## **BIO – DATA**

Dr. KAVYASHREE, R

Principal The Oxford College of Science Professor & Head Department of Biotechnology HSR Layout, Bangalore - 106

1. Name : Dr. KAVYASHREE, R

**2.** Age : 44 years Date of birth : 23.02.1972

Place of birth MYSORE, KARNATAKA

Sex Female

3. Educational Qualifications : B.Sc., M.Sc., Ph.D., F.S.Sc., FSAB, JF

(Starting from Bachelor's degree onwards)

Sl.	Degree	University	Year	Subjects	Percentage
No.					
1	2	3	4	5	6
1.	Bachelor of	Mysore	1993	Biochemistry	70%
	Science	University		Botany	
	(B.Sc.,)			Microbiology	
2.	Master of	Mysore	1995	Botany Specialization:	68%
	Science	University		Genetics and Cell Culture	
	(M.Sc.,)				
3.	Doctor of	Bangalore	2002	Title of the Ph.D., Thesis:	
	Philosophy	University		"In vitro morphogenetic	
	(Ph.D.,)			studies on mulberry variety	
				- S <sub>54</sub> "	

4. Specialization : PLANT BIOTECHNOLOGY

**5.** Present position and address : **PRINCIPAL** 

The Oxford College of Science

No. 32, 17<sup>th</sup> 'B' Main Sector IV, HSR Layout, BANGALORE – 560 102

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## 6. Details of professional training, research and teaching experience, specifying period.

YEAR	RESEARCH/TEACHING EXPERIENCE
1996-1998	RESEARCH TRAINEE (RT) –     Food Packaging Technology Department (FPTD)     Central Food Technological Research Institute (CFTRI) MYSORE-570     013.     In the project entitled "Suitability of indigenous aluminium cans for
1998-1999	packaging of processed foods and beverages" sanctioned to Dr. M. Mahadeviah, Head, FPTD, CFTRI, Mysore.  2. SENIOR RESEARCH FELLOW (SRF) –
1770-1777	Food Packaging Technology Department (FPTD) Central Food Technological Research Institute (CFTRI) MYSORE-570 013. In the project entitled "Suitability of indigenous aluminium cans for packaging of processed foods and beverages" sanctioned to me by Council for Scientific and Industrial Research (CSIR), New Delhi to work under the guidance of Dr. M. Mahadeviah, Head, FPTD, CFTRI, MYSORE-570 013.
1999-2001	3. <b>SENIOR RESEARCH FELLOW (SRF)</b> – Tissue culture and Cytogenetics Laboratory Department of Botany Bangalore University BANGALORE-560 056.  In the project entitled " <i>In vitro</i> morphogenetic studies on mulberry variety – S <sub>54</sub> " sanctioned to me by Council of Scientific and Industrial Research (CSIR), New Delhi to work under the guidance of Dr. M.C. Gayatri, Professor and Chairperson, Department of Botany, Bangalore University, BANGALORE-560 056.
2000	4. <b>PROFESSIONAL TRAINING:</b> Attended workshop on "Molecular Biology" conducted by Department of Biotechnology, Bharatidasan University, Trichy to undergo professional training to learn different techniques of molecular biology related to RAPD, RFLP, Western Blot, Southern Blot, SDS-PAGE and Agrobacterium mediated gene transfer in plant systems.
2003-2005	5. GUEST FACULTY (Full Time) Department of Botany Bangalore University BANGALORE-560 056.
2004-2005	6. <b>RESEARCH ASSOCIATE (RA)</b> – Plant Biotechnology Unit Annexe-Department of Botany Bangalore University, BANGALORE-560 056. In the project entitled "Programme support for priority areas in Plant Biotechnology" sanctioned to Dr. M.C.Gayatri, Professor & PI, Plant Biotechnology Unit, Annexe-Department of Botany, Bangalore University, BANGALORE – 560 056.

2005-2009	7.	CONTRACT LECUTURER  Plant Biotechnology Unit  Annexe-Department of Botany  Bangalore University  BANGALORE-560 056.  To conduct "Hands – On training programme on Plant tissue culture techniques" under the DBT project entitled "Programme support for priority areas in Plant Biotechnology" sanctioned to Dr. M.C.Gayatri, Professor & PI, Plant Biotechnology Unit, Annexe-Department of Botany, Bangalore University, BANGALORE – 560 056.
2005-2008	8.	PRINCIPAL INVESTIGATOR  DST WOS-A Project Plant Biotechnology Unit Annexe-Department of Botany Bangalore University BANGALORE-560 056. In the project entitled "Isolation of root rot tolerant clones through callus phase in Zingiber officinale Rosc." sanctioned to me by Department of Science and Technology (DST), Ministry of Science and Technology, Government of India, New Delhi under Women Scientist Scheme (WOS-A).
2006	9.	PROFESSIONAL TRAINING: Completed crash course in "Advanced Diploma in Genetic Engineering" at JIVAS, Bangalore
2006-2009	10.	GUEST FACULTY (Full Time) Department of Molecular Biology Plant Biotechnology Unit Annexe-Department of Botany Bangalore University, BANGALORE-560 056.
2009-2014	11.	ASSOCIATE PROFESSOR Department of Biotechnology Kristu Jayanti College Kothanur Post, K. Narayanapura, BANGALORE-560 077.
2011	12.	PROFESSIONAL TRAINING: Attended Refresher course on "Modern Biotechnological Techniques" at Manipal University, Manipal
2011-2012	13.	JNANA FELLOW Karnataka Jnana Aayoga (Knowledge Commission) Vidhana Soudha Government of Karnataka
2014-to-date	14.	PRINCIPAL Professor & Head, Department of Biotechnology Co-ordinator, Biotechnology Finishing School, The Oxford College of Science, HSR Layout BANGALORE – 560 102

