

**Prof. Dr. ZUNJARRAO RAJENDRA SHANKAR**  
M.Sc., Ph.D.  
Principal and Head, Department of Botany



**CONTACT COORDINATES:**

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**Honors**

1. Appointed as District co-ordinator (Pune City) to prepare National Education Policy-2015.
2. **'Best Principal Award'** by University of Pune, Pune. Awarded on 10<sup>th</sup> February, 2014.
3. Board Member (Botany), University of Pune.
4. Life Member, Progressive Education Society, Shivajinagar, Pune-5.
5. Visitor, Modern College of Agricultural Biotechnology, Mulashi, Paud, Pune.

**Research Projects:**

<b>Title:</b>	Optimization of Growth Rate of Potential Biodiesel Producing Microalgae
<b>Funding Agency:</b>	BCUD, SavitribaiPhule Pune University
<b>Duration:</b>	2014-2016
<b>Status:</b>	Ongoing
<b>Amount:</b>	Rs.2,40,000/-

<b>Title:</b>	Developing a Digital Herbarium of Angiospermic Plant of the Western Ghat Regions of Maharashtra
<b>Funding Agency:</b>	UGC, New Delhi.
<b>Duration:</b>	3 Years
<b>Status:</b>	On-going
<b>Amount:</b>	Rs.9,86,750/-

<b>Title:</b>	Bio-ecological and Bio-chemical approach to assess Bryophytes - Pigmy Locust Association
<b>Funding Agency:</b>	Department of Science and Technology (Project No. SR/SO/S-42/2008)
<b>Duration:</b>	2010-2013
<b>Status:</b>	On-going
<b>Amount:</b>	Rs.39,52,500/-

<b>Title:</b>	Macro ad Micro propagation of <i>Jatropha curcas</i> L. and <i>Pongamia pinnata</i> Vent.:Biodiesel plants
<b>Funding Agency:</b>	BCUD, University of Pune, Pune-7.
<b>Duration:</b>	2007-2009
<b>Status:</b>	Completed
<b>Amount:</b>	Rs.3,00,000/-

<b>Title:</b>	Survey and <i>in vitro</i> clonal multiplication of Banana var. Lalvelchi
<b>Funding Agency:</b>	UGC, New Delhi.
<b>Duration:</b>	July 1995-June 1997
<b>Status:</b>	Completed
<b>Amount:</b>	Rs.25,000/-

1. He has published Fourteen Research Papers in National and International Journals.
2. He has Presented thirty nine research papers in various National and International Conference
3. He has been written eight text books and One reference book.

**Consultancy:**

1. Working as consultant for 'Shirke Bioenergy' Pvt. Ltd. Pune.

**Seminars/Symposia/Conferences/Workshop attended:**

1. Presented a poster entitled "Effect of light emitting diode (LED) on the growth rate of Nannochloropsis and Chaetoceros : Potential source for biodiesel production" In a regional research conference Innovation 2015, for SavitribaiPhule Pune University College teachers in the subject Botany held at SahakarMaharshiBhousahebSantujiThorat College, Sangamner, on 4th and 5th July 2015.

