



**UKA TARSADIA UNIVERSITY(UTU)**

**C.G. BHAKTA INSTITUTE OF BIOTECHNOLOGY(CGBIBT)**

- A. NAME:** **RAMAR KRISHNAMURTHY**
- Department/Institute C .G.Bhakta Inst. of Biotechnology  
Month of Appointment September, 2011  
Status on Appointment Director
- B. PRESENT STATUS** Director, CGBIBT - UTU  
Dean, Faculty of Science, UTU;  
Ilorin, Nigeria since March, 2013;  
Visiting Professor to University of  
Fellow of Chartered Institute of  
Environmental & Public Health  
Management of Nigeria
- C. (i) UNIVERSITY EDUCATION WITH YEAR**
- |   |             |
|---|-------------|
| a. M.S. University of Baroda, Baroda, India | 1983 – 1988 |
| b. University of Madras, Madras, India      | 1981 – 1983 |
| c. University of Madras, Madras, India      | 1978 – 1981 |
- (ii) Pre-University Education**
- |   |             |
|---|-------------|
| a. Government Arts and Science College,<br>University of Madras, Cuddalore, India | 1977 – 1978 |
|---|-------------|
- D. ACADEMIC QUALIFICATIONS WITH YEAR**
- |   |      |
|---|------|
| Ph. D. (Botany)                         | 1988 |
| M.Sc. (Botany)                          | 1983 |
| B.Sc. (Zoology, Chemistry, Botany-Main) | 1981 |
- E. SCHOLARSHIPS, PRIZE AND HONOURS**
- (i) Awarded the **Fellow** status by Chartered Institute of Environmental and Public Health Management of Nigeria (**CEPHM**), Lagos, 28<sup>th</sup> April, 2017
- (ii) CSIR-RA & CSIR-Pool Officer, CSIR-New Delhi  
Post-Doctoral Fellowship at South Gujarat Univ., India 1990 -1995
- (iii) UGC-JRF Doctoral Fellowship (Ph.D.) & CSIR-SRF (after Ph.D.) at 1983 - 1989  
M.S. University of Baroda, India
- F. PROFESSIONAL EXPERIENCE**
- (i) Total: 28 years (15 years teaching & research, and 13 years Industrial Research & Development Experience)
- (ii) Currently Visiting Professor to University of Ilorin, Kwara State, Nigeria

**G. ACADEMIC BOARD AND UNIVERSITY MANAGEMENT EXPERIENCE**

- (i) Member of Academic Council, Veer Narmad South Gujarat University, Surat, India 2007 – 2011
- (ii) Member of Senate, Veer Narmad South Gujarat University, Surat, India 2007 – 2011
- (iv) Member of Board of Management, UkaTarsadia University, Bardoli, Surat, India 2011 -2014
- (v) Member of Academic Council and Board of Studies, UkaTarsadia University, Bardoli, Surat, India 2011 – Till Date

**H. RESEARCH INTEREST OR COMMISSIONED PROJECTS**

**Details of Research cum Teaching experience in various institutions and Transfer of technology**

- (i) Junior Research Fellow (U.G.C., New Delhi): April 1983- Dec. 1986; At Botany Department, M.S. University, Baroda.-During Ph.D.
- (ii) Senior Research Fellow (Direct Fellowship, C.I.S.R., New Delhi): Jan 1987 – Dec. 1989; At Botany Department, M.S. University, Baroda.-After Ph.D.
- (iii) Lecturer: Jan 1989 - May 1990; At Botany Department, M.S. University, Baroda.
- (iv) Research Cum Teaching (Direct Selection, C.S.I.R Research Associate, New Delhi): June 1990 – May 1991 Involved in research and teaching at Dept of Bioscience (as Post – Doctoral Research & Teaching at M.Sc. level), Veer Narmad South Gujarat University, Surat.
- (v) Lecturer: June 1991 – May 1992 (One Academic Year); At Post Graduate Dept of Botany, Science College Shahada (M.S.), Under University of Poona, India, for Teaching M.Sc.
- (vi) Scientist (Direct Selection as Scientist Pool Officer, C.S.I.R, New Delhi): June 1992 – Feb 1995, Involved Research and Teaching at Dept. of Bioscience (at M.Sc. level). Veer Narmad South Gujarat University, Surat, India
- (vii) Director (Previous Position): Mar. 1995 - Feb. 2007. For 13 years: At Zandu Foundation for Health Care (ZFHC), Gujarat/Bombay, Handled various R & D Departments and Office Administration (ZFHC was approved for M.Sc- by Research and Ph.D. by Bombay University, India).
- (viii) Director (Previous Position): March 2007 – August 2011. Bhagwan Mahavir College of M.Sc. Biotechnology, Surat, India; In addition to academic, Conducted Research on Medicinal & Aromatic plants, & Plant Tissue Culture for Ph.D. and M.Sc., students.
- (ix) Transfer of Research Technology to Industry for the best project award by Dept. of Biotechnology (DBT), Govt. of India, New Delhi. The 5 yrs DBT project has been completed (as Principal Investigator) on “Development of Novel Germplasm of *Mucuna pruriens* through conventional breeding and tissue culture methods,” during the years 1996 – 2001. 69 breeding lines have been developed in the project and short-listed five deserving lines for improved quality (yield and L-Dopa). The DBT

