

**PG AND RESEARCH DEPARTMENT OF BOTANY
NALLAMUTHU GOUNDER MAHALINGAM COLLEGE, POLLACHI - 01.**

DEPARTMENT ACTIVITIES (June 2018 - May 2019)

Seminars/symposia/workshops Organized

1. PG and Research Department of Botany, NGM College has conducted the One day National level training - Workshop on, Plant taxonomy, organized by PG and Research Department of Botany October 5th & 6th 2018.



2. PG and research Department of Botany, NGM College has conducted the one day workshop on Foldscope and its applications, organized by PG and Research Department of Botany, February 5th 2019. Chief Guest Dr. H. Rahana Banu, Assistant Professor, Department of Botany, PSGR Krishnammal College, Coimbatore.



3. Department of Botany (UG & PG), Department of Zoology and Green Cell of NGM College has jointly organized National science day celebration with special lecture on Nature conservation delivered by Ms. V. Kiruba Nandhini Salim Ali Institution for Ornithology on 28th February 2019.



4. The staff members and students of PG and research Department of Botany, NGM College has conducted the one day workshop on Hands on Training in Plant Biotechnology on 6th March 2019.

Association Guest lecture organized

1. PG and Research Department of Botany, NGM College has organized the association guest lecture entitled “Current and future trends in Molecular Biology and Biotechnology” delivered by Dr. R. Ragunathan, Director, Centre for Bioscience & Nanoscience Research, Coimbatore at Vivekanandar Arangam on 20th August 2018.



Staff Awards and honor

1. Ms. D. Sowmiya has successfully completed online NPTEL online course “Organic Farming for Sustainable Agricultural Production” (8 week course) Aug-Sep2018.
2. Dr. P. Sathishkumar has awarded as mentor for the NPTEL online course “Organic Farming for Sustainable Agricultural Production” (8 week course) Aug-Sep2018.
3. Dr. R. Rakkimuthu, has successfully completed online NPTEL online course “Human Molecular Genetics, (4 weeks course) Feb-Mar 2019.
4. Dr. P. Sathishkumar, qualified the online exam NPTEL with the distinction of Elite silver (88%) for Wild life Ecology (12 week courses), Jan-Apr 2019.
5. Dr. A. M. Anandakumar has successfully completed online NPTEL online course Wild life Ecology (12 week courses), Jan-Apr 2019.
6. Dr. R. Rakkimuthu, has awarded as member of MHRD’s Innovation Cell at Nallamuthu Gounder Mahalingam College, Pollachi for the academic year 2018-19.

Staff Participation in Seminars/symposia/workshops

1. Ms. D. Sowmiya has participated in Science academies lecture workshop on “Recent trends in microbiology and biotechnology”, Organized by Department of Biotechnology, Karpagam Academy of higher education, Deemed University, Coimbatore on 27th&28th June2018.
2. Dr. R. Rakkimuthu, Dr. P. Sathishkumar, Dr. A. M. Anandakumar and Ms. D. Sowmiya was participated in one day state level workshop on “Spectral data interpretation and chromatographic techniques” Organized by PG Department of Chemistry, NGM College, Pollachi held on 26th July2018.
3. Dr. R. Rakkimuthu has participated in the International Seminar on Waste Management organized by National Centre of Excellence (MHRD), Thiagarajar College, Madurai and Nottingham Trent University, United Kingdom held on 03rd September 2018.
4. Dr. R. Rakkimuthu, Dr. P. Sathishkumar, Dr. A. M. Anandakumar and Ms. D. Sowmiya was participated in one day National level workshop on “Sustainable Agriculture” Organized by PG Department of Zoology, NGM College, Pollachi held on 3rd October 2018.
5. Ms. D. Sowmiya was participated in one day integrated workshop on Advance Biotechnology Techniques - Module 3: Detection of Heavy metals by atomic absorption spectroscopy, held at Central Instrumentation Facility, Karpagam Academy of Higher Education, Coimbatore on February 14 - 15, 2019.

6. Dr. P. Sathishkumar and Dr. A.M. Anandakumar has participated in the three days training programme on “Training of Teachers (ToT) for student induction programme (SIP)” organized by University Grants Commission, South Eastern Regional Office, Hyderabad, on 16th to 18th may 2019.