### 7. Administrative Experience:

- Principal, The Oxford College of Science
   Head, Department of Biotechnology,
   Co-ordinator, Biotechnology Finishing School,
   The Oxford College of Science. Bangalore 560102.
  - Serving as Member Secretary, Governing Council
  - Serving as Member Secretary, Research Advisory Committee
  - Serving as Chairperson of various cell/committees
    - ✓ Internal Quality Assessment Cell (IQAC)
    - ✓ Committee for Staff Development & Welfare
    - ✓ Women Empowerment Cell
    - ✓ Sexual Harassment Elimination Cell
    - ✓ Equal Opportunity Cell
    - ✓ Student Council & Welfare Committee
    - ✓ Behavioural Science and Grievance Reddressal Cell
  - Serving as Member, Institutional Animals Ethics Committee (IAEC)

## 2. Co-ordinator (In-charge), Department of Molecular Biology, Bangalore University, Bangalore – 560 056.

- Involved in the establishment of Plant Biotechnology Unit, Orchidarium and Hardening Chamber with all modern infrastructural facilities at Jnana Bharathi Campus, Bangalore University, Bangalore as Research Associate of the DBT funded project
- Involved in the Institution of M.Sc., Molecular Biology course at Plant Biotechnology Unit as Principal Investigator of DST WOS-A scheme.
- Associated with the Co-ordinator of Molecular Biology in
  - Procurement of chemicals and glasswares
  - Procurement of equipments through tender notification
  - Procurement of books
  - Maintenance of stock registers, to registers, issue registers
  - Organizing BOS, BOE, BOAE meetings
  - Organizing lectures
- Instrumental in the institution of the "Molecular Biology Forum" during 2008.

#### 3. Organising committee member

- "11<sup>th</sup> meeting of the Subject Expert Committee (SEC) on Life Sciences Women Scientists Scheme A (WOS-A) sponsored by Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi held at The Oxford College of Science, Bangalore during 29<sup>th</sup> -31<sup>st</sup> December, 2014.
- "7<sup>th</sup> meeting of the Subject Expert Committee (SEC) on Life Sciences Women Scientists Scheme A(WOS-A) meeting sponsored by Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi held at Jnana Jyothi Auditorium, Central College, Bangalore University, Bangalore during 25<sup>th</sup> 27<sup>th</sup> July, 2008
- "1<sup>st</sup> meeting of the Subject Expert Committee (SEC) on Life Sciences Women Scientists Scheme A(WOS-A) sponsored by Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi held at The Club, Mysore Road, Bangalore during 1-2<sup>nd</sup> February, 2007
- "International Food Convention (IFCON) 98" held at CFTRI, Mysore during 1998.

## 4. Jnana Fellow

- Served as Jnana Fellow, Karnataka Jnana Aayoga (Knowledge Commission), Government of Karnataka from November – May, 2011.

## 5. Co-ordinator

- Life Science Forum at Kristu Jayanti college July, 2011 to July, 2014

## 6. Assistant Custodian

- PG I & III Semester Bangalore University examinations, 2013.

## 7. Subject Expert Committee Member

- For selection of SRF/JRF for DBT funded project at Department of Botany, Karnatak University, Dharwad, 2013

## 8. Executive Council Member

- Serving as Executive Council Member, Society of Cytologists & Geneticists, Bangalore since January, 2011.

## 8. Teaching Experience/courses taught with duration: 14 YEARS

Courses taught	Subjects	From	To	
	Theory	Practicals		
M.Sc., Botany				
I Semester III Semester IV Semester	Plant Tissue Culture Plant Biotechnology Genetics	Algae and Bryophytes Plant Tissue Culture Plant Biotechnology	2003 2003 2003	2005 2007 2007
M.Sc.,				
Molecular Biology				
I Semester II Semester	Microbiology Genetic Engineering	Microbiology Nucleic Acids and Genetic Engineering	2006 2006	2009 2009
III Semester	Molecular Biology of Development	Molecular Biology – I	2007	2009
IV Semester	Plant Biotechnology	Plant Biotechnology	2007	2009
M.Sc., Biotechnology				
I Semester II Semester III Semester IV Semester	General Microbiology Molecular Biology Plant Biotechnology Agricultural	General Microbiology Plant Biotechnology Agricultural	2009 2012 2009 2009	Till Date
	Biotechnology Biotechnology			
M.Sc., Microbiology		Bacteriology &		
I Semester	Microbial diversity Mycology Microbiological techniques	Virology Mycology	2009	
II Semester	Microbial Physiology	Microbial Physiology	2009	2014
IV Semester	Molecular Biology Agricultural Microbiology	Agricultural Microbiology	2012 2009	

## Examinership at P.G./Doctoral • External / Internal Examiner to conduct PG practical examinations of Bangalore University and other level Autonomous colleges (Mount Carmel College, Kristu Javanti College, CMR Institute) • External examiner nominated by Karpagam University for evaluation of thesis entitled "In vitro propagation and conservation of Flickengeria nodosa (Dalz.) Seidenf., A vulnerable orchid plant of high medicinal value" leading to Doctoral degree • Subject Expert Committee Member nominated by Department of Botany, Karnatak University Dharwad for selection of JRF/SRF to a DST funded research project BANGALORE UNIVERSITY ASSIGNMENT Assistant Custodian **Odd Semester PG Examination** 2012 EXTERNAL EXAMINER Month/Year Name of the College Semester **Brindavan College Indian Academy of Sciences** 2011 - to-date **Reva College** I, II, III & IV M.Sc., CMR College **PES College** Kristu Jayanti College INTERNAL EXAMINER Kristu Jayanti College V B.Sc., Kristu Jayanti College I, II, III & IV M.Sc., 2011 - 2014Kristu Jayanti College **ASSIGNMENT AT AUTONOMOUS COLLEGES** Name of the College Month/Year Semester Type of Assignment 2011 – Till-date **Mount Carmel College** III M.Sc., **Paper Setting**

