

**Dr. Sr. Meena K. Cheruvathur. (Sr. Santra Therese CMC)**

**Assistant Professor**



### Employment Record

Position	Date	Experience (years)	Location
Assistant Professor	27/9/2012 onwards.	2 years	Thrissur
Guest Lecturer	July – March 1998-97	1 year	Cheroor Thrissur
Guest Lecturer	July - March-2010-11	1 year	Cheroor Thrissur

### College Address

Department of Botany

St. Mary's College,  
Thrissur

INDIA, KERALA

Post 680020

Ph: 0487 233485

(College)

0487

2331137(Convent)

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srsantra@gmail.com

### Educational

### Research Project

Ongoing one Science Popularization Project entitled "Know the Plants Grow the plants" by Kerala State Council For Science, Technology And Environment, SasthraBhavan, Pattom, Thiruvananthapuram -4.

**Completed B.Sc research projects as Major advisor: 6.**

**Completed MSc . Projects as Major advisor: 4**

**Ongoing 3 MSc Projects as Major advisor.**

## Qualifications

**Exam passed :** BSc

**Subjects Taken :**

Botany (Main)

**Year :** 1995

**University/ Board :**

Calicut

**Exam passed :** MSc

**Subjects Taken :** Botany

**Year :** 1997

**University/ Board :**

Mahatma Gandhi

University

**Exam passed :** BEd

**Subjects Taken :**

Natural science)

**Year :** 1999

**University/ Board :**

Calicut University

**Exam passed :** MPhil

**Subjects Taken**

:Molecular Systematics

**Year :**

2007

**University/ Board :**

Bharathidasan University

**Exam passed :** PhD

**Subjects Taken :**

Botany, Biotechnology,

Microbiology,

Phytochemistry

**Year:** 2011

**University/ Board :**

Mahatma Gandhi

University

## Teaching experience

5 YEARS

## Research Publications: 14

### Important research publications

#### PAPERS PUBLISHED IN INTERNATIONAL JOURNALS:

1. **Meena K Cheruvathur**, Abraham J, Mani B, Thomas TD 2010. Adventitious shoot formation from cultured inter nodal explants of *Malaxisacuminata* D. Don, a valuable terrestrial medicinal orchid. *Plant Cell Tissue and Organ Culture*. 101: Pp. 163-170 (Springer).
2. **Meena K Cheruvathur**, Abraham J, Mani B, Thomas TD 2010. Micropropagation of *Cycleapeltata* (Lam) Hook &Thoms. based on enhanced axillary branching. *Industrial Crops and products*. 31: Pp. 92-98 (Elsevier).
3. **Meena K Cheruvathur**, Britto J, Thomas TD 2010. Callus induction and shoot regeneration from epicotyl explants of ethnomedicinally important *Caesalpiniaabonduc* (L.) Roxb. *Iranian Journal of Biotechnology*. 8: Pp. 263-269.
4. **Meena K Cheruvathur**, Britto J, Thomas TD 2011. Pulvinus- an ideal explant for plant regeneration in *Caesalpiniaabonduc* (L.) Roxb., an ethanomedicinal woody climber. *ActaPhysiologiaPlantarum*. 34(2): 693-699 (Springer)
5. **Meena K Cheruvathur**, Thomas TD 2011. Callus induction and high frequency plant regeneration in *Pseudarthritisviscida* (L.) Wright and Arn., a rare ethnomedicinal plant. *Physiology and Molecular Biology of Plants*. 17: Pp. 395-401 (Springer).
6. **Meena K Cheruvathur**, Sivu AR, Pradeep NS, Thomas TD 2012. Shoot organogenesis from leaf callus and ISSR assessment for their identification of clonal fidelity in *Rhinacanthusnasutus* (L.) Kurz., a potent anticancerousethnomedicinal plant. *Industrial Crops and Products*. 40: Pp.122-128 (Elsevier).
7. **Meena K Cheruvathur**, Krishnakumar G, Thomas TD 2012. Somatic embryogenesis and synthetic seed production in *Rhinacanthusnasutus* (L.) KURZ. *Plant Cell Tiss Organ Cult*. 113: Pp. 63-71 (Springer).
8. **Meena K Cheruvathur**, NeziaNajeeb, Thomas TD 2012. *In vitro* propagation and conservation of Indian Sarsaparilla, *Hemidesmusindicus* L. R. Br through somatic embryogenesis and synthetic seed production. *Acta Physiol. Plantarum*. 35 (2): Pp. 771-779 (Springer).
9. **Meena K Cheruvathur**, Jyothi Abraham, Thomas TD 2013. Plant regeneration through callus organogenesis and true-to-type conformity of plants by RAPD analysis in *Desmodiumgangeticum* (Linn.) DC. *ApplBiochemBiotechnol*. 1-12.
10. **Meena K Cheruvathur**, Thomas TD 2013. Callus induction and multiple shoot regeneration from in vitro cotyledonary nodal explants of *Rhinacanthusnasutus* (Linn.) Kurz. – a potent anticancerousethnomedicinal

