

Curriculum Vitae

Name: Mrunal Sarang Damle
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Contact address: Same as above
E-mail: msdamle@gmail.com
Date of birth: 24/07/1978
Place of birth: Dombivali (Dist: Thane, Maharashtra)
Nationality: Indian
Gender: Female
Marital Status: Married

Degree	Board/ University	Year	Subject(s)	Grade obtained
M. Sc.	University of Pune	2000	Botany (Special Subject: Plant Biotechnology)	First Class with Distinction (70.90%)
B. Sc	University of Pune	1998	Botany, Chemistry, zoology	First Class with Distinction (73%)
H. S.C	Maharashtra State Board of Secondary and Higher Secondary Examination, Pune, Divisional board-Bombay	1995	Chemistry, Biology, Mathematics, Physics, English, Marathi	First Class (69%)
S.S.C.	Maharashtra State Board of Secondary and Higher Secondary Examination, Pune, Divisional board-Bombay	1993	Chemistry, Biology, Mathematics, Physics, English, Marathi, Sanskrit, Geography, History, Civics	First Class with Distinction (81%)

Educational Qualification: M. Sc (Botany) CSIR, NET qualified, UoP approved as Biotechnology teacher.

Present Occupation: Laboratory Technician, MES Abasaheb Garware College, and Assist. Professor (CHB) in Dept. of Biotechnology, Biodiversity, Botany (MES, AGC)

Past Teaching Experience: Asst. Professor (Dept: Biotechnology, VPASC College, Baramati, 413 133)

Worked as a member of Paper setting and paper checking committees appointed by University of Pune for UG & PG Biotechnology exams.

Appointed as external examiner to assess UG & PG practical exams conducted by University of Pune.

CHB lecturer at Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411008

Subjects Taught: Theory and Practical Courses in Basic Biosciences, Plant Tissue Culture, Plant Biotechnology, and Advanced Genetics.

Achievements:

1. Passed national Eligibility Examination (CSIR/NET)
2. Obtained 1st rank in the B. Sc Botany exam in 1998 from Abasaheb Garware College, Pune.
3. Obtained 2nd rank in the M.Sc Botany exam in 2000 by University of Pune.
4. Obtained best lecture award at International Food Legume Research Conference 2005 held at IARI, Pusa, New Delhi.

Past research experiences:

1. Worked as a summer trainee (May 1999- June 1999) in Water Technology Centre, IARI, Pusa, New Delhi, under the guidance of Dr. (Mrs.) Renu Khanna Chopra on the project "Comparison of protein profiles from a cultivated plant species and four weeds." This work involved learning techniques like isolation, quantification of aqueous proteins, SDS-PAGE analysis, CBB staining, Silver staining of protein profiles, Activity profiles of SOD and Catalase enzymes from cultivated and weed species
2. M.Sc Dissertation done (July 1999- April 2000) in Department of Botany, University of Pune, under the guidance of Dr. G. S. Chinchankar on the project "Development of Micropropagation protocol for a medicinal plant *Plumbago zeylanica*, Linn."
3. Worked as a trainee (February 2001- May 2001) in Department of Biotechnology, Madurai Kamraj University, under the guidance of Dr. K. Veluthambi, to learn *Agrobacterium tumefaciens* mediated plant transformation. This training involved cloning of transgene in binary vector, mobilization of binary vector plasmid in *Agrobacterium tumefaciens* by triparental mating, Infection of *Vigna mungo* nodal sectors with recombinant *Agrobacterium* strain, Southern hybridization, Western Hybridization to confirm transgenics.
4. Worked as Project Assistant on the project (August 2000- December 2003) "Development of Transgenics in four major crops, viz., Mungbean, Rice, Tomato, Cotton for insect resistance" funded by Department of Biotechnology, Government of India, at Plant molecular biology Unit, Division of Biochemical Sciences, National Chemical Laboratory, Pune, India. This work included standardization of regeneration protocol for cotton, and construction of agrobinary clone having plant proteinase inhibitor gene under constitutive promoter.
5. Joined as Junior Research Fellow (CSIR), (January 2003- January 2008) under the able guidance of Dr. (Mrs.) Vidya S. Gupta, in Plant Molecular Biology Unit, Division of Biochemical Sciences, National Chemical Laboratory, Pune, India, started

work as a Ph.D student on “Characterization of host and non-host plant proteinase inhibitors for combating insect pest attack: A Case study using tomato and winged bean proteinase inhibitors”. This work involves development of transgenic plants resistant to insect infestations and study of potent proteinase inhibitor sources from tomato as well as winged bean plants

6. Worked as a exchange visitor, research scientist, (August 2004- April 2005) in USDA, Johnson Hall, Washington State University, Pullman, Washington State, USA , under the guidance of Dr. Fred J. Muehlbauer, Dr. Vincent R. Fransceschi, Dr. Mechthild T. Tegeder, Dr. Kevin McCaffee, Dr. P. N. Rajesh, on the project “ Development of transgenic chickpea and tomato resistant to *Helicoverpa armigera* using PtCI-5 and PtCI-2 as transgenes”.

Other experiences:

Worked as visiting faculty at Tilak Maharashtra University for two semesters, taught Cell Biology, Molecular Biology, and Genetic engineering to M.Sc Biotech students.

Completed 6 days training course on Green House technology, at Hi-tech Department, Mahatma Phule agriculture college, Pune.

Worked for 3 months in a reputed Indian manufacturing company as a marketing co-ordinator.

Techniques handled:

Protein isolation, Quantification of protein by Bradford’s method, SDS-PAGE, Native-PAGE, CBB staining, Silver staining, Protein purification by Ion-Exchange chromatography, Activity visualization using X-ray film contact print technique, Bioassays with *H. armigera*, Enzyme inhibitor assays, Plant DNA isolation, Plasmid isolation, Agarose gel electrophoresis, PCR, Southern hybridization, Plant RNA isolation, RT-PCR, Cloning of transcripts in pGEMT-Easy vector, Sequencing of plasmid clones, Expression of recombinant genes in *Pichia pastoris*, Model plant transformation, southern analysis, northern analysis, Western blotting.

Can make data sheets using computer, (MS Office, Excel, and Powerpoint). As well as can make presentations using powerpoint. Can do data search using internet. Can translate English to Marathi, Marathi to English as well as Hindi to English and English to Hindi.

Publications:

1. Damle MS, Giri AP, Sainani MN, Gupta VS (2005). Higher accumulation of proteinase inhibitors in flowers than leaves and fruits as a possible basis for differential feeding preference of *Helicoverpa armigera* on tomato (*Lycopersicon esculentum* Mill, Cv. Dhanashree). *Phytochem.* 66: 2659–2667.
2. Damle MS, Giri AP, Gupta VS, Pin 2 family of plant proteinase inhibitors, Standard review, MS under preparation.
3. Damle MS, Giri AP, Rajesh PN, Telang MA, Muehlbauer FJ, Tegeder MT, Fransceschi VR, Gupta VS, *Agrobacterium*-mediated transformation of Chickpea (*Cicer arietinum* L, Cv. Vijay) with winged bean proteinase inhibitor gene (*PtWCI*) for developing tolerance against *Helicoverpa armigera*, MS submitted to Proceedings of IFLRC-2005, New Delhi.