




## Faculty Details proforma for DU Web-site

(PLEASE FILL THIS IN AND Email it to [websiteDU@du.ac.in](mailto:websiteDU@du.ac.in) and  
cc: [director@ducc.du.ac.in](mailto:director@ducc.du.ac.in))

Title	Dr.	First Name	Sandip	Last Name	Das	Photograph
Designation		Assistant Professor				
Address		Department of Botany University of Delhi Delhi-110007				
Phone No	Office	91-11-27667573				
	Residence					
	Mobile	9911517831				
Email	sdas@botany.du.ac.in; sandipdas04@gmail.com					
Web-Page						
<b>Educational Qualifications</b>						
<b>Degree</b>	<b>Institution</b>				<b>Year</b>	
Ph.D.	Jamia Hamdard (Hamdard University), Delhi				1998	
M.Phil.	University of Delhi (M. Phil Botany)				1993	
PG	University of Delhi (M. Sc Botany)				1992	
UG	University of Delhi (B.Sc Botany)				1990	
Any other qualification						
<b>Career Profile</b>						
<b>Organisation / Institution</b>	<b>Designation</b>		<b>Duration</b>		<b>Role</b>	
TERI	Research Associate		November 1998-April 1999		Research Associate	
Cornell University, Ithaca, USA	Post-doctoral fellow		May 1999- August 1999		Post-doctoral research on "Comparative genomic analysis of self-incompatibility loci in <i>Arabidopsis thaliana</i> and <i>Arabidopsis lyrata</i> " with Professor Mikhail Nasrallah	
Hamdard University (Jamia Hamdard), Delhi	Assistant Professor		August 1999-February 2010		Teaching, research, administrative responsibilities	
Max Planck Institute for Developmental Biology, Tuebingen, Germany	Max Planck institute Post-doctoral fellow		September 2002-August 2004		Post-doctoral research on "Comparative genomics in Brassicaceae: Analyses of microRNA and other regulatory elements involved in development" with Professor Detlef Weigel	
University of Delhi	Assistant Professor		February 2010-Till date		Teaching, research, administrative responsibilities	
<b>Research Interest / Specialization</b>						
My main interest focuses on						
1. Evolution and development of plant morphological diversity and adaptive variation, especially the role of miRNA and transcription factor genes, and cis-regulatory elements						
2. Impact of polyploidization on genetic networks in <i>Brassica</i> and other plants, with special reference to						

epigenetic modification at microRNA and their cognate target loci 3. Evolutionary Developmental Genetics (“Evodevotics”) 4. Genome organisation of plants 5. Genetic engineering of plants for agronomic trait			
Teaching Experience (Subjects/courses Taught)			
Theoretical and practical aspects of the following subjects: i) Cell and Molecular Biology ii) Contemporary topics in Cell Biology iii) Archaeogoniatae iv) Genetics and Genetic Engineering v) Genomics, Proteomics and Protein Engineering vi) Bio-informatics			
<b>Honors and Awards:</b>			
Nominated Member: Plant Tissue Culture Association (India)			
<b>Publications (last Five years)</b>			
<b>Books / Monographs: Book Chapters</b>			
<b>Year of Publication</b>	<b>Title</b>	<b>Publisher</b>	<b>Co-author</b>
2012	Aspects of miRNAs in somatic embryogenesis. Somatic Embryogenesis and Gene Expression	In: Junaid Aslam, P. S. Srivastava and M. P. Sharma (eds) Somatic Embryogenesis and Gene Expression; Narosa Publishing	Gunjan Kumari, Karuna Kusumanjali, P. S. Srivastava
2009	Clonal fidelity in micropropagated plants.	In: Ashwani Kumar and N.S. Shekhawat, (Eds) Plant Tissue Culture and Molecular Markers: Their Role in Improving Crop Productivity: I.K. International Publishers, pg: 93-108	Sapna Maik-Ahlawat, Narula Alka, Das Sandip and Srivastava PS
2008	Genetic recombination and mutations.	e-book on Cell Biology and Genetics. National Science Digital Library (NSDL) project of National Institute of Science Communication and Information Resources (NISCAIR), CSIR (http://nsdl.niscair.res.in/dspace/handle/123456789/244 <b>or</b> <a href="http://hdl.handle.net/123456789/244">http://hdl.handle.net/123456789/244</a> )	Sandip Das