#### Valuation CMR College III M.Sc., **Paper Setting** Nov-Dec, 2011 I M.Sc., Paper Setting Nov-Dec, 2011 I B.Sc., Paper Setting Nov-Dec, 2011 Kristu Jayanti College I M.Sc., Paper setting & valuation Oct-Nov., 2014 III M.Sc.,

# 9. Research Experience and work carried out: 20 YEARS (including time spent for Ph.D. degree)

## 1996 - 1999 (CFTRI, Mysore)

Study of suitability of indigenous aluminium cans for packaging of processed foods and beverages

## 1999 – 2002 (Bangalore University)

Development of in vitro protocols in mulberry

- Micropropagation through direct and indirect organogenesis
- Ex vitro rooting
- Induction of haploids through ovary and ovule culture
- Production of synthetic seeds using vegetative propagules
- Reduce the cost of micropropagation using alternative sources in place of sucrose and agar.

## 2003 – 2004 (Bangalore University):

Development of *in vitro* protocols in medicinal plants and orchids

- Large scale multiplication through direct and indirect organogenesis
- Somatic embryogenesis
- Isolation of somaclones
- Slow callus culture
- Production of synthetic seeds for long term maintenance

Establishment of field gene bank, seed gene bank and *in vitro* bank for conservation of rare, endangered, threatened and endemic medicinal plants and orchids

#### 2005 – 2008 (Bangalore University):

Isolation of root rot disease tolerant clones in ginger

- through callus phase
- treating pure culture filtrate of P. aphanidermatum and P. myriotylum
- adopting continuous and discontinuous in vitro selection techniques
- confirming disease tolerance by *in vitro* and *in vivo* sick plot technique and genetic fidelity by RAPD assay

#### 2009 - to-date:

## M.Sc., research projects guided and completed:

1.	2007	In vitro morphogenetic studies on few endangered orchids.		
2.	2008	RAPD analysis of genetic variability in Geranium.		
3.	2010	In vitro and ex vitro regeneration of axillary bud synthetic seeds of groundnut.		
4.	2010	Molecular characterization of cardamom varieties using RAPD markers.		
5.	2010	Molecular characterization of Bamboo varieties using RAPD markers.		
6.	2011	Synthetic seed production from encapsulated PLBs and <i>ex situ</i> conservation of		
		selected medicinal orchids of Western Ghats.		
7.	2011	Mass Propagation and Phytochemical Screening of Vanda tesselleta.		
8.	2011	Assay of biofertilizers on growth and yield of green gram and channa.		

9.	2013	In vitro regeneration and Agrobacterium tumifaciens mediated transformation of
		Stevia rebaudiana – a natural sweetener.
10.	2013	Primer designing and transferability of mulberry SSR's in species of Moraceae
		family.
11.	2013	Cross-genera transferability of mulberry SSR markers among jackfruit, banyan
		and peepal.
12.	2014	Development of microsatellite markers and genetic diversity studies in
		Epidendroideae.
13.	2014	Tissue culture and genetic diversity studies in <i>Capsicum</i> sps.
14.	2015	Quantification of bacterial colony forming unit in a given environment by
		quantitative Real time PCR.
15.	2015	Optimization of growth parameters and establishing carbon dioxide dependency
		for BHK-21 adherent cell line and scale-up studies using micro-carrier technology.
16.	2016	Structural bioinformatics analysis of dihydrofolate reductases in the
		trimethoprim-resistant <i>dfr</i> gene cassette.
17.	2016	Screening of phytochemical compounds, antioxidants and antimicrobial activities
		of Cassia alata"
18.	2016	Evaluation of stability of the black tea concentrates of different geographical
		origins
19.	2016	Biodegradation of Xenobiotics (azodye) by Bacillus megaterium and purification of
		azo reductase and analysis of the degradation by HPLC.

## 10. Research Projects sanctioned by National funding agencies:

## 1. On-going: (Scientist Mentor)

Title: Increase in biomass and productivity of transgenic Stevia by overexpressing the *Flowering Locus M*, *Terminal Flower 1 (TFL1)* and down-regulating *Flowering Locus T (FT)*.

Funding Agency: DST, Government of India Scheme: Women Scientist Scheme (WOS-A)

Period: 3 years (2015 – 2018) Approved Cost: Rs. 22 lakhs

## 2. Completed: (Principal Investigator)

Title: Isolation of root rot tolerant clones through callus phase in *Zingiber officinale* Rosc.

Funding Agency: DST, Government of India Scheme: Women Scientist Scheme (WOS-A)

Period: 3 years (2005 – 2008) Approved Cost: Rs. 16.21 lakhs

## 3. Completed: (Co-Investigator)

Title: Molecular characterization of Western Ghats Orchids

Funding Agency: UGC, New Delhi Period: 3 years (2011 – 2014) Approved Cost: Rs. 9.61 lakhs

## 4. Completed: (Scientist Mentor)

Title: *In vitro* regeneration and *Agrobacterium tumifaciens* mediated transformation of *Stevia rebaudiana* – a natural sweetner.

Funding Agency: VGST, Department of IT, BT, S&T, Government of Karnataka

Scheme: SPiCE Project

Period: 5 months (October 2011 – March 2012)

Approved Cost: Rs. 30,000

## **5.** Completed: (Principal Investigator)

Title: Regulation of flowering in Stevia expressing floral repressor genes FLC and

TFL1

Funding Agency: VGST, Department of IT, BT, S&T, Government of Karnataka

Scheme: SMYSR Award Period: 2 years (2011 – 2013)

Approved Cost: Rs. 4.00 lakhs per year

## **6.** Completed: (Co-Investigator)

Title: Application of biofertilizer consortium to improve crop yield in legumes - a way to economically viable agriculture.