Staff Presentations (Poster/oral) in Seminars/symposia/workshops/conference

1. Dr. R. Rakkimuthu has presented a paper entitled “Studies on the antioxidant activity of the fern *Hemionitis arifolia* (Burm.) Moore” in one day National conference on Innovations in Biochemical and Food Technology organized by Department of Biotechnology, Kumaraguru College of Technology, Coimbatore in association with Institute of Engineers Student Chapter, KCT, on 2nd February 2019.
2. Dr. P. Sathishkumar has presented a paper entitled “Quantitative phytochemical screening of *Filicium decipiens* Wight & Arn.” leaves, in one day National conference on Innovations in Biochemical and Food Technology organized by Department of Biotechnology, Kumaraguru College of Technology, Coimbatore in association with Institute of Engineers Student Chapter, KCT, on 2nd February 2019.
3. Dr. A. M. Anandakumar has presented a paper entitled “Eco-friendly mosquito repellent fabric using dye derived from *Curcuma aromatic* Salisb.” in one day National conference on Innovations in Biochemical and Food Technology organized by Department of Biotechnology, Kumaraguru College of Technology, Coimbatore in association with Institute of Engineers Student Chapter, KCT, on 2nd February 2019.
4. Ms. D. Sowmiya has presented a paper entitled „Effect of silver nanoparticles of *Ulva fasciata* in germination of selected pulses, in one day National conference on Innovations in Biochemical and Food Technology organized by Department of Biotechnology, Kumaraguru College of Technology, Coimbatore in association with Institute of Engineers Student Chapter, KCT, on 2nd February 2019.

Publications

1. R. Rakkimuthu, M. Muthukumar, S. Aarthi and S. Nishana, 2018. Antimicrobial activity of methanolic tuber extract of *Cyperus rotundus* L., *World Journal of Pharmaceutical Research*, Vol. 8, Issue 1, 1155-1162.
2. A. M. Anandakumar, S. Kiruthika, P. SathishKumar, 2018. Allelopathic effect of some common weeds on two important crops *Zea mays* L. and *Vigna radiata*(L.) Wilczek., *JETIR*, Volume 5, Issue 12, 291 -291.
3. A. M. Anandakumar, G. Shanmugapriya, P. Sathishkumar, 2018. Evaluation of cytotoxic effect of phoskill on the root tips of *Allium cepa* L. *World Journal of Pharmaceutical Research*, Vol. 7, Issue 13, 880-886.

4. Sathishkumar P., Nancy S. And Anandakumar A.M, 2019. Evaluation of Anti-Dandruff Activity of Poly Herbal Hair Oil against the Fungus *Malassezia Furfur*, *IOSR Journal of Biotechnology and Biochemistry (IOSR-JBB)*, ISSN: 2455-264X, (5) 1 :01-06.
5. R. Rakkimuthu, P. Naveenraj, M. Susila, A. Sindhusa and R. Indu, 2019. Studies on the antioxidant activity of the fern *Hemionitis arifolia*(Burm.) Moore. *American International Journal of Research in Science, Technology, Engineering & Mathematics*, Special issue of National Conference on Innovations in Bio, Chemical and Food Technology (IBCFT -2019), February 02, pp.193-198.
6. P. Sathishkumar, D. Kaviya, R. Rakkimuthu, A.M. Anandakumar, D. Sowmiya and S. Sabirafathima, 2019. 'Quantitative phytochemical screening of *Filicium decipiens* Wight & Arn., *American International Journal of Research in Science, Technology, Engineering & Mathematics*, Special issue of National Conference on Innovations in Bio, Chemical and Food Technology (IBCFT -2019), February 02, pp. 208-212.
7. D. Sowmiya, R. Rakkimuthu, P. Sathishkumar, A. M. Anandakumar, S. Sinju, B. Vanisree, 2019. Effect of silver nanoparticles of *Ulva fasciata* in germination of selected pulses, *American International Journal of Research in Science, Technology, Engineering & Mathematics*, Special issue of National Conference on Innovations in Bio, Chemical and Food Technology (IBCFT -2019), February 02, pp.204-207.
8. A.M. Anandakumar , K. Anvar, R. Rakkimuthu, P. Sathishkumar, D. Sowmiya, J. Alahupreeti, 2019. Eco- friendly mosquito repellent fabric using dye derived from *Curcuma aromatic* Salisb, *American International Journal of Research in Science, Technology, Engineering & Mathematics*, Special issue of National Conference on Innovations in Bio, Chemical and Food Technology (IBCFT -2019), February 02, pp. 68- 72.

Staff Project Proposal Submitted

1. Dr. R. Rakkimuthu has submitted the project entitled "Screening of bioactive compounds from the fern *Cheilanthes mysorensis* Wall. In habiting lower Western Ghats, Tamilnadu to Tamil Nadu State Council for Science and Technology, Chennai. on February 2019, Under Science And Technology Project Scheme - 2019 (Rs 312500.00).
2. Dr. P. Sathishkumar has submitted the project entitled "Production of biodegradable mulch film – an alternative for PE plastic mulch, Tamilnadu to Tamil Nadu State Council for Science and Technology, Chennai. on February 2019, Under Science And Technology Project Scheme - 2019 (Rs2,00,000.00).