has appreciated this work and selected the best project award on 11<sup>th</sup> May, 2002, Technology Day at NewDelhi.

- (x) No. of Govt. sponsored projects handled during the last 20 years as Principal Investigator & Co. Principal Investigator: **Completed 7 Govt. Projects.**
- (xi) No. of Foreign Company Supported Joint Venture Projects: **Completed 3 Projects.**

**Completed Projects:**

- (i) Development of Traditional Herbal Drugs as Adaptogens – Immuno Modulators- To work on *Tinosporacordifolia*, *Sidacordifolia*, *Centellaasiatica*, *Asparagus racemosus* and *Terminaliachebula*. Joint Venture Project with RRL-CSIR Laboratory, Jammu & ZANDU. Sponsored by DST, Govt. of India, New Delhi, Project Year 1995 – 1998.
- (ii) Commercialization of *Stevia rebaudiana* (a natural non-caloric sugar free products 300 times sweeter than sugar) cultivation in different Indian climatic regions Viz. Vikasnagar in Uttaranchal, Dindugal in Tamil Nadu, Bangalore in Karnataka and Ambach-Vapi in Gujarat, Project finances supported by M/S Michimen Corporation, Osaka, Japan and M/S S.E. International, Mumbai. Project Year 1996-1999.
- (iii) Development of Navel Germplasm of *Mucunapruriens* with improved yield and L-Dopa content through conventional breeding and Tissue Culture methods. Sponsored by Department of Biotechnology, Govt. of India, New Delhi. Project Year 1996 -2002.
- (iv) Commercial scaling-up of *Phyllanthusamarus* (Bhui-Amla) a Hepato - tonic plant for higher herbage yield and active ingredient content under South Gujarat Conditions. Project finances supported by CMI, Munich, Germany. Project Year 1999-2000.
- (v) Selection of high yielding and chemical content genetic stock lines of Dashmool Drug Plants-Shalparni (*Desmodiumgangiticum*) and Pristiparni (*Urariapicta*). Sponsored by Department of Biotechnology, Govt. of India, New Delhi. Project Year 2001-2004.
- (vi) Standardization and Mass-Scale Propagation of Imported Orchid varieties for Export Quality. A Joint Venture Project with Zandu & M/S Natural Synergies Ltd, Chennai and M/S Multico Orchids, Singapore. Project Year 1996-1999.
- (vii) Transfer of technology for promotion of commercial cultivation of medicinal plants in Tribal Regions of South Gujarat. Sponsored by Department of Biotechnology, Govt. of India, New Delh. Project Year 2004-2008.
- (viii) Seed Production, Standardization, Labeling, Storage and Distribution of Medicinal Plants at Ambach, South Gujarat. Sponsored by National Medicinal Plants Board, Dept of ISM&H, Govt of India, New Delhi. Project Start Year 2007.
- (ix) Other ZANDU-Self-Finance Projects Completed: Transfer of Technology for Commercial production of Pharmaceutical products through contract production with farmers and growers – Commercial production of medicinal plants like Kauncha, Kalmegh, Vacha, Ashwagandha, Senna and more than 50 medicinal plants during the Year 1995-2007.