2008	Transgenics of some medicinal plants.	In: Ashwani Kumar and SK Sopory (Eds) Recent Advances in Plant Biotechnology and its Applications, Delhi, Volume 1, pp. 594-603	Srivastava PS, Sopory SK, Rajam MV, Narula Alka, Srivastava Toolika and Das Sandip
2007	Black Mustard ( <i>Brassica nigra</i> ).	In C. R. Kole (ed) Genome mapping, Molecular Breeding and Genomics: Volume 2- Oilseeds; Springer-Verlag GMBH, Heidelberg, Germany, pp. 264-274	Sandip Das, Ulf Lagercrantz, Martin Lascoux

#### In Indexed / Peer reviewed Journals: Reviews

Year of Publication	Title	Publisher	Co-author
2010	Molecular markers in medicinal plant biotechnology: past and present.	Critical Reviews in Biotechnology, March 2010, Vol. 32, No. 1 : Pages 74-92	Maryam Sarwat, Gowher Nabi, Sandip Das, Prem Shankar Srivastava
2007	Genomics and IP: An Overview.	Journal of Intellectual Property Rights 12(1): 57-71	Singh A, Das S and Wilson N

#### Articles

Gunjan Kumari, Karuna Kusumanjali, Prem Shankar Srivastava, Sandip Das (2013) Isolation and expression analysis of miR165a and REVOLUTA from Brassica species. Acta Physiologia Plantarum. 35: 399-410

Ya-Long Guo, Marco Todesco, Jörg Hagemann, Sandip Das, and Detlef Weigel (2012) Parallel evolution of flowering time variation in *Arabidopsis thaliana* and *Capsella rubella* through FLC mutations. Genetics 192(2): 729-739

Sahu D, Saroha A, Roy S, Das S, Srivastava PS, Das HR (2012) Suramin ameliorates collagen induced arthritis. Int Immunopharmacol. 12(1), January 2012, Pages 288–293

Karuna Kusumanjali, Gunjan Roy, P.S Srivastava and Sandip Das (2012) Sequence conservation and divergence in *miR164C1* and its target, *CUC1*, in *Brassica* species. Plant Biotechnology Reports:

6:149–163:

- Maryam Sarwat, Sandip Das and Prem S. Srivastava (2011) Estimation of genetic diversity and evaluation of relatedness through molecular markers among medicinally important trees: *Terminalia arjuna*, *T. chebula* and *T. bellerica*. Mol Biol Rep 38:5025–5036
- Maryam Sarwat, Sandip Das and Prem S. Srivastava (2011) AFLP and SAMPL markers for characterization of genetic diversity in *Terminalia arjuna*: a backbone tree of Tasar silk industry. Plant Syst Evol (2011) 293:13–23
- Singh A, Niraj K. Nirala, Sandip Das, Alka Narula, M. V. Rajam, P. S. Srivastava (2011) Overexpression of odc (ornithine decarboxylase) in *Datura innoxia* enhances the yield of scopolamine. Acta Physiol Plant. 33(6):2453-2459
- Singh A, N. K. Nirala, Alka Narula, Sandip Das and Prem S. Srivastava (2011) Isolation and characterization of Ty1-copia group of LTRs in genome of three species of *Datura*: *D. innoxia*, *D. stramonium* and *D. metel*. Physiol Mol Biol Plants. 17(3): 255-261;
- Sumiya Jamshieed, Sandip Das, M. P. Sharma, P. S. Srivastava (2010) Difference in in vitro response and esculin content in two populations of *Taraxacum officinale* Weber. Physiol Mol Biol Plants 16 (4): 353-358
- Srivastava Toolika, Sandip Das, Sopory SK and Srivastava PS (2009) A reliable protocol for transformation of *Catharanthus roseus* through *Agrobacterium tumefaciens*. Physiol. Mol. Biol. Plants 15 (1): 93-98
- Norman Warthmann\*, Sandip Das\*, Christa Lanz and Detlef Weigel (2008) Comparative analysis of *miR319A* locus in *Arabidopsis* and related Brassicaceae. (\* Joint First author) Molecular Biology and Evolution. 25: 892-902
- Maryam Sarwat, Sandip Das and P S Srivastava (2008) Analysis of genetic diversity through AFLP, SAMPL, ISSR and RAPD in *Tribulus terrestris*, a medicinal herb. Plant Cell Reports; 27 : 519-528)