Funding Agency: Karnataka Jnana Aayoga, Vidhana Soudha, Government of Karnataka

Scheme: Jnana Shodha, 2012 Period: 3 months (2012) Approved Cost: Rs. 1.5 lakhs.

#### 11. List of Publications:

## Papers published in International and National Journals: 35 International Journals: 20

- 1. **R. Kavyashree**, Divya S Aind. (2016). Dedifferentiation and Redifferentiation in *Stevia rebaudiana*, International Journal of Multidisciplinary Research Centre, Vol. II, Issue 2, 11-16. **IF: 2.513.**
- 2. **R. Kavyashree,** Divya S Aind. (2013). High frequency multiplication of shoots using axillary buds for production of ellite lines of *Stevia rebaudiana*, Advances in Bioscience and Biotechnology, Vol. 4, 781-784. **IF: 1.778.**
- 3. **R. Kavyashree.** (2009). Somatic embryogenesis and plantlet regeneration from *in vitro* pseudostem of ginger variety Varada. *Plant Cell Biotechnology and Molecular Biology*, 2009, 10 (1 & 2): 25-30. **ISSN: 0972-2025; H Index: 6.**
- 4. M.C.Gayatri and **R. Kavyashree** (2007). Effect of carbon sources on *in vitro* seed germination of monopodial orchid *Epidendrum radicans*. *Phytomorphology*, 57 (1 & 2): 67-70. **ISSN**: **0031-9449**; **H Index**: **12**
- 5. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2006). Propagation of mulberry variety S<sub>54</sub> by syn seeds of axillary bud, *Plant Cell, Tissue and Organ Culture*, 84: 245-249. **IF: 2.612; ISSN: 0167-6857, H Index: 52.**
- 6. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2006). Electrophoretic studies in *in vitro* diploid and gynogenic haploid of mulberry variety- S<sub>54</sub>. *Asian Journal of Microbiology, Biotechnology, & Environmental Sciences*, 8 (2): 315-317; **ISSN: 0972-3005; H Index: 11.**
- 7. M.C.Gayatri, **R. Kavyashree**, S.R.Usha and S.P. Dhananjaya (2006) *In vitro* seed germination of *Pecteilis gigantea* A rare, endangered and endemic orchid of Western Ghats. *Plant Cell Biotechnology and Molecular Biology*, 7 (3 & 4): 191-194. **ISSN**: **0972-2025**; **H Index**: **6**
- 8. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2006). Formulation of medium to reduce the cost of *in vitro* micropropagation. *Sericologia*, 46(4), 459-465. **ISSN: 0250-3980.**

- 9. M.C.Gayatri, V. Roopadarshini and **R. Kavyashree**. (2005). Selection of turmeric callus for tolerant to culture filtrate of *Pythium graminicolum* and regeneration of plants, Plant Cell, Tissue and Organ Culture, 83: 33-40. **IF: 2.612; ISSN: 0167-6857, 1573 5044; H Index: 52.**
- 10. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2005). Rapid clonal propagation of mulberry variety S<sub>54</sub> through *in vitro* culture of axillary bud. *Sericologia*, 2005, 45(4): 461-469. **ISSN: 0250-3980.**
- 11. M.C.Gayatri, V. Roopadarshini, **R. Kavyashree** and C.Suresh Kumar (2005). Encapsulation and regeneration of aseptic shoot buds of turmeric (*Curcuma longa* L.). *Plant Cell Biotechnology and Molecular Biology*, 6 (3 & 4): 89-94. **ISSN**: **0972-2025**; **H Index**: **6.**
- 12. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2005). *In vivo* regeneration of apical bud syn seeds of mulberry variety-S<sub>54</sub> (*Morus indica* L). *Plant Cell Biotechnology and Molecular Biology*, 6 (1 & 2): 69-72. **ISSN**: **0972 2025**; **H Index**: **6.**
- 13. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2005). A protocol for *in vitro* regeneration of mulberry variety- S<sub>54</sub> through callus phase. *Sericologia*, 45(1): 103 109. **ISSN: 0250-3980.**
- 14. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2005). *Ex vitro* rooting and acclimatization of *in vitro* shoots of mulberry variety- S<sub>54</sub> (*Morus indica* L). *Sericologia*, 45(1): 81-85. **ISSN: 0250-3980.**
- 15. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2004). Regeneration of encapsulated apical buds of mulberry variety-S<sub>54</sub> (*Morus indica L.*). *Sericologia*, 2004, Vol. 44 (1), 83-89. **ISSN: 0250-3980.**
- 16. M.C.Gayatri, **R.Kavyashree**, S.Kiran, V. Roopadarshini, C.Suresh Kumar and H.M.Shantha. (2004). Meiotic studies in cultivar 'Gangasetty' of *Codiaeum variegatum* Blume. *The Nucleus*, Vol. 47 (1,2), 42-44; **ISSN No. 0029-5698.**
- 17. M.C.Gayatri, H.M.Revanasiddaiah and **R. Kavyashree**. (2003). A protocol to reduce the cost of *in vitro* propagated plants of mulberry. *Sericologia*, Vol. 43(1), 109-115. **ISSN: 0250-3980.**
- 18. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2002). Induction of haploids through ovule culture in mulberry variety-S<sub>54</sub>. *Sericologia*, Vol. 42(4), 1-9. **ISSN: 0250-3980.**
- 19. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2001). A repeatable protocol for the production of gynogenic haploid plants in mulberry variety S<sub>54</sub>. *Sericologia*, Vol. 41(3), 517-521. **ISSN: 0250-3980.**
- 20. M.N.Srinivasa, H.M.Revanasiddaiah, M.C.Gayatri and **R. Kavyashree.** (2001). Indirect organogenesis through stem callus in mulberry variety Berhampore Local. *Sericologia*, Vol. 41(1), 101-104. **ISSN: 0250-3980.**

