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Title		First Name	Sudeshna	Last Name	Mazumdar-Leighton	Photograph
Designation	Associate Professor					
Department	Botany					
Address (Campus)	Rm#18, Department of Botany, Delhi University, Delhi-110007					
(Residence)	#D12, 8 Cavalry Lane, Delhi University, Delhi-110007; #A56, Panchvati Apartments, Vikaspuri, New Delhi-110018					
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Education						
Subject	Institution	Year	Details			
Ph. D.	Delhi University; Research at ICGEB, New Delhi & IRRI, Philippines	1996	Thesis topic: "Molecular characterization of trypsin genes in <i>Scirpophaga incertulas</i> (Wk.) and <i>Helicoverpa armigera</i> (Hb.) and recombinant soybean trypsin inhibitor gene expression in <i>E. coli</i> "			
M. Sc.	University of Delhi, South Campus	1991	Subjects: Genetics			
B. Sc.	Miranda House, Delhi University	1989	Subjects: Botany			
Career Profile						
Organization / Institution	Designation	Duration	Role			
Department of Entomology, Cornell University, NYSAES, NY 14456, USA	Post-doctoral Fellow	1996-2000	Worked on a NSF research project characterizing responses of lepidopteran pests to ingestion of plant anti-feedants			
Department of Plant Pathology, Cornell University, NY 14456, USA	Research Associate	2000-2003	Worked on USDA funded epidemiological surveys for plant viruses in NY state; proteolytic susceptibility of transgenic PRSV coat proteins, and grape biotechnology			
Department of Botany, Delhi University, Delhi-7, India	Reader	2003-till date	Teacher and Researcher			
Research Interests / Specialization						
Biology of the interactions of plants with their biotic environments; Sustainable agricultural biotechnology						
Teaching Experience (Subjects/Courses Taught)						
Core Paper VII: Plant Cell Biology & Biotechnology; Optional paper: Plant-Insect and Plant-Virus Interactions						
Honors & Awards						
Publications (LAST FIVE YEARS)						

<u>Books / Monographs - NA</u>			
<u>Year of Publication</u>	<u>Title</u>	<u>Publisher</u>	<u>Co-Author</u>
<u>In Indexed/ Peer Reviewed Journals</u>			
<u>Year of Publication</u>	<u>Title</u>	<u>Journal</u>	<u>Co-Author</u>
1.	Sudeshna Mazumdar-Leighton, Cheerukeri Raghavendra Babu and John Bennett (2000) "Identification of novel serine proteinase gene transcripts in the midguts of two tropical insect pests, <i>Scirpophaga incertulas</i> (Wk.) and <i>Helicoverpa armigera</i> (Hb.)" Insect Biochemistry and Molecular Biology 30 (1): 57-68.		
2.	Sudeshna Mazumdar-Leighton and Roxanne M. Broadway (2001) "Identification of six chymotrypsin cDNAs from larval midguts of <i>Helicoverpa zea</i> (corn earworm) and <i>Agrotis ipsilon</i> (black cutworm) feeding on the soybean trypsin inhibitor" Insect Biochemistry and Molecular Biology 31 (6/7): 633-644.		
3.	Sudeshna Mazumdar-Leighton and Roxanne M. Broadway (2001) "Transcriptional induction of diverse midgut trypsins from larval <i>Helicoverpa zea</i> (corn earworm) and <i>Agrotis ipsilon</i> (black cutworm) feeding on the soybean trypsin inhibitor" Insect Biochemistry and Molecular Biology 31 (6/7): 645-657.		
4.	D. Shah, B. Nault, H. Dillard, S. Mazumdar-Leighton and D. Gonsalves, 2003, "Incidence and spatial patterns of viruses in New York snap beans in 2002" Phyto- pathology, 93: S78.		
5.	Nault, B.A., D. Shah, H. Dillard, S. Mazumdar-Leighton, D. Gonsalves and A. McFaul (2003) "Aphid dispersal and virus incidence in snap bean fields". In Proceedings of the Mid Atlantic Fruit and Vegetable Convention. Hershey, PA. Pennsylvania Vegetable Growers Association. pp. 39-41.		
6.	Nault, B.A., D. Shah, H. Dillard, S. Mazumdar-Leighton, D. Gonsalves and A. McFaul (2003) "Seasonal patterns of aphid movement and virus incidence in snap bean fields". In Proceedings of the New York State Vegetable Conference. Cornell Cooperative Extension and New York State Vegetable Growers Association. pp. 84-87.		
7.	DA Shah, HR Dillard, S Mazumdar-Leighton, D Gonsalves and B Nault, (2006), "Incidence, Spatial patterns, and Associations among Viruses in Snap Bean and Alfalfa in New York", Plant Disease, 90:203-210.		
8.	A Bhattacharyya, S. Mazumdar, S Mazumdar-Leighton and CR Babu, (2006), "A Kunitz		