2. Principals/Directors workshop of SavitrabaiPhule Pune University, Pune held on 3<sup>rd</sup> to 5<sup>th</sup> May 2015 at Sinhgad Institutes Lonavala.
3. "UGC sponsored short term faculty development programme for science teachers of Pune city" organized by University of Pune, Pune 7, at Modern College of Arts, Science and Commerce, Shivajinagar, Pune 5, held from 2<sup>nd</sup> June to 8<sup>th</sup> June 2014.
4. Seminar on 'New Companies Act 2013' organized by Modern College of Arts Science and Commerce, Shivajinagar, Pune on 21<sup>st</sup> February 2014.
5. Seminar on 1<sup>st</sup> Edition of 'SKILLCON INDIA, 2013', organized by Mahratta Chamber of Commerce, Industries and Agriculture and EDGE Form, on 12-13 March 2013.
6. 'WordCamp Pune 2013', organized by WordCamp User Group Pune on 23<sup>rd</sup>-24<sup>th</sup> February 2013.
7. International seminar on '*Marathi BhyashikansathiDesh-VideshatilNokari-VyavasayachyaSandhi*' organized by Modern College of Arts, Science and Commerce, Shivajinagar Pune 5, on 12<sup>th</sup> to 15<sup>th</sup> January 2009.
8. 'National symposium on emergence of modern techniques and development in biobusiness' organized at Modern College, Pune 53, on 18<sup>th</sup> to 20<sup>th</sup> February 2008.
9. Seminar on 'Recent Trends in Botany', organized by Ahmednagar College, Ahmednagar, on 8<sup>th</sup> Feb. 2007.
10. Symposium on 'Recent Trends in Life Sciences' organized by Modern College, Pune, 53, on 8<sup>th</sup>& 9<sup>th</sup> Jan.2007.
11. Indian Nurserymen Association's 10<sup>th</sup> National Nurserymen & Landscapists Convention, Organized Maharashtra Nurserymen Association, at BalgandharvaRangamandir, Pune, on 11<sup>th</sup> – 14<sup>th</sup> November 2006.
12. Seminar on Critical aspects of PCR, organized by Eppendorf on 13<sup>th</sup> October 2006, at Hotel Ambassador, Pune.
13. Seminar on Nursery management, organized by Sakal Agro One, on 20<sup>th</sup> September 2006, at S.M. Joshi auditorium, Pune.
14. One day Seminar on Floriculture in Polyhouses, organized by Sakal Agro one, on 6<sup>th</sup> January 2006.
15. National Conference in Plant Sciences, held at PVP College, Pravaranagar, on 10<sup>th</sup> to 12<sup>th</sup> March 2005.
16. One day Seminar on Floriculture in Polyhouses, organized by Sakal Agro one, on 15<sup>th</sup> June 2005.
17. International Conference on Biosciences, Biotechnology and Biodiversity analysis, held at Modern College, Pune-5 on 15<sup>th</sup>, 16<sup>th</sup> and 17<sup>th</sup> October 2005.
18. One day Seminar in Botany, held at RayatShikshanSanstha's Dada Patil College, Karjat, Dist-Ahmednagar, on 17<sup>th</sup> February 2004.
19. National Symposium on 'Recent Advances In Management of Plant Diseases, Technology Development and Applications' held at Modern College, Pune-411005, on 20<sup>th</sup> and 21<sup>st</sup> December 2003.
20. National Conference on Recent Advances in Plant, Microbial and Environmental Biotechnology, organized by, C.T. Bora College, Shirur (Pune), on 22<sup>nd</sup>& 23<sup>rd</sup> March 2003.
21. State Level Conference in Botany: Biotechnology, Biodiversity and Environmental Aspects, organized by P.V.P. College, Pravaranagar, on 26<sup>th</sup> February 2003.

