

## Dr. BHALSING SANJIVANI ROHIDAS

School of Life Sciences, North Maharashtra University, Jalgaon

E-mail: bhalsingsr@gmail.com

Tel. No.: (O) 0257 - 2257421; (R) 0257 2282975

Fax no.: 0257-2258403, 2258406



**Education Qualification.** M.Sc. (Biochemistry), Ph.D. Biochemistry.

**Teaching Experience.:** 11 Years.

**Area of Research/Expertise.:** Plant Tissue Culture, Production of Biopharmaceuticals.

**Awards/Fellowships/prizes received.:**

- Late Actress Smita Patil Memorial Research Fellowship sponsored by Chief Minister Fund, North Maharashtra University during Feb. 1995 to March 1997
- Senior Research Fellowship (SRF) C.S.I.R., New Delhi during April 1997 to October 2000
- Research Associate Fellowship (RA), C.S.I.R., New Delhi during Nov. 2000 to October 2001

**Ph.D. students on going: 02**

Sr. No.	Name of the students	Registration number	Title of the topic	Year of Registration
1	Harshal Avinash Deshpande	NMU/11/Ph.D./ Biochem/13/2011	<i>In vitro</i> propagation studies in medicinally important plants: <i>Helicteres isora</i> L. and <i>Desmodium gangeticum</i> (L) DC	2011
2	Kapil Suresh Patil	NMU/11/Ph.D./ Biotech/58/2011	<i>In-vitro</i> Culture Study of Medicinal Plants: <i>Boerhaavia diffusa</i> L. and <i>Cyclea peltata</i> (Lam) Hook F. and Thoms.	2011

## Number of Books Written: 04

### Research papers published:

1. **Bhalsing S.R** and Maheshwari V.L (1996) *In vitro* culture of *S. khasianum* and extraction of solasodine **J.Plant Biochem, Biotechnology 6**, 39-40. **(IF: 0.13 )**
2. **Bhalsing S.R** and Maheshwari V.L (1998) Plant cell tissue: A potential source of medicinal compounds, **Ind J.Sci.Ind.Res, 57:703-708. (IF: 0.5 )**
3. Teli N.P, Pawar P.K., **Bhalsing S.R** and Maheshwari V.L (1999) *Withania somnifera* (Ashwagandha) Regeneration through meristem culture **J.Plant Biochem, Biotechnology 9:1-3. (IF: 0.13)**
4. Teli N.P, Pawar P.K., **Bhalsing S.R** and Maheshwari V.L (1999) Plant Tissue Culture Studies in some medicinally important member of family Solanaceae **J. Adv.Sci.Technol.2, 10.15.**
5. Teli N.P, Pawar P.K., **Bhalsing S.R** and Maheshwari V.L (2000) Regeneration of *Vigna radiata* (I) Wilczek through leaf derived callus and shoot tip culture **J.Physio Mol Bio.Plants, 6, 61-66. (IF:0.1 )**
6. **Bhalsing S.R**, Teli N.P, Pawar P.K. and Maheshwari V.L (2000) Isolation and characterization of solasodine from culture cell of *S. khasianum* **J.Plant Biochem, Biotechnology 27(2) 185-187. (IF: 0.13)**
7. **Bhalsing S.R**, Teli N.P, Saindane P.V, Baviskar M.P, Pawar P.K and Maheshwari V.L (2001) Tissue culture grown Banana – A cost effective strategy for hardening, **J.Physio Mol Bio.Plants, 7 (2) 185-189.**
8. Pawar P.K, Teli N.P, **Bhalsing S.R**, and Maheshwari V.L (2001) Micropropagation and organogenic studies in *Withania somnifera* (I) Dunal **J.Plant Biotechnology 28 (2) 217-221.**
9. Pawar P.K, Pawar C.S, Narkhede B.A, Teli N.P, **Bhalsing S.R** and Maheshwari V.L (2002) A technique for rapid micropropagation of *Solanum surattense*, **Ind J.Plant Biotechnology (I) 201-204(IF: 0.44)**
10. **Bhalsing S.R**, Teli N.P, Pawar P.K. and Maheshwari V.L (2003) Regeneration and transformation of some medicinally important members of family solanace In: **Plant Genetic Engineering Vol-III Improvement of commercial Plants (Ed.Singh R.P. and Jaiswal P.K) Sci-Tech Publ.co.Texas, USA 3(I), 321-347.**
11. **Bhalsing S.R**, and Bhalsing R.R (2007) Sugarcane response to magnesium Salinity, **Research link-42, Vol VI (7), 49-50**
12. Patil G.S, Shimpi T.S, Deshpande H.A, Narkhede J.D and **Bhalsing S.R** (2009).Tissue culture