**Conference Presentations (Selected)**

Gunjan Kumari, Karuna Kusumanjali, P. S. Srivastava and Sandip Das (2013) Functional Characterization of a trans-regulator (miR165a) from *Brassica juncea*. International conference on Biotechnology for Human Welfare. Organized by Kakatiya University, Warangal, February 7-9, 2013 **(second best poster award)**

Karuna Kusumanjali, Gunjan Kumari, P S Srivastava, Sandip Das (2012) Molecular and functional characterization of CUC1 and its regulator miR164 from *Brassica* species. International Conference on Plant Biotechnology for Food security. Organized by Society for Plant Biochemistry and Biotechnology, NRCPB and IARI, February 21-24, 2012 **(Best Poster Award in “Genomics and Bioinformatics” category)**

Gunjan Kumari, Karuna Kusumanjali, P S Srivastava, Sandip Das (2012) Molecular cloning and characterization of miR165a and its target REVOLUTA from *Brassica* species. International Conference on Plant Biotechnology for Food security. Organized by Society for Plant Biochemistry and Biotechnology, NRCPB and IARI, February 21-24, 2012

Karuna Kusumanjali, Gunjan Kumari, P S Srivastava, Sandip Das (2012) Molecular and functional characterization of CUC1 and its regulator miR164 from *Brassica* species. 33rd Annual PTCA (I) Meet and National symposium on "Impact of Plant Tissue Culture on Advances in Plant Biology, January 19-21, 2012, Ahmedabad

Ritesh Kumar, Karuna Kusumanjali, Gunjan Kumari, Kalpna Singh, Aarti Kohly, P S Srivastava and Sandip Das (2010) *Brassica* Genomics: Unravelling the Role of Transcription Factors And miRNAs and Impact of Polyploidization. In: National Symposium on “PLANT CELL TISSUE & ORGAN CULTURE: THE PRESENT SCENARIO” & 31st Annual Meeting of Plant Tissue Culture Association of India (3-5 MARCH 2010), Kolkata

Karuna Kusumanjali, Ritesh Kumar, Gunjan Kumari, Kalpna Singh, Aarti Kohly P S Srivastava and Sandip Das (2009) Molecular Analysis of Regulatory Elements Involved in Leaf Development in *Brassica* Species. PTCA, IHBT, Palampur, April 2-4, 2009: **Special Appreciation award**

Sandip Das (2008) Genomics of Regulatory Elements in *Brassica*: Unraveling the “Code”: Rothamsted Research, Harpenden, UK, December 02, 2008

“MicroRNAs and Trait modification in *Brassica*”: Joint Indo-Canadian DBT:NRC-PBI workshop on Plant Biotechnology, New Delhi, February 04-06, 2008

**Total Publication Profile****Books: None****Book chapters: 07****In Indexed /Peer Reviewed Journals:****Review articles: 02****Articles: 17****Conference Presentations: 06**