plant. *Vimala Int. J. For Pure and Appl. Sc.* 1 (1): 81-89.

11. **Meena K Cheruvathur**, Thomas TD 2013. Shoot organogenesis from root – derived callus of *Rhinacanthus nasutus* (Linn.) Kurz. And assessment of clonal fidelity of micropropagated plants using RAPD analysis. *ApplBiochemBiotechnol.* 1-14 (October- online)
12. **Meena K Cheruvathur**, Thomas TD 2014. High frequency multiple Shoot induction from nodal segments and rhinacanthin production in the medicinal shrub *Rhinacanthus nasutus* (Linn.) Kurz. *Plant Growth Regul.* 1-8 (January-online)
13. **Meena K Cheruvathur**, Thomas TD 2014. Effect of plant growth regulators and elicitors on rhinacanthin accumulation in hairy root cultures of *Rhinacanthus nasutus* (L.) Kurz. *Plant Cell Tiss Organ Cult.* DOI 10.1007/s11240-014-0473-9.
14. **Meena K Cheruvathur**, Thomas TD 2015. *In vitro* micropropagation and flowering in *Ipomoea sepiaria* Roxb. An important ethnomedicinal plant. *Asian Pacific Journal of Reproduction* 2015, 4(1): 49-53

#### **Paper presentations in international/national seminars/symposia/conferences**

1. **Meena K Cheruvathur**, Abraham J, Thomas TD 2009. *In vitro* regeneration of *Ipomoea sepiaria* Roxb.- An important ethnomedicinal plant by direct organogenesis. National Conference on Modern Trends in Plant *in vitro* Biology held at Department of Plant Science, School of Life Sciences, Bharathidasan University, Tiruchirappalli, Tamil Nadu.
2. **Meena K Cheruvathur** Abraham J, Thomas TD 2009. A quick *in vitro* propagation of *Cyclea peltata* (Lam.) Hook.F.&Thoms. National Conference on Modern Trends in Plant *in vitro* Biology held at Department of Plant Science, School of Life Sciences, Bharathidasan University, Tiruchirappalli, Tamil Nadu.
3. **Meena K Cheruvathur**, Abraham J, Thomas TD 2009. Effect of growth regulators on shoot multiplication and callus regeneration of an important ethnomedicinal plant, *Vallarissolanaceae* (Roth) O. Ktze. National seminar on Imperatives for Sustainable Development held at Department of Botany and Chemistry, Carmel College, Mala, Thrissur.
4. **Meena K Cheruvathur** Abraham J, Thomas TD 2009. Regeneration of internodal callus of an important ethnomedicinal plant: *Caesalpinia bonduca* (L.) Roxb. National seminar on Imperatives for Sustainable Development held at Department of Botany and Chemistry, Carmel College, Mala, Thrissur.
5. **Meena K Cheruvathur**, Britto J, Thomas TD 2009. Callus regeneration from epicotyl explants of an important ethnomedicinal plant. *Caesalpinia bonduca* (L.) Roxb. National seminar on Ecotechnologies and Evergreen Revolution (Green tech-2009) held at Department of Botany, St. Marys College, Thrissur.
6. **Meena K Cheruvathur**, Najeeb N, Thomas TD 2010. Somatic embryogenesis and synthetic seed production from *Hemidesmus indicus* (L.) R. BR. an important medicinal plant. XX Annual conference of IAAT and international symposium on Taxonomy, Plant diversity and Conservation held at Bharathiar University, Coimbatore.
7. **Meena K Cheruvathur**, Thomas TD, 2010. *In vitro* induction of shoots from