3. Dr. A.M. Anandakumar has submitted the project entitled “Production Of An Eco-Friendly Bio- Control Compounds From Endophytic Fungus Of Some Important Plants Of Western Ghats, Tamilnadu India., Tamilnadu to Tamil Nadu State Council for Science and Technology, Chennai on February 2019, Under Science And Technology Project Scheme - 2019 (Rs 2,00,000.00).
4. Ms. D. Sowmiya has submitted the project entitled “**Antihyperlipidemic activity of virgin coconut oil (VCO) extracted from pollachi coconuts** to Tamil Nadu State Council for Science and Technology, Chennai on February 2019, Under Science And Technology Project Scheme - 2019 (Rs3,73,000.00).
5. Dr. R. Rakkimuthu has submitted the project entitled “Effect of Herbal Spray for Coconut Copra Process, Storage and Post harvest Disease Management” to DST Technology Development Program AgroTech Scheme 18.3.2019. (Rs1155000.00).

Student Project Presentations

1. Ms. S. Nancy, Ms. R. N ishanthini and Mr. D. Vinothkumar has presented the project findings entitled “Evaluation of anti- dandruff activity of poly herbal hair oil against the fungus *Malassezia*sp.” to Tamil Nadu State Council for Science and Technology, at National College, Tiruchirappallion 20th and 21st July 2018.
2. Mr. K. Anvar, Ms. S. K iruthika and Ms. G. Shanmugapriya has presented the project findings entitled “Fabrication of mosquito repellent cotton textile using eco-friendly dye derived from *Curcuma aromatic* Salisb.” to Tamil Nadu State Council for Science and Technology at National College, Tiruchirappallion 20th and 21st July 2018.

Student Project Proposal Submitted (Aug-2018)

1. Mr. K. Sreenivasan has submitted the project proposal entitled “Recycling of organic wastes by cellulolytic bacteria” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. R. Rakkimuthu.
2. Ms. S. Ramya and Ms. R. Nithyakamachi “Evaluation and formulation of polyherbal ointment against bovine mastitis disease of cow” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. R. Rakkimuthu.
3. Ms. S. Sinju has submitted the project proposal entitled “Green synthesis and characterization of nanostructured ZnO thin films using *Citrus limetta* (Sweet lime) peel extract” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. R. Rakkimuthu.

4. Ms. R. Indu and Ms. S. Sabira fathima has submitted the project proposal entitled “Antifungal herbal spray for Coconut copra process and production” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. R. Rakkimuthu.
5. Mr. G. Chokkalingam, Mr. B. Tamil selvanand Mrs. M. Gayathri has submitted the project proposal entitled “Production of degradable bio plastics from invasive alienplants in Anamalais, The Western Ghats” toTamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. P.Sathishkumar.
6. Ms. Inmukyshyamala and Mr. V. Vinithdevahas submitted the project proposal entitled “Evaluation of aromatic spices and vegetable biomass for its anti-diabetic properties using yeast cells ” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. P.Sathishkumar.
6. Ms. A. Sruthi has submitted the project proposal entitled “Cad - based fabric designing using botanical motifs” toTamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. P.Sathishkumar.
7. Mr. R. Ramanathan, Mr. P. Arunkumarand Mr. N. Sasikumarhas submitted the project proposal entitled “Making of novel Eco-friendly phyto-herbicide using allelochemicals of some plants ”to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. A.M.Anandakumar.
8. Ms. Alahupreeti, Ms. K. Sowmiyadevi and Ms. D. Rathika has submitted the project proposal entitled “Evaluation of artificial and natural food colours on the chromosomal behavior of root tips of *Allium cepa* L.” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Dr. A.M.Anandakumar.
9. Mr. K. Arunkumar and Mr. K. Tamil selvan has submitted the project proposal entitled “Enhancing thermal comfort by mimicking the adaptive techniques of Lichens and mosses” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Ms. D.Sowmiya.
10. Ms. M. Ganeshanuciyaidevi and Ms. K. Kiruthikahas submitted the project proposal entitled “Formulation and evaluation of polyherbal powder shampoo in anti dandruff treatment” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Ms. D.Sowmiya.
11. Ms. B. Vanisree and Mr. R. Kanagaraj has submitted the project proposal entitled “Glycemic profiling and prebiotic potential of culinary spices” to Tamil Nadu State Council for Science and Technology, Chennai, under the guidance of Ms. D. Sowmiya.

TNSCST Sanctioned StudentProject

1. Production of degradable bio plastics from invasive alien plants in Anamalais, the Western Ghats by Mr. G. Chokkalingam, Mr. B. Tamil selvanand Mrs. M. Gayathriduring the period of November 2018 to April 2019, under the guidance of Dr. P. Sathishkumar. (Rs 7500).