22. International Seminar on Sugarcane Genomics and Genetic Transformation, Organized by V.S.I., Pune, on 28<sup>th</sup> and 29<sup>th</sup> August 2003.
23. National Conference on Botany for Human welfare, held at K.S.K. college, Beed, on 4<sup>th</sup> and 5<sup>th</sup> January 2003.
24. U.G.C. Sponsored National Seminar on "Promotion of Basic Sciences as a Career", Organized by Modern College, Pune-5 and University of Pune-7., on 16<sup>th</sup> to 18<sup>th</sup> December 2002.
25. National Conference on Biodiversity: Taxonomy and Conservation, held at Department of Botany, Majalgaon College, Majalgaon, Dist. Beed, on 27<sup>th</sup> and 28<sup>th</sup> July 2002.
26. National Seminar on Current Trends in Plant Sciences, held at Department of Botany, University of Pune, on 26<sup>th</sup> to 28<sup>th</sup> March-2002.
27. National Seminar on Sugarcane Biotechnology, held at V. S.I., Pune on 21<sup>st</sup> and 22<sup>nd</sup> January 2000.
28. Indian Science Congress, held at University of Pune, on 3<sup>rd</sup> to 7<sup>th</sup> January 2000.
29. 22nd All India Botanical Conference, held at Mumbai, on 23<sup>rd</sup> to 25<sup>th</sup> October 1999.
30. 14<sup>th</sup> Group Meet of All India Coordinated Research on Floriculture Crops, held at College of Horticulture, Pune on 6<sup>th</sup> to 10<sup>th</sup> January 1999.
31. Seminar on Recent Advances in Cell, Tissue and Embryo Culture, held at Department of Botany, University of Pune, on 1<sup>st</sup> to 3<sup>rd</sup> March 1997.
32. National Symposium on Biotechnology: Biotechcellence-96, held at Anna University, Madras, on 14<sup>th</sup> to 16<sup>th</sup> February 1996.
33. National Seminar on Recent Advances in Plant Sciences, held at Birla College, Kalyan, on 6<sup>th</sup> to 8<sup>th</sup> December 1991.
34. Seminar on Frontiers of Plant Physiology Research, organized by P.V.P. College, Pravaranagar, on 28<sup>th</sup> & 29<sup>th</sup> March 1990.
35. National Seminar on Modern Trends in Botany, held at Department of Botany, University of Pune, on 21<sup>st</sup> to 24<sup>th</sup> February 1991.
36. One day Seminar in Botany, organized by Department of Botany, University of Pune, Pune-7 on 19<sup>th</sup> February 1989.

### **Participated as Resource Person:**

1. Worked as selection committee member for the selection of 'Principal' for the Sanstha's various colleges conducted by the RayatShikshanSanstha at Bharatratna Dr. BabasahebAmbedkarMahavidyalaya, Aundh, Pune on 3<sup>rd</sup> February 2014.
2. Delivered a guest lecturer on 'Marathi terminology for Plant tissue culture' in National conference organized by Arts, Commerce and Science, College College, on 26<sup>th</sup> Sept. 2013.
3. Worked as organizing secretary of 'International Conference on Biodiversity and its conservation organized by Department of Botany, Modern College, Pune-5 on 28<sup>th</sup> to 30<sup>th</sup> January 2011.
4. Participated as resource person in the refresher course in Botany, held at Department of Botany University of Pune, Pune-7 on 21<sup>st</sup> March 2009 and delivered speech on 'Career Opportunities in Botany'.
5. International seminar on 'Marathi BhyashikansathiDesh-VideshatilNokari - VyavasayachyaSandhi' organized by Modern College of Arts, Science and Commerce, Shivajinagar Pune 5, on 12<sup>th</sup> to 15<sup>th</sup> January 2009.
6. Participated as a member of expert panel, in the panel discussion on 'Career opportunities in life sciences', in 'National symposium on emergence of modern techniques and development in biobusiness', organized at Modern College, Pune 53, on 18<sup>th</sup> to 20<sup>th</sup> February 2008.
7. Participated as a member of expert panel, in the panel discussion on 'Career opportunities in life sciences', in 'National symposium on emergence of modern techniques and development in biobusiness', organized at Modern College, Pune 53, on 18<sup>th</sup> to 20<sup>th</sup> February 2008.
8. Worked as a Chairman of research paper evaluation panel, in 'National symposium on emergence of modern techniques and development in biobusiness', organized at Modern College, Pune 53, on 18<sup>th</sup> to 20<sup>th</sup> February 2008.
9. Participated as a resource person and gave key note address on 'Plant biotechnology', in the University level seminar, organized by Jedhe College Pune, on 24<sup>th</sup> January 2008.
10. Participated as a resource person in a Lecture series organized under the quality improvement programme of University of Pune, Pune-7, at Shri Shiv Chhatrapati College, Junnar, on 11<sup>th</sup> January 2008 and delivered lecture on 'Plant tissue culture biotechnology and human welfare'.
11. Participated as a resource person and delivered speech on 'Techniques and application of plant tissue culture' to the teachers participated in the Seminar organized by DNA clubs, at BharatiVidyapeeth, Pune, in November 2007.
12. Participated as a resource person and delivered lead lecturer on 'Plant tissue culture' in a workshop organized by Mukhtangan Exploratory Science Center, Pune on 29<sup>th</sup> April 2007.
13. Participated as a resource person and delivered lead lecturer on 'Plant tissue culture', in 'One day seminar on recent trends in Botany', organized by Ahmednagar College, Ahmednagar, on 8<sup>th</sup> Feb. 2007.
14. Participated as a resource person and delivered lead lecturer on 'Micropropagation techniques' in One Day workshop on 'Technique in tissue