proteinase inhibitor from *Archidendron ellipticum* seeds: Purification, characterization, and kinetic properties”, *Phytochemistry* 67:232-241.

9. A Bhattacharyya, S Mazumdar Leighton and CR Babu, (2007), “Bioinsecticidal activity of *Archidendron ellipticum* trypsins inhibitor on growth and serine digestive enzymes during larval development of *Spodoptera litura*”, *Comp. Biochem. Physiol. C. Toxicol. Pharmacol.*, 145(4):669-677.
10. A Bharadwaj, S Leelavathi, S Mazumdar-Leighton, A Ghosh, S Ramakumar and V ShivaReddy, (2008), “The critical role of partially exposed N-terminal Valine residue in stabilizing GH10 Xylanase from *Bacillus* sp. NG-27 under poly-extreme conditions”, *PLoS One*, 3(8):e3063.
11. A Bharadwaj, S Leelavathi, S Mazumdar-Leighton, A Ghosh, S Ramakumar and V ShivaReddy, (2010), “The critical role of N- and C-terminal contact in protein stability and folding of a family 10 Xylanase under poly-extreme conditions”, *PLoS One*, 5(6):e11347.
12. B Oppert, EN Elpidina, M Toutges and S Mazumdar-Leighton, (2010), ‘Microarray analysis reveals strategies of *Tribolium castaneum* larvae to compensate for cysteine and serine protease inhibitors’ *Comp Biochem Physiol Part D Genomics Proteomics* 5(4):280-7.
13. M Saikia, YT Singh, A Bhattacharya and S Mazumdar-Leighton, (2010), ‘Expression of diverse midgut serine proteinases in the sericigenous Lepidoptera *Antheraea assamensis* (Helfer) is influenced by choice of host plant species’ *Insect Molecular Biology* 20(1): 1-13.
14. P Singh-Pant, P Pant, SK Mukherjee and S Mazumdar-Leighton, (2012), ‘Spatial and temporal diversity of begomovirus complexes in papayas with leaf curl disease’ *Archives of Virology* 157: 1217-1232.
15. YT Singh, S Mazumdar-Leighton, M Saikia, P Pant, S Kashung, K Neog, R Chakravorty, S Nair, J Nagaraju, CR Babu, (2012), “Genetic variation within natural populations of endemic silkmths, *Antheraea assamensis* (Helfer) from North-East India indicates need for in situ conservation” *PLoS ONE* 7(11): e49972 doi:10.1371/journal.pone.0049972.

Articles

- Loktak: the largest floating lake of the world needs restoration” (2013) *Current Science*, 104: 10. <http://www.currentscience.ac.in/Volumes/104/01/0010.pdf>
- “Rabha’s weave” (2008) www.mugadbase.com
- “Biotechnology: A new era for Plant Biotechnology and Plant Protection” (2000) www.apsnet.org/online/feature/Biotechnology.html

Public Service / University Service / Consulting Activity

Professional Societies Memberships
Projects (Major Grants / Collaborations)
Contact smazumdar@botany.du.ac.in for details
Other Details

(Signature of Faculty Member)

(Signature & Stamp
of Head of the Department)