## NATIONAL JOURNALS: 11

- 21. **R. Kavyashee.** (2012). Genetic polymorphism in seven varieties of *Zingiber officinale* using RAPD markers. *Advanced Biotechnology*, 2012, Vol. 11 (11), 25 28. **ISSN: 0973-0109.**
- 22. Nagananda G. S., **R**. **Kavyashee**, Nalini Satish Chandra. (2012). Brick pieces soaked in liqued culture medium a new matrix for seed germination and plantlet development for orchid *Flickingeria nodosa* (Dalz.) Seidenf., *Current Science*, Vol. 102, No. 8, 1104 1107. **ISSN: 0011-3891; IF: 0.897.**
- 23. **R. Kavyashee.** (2011). *In vitro* micropropagation of ginger varity Suruchi. *Advanced Biotechnology*, Vol. 11(1): 17-19. **ISSN: 0973-0109.**

- 24. **R. Kavyashee.** (2009). An efficient *in vitro* protocol for rapid clonal multiplication of ginger variety Varada. *Indian Journal of Biotechnology*, Vol. 8, 328-331. **ISSN: 0972-5849**: **IF: 0.510**.
- 25. **R. Kavyashree.** (2008). Molecular and morphological characterization of seven varieties of *Zingiber officinale*. *Journal of Cytology and Genetics*, 9 (NS), 101-107. **ISSN:** 0253-7605.
- 26. **R. Kavyashree** (2007). A repeatable protocol for *in vitro* micropropagation of mulberry variety—S<sub>54</sub>. *Indian Journal of Biotechnology*, 6, 385 388. **ISSN: 0972-5849**; **IF: 0.510.**
- 27. M.C.Gayatri, M. Madhu and **R. Kavyashree.** (2006). Micropropagation of *Melia azedarach* L. An important folk medicinal plant. *Journal of Medicinal and Aromatic Plant Sciences*, 28:355-358. **ISSN 0974-7877**; **SJR Rank 0.221**.
- 28. M.C.Gayatri, M. Madhu, **R. Kavyashree** and S.P.Dhananjaya. (2006). A protocol for *in vitro* regeneration of *Eryngium foetidum* L. *Indian Journal of Biotechnology*, 5: 249-251. **ISSN: 0972-5849; IF: 0.510.**
- 29. M.C.Gayatri and **R. Kavyashree** (2005). Influence of carbon sources on *in vitro* seed germination, protocorm and shoot formation in *Vanilla planifolia*, *The Journal of Current Sciences*, 7(1): 43-48. **ISSN: 0972-6101.**
- 30. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2005). Somaclonal variations for some morphological and biochemical traits in mulberry variety-S<sub>54</sub> through callus phase, *The Journal of Cytology and Genetics*, 6 (NS) : 41-46. **ISSN:** 0253-7605.
- 31. **R. Kavyashree**, M.C.Gayatri and H.M.Revanasiddaiah. (2005). Isolation of somaclones in mulberry variety— S<sub>54</sub> through callus phase. *Indian Journal of Botanical Research*, 1(1): 29-35. **ISSN: 0973-2233.**
- 32. M.C. Gayatri, **R. Kavyashree**, S.Kiran, M.Madhu and H.M.Shantha. (2004). Cytological instability in cultivar 'Gangasetty' of *Codiaeum variegatum* Blume. *The Journal of Current Sciences*, Vol. 5 (1), 115-118. **ISSN: 0972-6101.**
- 33. M.C.Gayatri, H.M.Revanasiddaiah and **R. Kavyashree** (2003). A comparative electrophoretic study on protein profile of diploid and gynogenic haploid plants of mulberry variety-S<sub>54</sub>. *Journal of Current Sciences*, 3(1), 29-33. **ISSN: 0972-6101.**
- 34. M.C.Gayatri, H.M.Revanasiddaiah and **R. Kavyashree** (2002). Electrophoretic studies in *in vitro* derived gynogenic haploids in mulberry. *The Journal of Cytology and Genetics*, 3(NS),175-178. **ISSN: 0253-7605.**
- 35. P. Ashok Kumar, H.M.Revanasiddaiah, M.C.Gayatri and **R. Kavyashree.** (1999). Indirect organogenesis in *Morus alba* L.-S<sub>30</sub>. *Proceedings of NSTS*, Vol. 1, 4-5.

## 12. Conferences attended: 28; Papers presented: 23

### **International Conference: 5; Papers presented: 9**

- **1. R. Kavyashree**. Award Lecture "Contributions made in the field of medicinal Plant Biotechnology" at "3<sup>rd</sup> International Conference on medicinal Plants & Herbal products" organized by Faculty of Medicine and the Institute of Indigenous medicine, University of Colombo, Colombo, Sri Colombo, 19<sup>th</sup> 21<sup>st</sup> December, 2011.
- 2. **R. Kavyashree**. *In vitro* selection of ginger cell lines tolerant to *Pythium myriotylum* and its regeneration presented at XVIII International Botanical Congress held at Melbourne Congress and Exhibition Centre, Melbourne during 23<sup>rd</sup> 30<sup>th</sup> July, 2011.
- **3. R. Kavyashree**. Molecular characterization of bamboo using RAPD markers presented at XVIII International Botanical Congress held at Melbourne Congress and Exhibition Centre, Melbourne during 23<sup>rd</sup> 30<sup>th</sup> July, 2011.
- **4. R. Kavyashree**. *In vitro* selection of ginger cell lines tolerant to *Pythium myriotylum* and regeneration of plants presented at First International Conference of Bio-processing