**I. HONOUR, INVITATION, TECHNICAL ADVISOR, DISTINCTION AND MEMBER OF BODY:**

- (i) Saline and Waste-Land Development through Medicinal Plants Cultivation and Organic Fertilizer application Approach, Project with ZAHAB General Trading & Contracting Corporation, Safat & Self Supported by ZAHAB (2007).
- (ii) Project Advisor: Developing Cultivation of Medicinal and Tissue Culture Plants of Industrial Importance, with M/S SMASB Limited & HAMDANI FARM LTD, Ilorin, Nigeria, (June, 2009).
- (iii) Visited Nigeria as an expert in March 2013 to commence commercial R&D project with Hamdani Farm Pvt Ltd, Ilorin on Tissue Culture Banana, Papaya, Watermelon, other fruit crops and Medicinal Plants.
- (iv) Visited University of Ilorin, for projects and MoU meeting in March 2013.
- (v) Visited International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria for MoU and Research meeting in Nov 2013.
- (vi) Currently supporting Local Farmers for cultivating Tissue Culture plants of Banana, Sugarcane, Medicinal Plants and other crops, through Maliba Centre for Excellence in Tissue Culture, C.G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Bardoli, Surat, Gujarat, India. The Project finance is partially supported by Gujarat State Horticultural Mission, Govt. Gujarat, India. The Project is in Progress since the year 2013.
- (vii) Member of Indian Society of Ethnobotany and Society for Ethnopharmacology
- (viii) Participated as Zandu Company Representative in Research Project Committee to the Dept of Biotechnology, Govt. of India, New Delhi.
- (ix) Currently Project Committee Member, Gujarat Medicinal Plants Board, Govt. of Gujarat since Dec 2014.
- (x) Visited University of Ilorin (Unilorin), Nigeria, 2 May – 28 May 2015, for providing technological support to establish Plant Tissue Culture Laboratory. The Tissue Culture Lab was commissioned and inaugurated by Prof. A.G. Ambali, Vice Chancellor, Unilorin, on 21 May 2015.
- (xi) Visited University of Ilorin (Unilorin), Nigeria in September & November 2015; in May & November 2016 for providing technical guidance in Plant Tissue Culture Laboratory project, Shri N G Patel (Bhakta) Research Project and other joint research projects.
- (xii) Visited Lagos, Nigeria on 28<sup>th</sup> April 2017 to receive Fellow status award conferred by Chartered Institute of Environmental and Public Health Management of Nigeria (CEPHM) and also attended Shri N G Patel (Bhakta) Research Fellowship awardees selection committee meeting and joint research projects as an expert & mentor at University of Ilorin, in the 1<sup>st</sup> & 2<sup>nd</sup> week of May 2017.

**J. EXPERIENCE SINCE BASIC QUALIFICATIONS AND ADMINISTRATIVE EXPERIENCE**

- i. Director, C. G. Bhakta Institute of Biotechnology,  
Uka Tarsadia University, Bardoli, Surat, India 2011- To Date

- Dean, Faculty of Science, UkaTarsadia University, Bardoli  
Surat, India 2016 – To Date
- ii. Dean, Faculty of Science, UkaTarsadia University, Bardoli,  
Surat, India 2011 - 2014
- iii. Director, BhagwanMahavir College of Biotechnology, affiliated  
to Veer Narmad South Gujarat University, Surat, India 2007 - 2011
- iv. Director, Zandu Foundation For Health Care, India 1995 - 2007
- v. Research Associate and Scientist Pool Officer at Veer Narmad,  
South Gujarat University, Surat, India 1990 - 1995
- vi. Lecture at Botany Dept., M.S. University of Baroda,  
Baroda, India 1989 - 1990
- vii. Senior Research Fellow(C.S.I.R. – Direct) at Botany,  
Dept., M.S. University of Baroda, Baroda, India 1987- 1989
- viii. Junior Research Fellow (UGC) at Botany Dept.  
M.S.University of Baroda, Baroda, India 1983- 1986

**K. PATENT**

**Patent Filed: Patents filed jointly with RRL scientists, Jammu (CSIR Laboratory– Govt. of India) on the following title.**