<b>Public Service / University Service / Consulting Activity: N.A</b>
<p><b>Professional Societies Memberships</b>  Society for Plant Biochemistry and Biotechnology, India (Life Member)  Nominated Member: Plant Tissue Culture Association (India)</p>
<p><b>Projects (Major Grants / Collaborations)</b></p> <p><b>Ongoing:</b></p> <ol style="list-style-type: none"> <li>1. Characterization of developmentally regulated promoters from <i>Brassica</i> species (UGC)</li> <li>2. RNAi mediated modification of oil quality in <i>Brassica</i>”” Subproject under the DBT consortia project on “Development and Stress specific genomics of small noncoding RNA in <i>Brassica</i> sps., Rice and Wheat” (Principal Investigator; Department of Biotechnology, Govt. of India)</li> <li>3. "Molecular analysis of the promoter elements associated with Brassica miRNA genes” (Department of Biotechnology, Govt. of India)</li> </ol> <p><b>Completed:</b></p> <ol style="list-style-type: none"> <li>1. Assessment of genetic diversity of two medicinal plants <i>Terminalia</i> and <i>Tribulus</i> through AFLP. (Principal Investigator, Department of Biotechnology)</li> <li>2. Isolation and characterization of transcription factor and microRNA genes from <i>Brassica</i> and investigation into molecular basis of morphological variation. (Principal Investigator, Department of Biotechnology, Govt. of India)</li> <li>3. Trait manipulation using microRNA genes in <i>Brassica juncea</i>” Subproject under the DBT consortia project on “Development and Stress specific genomics of small noncoding RNA in <i>Brassica</i> sps., Rice and Wheat” (Principal Investigator; Department of Biotechnology, Govt. of India)</li> <li>4. UK-India Partnering Award for <i>Enhancing Oilseed Crop Improvement through Genomic Approaches</i> (Indian Co-Partner; In collaboration with Dr. Graham King, Rothamsted Research, Harpenden, UK, and Dr. Ian Bancroft, John Innes Center, Norwich, UK; Funding agency- Biotechnology and Biological Sciences Research Council (BBSRC), UK)</li> </ol>
<b>Other Details</b>
<b>Research Guidance</b>
<p><i>List against each head (If applicable)</i></p> <ol style="list-style-type: none"> <li>i. <i>Supervision of awarded Doctoral Thesis</i></li> </ol> <p><b>Awarded</b></p> <ol style="list-style-type: none"> <li>ii. Ritesh Kumar: Molecular Analysis of TCP4 and regulatory sequences from <i>Brassica</i> species (supervisor)</li> <li>iii. Kalpna Singh: Molecular characterization of MINI3 WRKY10 from <i>Brassica</i> species (supervisor)</li> <li>iv. Parul Chowdhury: Sequence Analysis and molecular characterization of microRNA genes</li> </ol>

<p>from <i>Solanum esculentum L</i> (supervisor)</p> <p>v. Karuna Kusumanjali: Genomic analysis of <i>CUC1</i> And microRNA gene, <i>miR164</i> from <i>Brassica species</i> (supervisor)</p> <p>vi. Maryam Sarwat: Analysis of Genetic diversity in <i>Terminalia arjuna</i>, <i>T.bellerica</i>, <i>T.chebula</i>, and <i>Tribulus terrestris</i> by molecular markers (as co-supervisor)</p> <p>vii. Gowher Nabi: Abiotic Stress Tolerant Transgenics of <i>Bacopa monniera</i> (L.) Wettst. and Evaluation of Bacoside Content (as co-supervisor)</p> <p>viii. Shivane Kaul: Invitro micropropagation and <i>Agrobacterium</i> mediated transformation of <i>Ajuga bracteosa</i> and <i>Artemisia annua</i> for early flowering (as co-supervisor)</p> <p>ix. Toolika Srivastava: Induction of Abiotic Stress Tolerance in <i>Bacopa monniera</i> (L.) Wettst. and <i>Catharanthus roseus</i> (L.) G.Don through <i>Agrobacterium tumefaciens</i> mediated transformation (as co-supervisor)</p> <p><b>Submitted: N.A</b></p> <p><b>Supervision of Doctoral Thesis, under progress</b></p> <p><i>Ms. Neer Komal Singh</i></p> <p><i>Ms Aditi Singh</i></p> <p><i>Mr. Saurabh</i></p> <p><b>Supervision of awarded M.Phil dissertations: None</b></p> <p><b>Supervision of M.Phil dissertations, under progress: Two</b></p>
Association With Professional Bodies
<ol style="list-style-type: none"> <li>1. <i>Editing</i></li> <li>2. <i>Reviewing:</i> <i>Project reviewer for DBT</i> <i>Manuscript reviewer for J Bioscience, IJGPB, Phytomorphology, Biotechnology Journal, Molecular Biology Reports</i></li> <li>3. <i>Advisory Committees and Boards</i></li> <li>4. <i>Memberships</i></li> <li>5. <i>Office Bearer</i></li> </ol>
Other Activities

Signature of Faculty Member

- You are also requested to also give your complete resume as a DOC or PDF file to be attached as a link on your faculty page.