- and application of Microbial Biotechnology in Agriculture held at National Research Centre, Cairo, Egypt during 1<sup>st</sup> 3<sup>rd</sup> November, 2010
- **5. R. Kavyashree**. Molecular and morphological characterization of seven varieties of *Zingiber officinale* presented at 12<sup>th</sup> Biological Science Congress held at University of Malaya, Kaulalumpur during 17<sup>th</sup> 19<sup>th</sup> December, 2007.
- **6.** H. M. Revanasiddaiah, **R. Kavyashree** and M.C.Gayatri. Induction of gynogenic haploids in mulberry through unpollinated ovary culture presented at 12<sup>th</sup> Biological Science Congress held at University of Malaya, Kaulalumpur during 17<sup>th</sup> 19<sup>th</sup> December, 2007.
- **7. R. Kavyashree**, M.C.Gayatri and S. Kiran. Somaclonal variation in *Zingiber officinale* Rosc. Screening for tolerance to *Pythium aphanidermatum*" presented at XVII International Botanical Congress held at Austria Centre, Vienna during  $17^{th} 23^{rd}$  July, 2005.
- **8.** M.C.Gayatri, V. Roopadarshini and **R. Kavyashree**. Isolation of somaclones in turmeric screening of disease tolerance *in vitro* presented at XVII International Botanical Congress held at Austria Centre, Vienna during 17<sup>th</sup> 23<sup>rd</sup> July, 2005.
- **9. R. Kavyashree**, H.M.Revanasiddaiah and M.C.Gayatri. Synseed technology for conservation and propagation of mulberry presented at XVII International Botanical Congress held at Austria Centre, Vienna during 17<sup>th</sup> 23<sup>rd</sup> July, 2005.

## National Conference: 20; Papers presented: 15

- 1. **M.Mahadevaiah and R. Kavyashree.** Suitability of Aluminium cans for packaging of mango products presented at National Seminar on Food Preservation by Hurdle Technology held at DFRL, Mysore during 29<sup>th</sup> 30<sup>th</sup> December, 1997.
- 2. P. Ashok Kumar, H.M.Revanasiddaiah, M.C.Gayatri and **R. Kavyashree.** Indirect organogenesis in *Morus alba* L.-S<sub>30</sub> presented at National Seminar on Tropical Sericulture held at University of Agricultural Sciences, GKVK, Bangalore 560 065 during 28<sup>th</sup> 30<sup>th</sup> December, 1999.
- 3. **R. Kavyashree.** A repeatable protocol for the production of gynogenic haploid plants in mulberry variety S<sub>54</sub> presented at Eighth All India Conference on Cytology and Genetics held at Bangalore University, Bangalore during 23<sup>rd</sup> 25<sup>th</sup> January, 2001.
- 4. M.C. Gayatri, **R. Kavyashree**, S.Kiran, M.Madhu and H.M.Shantha. Meiotic studies in cultivar 'Gangasetty' of *Codieaum variegatum* Blume presented at Ninth All India Conference on Cytology and Genetics held at Hyderabad, during 6<sup>th</sup> 8<sup>th</sup> November, 2003.
- 5. M.C.Gayatri, M.Madhu, Kiran, S. and **R. Kavyashree.** *In vitro* morphogenetic studies in *Vanilla (Vanilla planifolia* Andrews) presented at 5<sup>th</sup> International Food Convention IFCON held at CFTRI, Mysore during 5<sup>th</sup> 8<sup>th</sup> December, 2003.
- 6. M.C.Gayatri, V. Roopadarshini and **R. Kavyashree.** Isolation of somaclones in turmeric screening for disease tolerance *in vitro* at National Symposium on Plant Biotechnology: New Frontiers held at CIMAP, Lucknow during 18<sup>th</sup> 20<sup>th</sup> November, 2005.
- 7. M.C.Gayatri, M.Madhu and **R. Kavyashree.** Influence of growth regulators on *in vitro* micropropagation of an endangered medicinal plant *Baliospermum montanum* at National Symposium on Plant Biotechnology: New Frontiers held at CIMAP, Lucknow during 18<sup>th</sup> 20<sup>th</sup> November, 2005.
- 8. **R. Kavyashree,** M.C.Gayatri and H.M.Revanasiddaiah. Synseed technology for conservation and propagation of mulberry at National Symposium on Plant Biotechnology: New Frontiers held at CIMAP, Lucknow during 18<sup>th</sup> 20<sup>th</sup> November, 2005.
- 9. M.C.Gayatri, V. Roopadarshini and **R. Kavyashree.** *In vitro* cell selection approach for the development of disease tolerance in turmeric against pure culture filtrate of *Pythium*