- culture,' organized by HPT Arts and RYK Science College, Nashik, on 11<sup>th</sup> January 2007.
15. Participated as a resource person in the 'Lead College and Cluster group programme' of Shivaji University, at SGM College, Karhad, and delivered a lecture on 'Micropropagation: Techniques and its applications', on 25<sup>th</sup> February 2006.
  16. Participated as a resource person in the Quality Improvement Programme Lecture series, at BaburaojiGholap College, Sangvi and delivered a lecture on 'Applications of Micropropagation' on 18<sup>th</sup> February 2006.
  17. Participated as a resource person in the Quality Improvement Programme Lecture Series, at AnnasahebAwate College, Manchar and delivered a lecture on 'Micropropagation and its application in horticulture', on 17<sup>th</sup> February 2006.
  18. Participated as a resource person in NSS Camp of Modern College (Jr. Wing), Pune-411005, at Wadhu, Shirur and delivered a speech on 'Production of Banana and Sugarcane Plantlets by tissue culture (in Marathi)', for farmers, on 17<sup>th</sup> December 2005.
  19. Participated as a resource person in the 'Workshop on Biotechnology and its importance in pharmaceutical industry', at Modern College of Pharmacy, Nigdi, Pune, and delivered a lecture on 'Commercial aspects of tissue culture of medicinal plants', on 20<sup>th</sup> March 2004.
  20. Participated as a resource person in the One Day Seminar organized at RayatShikshanSanstha's Dada Patil College, Karjat, DistAhmednagar, on 17<sup>th</sup> February 2004.
  21. Participated as a resource person and delivered a lecture on 'Commercial Micropropagation', in the lecture series under quality improvement programme, at SSGM College, Kopargaon, on 16<sup>th</sup> February 2004.
  22. Participated as a resource person and delivered a lecture on 'Tissue Culture of Medicinal Plants' in the Pharmacy week lecture Series' organized by Modern College of Pharmacy, Nigdi, Pune 44, on 18<sup>th</sup> December 2003.
  23. Participated as a resource person in the 'Workshop on Awareness and Teaching of new topics in F.Y.B.Sc. Botany syllabus', held at BaburaojiGholap College, Pune, on 1<sup>st</sup> October 2002.
  24. Participated as a resource person in 'Two day workshop on Basic and Applied aspects in Botany', organized by DadasahebRupwate Science College, Akole, on 1<sup>st</sup> and 2<sup>nd</sup> February 2003, and delivered an expert lecture on Micropropagation.
  25. Participated as a resource person in State level seminar on Modern Agriculture Technologies, jointly organized by Vivekanand Institute of Research and Applied Technology (VIRAT) &Agrotec Consultants, Pune on 15<sup>th</sup>& 16<sup>th</sup> September 2002 and delivered a speech on "Self Employment & Jobs through Plant tissue culture".
  26. Participated as a resource person in Plant Tissue Culture in one day seminars organized by Shiv Chhatrapati College, Junnar on 11<sup>th</sup> March 2002.
  27. Participated as a resource person in Plant Tissue Culture in One Day Seminars organized by RayatShikshanSanstha's Arts, Science & Commerce College, Pimpri on 14<sup>th</sup> February 2002.

