> 122: 92-94.
13.	Mohanty A* , Martin JP, Aguinagalde I (2002). Population genetic analysis of chloroplast DNA in populations of <i>Prunus spinosa</i> in Europe. <i>American Journal of Botany</i> 89: 1223-1228.
14.	Mohanty A* , Martin JP, Aguinagalde I (2001). A population genetic analysis of chloroplast DNA in wild populations of <i>Prunus avium</i> L. in the European continent. <i>Heredity</i> 87: 421-427.
15.	Mohanty A* , Martin JP, Aguinagalde I (2001). Chloroplast DNA study in wild populations and some cultivars of <i>P. avium</i> L. <i>Theoretical Applied Genetics</i> 103 : 112-117.
16.	Mohanty A* , Martin JP, Aguinagalde I (2000). Chloroplast DNA diversity within and among populations of the allotetraploid <i>Prunus spinosa</i> L. <i>Theoretical Applied Genetics</i> 100: 1304-1310.
17.	Mohanty A* , Martin JP, Aguinagalde I (2000). Chloroplast DNA diversity and distinguishing sweet cherry cultivars: A New Approach. <i>Acta Horticulture</i> 546: 463-469.
18.	Chrungu B, Verma N, Mohanty A , Pradhan A, Shivanna KR (1999). Production and characterization of interspecific hybrids between <i>Brassica maurorum</i> and crop brassicas. <i>Theoretical Applied Genetics</i> 98: 608-613.

Chapters in Books

S.No.	
1.	Mohanty A , Verma N, Chrungu-Kaula B (2012) Role of Wild Relatives in Faba Bean Improvement. In: Faba Bean (<i>Vicia faba</i> L.) A Potential Leguminous Crop of India, AK Singh and BP Bhatt (eds), ICAR Research Complex for Eastern Region, Patna, pp 39-42
2.	Shaheen R, Verma N, Mohanty A (2012) Germplasm Evaluation in Faba Bean (<i>Vicia faba</i> L.) In: Faba Bean (<i>Vicia faba</i> L.) A Potential Leguminous Crop of India, AK Singh and BP Bhatt (eds), ICAR Research Complex for Eastern Region, Patna, pp 63-72
3.	Mohanty A , Verma N, Chrungu-Kaula B (2010) New potential forage /fodder crops for India. In: Forages and Fodder. Singh AK, Khan MA, Subash N, Singh KM (eds), pp 45-50.

Supervision of M.Sc Thesis

S.No.	
1.	Ms. Vidisha Minhas (Amity University); Thesis Title: Plant mitochondrial genome analysis for assessing its importance in phylogenetic studies
2.	Ms. Priyanka Babuta (TERI); Thesis Title: Bioinformatic analysis of sequence and conserved motif in Rhamnosyltransferases in plants
3.	Ms. Arpita Khurana (TERI); Thesis Title: <i>In silico</i> analysis of chloroplast genome sequences of higher plants for identification of putative dna barcoding regions