- studies on *Bacopa monnieri* (L) Pennell – A Threatened medicinal herb, Research Analysis and Evaluation, Vol (I); pp : 29-31
13. Goswami A A, Kashikar P G, Deshpande H A and **Bhalsing S R** ( 2009) Bioassay on Atrazine, Alachlor, 2,4 – D and prediction of it's toxicity on *Chlorella pyrenoidosa* using algal growth method, Asian Journal of Chemical and Environmental Research,; Vol – 2; ( 3-4); pp : 87-90
  14. Deshpande H.A, Chalse M.N and **Bhalsing S.R.** (2010). *Centella asiatica* Linn: *In vitro* Regeneration through Leaf Derived Calli. Journal of Herbal Medicine and Toxicology, Vol 4 (2); pp : 103 – 106
  15. Deshpande H.A and **Bhalsing S.R.** (2011). Phytochemical Analysis in *Cassia obtusifolia*, *Cassia auriculata*, *Tephrosia purpurea*, *Helictres isora* and *Centella asiatica*. International Journal of Pharma and Biosciences, Vol – 2; (3) ; pp : 363 – 367.
  16. Deshpande H.A. and **Bhalsing S. R.**, (2013). Recent advances in the phytochemistry of some medicinally important *Cassia* species: A Review. International Journal of Pharma Medicine and Biological Sciences. Vol 2, Issue -3, pp: 60-78.
  17. Deshpande H.A. and **Bhalsing S. R.**, (2013). Isolation and Characterization of Diosgenin from *in vitro* cultured tissues of *Helicteres isora*. Physiology and molecular biology of plants; DOI 10.1007/s12298 – 013-02053.
  18. Deshpande H.A and **Bhalsing S.R.** (2013). Characterization of Diosgenin in *Helicteres isora* Linn: A Medicinally important Plant. In proc. of International Journal of Nutrition, Pharmacology, Neurological Diseases; Vol- (3); 4; pp :418
  19. Deshpande H.A, Sonawane S. C., Gavit S.V. and **Bhalsing S.R.** (2014) *In vitro* production of Diosgenin from *Helicteres isora* L. through callus culture under the influence of different Additives. Asiatic Journal of Biotechnology Resources; Vol – (11); pp : 15 – 20
  20. Deshpande H.A and **Bhalsing S.R** (2014). A Review of Phytochemical Profile of *Desmodium gangeticum* (L.) DC: A Valued Endangered Medicinal Plant. International Journal of Pharmaceutical Science and Health Care. Vol (4); 1; pp : 36 - 48

#### **Research papers published in conferences:**

1. **Bhalsing S.R** and Maheshwari V.L (1997) Importance of secondary plant constituents as drugs – A Biotechnological strategy to obtain them *in vitro*. In Proc. of National Symposium on Pant Structural Morphogenesis (Eds, Ramia, T.V. and Kothari I.L.) 79-85