### **Participated as Guest Lecturer:**

1. Delivered a guest lecturer on 'Marathi terminology for Plant tissue culture' in National conference organized by Arts, Commerce and Science, College College, on 26<sup>th</sup> Sept. 2013.
2. Participated as a guest lecturer in Plant tissue culture and delivered a guest lecturer for M.Sc. Botany students, on 'Applications of Plant tissue culture in Plant breeding', at PVP College, Pravaranagar, on 9<sup>th</sup> September 2007.
3. Participated as guest lecturer in Horticulture and Landscaping, at IRICEN, Pune, on 15<sup>th</sup> March 2007.
4. Participated as guest lecturer in Plant Tissue Culture and delivered a lecture on commercial micropropagation in Plant Tissue Culture training course, on 14<sup>th</sup> October 2006, at S.P. College, Pune.
5. Participating as guest lecturer in horticulture and landscaping at IRICEN, Pune, since 1998.
6. Participated as guest lecturer and delivered a lecture on 'Plant Tissue Culture', at Shri. Shiv Chhatrapati College, Junnar, on 19<sup>th</sup> January 2006.
7. Participated as guest speaker and delivered a speech on 'Tissue Culture' on 21<sup>st</sup> April 2005 at Pune PrarthanaSamaj, Pune.
8. Participated as guest lecturer and delivered a lecture on 'Career Opportunities in Plant Tissue Culture Industry', at Divekar College, Varvand, Tal. Daund, Dist. Pune, on 20<sup>th</sup> February 2004.
9. Participated as guest lecturer and delivered a lecture on 'Techniques and application of plant Tissue culture', at Prof. Ramkrishna More College, Akurdi, on 14<sup>th</sup> January 2004.
10. Participated as a guest lecturer and delivered lecture on 'Plant Tissue Culture Technology' at Poona College of Arts, Science and Commerce, Pune-1, for B.Sc. students, on 18<sup>th</sup> August 2003.
11. Participated as guest lecturer and delivered a lecture on 'Plant tissue culture-techniques and applications', as a part of National Pharmacy Week 2003, at Modern College of Pharmacy, Nigdi, Pune-44 on 28<sup>th</sup> June 2000.
12. Participated as guest lecturer and delivered a lecture on "A technique of tissue culture & its application" at Mahatma Basaveshwar College, Latur on 20<sup>th</sup> September 2002.
13. Participated as guest lecturer and delivered a lecture on 'Applications of Plant Tissue Culture' at Shri Shiv Chhatrapati College, Junnar, on 11<sup>th</sup> March 2002.
14. Participated as a guest speaker in 'Yuvwani' programme of Pune Radio Centre and delivered a speech on 'Job opportunities through Botany', on 28<sup>th</sup> June 2000.
15. Participated as a guest lecturer, and gave lecture on Plant Tissue Culture, to M.Sc Microbiology students at AbasahebGarware College, Pune-4, on 5<sup>th</sup> October 1999.
16. Participated as a guest lecturer and gave lecturers on Cytogenetics and Plant Breeding to M.Sc. Botany students at PVP College, Pravaranagar in March 1987.