Student participation:

1. First M.Sc., Botany student R. Kanagaraj was participated in STPIB “18 during May 24- June 13, 2018 organized by the academy of sciences Chennai and CAS in Botany, University of Madras and sponsored by the Science city, Government of Tamilnadu, Chennai.
2. First M.Sc., Botany student G. Chokkalingamwascompleting the “Medical coding internship programme” from 04.06.2018 to10.06.2018 at Coimbatore under the sponsorship of “Thought Flows”, Saravanampatti,Coimbatore.
3. Second M.Sc., Botany students was participated in Science academies lecture workshop on “Recent trends in microbiology and biotechnology”, Organized by Department of Biotechnology, Karpagam Academy of higher education, Deemed University, Coimbatore on 27th& 28thJune2018.
4. First M.Sc., Botany students M. Meenambigai, K. Pavithra and Aleena B. Eluvanthingal was participated in one day state level workshop on „Special data interpretation and chromatographic techniques“ Organized by PG Department of Chemistry, NGM College, Pollachi held on 26th July2018.
5. First and second M.Sc., Botany students M. Meenambigai, K. Pavithra, P.Priyadharshini, R. Kanagaraj and K. Sreenivasanwas participated in the International seminar on Waste Management organized by National Centre of Excellence (MHRD), Thiagarajar College and Nottingham Trent University, United Kingdom held on 03rd September 2018.
6. Students of PG and research Department of Botany, NGM College has participated the One day National level training - workshop on, Plant taxonomy, organized by PG and Research Department of Botany on October5th&6th 2018.

7. Second M.Sc., Botany students Tamilselvan K was participated in the National Training workshop on Seri culture techniques (Central sector scheme 2018-2019) organized by Tamilnadu Sericulture department, Sericulture Training center, Hosur from 03rd to 07th December 2018.
8. Second M.Sc., Botany students were participated in Three days entrepreneurship awareness camp, sponsored by NSTEDB, DST, Govt. of India, Nodal Agency, EDII, Ahmedabad, Gujarat in association with CED, Madurai, organized by Bharathiyar university arts and science college, Pollachi from 20.12.2018 to 22.12.2018.
9. Second M.Sc., Botany students K, Arunkumar and N. Sasikumar were participated in two days National seminar cum medicinal plant exhibition on Complementary and alternative Indian system of medicine on 1st and 2nd February 2019. Sponsored by DBT Star College Scheme, New Delhi jointly organized by the department of Botany and Bioinformatics, Nirmala College for Women, Coimbatore and Bharatheeya Naatu vaidhya Samithy, Trivandrum.
10. Second M.Sc., Botany students S. Sabirafathima, R. Indu, J. Alagupreethi and B. Vanisri were participated in one day National conference on Innovations in Biochemical and Food Technology organized by Department of Biotechnology, Kumaraguru College of Technology, Coimbatore in association with Institute of Engineers Student Chapter, KCT, on 2nd February 2019.
11. Second M.Sc., Botany students K. Pavithra, P.V. Akhila and J. Logeswary were participated in one day workshop under DBT Star College Scheme on “Intercollegiate workshop on protein and nucleic acid quantification with nanophotometer”, conducted by the Department of Biotechnology, Dr. N. G. P Arts and Science College, Coimbatore (19.02.2019).

Broad of Studies

1. Broad of studies conducted on 16.02.2018 to frame Syllabi for the M.Sc., Botany course for the academic year of 2019-2021.

Field visits organized

1. Dr. R. Rakkimuthu, Dr. P. Sathishkumar, Dr. A. M. Anandakumar and Ms. D. Sowmiya accompanied PG Botany students for a field visit to Gopalswamy hills, Pollachi on 21th July 2018.
2. Dr. R. Rakkimuthu, Dr. P. Sathishkumar accompanied I PG Botany students for a field visit to Yercaud Hills, Selamon 16th August 2018.

3. Dr. R. Rakkimuthu, Dr. P. Sathishkumar, Dr. A. M. Anandakumar and Ms. D. Sowmiya accompanied PG Botany students for a field visit to Thia shola, Doddabetta, Ooty on 26th September 2018.
4. Dr. R. Rakkimuthu, Dr. P. Sathishkumar, Dr. A. M. Anandakumar and Ms. D. Sowmiya accompanied PG Botany students for a institutional visit to Benchmark Tea Factory, Ooty on 27th September 2018.
5. Dr. R. Rakkimuthu, Dr. P. Sathishkumar and Dr. A. M. Anandakumar accompanied students of PG and research Department of Botany, NGM College and Students of various Colleges for a field visit to Gopalswamy hills, in connection with One day National level training - workshop on, plant taxonomy, organized by PG and Research Department of Botany October 5th & 6th 2018.
6. Dr. P. Sathishkumar, Dr. A. M. Anandakumar and Ms. D. Sowmiya accompanied students of PG and Research Department of Botany, NGM College for a field cum institutional visit to Central Institute for Cotton Research (RS) and Sugarcane Breeding Research Institute, Coimbatore on 04th December 2018.