**Patent taken (European patent)**

**TITLE:**3-0-[ALFA–L-RAMNOPYRANOSYL-(1-2)-ALFA-L- RAMNOPYRANOSYL-(1-4)-3 BETA- D- GLUCO PYRANOSYL] -25 (S) –SPIROSTAN -3 BETA – OL, PROCESSFOR ITS ISOLATION, AND ITS USEAS IMMUNOMODULATOR (2005)

**Patent number:** 027086164 -2123-IN0200057

**L. SOME SELECTED IMPORTANT PARTICIPATION IN LECTURES, INVITED TALK, PRESENTATION AND OVERSEASE RESEARCH COLLABORATION**

- (i) Delivered a lecture and chaired in a session of International Conference on Ethnopharmacology at Trissur, Kerela, India, 20-22 January,2006.
- (ii) Participated and delivered special lectures at department of Agriculture, Government of Kuwait on Developing Agro-Biotechnological based Industrial Projects during 5<sup>th</sup> - 14<sup>th</sup> April 2007 at Kuwait
- (iii) In the work-shop on “Minor forest produce (MEP) and MEP based Industries” as a member of ProjectGuidanceCommittee and also delivered a lecture on “Feasibility studies on Medicinal Plants Cultivation in South Gujarat” in GITCO project Report ( Sponsored by DSIR, Govt. of India, New Delhi ). Review committee meeting held on July 6, 2007 at Gujarat Industrial and Technical Consultancy Organization Limited, Ahmedabad, Gujarat,India
- (iv) Delivered special lecture at Department of Agriculture, Ministry of Kwara State, Ilorin, Nigeria, on Developing Cultivation of Medicinal and other Plants of Industrial Importance in June, 2009 at Ilorin, Nigeria.

- (v) Organized an International Conference (as a Chairman) on Medicinal Plants at UkaTarsadia University, Bardoli, Surat, India, 24–26 Sep 2014.
- (vi) Delivered a Special Invited Talk at Ladok Akintola University of Technology, Ogbomosho, Oyo State, Nigeria on 25 May 2015.
- (vii) Supervised as Mentor jointly along with Prof. J. A. Morakinyo (Supervisor, Unilorin) to Mr. David A. Animausan, Asst Lecturer, Plant Biology, University of Ilorin (Unilorin) for his part of Ph.D. work on **Nigerian and Indian Napier Grass**, Nov 2013 – Mar 2015.
- (viii) Supervised as Mentor jointly along with Prof. O. T. Mustapha (Supervisor, Unilorin) to Mrs. Khadijah A. Abdulkareem, Asst Lecturer, Plant Biology, University of Ilorin (Unilorin), for her part of Ph.D. work, on some **Nigerian Accessions of *Dipcadi***, Nov 2014 – Apr 2015.
- (ix) Initiated (in May 2015) as Mentor along with Prof. A. T. Oladiji (Supervisor, Unilorin) to Ms. Abidakun, Oreoluwa Moyosore, Dept of Biochemistry, University of Ilorin (Unilorin), Nigeria for a Research Project on “**Anti – Anaemic Potentials of Nigerian and Indian Accessions of Jowar (*Sorghum bicolor*) for Iron deficiency**”.
- (x) Supervised as Mentor jointly along with Prof. L. O. Tiamiyu (Supervisor, Unilorin) to Dr. Akinwande Akinlolu Ademuyiwa, Faculty of Agriculture, University of Ilorin (Unilorin), The Awardee of three months research fellowship through C. G. Patel (Bhakta) Grant for Research in Biotechnology by Unilorin, to work on “**Random Amplified Polymorphic DNA (RAPD) analysis of the genetic variability in wild and hatchery raised populations of the African *Clariid catfishes in Nigeria***”, at UkaTarsadia University, Project period: August 2016- October 2016.
- (xi) Supervised as Mentor jointly along with Prof. O. S. Balogun (Supervisor, Unilorin) to Miss Fatima A. Ibrahim, Centre for Research Development and In-House Training (CREDIT), University of Ilorin (Unilorin), The Awardee of three months research fellowship through C. G. Patel (Bhakta) Grant for Research in Biotechnology by Unilorin, to work on “**Micropropagation of Sugarcane using Tissue Culture Technique**”, at UkaTarsadia University, Project period: August 2016- October 2016.
- (xii) Chaired in a session of 3<sup>rd</sup> Convention: SFE-India, 2016, National Seminar on “Analytical Techniques for Drug Discovery & Development from Natural Products” at Kolkata, India, 24<sup>th</sup> September, 2016.
- (xiii) Chaired in a session in 7<sup>th</sup> world Ayurveda Congress & Agro Expo 2016, “International Conclave on Ethnopharmacology, Ethno-medicine and Traditional Health Practices”, 3-4<sup>th</sup> December 2016, Science City, Kolkata, India
- (xiv) Organized 4<sup>th</sup> **International Congress of Society for Ethnopharmacology**, SFE-India, as a Chairman on “**Healthcare in 21<sup>st</sup> Century: Perspectives of Ethnopharmacology & Medicinal Plant Research**” at UkaTarsadia University, Bardoli, Surat, India, 23–25, 2017
- (xv) Had been as Chairman and Guest of honor in several conferences.
- (xvi) Supervised as Mentor jointly along with Prof. G. Olaoye, Faculty of Agriculture (Supervisor, Unilorin) to Miss Abidakun, Oreoluwa Moyosore, Centre for