- graminicolum presented at Tenth All India Conference on Cytology and Genetics held at Andhra University, Visakhapatnam, during  $8^{th} 10^{th}$  December, 2005.
- 10. M.C.Gayatri, M.Madhu and **R. Kavyashree.** *In vitro* propagation of *Rubia cordifolia* Linn. An important medicinal plant. Tenth All India Conference on Cytology and Genetics held at Andhra University, Visakhapatnam, during 8<sup>th</sup> 10<sup>th</sup> December, 2005.
- 11. M.C.Gayatri, S.P.Dhananjaya, **R. Kavyashree** and G.S.Nagananda. An efficient *in vitro* protocol for large scale multiplication of *Phalaenopsis* through seeds. Tenth All India Conference on Cytology and Genetics held at Andhra University, Visakhapatnam, during 8<sup>th</sup> 10<sup>th</sup> December, 2005.
- 12. Participated in National Conference on Emerging Trends and Future Challenges in Biotechnology held at PESIT, Bangalore during  $22^{nd} 23^{rd}$  September, 2006.
- 13. **R. Kavyashree.** High frequency *in vitro* shoot multiplication of *Zingiber officinale* Rosc., using Thidiazuron presented at SYMSAC III held at Lalbagh, Bangalore during  $8^{th} 10^{th}$  November 2006.
- 14. Attended National Conference on Developmental Biology organized by Department of Botany, Bangalore University at IISc., Bangalore during 15<sup>th</sup> -17<sup>th</sup> September, 2010.
- 15. Attended National Conference on Awareness on GM foods conducted by BCIC, sponsored by DBT and Government of Karnataka on 21<sup>st</sup> April 2011
- 16. Attended "Recent Trends in Genomics & Proteomics" organized by Indian Academy & Department of Biotechnology, Bangalore University at Jnana Jyothi Auditorium, Bangalore University during 26<sup>th</sup> 27<sup>th</sup> May, 2011.
- 17. Nagananda G.S., Nalini Satishchandra and **R. Kavyashree.** A Novel Economical Capillary Force Brick Based Liquid Medium for *in vitro* seed germination and development of medicinally important orchid *Flickingeria nodosa* (*Dalz.*) *Seidenf* at Bangalore India Bio, 2012 held from 06-08<sup>th</sup> February 2012.
- 18. Attended Conference on "Biotech crops for food security in India" organized by FBAE, Bangalore at Hotel Bangalore International on 27<sup>th</sup> February, 2012.
- 19. **R. Kavyashree** and Divya Shalini Aind. "Biofertilizer: A boon to nature from nature" at Second National Symposium on Innovative Approaches and Modern Technologies for Crop Productivity, Food Safety and Environmental sustainability" held at Thrissur, Kerala during November 19th 20th, 2012.
- 20. Attended State Level Conference on "Science and Technology for Societal Transformation" organized by KSTA during 19th 20th December, 2012.
- 21. Attended "Bangalore Bio, 2013" held at Lalit Ashok, Bangalore during 13th to 15th February, 2013.
- 22. R. Kavyashree, Sneha S. Naik and Swati Verneker. Molecular assessment of mulberry SSRs in species of Moraceae family for identification and conservation presented at International Conference on Biodiversity, Bioresources and Biotechnology organized by Society of Applied Biotechnologists at Quorum Hotel, Mysore, during 30-31<sup>st</sup> January, 2013.
- 23. Attended 103rd Indian Science Congress on "Science and Technology for Indegenous Development in India" during 3rd 7th January, 2016.
- 24. Attended the 2 day XI ISBA conference 'Powering Start- up enablers: Incubators, Accelerators, Innovation Clusters, Co-working spaces' at Pune on 10th & 11th September 2016.

#### 13. Symposium/Seminars/Meetings attended: 8

- Access to scholarly electronic journals/databases under UGC-Infonet held at Bangalore University, Bangalore during 29<sup>th</sup> -30<sup>th</sup> November 2004 organized by Information and Library Network (INFLIBNET) Centre, Ahmedabad in collaboration with Bangalore University.
- 2. 'Jnanarjana, 2005', National Symposium on recent trends in life science held at The Oxford Educational Institutions, Bommanahalli, Bangalore during 2<sup>nd</sup> 3<sup>rd</sup>, 2005.

- 3. Exploring Entrepreneurship & Corporate Opportunities Getting started on the career ladder held at The Oxford College of Science campus in Bangalore held on 13<sup>th</sup> October 2010
- 4. Indo-Swiss Life Sciences Round Table organized by ABLE, Bangalore on 28<sup>th</sup> October, 2010.
- 5. Industry Academia Forum on Creating industry- ready talent for Biopharmaceutical industry at Biocon, Bangalore on 22<sup>nd</sup> July, 2011.
- 6. Workshop cum Seminar on Stake Holders involvement in formation of Sectoral Skill council for Education and Training at Hotel Chancery Pavilion on 6<sup>th</sup> August, 2011.
- 7. 77<sup>th</sup> Annual Meeting of Indian Academy of Sciences at Physical Research Laboratory, Ahmedabad during 17<sup>th</sup> 20<sup>th</sup> November, 2011.
- 8. Workshop for College Principals on "Role of Principal in Achieving Excellence of Institution" by UGC-Human Resource Development Centre from 21<sup>st</sup> to 23<sup>rd</sup> September, 2015.
- 9.  $103^{rd}$  Indian Science Congress- "Science and Technology for Indigenous Development in India." From  $3^{rd}$  Jan  $2016 7^{th}$  Jan 2016 at Mysore.

### 14. Journal Reviewer:

- 1. African Journal of Biotechnology (AJB)
- 2. African Journal of Microbiology (AJM)
- 3. Agricultural Science Research Journal (ASRJ)
- 4. International Research Journal of Biotechnology (IRJOB)
- 5. Physiology and Molecular Biology of Plants (PMBP)

## 15. Books published:

- 1. Tissue culture studies in mulberry, 2010, Lambert Publishing Company, Germany. ISBN 978-3-8433-5166-9.
- 2. Plant Tissue Culture Protocols in Plant Biotechnology, 2015. Narosa Publishing House Pvt., Ltd.,. ISBN 978-81-8487-443-3.

#### 16. Lectures delivered:

- 1. "Plant tissue culture a versatile and viable tool" delivered lecture as Resource person at "Contemporary trends in animal sciences" the Second Refresher course in Zoology organized under the aegis of Department of Zoology and UGC-Academic Staff College, Bangalore University, Bangalore, during 9<sup>th</sup> 29<sup>th</sup> March, 2005.
- 2. Plant metabolic engineering Past, present & future" delivered lecture as invited speaker at "National conference on Biotechnology, Bioinformatics and Bioengineering" held at Dharmapuri, Tamilnadu during 17<sup>th</sup> 18<sup>th</sup> December 2010.