2. Deshpande H.A and **Bhalsing S.R. (2010)**. Phytochemical Analysis of *Cassia obtusifolia*, *Cassia auriculata*, *Tephrosia purpurea*, *Helictres isora* and *Centella asiatica*. **In proc of national conference on Biotechnology for all (NCBFA – 2010)**. At School of Life Sciences, North Maharashtra University, Jalgaon; 29<sup>th</sup> – 30<sup>th</sup> December, 2010. pp-95
3. Deshpande H.A and **Bhalsing S.R. (2011)**. *In Vitro* propagation of some important medicinal plants from family Leguminosae: An innovation for their sustainable usage. In proceedings of **AAVISKAR – 2011**: University Level Research Festival at North Maharashtra University, Jalgaon on 28 – 29th Dec 2011. pp – 77
4. Deshpande H.A and **Bhalsing S.R. (2012)** Micropropagation Through Shoot Tip Culture in *Helictres isora* L and *Cassia obtusifolia* L” was presented at **National Symposium on Impact of Plant Tissue Culture on Advances in Plant Biology & 33rd PTCA (I) National Meet** Organized by Loyola Centre for R & D jointly with St. Xavier's College, Ahmedabad from 19 – 21<sup>st</sup> Jan 2012 pp 158.
5. Patil K. S. and **Bhalsing S. R. (2012)** “An overview of plant tissue culture studies of antidiabetic plants from Khandesh region (Maharashtra).” in the proceedings of the National symposium on “**Impact of Plant Tissue Culture on advances in Plant Biology**” at St. Xavier’s College and Loyola Centre for Research and Development, Ahmedabad on 19<sup>th</sup> – 21<sup>st</sup> January, 2012. pp-162.
6. Deshpande H.A, Patil K. S., and **Bhalsing S.R (2013)**. Extraction, Isolation and Identification of Diosgenin in *Helicteres isora* Linn: A Medicinally important Plant. In proc. of national conference on plant sciences, **Parvatibai Chaugule college of Arts, Science and Commerce, Madgaon, Goa. 7<sup>th</sup> -8<sup>th</sup> February, 2013**; pp : 81

**Research project completed:**

Sr. No.	Name of Investigator (PI)	Title of Project	Duration	Year of completion	Amount Sanctioned (Rs)	Funding Agency
1.	Dr. (Mrs.) S. R. Bhalsing	Hairy root culture in some medicinally important Solanaceous plants	(18 <sup>th</sup> Dec, 2002 – 18 <sup>th</sup> Dec 2004) 2 years	2004	50,000/-	UGC, New Delhi
2.	Dr. (Mrs.) S. R. Bhalsing	<i>In vitro</i> propagation of the medicinal plant, <i>Solanum surattense</i> Burn F	(3 <sup>rd</sup> Jan, 2008 – 3 <sup>rd</sup> Jan, 2010) 2 years	2010	88,000/-	UGC, New Delhi
3.	Dr. (Mrs.) S. R. Bhalsing	<i>In vitro</i> propagation studies in some medicinally important plants	(1 <sup>st</sup> Feb, 2010 – 31 <sup>st</sup> Jan, 2013 ) 3 years	2013	9.47800/-	UGC, New Delhi

**Memberships:**

- Life member of Biotech Research Society of India, Trivandrum, India.
- Life membership of global biotech forum, Nagpur
- Life membership of H. S. Shrivastava foundation for Science and Society (PHSSFSS), Luknow.

**Any other activity done/going on:**

- Attended workshop on “ Capacity building of Women Managers in higher education”, sponsored by UGC on October 19 - 23, 2010 at Women’s studies center, NMU, Jalgaon.
- Selected as a lady programme officer for NMU-NSS campus unit from 2012-2015
- Worked as a lady programme officer for NMU-NSS campus unit during special winter NSS camp at Tahakali, Taluka: Dharangaon, Dist: Jalgaon during 25<sup>th</sup> Dec, 2012 to 31<sup>st</sup> Dec, 2012.
- Successfully completed the 41<sup>st</sup> orientation course being organized by National Service Scheme- Empanelled Training Institute, Ahmednagar during 15<sup>th</sup> July, 2013 to 21<sup>st</sup> July, 2013 at Ahmednagar College, Ahmednagar.

- Participated in the special field visits at “Ideal village” - Ralegansidhhi, “Adarsh gaon” – Hivrae Bazaar , “Orphan school” – Pumpkin House
- Worked as a member in syllabus framing committee for ‘ Ayurvedic Botany’ syllabus at Maharashtra University of Health Science, Nasik on 17<sup>th</sup>May,2013
- Worked as a lady programme officer for NMU-NSS campus unit during special winter NSS camp at Tahakali, Taluka: Dharangaon, Dist: Jalgaon during 25<sup>th</sup> Dec – 31<sup>st</sup> Dec, 2013.