- Research Development and In-House Training(CREDIT), University of Ilorin(Unilorin),The Awardee of three months research fellowship through C.G.Patel(Bhakta) Grant for Research in Biotechnology by Unilorin, to work on “**In Vitro Propagation of Plantain : A Step to Ensuring Food Security in Nigeria**”, at UkaTarsadia University, Project period: January,2017- April, 2017.
- (xvii) Supervised as Mentor jointly along with Prof.O.T.Mustapha, Department of Plant Biology, Faculty Science(Supervisor, Unilorin) to Mr.S.B.Adeyemi, University of Ilorin(Unilorin),The Awardee of three months research fellowship through C.G.Patel(Bhakta) Grant for Research in Biotechnology by Unilorin, to work on “**Isolation and Characterization of Bioactive Compounds from Selected Nigerian Medicinal Plants for Diabetes Treatment**”, at UkaTarsadia University, Project period: January,2017- April, 2017.
- (xviii) Supervised as Mentor jointly along with Dr. B.V. Owoyele, Department of Physiology, Faculty of Basic Medical Sciences (Supervisor, Unilorin) to Mrs.Ayinla Maryam Tayo, University of Ilorin(Unilorin),The Awardee of three months research fellowship through C.G.Patel(Bhakta) Grant for Research in Biotechnology by Unilorin, to work on “**Antidiabetic effects of *Ocimum gratissimum* and *Senna fistula*: Inhibitor of gluconeogenic enzymes and Beta cell death in streptozotocin induced diabetic rats**”, at UkaTarsadia University, Project period: January,2017- April, 2017.

#### M. LIST OF PUBLICATIONS (1987– Till date)

##### (Selected Publications)

1. **R. Krishnamurthy**, Ramesh Babu, M.Anbazhagan, G. Banerjee and K.A. Bhagwat (1986). Physiological studies on the levels of some avenge trees, exposed to chronic low levels of air pollutants. **The Indian Forester**, **112**, 503-511.
2. **R. Krishnamurthy**, M.Anbazhagan, and K.A. Bhagwat (1987). Effect of NaCl on; the inorganic ions, growth and yield of rice, **oryza**, **24**, 65-69.
3. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1987). Relationship of salt tolerance with leaf ascorbic acid content and titrable acid number in rice varieties. **Indian J. Exptl. Biology**, **25**,273-275.
4. **R. Krishnamurthy**, M. Anbazhagan and K.A Bhagwat (1987). Salt responses of enzymes from rice cultivars differing in salt tolerance. **Current Science**, **56**,489-490.
5. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1987). Chlorophyll breakdown and sodium chloride toxicity of rice. **Indian J. Agricultural Science**, **57**,567-570.
6. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1987). Accumulation of free amino acids and distribution of NaCl and K in rice (*Oryza sativa* L.), varieties exposed to NaCl stress. **Indian J. Plant Physiology**, **30**, 183-188.
7. Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat (1987). Yield of rice cultivars to chronic air pollution stress as, influenced by soil nitrogen. **International Rice Research News Letter** (Philippines) **12**, 16.
8. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1987). Tiller growth as an index of salt resistance. **International Rice Research News Letter** (Philippines), **12**, 14-15.

9. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1988). Evaluation of quaternary ammonium compounds as an index of salt tolerance using rice cultivars. **Indian J. Exptl. Biol.**, **26**, 137-139.
10. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1988). Glycinebetaine accumulation and varietal adaptability to salinity as a potential metabolic measure of salt tolerance in rice. **Current Science**, **57**, 259-261.
11. M. Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat (1987). Foliar application of polymines, kinetin and ascorbic acid on grain filling of rice. **International Rice Research News Letter** (Philippines), **12**, 10.
12. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1988). Effect of salinity on the concentration of nitrogenous compounds in rice cultivars. **Oryza**, **25**, 84-86.
13. M. Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat (1988). Proline an enigmatic indicators of air pollution tolerance in rice cultivars. **Journal of Plant Physiology** (Stuttgart), **133**, 122-123.
14. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1988). Effect of NaCl on protein metabolism of seedlings of rice varieties. **The Indian Botanical Society**, **67**, 243-245.
15. **R. Krishnamurthy**, M. Anbazhagan, and K.A. Bhagwat (1989). Testing salt tolerance variability in the nutritional quality of seeds produced by rice cultivars subjected to salinity. **Seed Science & Technology** (England), **17**, 269-275.
16. M. Anbazhagan, **R. Krishnamurthy**, Upasna K. Nehra and K. A. Bhagwat (1989). Evaluation of SO<sub>2</sub> resistance in the Seedlings of rice cultivars. **Acta Botanica Indica**, **17**, 182-186.
17. M. Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat (1989). The performance of three cultivars of rice cultivated near to, and distant from, a fertilizer plant. **Journal of Environmental Pollution** (Britain), **58**, 125-138.
18. **R. Krishnamurthy** and K.A. Bhagwat (1989). Polyamines as modulators of salt tolerance in rice cultivars. **Plant Physiology** (U.S.A.), **91**, 500-504.
19. **R. Krishnamurthy** and K.A. Bhagwat (1989). Changes in protein and total nitrogen under salt stress in rice seedlings. **Indian J. Exptl. Biol.**, **27**, 1064-1066.
20. **R. Krishnamurthy** and K.A. Bhagwat (1990). Linear accumulation of choline and glycinebetaine in salt stressed wheat seedlings. **Current Science**, **59**, 111-112.
21. **R. Krishnamurthy** and K.A. Bhagwat (1990). A rapid and simplified method for determination of chloride in plant material. **Indian J. Exptl. Biol**, **28**, 198-200.
22. M. Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat. Predisposition of rice plants to the effects of air pollution exposure by modifying nitrogen nutrition, L.J. Brassler and W.C. Mulder (Eds), **Man and His Ecosystem**. Proceedings of the 8<sup>th</sup> World Clean Air Congress