internodal segments of an important terrestrial medicinal orchid *Malaxisaccuminata* D. Don. International conference on Folk and herbal medicine held at University college of science, Mohanlal Sukhadia University, Udaipur, Rajasthan.

8. **Meena K Cheruvathur** Thomas TD, 2011. A protocol for plant regeneration in *Pseudarthriaviscida* (L.) Wright and Arn., via cotyledonary node and leaf derived calli. International symposium on Genomics of crops, Medicinal plants and Microbes held at Department of Botany, Kerala University, Kariavattom, Thiruvananthapuram.
9. **Meena K Cheruvathur**, G. Krishnakumar and T.D. Thomas 2011. Somatic embryogenesis, synthetic seed production and assessment of clonal fidelity by RAPD analysis in *in vitro* propagated plantlets from *Rhinacanthus nasutus* (L.) KURZ., a highly valuable ethnomedicinal plant. National seminar on Bioprospecting of plant genetic resources of Western Ghats held at Post Graduate and Research Department of Botany, St. Thomas College, Pala.
10. **Meena K Cheruvathur** 2014. Phytochemical analysis of *in vitro* and *in vivo* roots of *Calotropis gigantea*. National seminar on Uses of Biotechnological tools for bioresources Conservation held at Carmel college, Mala (20-21 – February, 2014)
11. **Meena K Cheruvathur** 2014. Production of valuable secondary metabolites from leaves and callus cultures of *Momordica dioica* Roxb. Ex Wild. National seminar on Uses of Biotechnological tools for bioresources Conservation held at Carmel college, Mala (20-21 – February, 2014).
12. **Meena K Cheruvathur**, 2014. "Naattarivukaludesasthreeyatha". Desi Inter National folklore seminar and festival on traditional knowledge on 30-31 – May -2014 at Kerala Sahithya academy hall, Thrissur.
13. **Meena K Cheruvathur**, 2014. *Centella asiatica* – A potential brain tonic. Interdisciplinary International one day Seminar " Bona Salus" – a rendezvous on edging drifts in psychology and educational dimensions in the young populace held on Little flower college, Guruvayoor (13-6-2014).
14. Meena K. Cheruvathur, T. Dennis Thomas, 2014, " *In vitro* production of bio active secondary metabolites from leaf derived callus cultures of *Rhinacanthus nasutus* (Linn) kurz." In International seminar - "Asian Plant science Conference" - organised by Society For Applied Biotechnology, Biotechnology society of Nepal, Association For The Advancement Of Biodiversity Science and Euratian Academy of Environmental Sciences, held at Hotel Nirvana, Sidhartha Nagar, bhairaha, Lumbini, Nepal on 1-3 November, 2014.
15. C. V. Sheeba, Meena K. Cheruvathur,; 2014, Ethnomedicinal practices of tribes of Muthanga, Wayanad District of Kerala in International seminar, - "Asian Plant science Conference" organised by Society For Applied Biotechnology, Biotechnology society of Nepal, Association For The Advancement Of Biodiversity Science and Euratian Academy of Environmental Sciences, held at Hotel Nirvana, Sidhartha Nagar, bhairaha, Lumbini, Nepal on 1-3 november, 2014.

