


Name	Dr. Nirmal Mandal
Date of birth	8 th November, 1964
Photo	
Designation	Professor
Official address/Department	Department of Agricultural Biotechnology F/Agriculture, BCKV, Mohanpur-741252, Nadia
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Phone	09432280086
E-Mail	nirman_bckv05@yahoo.com
Working in BCKV since (Date of Joining)	10 th January, 1996
Professional training	<ul style="list-style-type: none"> i) Training experience (25th Feb. to 12th March, '97) on “Recent Techniques on Molecular Biology and Biotechnology” conducted by the Centre of Biotechnology, I.A.R.I. , New Delhi and sponsored by Centre of Advance Studies , I.C.A.R. ii) Training experience (29th March to 18th April, 2000) on “PCR Amplification and Cloning of Gene” organized by Division of Biochemistry, I.A.R.I., New Delhi and sponsored by Centre of Advanced Studies, I.C.A.R. iii) Attended ICAR Sponsored Summer School (17th July to 6th Aug, 2002) on "Ecofriendly utilization of solid and liquid wastes of farm, urban and industrial wastes for agriculture" conducted by the Department of Environmental Science, Tamil Nadu Agricultural University, Coimbatore. iv) Attended a training entitled “Application Training on Applied Biosystems Real Time PCR System” held on 2-14 September 2007 at LABINDIA Technical Training Centre, Gurgaon, Haryana. v) Attended winter school on “Research and development needs in transgenic farming era” sponsored by ICAR, New Delhi and organized by UAS, Dharwad. Karnataka, from December 11-31, 2008.
Fellow of the Society	Fellow of the Society for Sciences (F.S.Sc.), awarded in 2003
Research interests and area of specialization	<i>In vitro</i> culture technology and genetic modification of crop plants
Best 10 publications with NAAS score > 8	<ol style="list-style-type: none"> 1. Mandal N and Gupta S (1997) Anther culture of an interspecific rice hybrid and selection of fine grain type with submergence tolerance. Plant Cell Tissue and Organ Cult, 51: 79-82 (IF: 2.612, NAAS: 8.20). 2. Mandal N, Raj SK and Gupta S (1999) Anther culture for breeding submergence tolerance in rice (<i>Oryza sativa</i> L.). Phytomorpholog, 49: 21-28. (NAAS:9.23). 3. Gantait S, Mandal N, Bhattacharyya S, Das PK (2011) Induction and identification of tetraploids using <i>in vitro</i> colchicine treatment of <i>Gerbera jamesonii</i> Bolus cv. Sciella. Plant Cell Tissue and Organ Culture, 106(3): 485-493. (IF: 2.612, NAAS: 8.20). 4. Gantait S, Mandal N, Das PK (2011) <i>In vitro</i> accelerated mass propagation and <i>ex vitro</i> evaluation of <i>Aloe vera</i> L. with aloin content and superoxide dismutase activity. Natural Product Research (Taylor & Francis), 25(14): 1340-1378. (NAAS: 8.16). 5. Gantait S, Sinniah UR, Mandal N, Das PK (2012) Direct induction of protocorm-like bodies from shoot tips, plantlet formation, and clonal fidelity analysis in <i>Anthurium andreanum</i> cv. CanCan. Plant Growth Regulation, 67(3): 257-270. (NAAS: 8.39)

	<p>5. Talem RS, Wani SH, Sing NB, Nandini R, Sadhukhan R, Bhattacharyya S and Mandal N (2013) Cisgenics-A sustainable approach for crop improvement. Current Genomics, 14: 468-476. (NAAS rating 8.63)</p> <p>6. Kundu S, Salma U, Ali Md. N, Hazra AK and N Mandal (2018) Development of transgenic hairy roots and augmentation of secondary metabolites by precursor feeding in <i>Sphagneticola calendulacea</i> (L.) Pruski. Industrial Crops & Production, 121: 206-215. (NAAS: 10.24)</p> <p>7. Salma U, Kundu S, Ali Md. N and Mandal N (2018) Augmentation of wedelolactone through <i>in vitro</i> tetraploid induction in <i>Eclipta alba</i> (L.) Hassk. Plant Cell Tiss. Organ Cult., 133:289–298. (NAAS:8.20)</p> <p>8. Kundu S, Salma U, Ali Md. N and Mandal N (2018) <i>In vitro</i> tetraploidization for the augmentation of wedelolactone in <i>Sphagneticola calendulacea</i> (L.) Pruski. Acta Physiol. Plant., 40: 215. (NAAS: 11.54).</p> <p>9. Salma U, Kundu S, Ali Md. N and Mandal N (2019) Somatic embryogenesis-mediated plant regeneration of <i>Ecliptaalba</i> (L.) Hassk. and its conservation through synthetic seed technology. Acta Physiol. Plant.,41:103 (NAAS: 11.54).</p> <p>10. Mitra M, Gantait S and Mandal N (2020) <i>Coleus forskohlii</i>: advancements and prospects of <i>in vitro</i> biotechnology. Appl. Microbiol. Biotechnol., 104: 2359–2371. (NAAS:9.67).</p>
Books or chapter in books	<p>1. Genetic diversity in some wild and cultivated germplasm in <i>Vigna</i> by molecular marker. In: Recent Trends in Horticultural Biotechnology, Vol. 2 (eds. R. Keshavachandran et. al.). New India Publishing Agency, New Delhi, p. 515, (2007).</p> <p>2. Sustainable management of rice blast [<i>Magnaporthe grisea</i> (Hebert) Barr]: 50 years of research progress in molecular biology. In: Arya A and Perello AE (eds.) Management of fungal plant pathogens: Current trends and progress. CAB International, Nosworthy Way, Wallingford, Oxford, Oxford Shire, UK, Chapter 8, p. 92, (2010).</p> <p>3. Single nucleotide polymorphism (SNP) marker for abiotic stress tolerance in crop plants. In: Advances in Plant Breeding Strategies, Vol. 2 (eds. JM Al-Khayri, M. Jain, DV Johnson). Springer International Publishing, Switzerland, p. 327, (2016).</p>
Laboratory manual	Prepared six different manuals for different UG & PG courses
Courses teaching	<p>UG Level: Principles & Practices of Agricultural Biotechnology, Micropropagation Technologies</p> <p>PG level: Principles of Biotechnology, Plant Tissue Culture & Genetic transformation, Biosafety , IPR & Bioethics, Commercial Plant Tissue Culture, Advances in Crop Biotechnology</p>
Research projects/ supports	DBT sponsored project entitled “In-depth investigation on biotic/abiotic elicitors mediated induced systemic resistance in rice- <i>Rhizoctonia</i> system under different agro-ecological region of West Bengal”. San. No. 102/IFD/SAN/PR-317/2009-2010 dated 2.06.2009.
Number of seminar/ symposium attended	National- 13 International- 14
Laboratory strength	Basic facilities of plant tissue culture and molecular marker technology
Number of scholars supervised	Ph.D. Student Guidance: Awarded- 21 and presently Working- 5
Additional duty in administration	Discharged duty as Head of the Department from 2002 to 2020
Life members of the scientific society	<p>1. Society for Plant Biochemistry and Biotechnology, New Delhi- 110 012.</p> <p>2. Society for Sciences, Dumka- 841 101</p> <p>3. The Indian Society of Genetics and Plant Breeding, New Delhi- 110 012</p> <p>4. Crop & Weed Science Society, Kalyani, West Bengal- 741235</p> <p>5. Association for Plant Breeding and Improvement, Kolkata- 700 019</p>