### **Seminar / conferences / symposia / workshops organized:**

1. Worked as convener of International conference on “Application of Advanced Technology for Enhancing Quality of Science Education” at Modern College of Arts, Science and Commerce, Shivajinagar, Pune on 26<sup>th</sup> – 27<sup>th</sup> February 2015.
2. Worked as convener of an National conference on “Dynamics Microbes: Role in Human Welfare” held at Modern College of Arts, Science and Commerce, Shivajinagar, Pune on 21<sup>st</sup> – 22<sup>th</sup> January 2015. Worked as a Chairman, of Pune City Zonal Sports Committee, Pune for the year 2014-2015.
3. Worked as convener of state level seminar on “Freshwater Ecosystems of Maharashtra: Their Biota, Ecology and Health” at Modern College of Arts, Science and Commerce, Shivajinagar, Pune on 6<sup>th</sup>– 7<sup>th</sup> February 2015.
4. Worked as organizing committee in “UGC sponsored short term faculty development programme for science teachers of Pune city” organized by University of Pune, Pune 7, at Modern College of Arts, Science and Commerce, Shivajinagar, Pune 5, held from 2<sup>nd</sup> June to 8<sup>th</sup> June 2014.
5. Worked as convener of ‘International Conference on Conservation of Environment by Adopting New Technologies’ organized by Modern College of Arts, Sciences and Commerce, Shivajinagar, Pune-5 on 28<sup>th</sup> to 29<sup>th</sup> January 2014.
6. Worked as convener of ‘National Conference on Hazardous E-waste Management’ organized by Department of Electronics, Modern College of Arts, Sciences and Commerce, Shivajinagar, Pune-5 on 23<sup>rd</sup> to 24<sup>th</sup> December 2013.
7. Member of Organizing Committee for ‘Quality Enhancement Workshop’, organized by Microbiology Association, Dept. of Microbiology, Modern College of Arts, Science and Commerce, Shivajinagar, Pune-5 on 5<sup>th</sup> February 2013.
8. Member of Organizing Committee for “Workshop on Intellectual Property Rights at the Biotech Fest 2013” held on 2<sup>nd</sup> February 2013 at Modern College of Arts, Science & Commerce, Shivajinagar, Pune-411005.
9. Member of Organizing Committee for “International Conference on Employability Enhancement through Proficiency in Indian and Foreign Languages”, held on 28 to 30 January 2013 at Modern College of Arts, Science & Commerce, Shivajinagar, Pune-411005, in association with ICSSR, New Delhi and under Quality Improvement Programme, University of Pune.
10. Member of Organizing Committee for a 2-days ‘National Workshop on Careers in Statistics’ held on 12 and 13 January 2012 at Modern College of Arts, Science & Commerce, Shivajinagar, Pune-411005, in the International Statistic Year 2013.
11. Worked as Convener of ‘State level Conference on Microbiology in 21<sup>st</sup> Century’ organized by Modern College of Arts, Sciences and Commerce, Shivajinagar, Pune-5 on 25<sup>th</sup> to 26<sup>th</sup> February 2011 at Modern College of Arts, Sciences and Commerce, Shivajinagar, Pune-5.
12. Worked as Organizing Secretary of ‘International Conference on Biodiversity and its Conservation’ organized by Modern College of Arts, Sciences and Commerce, Shivajinagar, Pune-5 on 28<sup>th</sup> to 30<sup>th</sup> January 2011 at Modern College of Arts, Sciences and Commerce, Shivajinagar, Pune-5.