**Contribution to university/School/Department:**

**(a) Contribution to University:**

- Actively participated in conducting GD – PI in MBA entrance examination 2009 - 2010 at the School of Management studies, North Maharashtra University, Jalgaon on June 12, 2009
- Actively participated in Central Assessment Programme of North Maharashtra University, Jalgaon since 2009 - 2013
- Worked as a member in Hostel Development Zone Council of North Maharashtra University during the academic year 2011-2013
- Worked as a core committee member in Avishkar,2011 at North Maharashtra University, Jalgaon on 28<sup>th</sup> and 29<sup>th</sup> December, 2011
- Worked as a core committee member at university level research festival Avishkar, 2012 at North Maharashtra University, Jalgaon on 13<sup>th</sup> and 14<sup>th</sup> December,2012
- Working as a member in 3<sup>rd</sup> Global Sustainable Biotech Congress – 2014 in collaboration at NMU,Jalgaon since 2012 – 2013
- Actively participated in Hostel day celebration and cultural activities at North Maharashtra University on 19<sup>th</sup> Jan, 2013.
- Working as a lady Programme officer for NMU-NSS Camp unit at North Maharashtra University for three years since 2012
- Active participation at University level Avishkar,2013 at North Maharashtra University, Jalgaon on 18<sup>th</sup> – 19<sup>th</sup> October; 2013
- Active participation at State level Avishkar,2013 at North Maharashtra University, Jalgaon on 16<sup>th</sup> - 18<sup>th</sup> January, 2014

- Actively participated in Hostel day celebration and cultural activities at North Maharashtra University on 9<sup>th</sup> Feb, 2014
- **(b) Contribution to School/Department:**
- Delivered two guest lectures at SET-NET coaching programme (Summer session and Winter session) in the School of Life Sciences during 2009 - 2010
- Actively participated as a member of organizing committee in two day workshop on “**Advanced Biotechniques: Hands on learning instruments**” at the School of life science Sciences during October, 2009
- Actively participated in UGC – SAP – DRS seminar on Agrobiotechnology at the School of life science Sciences during March, 2010
- Participated as a member in syllabus framing at B. Sc (Biochemistry) during 2008 – 2010.
- Active participation in the admission procedure for M.Sc.MB/BC/BT students at School of Life Sciences ,North Maharashtra University during 2009 -2013
- Actively participated in Tree Plantation program organized by the School of Life Sciences, during 2009 – 2010.
- Worked as a co-ordinator for the two day workshop on ‘**Bioinstrumentation**’ organized by School of Life Science for all M.Sc. MB/BT/BC II year students on July 30-31, 2010
- Actively participated and worked as a member in national level conference on “**Biotechnology for All**” sponsored by UGC, CSIR, DBT, Ministry of Earth Sciences, Govt of India and Department of Atomic Energy ,BRNS on December,29-30,2010 at School of Life Science ,NMU, Jalgaon
- Actively participated in the workshop on “**Advanced Biotechniques: Hands on Learning Instruments**” at School of Life Science for all M.Sc II MB/BC/BT students on 29<sup>th</sup> - 30<sup>th</sup> July, 2012
- Actively participated and worked as a co-ordinator in UGC-SAP-DRS phase II program sponsored two day seminar on “**Recent trends in Life Sciences**” at School of Life Science on 12<sup>th</sup> and 13<sup>th</sup> January,2011

- Actively participated in DBT sponsored short term training course on “ **Commercial Application of Plant Tissue Culture and Genetic Transformation**” at Bharatidasan University, Tiruchirapalli, Tamilnadu during 12-25<sup>th</sup> March,2012
  - Worked as a member in syllabus framing at M.Sc II (Biochemistry) in the year 2012 – 2013
  - Worked as a committee member for preparing reaccreditation report of School of Life Science to NAAC, Bangalore during April – May,2013
  - Active participation in the preparation of **Quarterly Progress Report (QPR)** of school of Life Sciences since, 2009
  - Active participation in the preparation of activity report of School of Life Sciences since, 2009.
  - Delivered guest lectures at SET-NET coaching programme (Winter Session) in the School of Life Sciences during 9<sup>th</sup> Oct – 23<sup>rd</sup> Oct; 2013
-