## 17. Awards and Fellowships:

- **1. Prof. R. P. Roy Prize** for the original research paper entitled "A repeatable protocol for the production of gynogenic haploid plants in mulberry variety-S<sub>54</sub>" presented at the "Eighth All India Conference on Cytology and Genetics" held at Bangalore University, Bangalore during 28<sup>th</sup>-30<sup>th</sup> January, 2001.
- 2. Fellow of Society of Sciences (F.S.Sc.) by Society of Sciences, India, 2004.
- **3. Fellow of Society of Applied Biotechnologists (FSAB)** by Society of Applied Biotechnologists, 2010.
- **4. Jnana Fellowship** by Karnataka Knowledge Commission, Government of Karnataka, 2011.
- **5. Young Scientist Award** for contributions made in the field of medicinal Plant Biotechnology at "3<sup>rd</sup> International Conference on medicinal Plants & Herbal products"

organised by Faculty of Medicine and the Institute of Indigenous medicine, University of Colombo, Colombo, Sri Lanka during 19<sup>th</sup> – 21<sup>st</sup> December, 2011.

6. 'Honorary Doctorate award' by Dr. Radhakrishnan Research and Development Centre, University of South America in 2016.

## 18. Membership of Professional Bodies:

- 1. Life Member Society of Cytologists and Geneticists
- 2. Life Member Society of Plant Cell Biotechnology & Molecular Biology
- 3. Life Member Society of Sciences
- 4. Life Member International Society of Plant Morphologists
- 5. Life Member The Indian Science Congress Association
- 6. Life Member Society of Applied Biotechnologists

## 19. Accomplishments:

### a. External funds received – Rs. 73,62,000.00

(Workshop, SEC meeting, Women Scientist Scheme (WOS-A) DST, UGC, New Delhi, VGST, Department of IT, BT, S&T, Government of Karnataka, Karnataka Jnana Aayoga, Vidhana Soudha, Government of Karnataka)

## b. Conferences organised:

- 1. **Organizing committee member**, "IFCON 1998" (International Food Convention) held at CFTRI, Mysore during December, 1998.
- 2. **Organising Committee Member**, "National Seminar on Bioprocessing and Fermentation Technology" held at Kristu Jayanti College during 23 25<sup>th</sup> March 2010.
- 3. **Organising Secretary**, "National conference on Plant diversity: Prospects and problems on Conservation" held at Kristu Jayanti College during  $27^{th} 29^{th}$  October, 2010.
- 4. **Organising Committee Member**, "National Workshop on Entrepreneurship in Life Sciences" held at Kristu Jayanti College during 10<sup>th</sup> 11<sup>th</sup> October, 2011.
- 5. **Organizing Secretary,** Workshop on "Writing Research Proposals" sponsored by SERB, Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi held at The Oxford College of Science, Bangalore on 31<sup>st</sup> October 2014.
- 6. **Organizing Chair, Faculty Development program -** Workshop on "Advances in *in vitro* cell culture and functional applications" sponsored by Department of Biotechnology, Ministry of Science and Technology, Government of India, New Delhi held at The Oxford College of Science, Bangalore from 6<sup>th</sup> -10<sup>th</sup> July 2015.
- 7. **Organizing Chair, Faculty Development program on "Mind your Teaching"** by Mindsmart Learning Strategies, Bangalore held at The Oxford College of Science, Bangalore on 29<sup>th</sup> 31<sup>st</sup> July, 2015.

#### c. Outreach activities:

As Co-ordinator/Member of Life Science club, conducted

- 1. Awareness programme in Kothanur village on H1N1 pandemic in 2010
- 2. Parthenium eradication programme in areas surrounding Kristu Jayanti College, 2010
- 3. Organic waste management programme to school students in Kothanur village,

As Jnana Fellow, Karnataka Jnana Aayoga, Government of Karnataka

• Studied work-climate of the Department of Health & Family Welfare and Suggested measures for its improvement and bring in more accountability

### d. Event Judge:

- 1. Biodesign at "National Symposium on Breakthrough in Molecular Diagnostics" organized by The Oxford Educational Institution under the aegis of Children's Education Society during  $22^{nd} 23^{rd}$  March, 2007.
- 2. Poster session at "National Conference on molecular innovations in Food Processing and food safety management" organized by The Oxford Educational Institution in collaboration with IICPT during 4<sup>th</sup> 5<sup>th</sup> April, 2010.
- 3. National level "Green India Competition" for PU Students, 2010

#### e. Other Contributions:

Initiated, planned and set up:

- 1. Molecular Biology Forum at Department of Molecular Biology, Bangalore University, Bangalore during 2007.
- 2. Jayantian Life Science Forum at Department of Life Sciences, Kristu Jayanti College, Bangalore during 2011.

As Co-ordinator of the forum I have organised various activities such as Award Lectures, Guest Lectures, Skill & Knowledge Development Programme and Industry interactions.

## f. Other training programme undertaken:

- 1. Life Skill Education program conducted by Rajiv Gandhi Centre of Youth Development, Ministry of Youth Affairs Sports, Government of India, Sriperumbadur, Tamil Nadu and Centre for Life Skills Education, Kristu Jayanti College, Bangalore from 05-09<sup>th</sup> June, 2013.
- 2. Lean Six Sigma Green Belt Certification course conducted by Asian Institute of Quality Management, Pune during  $01 03^{rd}$  May, 2014.

(Dr. R. Kavyashree) **Signature** 

Date: 27.07.2017 Place: Bangalore