13. Worked as Advisor for the workshop entitled “Essential oil and Medicinal plants” held at MotilalJhunjunwal College, Vashi, Navi Mumbai, on 27<sup>th</sup> November 2009.
14. Worked as the convener of ‘One day lecturer series on Microbial degradation and its applications’, organized under quality improvement programme of University of Pune on 23<sup>rd</sup> February 2008, at Modern College, Pune 5.
15. Worked as the convener of ‘One day lecturer series on Advances in Plant Sciences’, organized on 1<sup>st</sup> February 2008, at Modern College, Pune 5, under quality improvement programme of University of Pune.
16. Worked as the convener in the organization of ‘Biotech Fest 2007’, on 28<sup>th</sup> to 30<sup>th</sup> December 2007, at Department of Biotechnology, Modern College, Pune-411005.
17. Worked as the convener of ‘One day Lecture Series in Microbiology’, held at Modern College, Pune 5, under quality improvement programme of University of Pune, on 18<sup>th</sup> Feb, 2007.
18. Worked as Coordinator of the Work shop on Syllabus of Biotechnology, organized by Modern College, Pune 5, on 16<sup>th</sup>&17<sup>th</sup> Feb.
19. Worked as a member of organizing committee of seminar on the Role of Women in R&D organized by Modern College Pune 5 on 13<sup>th</sup> to 15<sup>th</sup> Feb. 2007.
20. Worked as a member of organizing committee of ‘Workshop on Biotechnology’, jointly organized by Department of Biotechnology and Microbiology, Modern College, Pune-5 and BangaloreGenei, Bangalore, on 17<sup>th</sup> November 2005, at Modern College, Pune 5.
21. Worked as a member of organizing committee of ‘National Symposium on ‘Recent Advances in Management of Plant Diseases Technology Development and Applications, organized by Department of Botany, Modern College, Pune-5 on 20<sup>th</sup> and 21<sup>st</sup> December 2003.
22. Worked as a member of ‘International Conference on Biosciences, Biotechnology and Biodiversity’ Analysis, organized by Department of Botany, Modern College, Pune-5 on 15<sup>th</sup> to 17<sup>th</sup> October 2005.
23. Worked as member of Local organizing committee, Pre-conference printing and proceedings committee, of ‘National seminar on promotion of Basic Science as a Career’, jointly organized by Modern College, Pune-5 and Department of Electronic Science, University of Pune, Pune-7 on 16<sup>th</sup> to 18<sup>th</sup> December 2002.

### **Paper Published/Presented:**

1. Zunjarrao R. S., Pande A. K., Gopale K. D., Phalke Mayuri, Joshi Onkar, Kindre Anita, and Paranjpe S. Y. (2013) Studies on the Survey and Natural History of Tetrigids (*Tetrigidae: Orthoptera*), *Indian Journal of Entomology*, 76(1),55-63. (Print ISSN: 0367-8288. Online ISSN:0974-8172).
2. Gopale K. D. and Zunjarrao R. S. (2013) *In Vitro* Culture of *Jatropha curcas* L.: A Biofuel Plant Int. J. Pure Appl. Sci. Technol., 14(2), pp. 46-54. (Impact factor 0.36)

3. Gopale K. D. and Zunjarrao R. S. (2013) Evaluation of Genetic Diversity of *Jatropha Curcas* L. Using RAPD Marker in Maharashtra Int. J. Pure Appl. Sci. Technol., 14(2), pp. 12-24. (Impact factor 0.36)
4. Gopale K. D. and Zunjarrao R. S. (2011) Vegetative Propagation of *Jatropha curcas* L. by Rooting of Stem Cuttings *J. Agri.Res.Technol.*, 36 (3): 509-511.
5. Gopale K. D. and Zunjarrao R. S. (2011) Variations in Biochemical Content of *Jatropha curcas* Seeds Collected from Agroclimatic Zones of Maharashtra State of India, *The IUP Journal of Life Sciences*, 5(3): 1-13.
6. Gopale K. D. and Zunjarrao R. S. (2011) Effect of Auxin, length of stem cuttings, substrate and seasonal variations on *Jatropha curcas* L.: A biodiesel plant, *National Journal of Bioscience Discovery* 2(1): 76-81.
7. Gopale K. D. and Zunjarrao R. S. (2010) Inter and Intra-Provence Variation in *Jatropha curcas* L. from different Agroclimatic zones of Maharashtra , *National Journal of Bioscience Discovery* 1(1): 1-6.
8. Gopale K.D. & Zunjarrao R. S. (2010) Response of Spirulina to Various Combinations of Media” has been published in *Journal of Maharashtra Agricultural Universities*, 35(2): 329-331 (2010).
9. Gopale K.D. & Zunjarrao R. S. (2010) Inter and Intra-Provence Variation in *Jatropha curcas* L. from different Agroclimatic zones of Maharashtra” has been published in *National Journal of Bioscience Discovery* 1(1): 1-6 (2010).
1. Salunke S.P. & Zunjarrao R.S. (2008) Effect on post-harvest ageing of seeds on seed germination and early seedling growth in *Pongamia pinnata* Vent. presented at ‘National Seminar on the role of care-takers of biosphere’, held at Vidya Pratistan’s Arts, Science and Commerce College , Baramati, on 14th to 16th February 2008.
10. Salunke S.P. & Zunjarrao R.S. (2008) *In vivo* and *in vitro* propagation of *Pongamia pinnata* Vent. presented at ‘National Seminar on the role of care-takers of biosphere’, held at Vidya Pratistan’s Arts, Science and Commerce College, Baramati, on 14th to 16th February 2008.
11. Gopale K.D. & Zunjarrao R. S. (2007) Effect of various Nutrient media on Biomass Production in Spirulina, presented in National Conference held at Department of Botany, University of Pune, Pune 7, on 26 th -27 th February 2007.
12. Gopale K.D. & Zunjarrao R. S. (2007) Development of low cost technology for Spirulina biomass production at household level, presented in National Conference held at Babasaheb Ambedkar Technical University, Lonere, Dist. Raigad, on 29th to 31st March, 2007.