### **PARTICIPATION IN SEMINARS/SYMPOSIA/CONFERENCES**

1. National Conference on Modern Trends in Plant *in vitro* Biology held at Department of Plant Science, School of Life Sciences, Bharathidasan University, Tiruchirappalli, Tamil Nadu (5-6/1/09).
2. National seminar on Imperatives for Sustainable Development held at Department of Botany and Chemistry, Carmel College, Mala, Thrissur (25-26/2/09).
3. National seminar on Ecotechnologies and Evergreen Revolution (Green tech-2009) held at Department of Botany, St. Marys College, Thrissur (4-6/3/09).
4. XX Annual conference of IAAT and international symposium on Taxonomy, Plant diversity and Conservation held at Bharathiar University, Coimbatore (26-28/11/10).
5. In Vitro and in vivo methods in bioresource Conservation. Fifteen days workshop in The Rapinat and Centre for molecular systematic, St. Joseph's College, Tiruchirappalli-620 002, Tamilnadu (17/2/10 to 2/3/10)
6. National seminar on Bioprospecting of plant genetic resources of Western Ghats held at Post Graduate and Research Department of Botany, St. Thomas College, Pala (22-23/11/11).
7. Xavier Board of Higher Education, Regional Meet, 2012 Of Kerala North Region held at Nirmala College, Muvattupuzha (27-10-12).
8. Hands on workshop on DNA Barcoding and Finger Printing held at KKTM College, Pullut, Kodungallur (7-2-13, 8-2-13).
9. Thrissur- A Kalaidoscopic View held at St. Marys College, Thrissur (14-15/2/12).
10. Xavier Board Of Higher Education in India, Kerala north Regional Meet, 2013 of Kerala North Region held at Vimala college, Cheroor
11. Faculty Development Programme Held in Mariyan College, Kuttikkanam on October , 2013
12. UGC Sponsored National Seminar on Uses of Biotechnological tools for Bio resources Conservation held at Carmel college, Mala (20-21 – February, 2014).
13. UGC Sponsored Orientation programme held at Academic Staff College, Calicut from March 1 to 28, 2014.
14. UGC sponsored National seminar on Frontiers in Green Chemistry held at St. Marys College, Thrissur (24-25/7/14).
15. NAAC Sponsored National Seminar on Recent trends in higher education policies: Scope and Challenges in governance held at St. Marys College, Thrissur (26-9-14).
16. Desi Inter National folklore seminar and festival on traditional knowledge on 30-31 – May -2014 at Kerala Sahithya academy hall, Thrissur.
17. Interdisciplinary International one day Seminar “ Bona Salus” – a rendezvous on edging drifts in psychology and educational dimensions in the young populace held on Little flower college, Guruvayoor (13-6-2014).
18. International seminar – “Asian Plant science Conference” - organised by Society For Applied Biotechnology, Biotechnology society of Nepal, Association For The Advancement Of Biodiversity Science and Euratian

Academy of Environmental Sciences, held at Hotel Nirvana, Sidhartha Nagar, bhairaha, Lumbini, Nepal on 1-3 November, 2014.

#### **Other details**

1. Gave a talk on “**BIODIVERSITY OF PLANTS**” to students, Teachers Training Institute, Pavaratty, Thrissur
2. Inaugurated the World Environmental Day – June 5 –celebration in Sacred Heart Convent Girls High School, Thrissur and delivered a talk on the above topic (2013).
3. Gave a talk on “gene transfer strategies in plants” and demonstrated Agrobacterium mediated gene transfer strategies in plants” in UGC Sponsored National Seminar on Uses of Biotechnological tools for Bio resources Conservation held at Carmel college, Mala (20-21 – February, 2014).
4. Gave talk on biopesticides to St. Mary’s school Students, Ollur
5. Consultation to School projects, PG projects etc.