- 1989, The Hague, the Netherlands, 4-15 September 1989. Volume 2. Elsevier Science Publishers B.V. Amsterdam. Pp, 79-86.
- 23 M.Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat (1990). Changes in the levels of carbohydrates in rice cultivars due to air pollution. **Indian J. Exptl. Biol**, **28**,395-396.
- 24 M.Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat (1990). Changes in the phenolic contents of rice cultivars towards air pollution exposure. **Proc. Indian Acad. Sci. (Plant.Sci.)**, **100**,107-112
- 25 M.Anbazhagan, **R. Krishnamurthy** and K.A. Bhagwat (1990).Effect of air pollution on rice plants under the application of polyamines. **Indian J. Exptl. Biol.** **29**, 89-90.
- 26 M.Anbazhagan, **R. Krishnamurthy**, Ila M. Joshi and K.A. Bhagwat (1990). Appraisal of *Calotropisprocera* L. as a Bio-monitor for auto-exhaust pollution. **Indian J. Environmental Health**, **32**,389-392
- 27 **R. Krishnamurthy** and K.A. Bhagwat (1991). A rapid simplified and sensitive method for the determination of chloride, calcium and magnesium in plant material. **Indian J. Exptl. Biol.****29**. 444-447.
- 28 **R. Krishnamurthy** (1991). Amelioration of salinity effect in salt tolerant rice (*Oryzasativa* L.) by foliar application of putrescine. **Plant Cell Physiology** (Japan), **32**, 699-703.
- 29 K. Udaiyan and **R. Krishnamurthy** (1991). Fungi in a sewage treatment system. **ActaBotanicaIndica**, **19**, 176-184.
- 30 **R. Krishnamurthy** and K.A. Bhagwat (1993).Effect of foliar application of proline on the salt stressed rice seedlings. **Acta Agronomical Hungarica** **421**,267-272.
- 31 **R. Krishnamurthy** and K.A. Bhagwat (1994) Effect of NaCl on enzymes in salt tolerant and salt sensitive rice cultivars. **Acta Agronomical Hungarica** **43**, 51-57.
- 32 **R. Krishnamurthy**, T.Srinivas and K.A. Bhagwat (1994). Effect of air pollution on some bund trees of the agricultural lands. **J. Environ. Biol.** **15** 97-106.
- 33 **R. Krishnamurthy** and K.A. Bhagwat (1993). Effect of NaCl on the enzymes of rice. **Biovigyanam.** **19**, 84-88.
- 34 **R. Krishnamurthy** and M.H. Parabia (1995). Enhanced accumulation of solasodine in *Solanumtrilobatum*L. callus treated for short-term and long-term with different substances. **ActaBotanicaIndica**, **23** 235-240.
- 35 **R. Krishnamurthy**, P.Suvagia, J.M. Pathak, K.M. Parikh and N.S. Bhikne (1996). Selection of Mucuna lines for higher L-Dopa and improved yield through conventional breeding and tissue culture methods. Proceedings of the International Symposium on

- “Breeding Research on Medicinal and Aromatic Plants”, Eds. F. Pank, June 30-July 4<sup>th</sup> Publ. **Federal Centre for Breeding Research on Cultivated Plants**, Quedlinburg, Germany, pp.231-234.
- 36 **R. Krishnamurthy**, M.N. Reddy and M.H. Parabia (1996) *Solanum trilobatum* L: A potential source of solasodine in plants and tissue cultures. **J. Environ. Biol.** **17**, 197-203.
- 37 **R. Krishnamurthy** and M.H. Parabia (1996). Hormonal control of steroidal alkaloid synthesis in *Solanum trilobatum*. L. tissue cultures exposed to light and dark conditions. **J. Ecobiol.** **8**, 215-219.
- 38 V.B. Kadam, **R. Krishnamurthy**, and M.H. Parabia (1996). Nutritional status of seeds of some tree species. The proceedings of the 15<sup>th</sup> Annual sessions of “The Academy of Environmental biology. Biol. Nov. 7-9, Muzaffarnagar. Publ. **J. Environ. Biol.** **5** 125-130.
- 39 V. B. Kadam, **R. Krishnamurthy** and M.H. Parabia (1997). Photochemical evaluation of three endangered medicinal Taxa of South Gujarat Forests. **J. Environ. Biol.** **18**, 333-342.
- 40 **R. Krishnamurthy**, M.S. Chandorkar, M.R. Palsuledesai, J.M. Pathak, Rajendra Gupta and S.S. Handa (2001). Quality assurance *Mucunapruriens*(L.) DC. From farm to pharma. Presented by Dr. S. S. Handa during the workshop on “**Cultivation Gathering, Post-Harvest Care and Processing Technologies for the Production of Medicinal Plants**” at the Research Institute for Medicinal Plants Budapest-Lillafured, Hungary, during 26<sup>th</sup> -30<sup>th</sup> May, 2001, sponsored by International Center for Science and High Technology (ICS-UNIDO) Trieste-Italy
- 41 **R. Krishnamurthy**, M.S. Chandorkar, M.R. Palsuledesai, J.M. Pathak and Rajendra Gupta (2002). Breeding in velvet been (*Mucunapruriens*) for improvement in seed yield and quality traits. **Indian Journal of Agricultural Sciences**, **72**, 709-715.
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## **O. COMMUNITY SERVICES**

Involved with Farmers of Gujarat, Maharashtra, Karnataka and TamilNadu States, India for commissioning Agro-Technology of Medicinal Plants Cultivation and also supporting Farmers by providing Tissue Culture Plants of Banana, Sugarcane and some fruit crops since 1995 to till date. Since then, severalFarmers training, Lectures and workshops for medicinal and tissue culture plants have been organized and conducted.