13. Gopale K.D. & Zunjarrao R. S. (2007) Development of House hold Technology for Spirulina biomass production, communicated to the *Journal of Maharashtra Agricultural Universities*,
14. Zunjarrao R. S. (2006). Propagation of Plants by Tissue Culture, Published in the Souvenir of Indian Nurserymen Association's 10th National Nurserymen & Landscapists Convention, Organized by Maharashtra Nurserymen Association, at Balgandhrva Rangmandir, Pune, on 11th – 14th November 2006.
15. Zunjarrao R. S. (2005). In vitro cormlet and plantlet formation in Gladiolus, published in the Proceeding of National Conference in Plant Sciences, organized by PVP College, Pravaranagar, on 10th to 12th March 2005.
16. Zunjarrao R.S. (2003) "Causes of poor performance of tissue culture raised banana plants in field conditions", presented on State level conference in Botany, organized by PVP College, Pravaranagar, on 26th February 2003.
17. Zunjarrao R. S. (2003). "Low cost micropropagation: Effectiveness, Limitations and future prospects" presented at state level conference in Botany, organized by PVP College, Pravaranagar, on 26th February 2003.
18. Zunjarrao R. S. and Gunjal V. E. (2003). "Improvement in seed germination of Jojoba (*Simmondsia chenensis*) through in vitro culture of radicular portions of seeds", presented in UGC sponsored National conference on Recent Advanced in Plant, Microbial and Environmental Biotechnology, held at the C.T. Bora College, Shirur, on 22nd and 23rd March 2003.
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#### **MEMBERSHIPS:**

1. Board Member (Botany), University of Pune.
2. Life Member, Progressive Education Society, Shivajinagar, Pune-5.
3. Visitor, Modern College of Agricultural Biotechnology, Mulashi, Paud, Pune.
4. Life member, Association of Teachers in Biological Sciences, Mumbai.
5. Member, Business Council, Progressive Education Society, Shivajinagar, Pune 5.
6. Member of the editorial board of the International Journal of life sciences.
7. Working as a Chairman of Pune City Zonal Sports Committee, Pune for the year 2014-2015.
8. Worked as selection committee member for the selection of 'Principal' for the Sanstha's various colleges conducted by the Rayat Shikshan Sanstha at Bharatratna Dr. Babasaheb Ambedkar Mahavidyalaya, Aundh, Pune on 3<sup>rd</sup> February 2014.

#### **PERSONAL DETAILS:**

Date of Birth : 23<sup>rd</sup> August, 1963.  
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Sex : Male.  
Marital status : Married.

**Prof. Dr. R.S. ZUNJARRAO**

**Place: PUNE**  
**Date: 28/03/2015**