


# Name: Dr. Mridul Chakraborti

Designation: Scientist (Plant Breeding)

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<b>Qualification:</b>	Ph.D. (Genetics)	
<b>Specialization:</b>	Plant Breeding	
<b>Professional Experience:</b>	Joined ICAR-ARS on 21/04/2009	
<b>Publications:</b> <ul style="list-style-type: none"> <li>a) Research paper: 12</li> <li>b) Popular Articles: Nil</li> <li>c) Books: Nil</li> <li>d) Book Chapters: Nil</li> <li>e) Bulletins: Nil</li> </ul>		
<b>Training (International):</b> Nil		
<b>Training (National):</b> <ul style="list-style-type: none"> <li>• 21 days training on “Prebreeding in crop improvement” at PAU, Ludhiana (Sep., 2011)</li> </ul>		
<b>Recognition:</b> <ul style="list-style-type: none"> <li>• Joint CSIR-UGC NET in Life Sciences for lectureship with JRF (December, 2005).</li> <li>• ICAR- NET in Plant Breeding (2007) and 2<sup>nd</sup> rank in Agricultural Research Service.</li> <li>• Junior Research Fellowship by Indian Council of Agricultural Research from August, 2004-July, 2006 (All India Rank-02; in Plant Sciences group).</li> <li>• University Merit Scholarship during undergraduate studies, 2000-2004.</li> <li>• National Scholarship by West Bengal Council of Higher Secondary Education for outstanding 10+2 result (1999).</li> <li>• Ranked 1<sup>st</sup> in the national level entrance examination for Ph.D. admission conducted by Indian Agricultural Research Institute, New Delhi and awarded IARI-Senior Research Fellowship (August, 2006).</li> <li>• Ranked 1<sup>st</sup> in the national level entrance examination for Ph.D. admission conducted by National Centre for Plant Genome Research, New Delhi (July, 2006).</li> </ul>		
<b>Award:</b> <ul style="list-style-type: none"> <li>• IARI Best Ph.D. Student of the Year (2010) Award (Gold medal and cash prize of Rs. 10000).</li> <li>• Best Research Paper (2010) Award from Indian Society of Genetics and Plant Breeding (Certificate and Cash Prize of Rs. 10000).</li> <li>• IARI Best M.Sc. Student of the Year (2007) Award (Gold medal and cash prize of Rs. 10000).</li> <li>• University Gold Medal for Best Undergraduate Student (2004) from Uttar Banga Krishi Viswavidyalaya, W. Bengal.</li> </ul>		
<b>Brief Achievement :</b> <ul style="list-style-type: none"> <li>• Identification of neurogenic function of a phospholipid signaling mutant in <i>Drosophila</i> affecting olfactory response.</li> <li>• Identification of single cross hybrids of quality protein maize (QPM) lines as potential source for zinc biofortification.</li> <li>• Co-worker in development and multiplication of black seeded berseem, tetraploid-pentafoliate berseem, various interspecific crosses of <i>Trifolium</i> and 12x guinea grass.</li> </ul>		

- Development of an advanced breeding line of berseem which entered in AVT.

**Selected Publication :**

- Medhi R. P., **Chakraborti M.** and Rampal. (2012) Orchid biodiversity of India: conservation and utilization. *Indian J. Genet.*, 72(2): 148-156. (NAAS: 6.6)
- **Chakraborti M.**, Prasanna B. M., Hossain F., Mazumdar S., Guleria S.K. and Gupta H.S. (2011) Identification of kernel iron- and zinc-rich maize inbreds and analysis of genetic diversity using microsatellite markers. *J. Plant Biochem. Biotechnol.* **20(2)**: 224–233. (NAAS: 6.8)
- Prasanna B. M., Mazumdar S., **Chakraborti M.**, Hossain F., Manjaiah K.M., Aggarwal P.K., Guleria S.K. and Gupta H.S. (2011) Genetic variability and Genotype × Environment interactions for kernel iron and zinc concentration in maize (*Zea mays*) genotypes. *Indian J. Agric. Sc.* **81** (8): 704-711. (NAAS: 6.6)
- **Chakraborti M.**, Prasanna B.M., Hossain F. and Singh A.M. (2011) Genetic analysis of kernel iron and zinc concentrations in the Quality Protein Maize (QPM) genotypes. *Indian J. Genet.* **71** (4): 312-319. (NAAS: 6.6)
- Acharya S., Sharma D.K., Joshi H.C. and **Chakraborti M.** (2011) Effects of Some Heavy Metals on *in vitro* Pollen Germination and Tube Growth of *Jatropha curcas*. *Range Mgmt. & Agroforestry* **32(1)**: 52-55. (NAAS: 6.6)
- **Chakraborti M.** and Chandrashekar S. (2010). Multiple roles of a PLCβ regulator in olfaction, pupal development and synaptic vesicle recycling in *Drosophila melanogaster*. *Indian J. Genet.* **70(3)**: 215-221. (NAAS: 6.6)
- **Chakraborti M.**, Prasanna B.M., Hossain F. and Singh A.M. (2010) Generation mean analysis of kernel iron and zinc concentrations in maize (*Zea mays* L.). *Indian J. Agric. Sc.* **80(11)**: 956-959. (NAAS: 6.6)
- Dhir R., Yadav A, Shukla D., Srivastava N., **Chakraborti M.**, Malaviya D.R., Roy A.K. and Kaushal P. (2010) Differential response of various interspecific hybrids of *Trifolium* for shoot bud multiplication. *Range Mgmt. & Agroforestry. Symposium Issue (B)*: 258-259. (NAAS: 6.6)
- Yadav A., Dhir R., **Chakraborti M.**, Malaviya D.R., Roy A.K. and Kaushal P. (2010) Genetic diversity in different *Trifolium* species based on RAPD markers. *Range Mgmt. & Agroforestry. Symposium Issue (A)*: 92-93. (NAAS: 6.6)
- **Chakraborti M.**, Prasanna B.M., Hossain F., Singh A.M. and Guleria S.K. (2009). Genetic evaluation of kernel Fe and Zn concentrations and yield performance of selected Maize (*Zea mays* L.) genotypes. *Range Mgmt. & Agroforestry.* **30 (2)**: 109-114. (NAAS: 6.6)
- **Chakraborti M.**, Hossain F., Kumar R., Prasanna B.M. and Gupta H.S. (2009) Genetic Evaluation of Grain Yield and Kernel Micronutrient Traits in Maize. *Pusa Agri. Sci.* **32**: 11-16. (NAAS: 3.2)
- Prasanna B. M., Mazumdar S., Tyagi P., **Chakraborti M.**, Hossain F., Manjaiah K.M., Gupta H.S., Aggarwal P.K., Guleria S.K., Plaha P. and Pixley K. (2010). Genetic variability for kernel iron and zinc densities in selected HarvestPlus and Indian maize genotypes. *In Maize for Asia: Emerging Trends and Technologies*. Proceedings of the 10th Asian Regional Maize Workshop, Makassar, Indonesia, 20 – 23 October 2008. **Mexico D.F.: CIMMYT.** Pp 228-232.