

Three Day National Workshop on Research Data Analysis, Application of GIS and Research Writing in Ecology, Environment, Conservation Biology & Angiosperm Taxonomy

23rd - 25th October 2019

REPORT



**Research Department of Botany
MES Asmabi College, P. Vemballur**



Western Ghats Hornbill Foundation

Kerala GIS Community

3 Days National workshop on Research data analysis Application of GIS and Research writing in Ecology Environment Conservation biology and Angiosperm Taxonomy

The three-day workshop was organised for the researchers and students to aspire to research as a passion. It was organised at MES Asmabi College from October 23–25, 2019. This was organised jointly by the Research Department of Botany at MES Asmabi College and the Western Ghats Hornbill Foundation, with support from the Kerala GIS Community. The workshop aimed to provide participants with a platform to enhance their research skills and foster collaboration among researchers and students in the field of botany and GIS technology.

The training on Ecology, Environment Conservation Biology, and Angiosperm Taxonomy was in the fields of 1. research data analysis, 2. application of GIS, and 3. research writing. The workshop was inaugurated by Dr. N. Sasidharan, Scientist, KFRI. The workshop was conducted over three days based on research data analysis and the application of GIS in research writing.



The programme had both theoretical and technical sessions in the areas of life science, forestry, conservation biology, environmental science, and social science. Dr. N. Sasidharan led the technical discussion on the development of angiosperm taxonomy and its applications in GIS technology. Dr. Sasidharan shared his expertise on the latest techniques and tools used in angiosperm taxonomy, highlighting the importance of accurate classification and identification for conservation efforts.

Ms. Aswini, CGIST on Fundamentals of GIS and its Application in Ecology and Conservation, discussed the fundamental principles of GIS and its application in the field of ecology and conservation. She emphasised the role of GIS in analysing spatial data and making informed decisions for effective conservation planning. to help participants develop a comprehensive understanding of the intersection between botany and GIS technology. Through hands-on exercises and interactive discussions, participants gained practical knowledge on how to analyse research data, utilise GIS tools for mapping and spatial analysis, and effectively communicate their findings through research writing. This training not only equipped participants with valuable skills but also encouraged networking and collaboration among researchers and students in the field of botany and GIS technology.

The session provided valuable insights into the integration of technology and science for better understanding and management of ecosystems. Dr. Amitha Bachan K.H. provided a technical session on research designs on tropical vegetation dynamics and the application of GIS. Highlighted the importance of using GIS to analyse changes in vegetation patterns over time and its impact on ecosystem dynamics. Additionally, Dr. Bachan discussed how GIS can be used to identify priority areas for conservation efforts, such as by mapping habitat corridors and identifying areas at risk of deforestation.

A total of 21 students and niche teachers participated in the training. Participants gained hands-on experience using GIS software to analyse and map plant species distribution, enhancing their understanding of the intersection between botany and GIS technology. The workshop was a great success and well supported by the students, researchers, and professionals with interdisciplinary expertise in conservation and environmental science . The participants were able to apply their newly acquired skills in real-world scenarios, such as identifying areas where deforestation is likely to occur and proposing strategies for conservation efforts. This collaboration between students, researchers, and professionals fostered a rich exchange of knowledge and ideas, further advancing the field of conservation and environmental science.

ABOUT

The workshop is being organized by Research Department of Botany, MES Asmabi College, P. Vemballur in collaboration with Western Ghats Hornbill Foundation and Kerala GIS Community. This includes theory sessions and hands on training on the research areas of Life Science, forestry, conservation biology, Environmental Science and social science.

The hands on training will be given for selected 30 candidates on Analysis of ecological and vegetation data, use of GIS Mapping in conservation and environmental studies, Advancements in Plant taxonomy including nomenclature and illustrations and Research writing.

This will be useful for students and professionals seeking interdisciplinary expertise in conservation and environment science especially masters and doctoral students.

This is being organized as part of the Golden Jubilee celebrations of MES Asmabi College, P. Vemballur and a curtain raiser of short-term courses such as 1. Advanced GIS and Remote Sensing for Ecology, Environment and Conservation, 2. Ecosystem Dynamics, Climate Change and Ecological Monitoring (specialization of Western Ghats and Himalayas), 3. Ecorestoration and sustainable Management of Tropical Ecosystems, 4. Conservation legislations and Management of Forest Ecosystems, 5. Indigenous Rights and Inclusive Conservation in association with Western Ghats Hornbill Foundation, Kerala GIS Community, Christ university Bangalore and UPSA- HRDC, Nainital.

REGISTRATION

The seats for general session (Day 1) is open to a wide registered audience, but day 2 & 3 are restricted to 30 participants only on first come first served basis.

CATEGORY	FEES	LAST DATE
For general session - seminar only	Rs. 200/	- 21/10/2019
Entire workshop (students)	Rs. 800/	- 15/10/2019
Entire workshop (Professionals)	Rs. 1500/	- 15/10/2019

For registration, please visit - www.hornbillfoundation.org
copy and paste this link - <https://forms.gle/bVnF7h7nLrY9zHH17>

Patrons

Dr. Ajims P. Muhammad
Principal
Mr. Salim Arakkal, Secretary & Correspondent.
Dr. K.M. Mohamed Nasser
HoD, Research Dept. of Botany
MES Asmabi College
Convener
Dr. K. H Amitha Bachan

Joint conveners

Mr. Anoop Chandran
Mrs. Shermi CB,
Dr. Girija T.P.
Mrs. Anitha K.T.
Assi. Convener
Sreehari S Nair
8547394911
Pooja Suresh
9645661186



23 - 25
OCTOBER 2019

3 Day National Workshop For Research Scholars & Students

@ MES Asmabi College, P. Vemballur,
Kodungallur, Kerala, India.

Research, Data analysis, Application of GIS
and Research Writing In Ecology, Environment,
Conservation Biology
& Angiosperm Taxonomy

Research Department of Botany
MES Asmabi College
P. Vemballur

Western Ghats Hornbill Foundation
&
Kerala GIS Community



PROGRAMME SCHEDULE

THEORETICAL SESSION

23RD OCTOBER 2019 - DAY 1

INAUGURATION & KEYNOTE TALK

CONSERVATION RESEARCH IN THE CHANGING CLIMATE

Dr. PRIYADARSANAN DHARMAARAJAN
SENIOR FELLOW & PROGRAMME LEADER (ECOSYSTEMS AND GLOBAL CHANGE)
ATREE, BANGALORE.

ADVANCEMENTS IN TROPICAL ANGIOSPERM TAXONOMY

DR. N. SASIDHARAN
DEPUTY DIRECTOR REGIONAL
NATIONAL MEDICINAL PLANT BOARD, SOUTHERN REGION, KFRI.

FUNDAMENTALS OF GIS AND ITS APPLICATION IN ECOLOGY AND CONSERVATION BIOLOGY

MS. ASWINI A
SENIOR FACULTY, CGIT & KERALA GIS COMMUNITY

TROPICAL VEGETATION DYNAMICS : ANALYSIS AND INTERPRETATION

DR. K. H AMITHA BACHAN
ASSI. PROF., RESEARCH GUIDE, (MEMBER IUCN SPECIES SPECIALIST GROUP)
RESEARCH DEPT. OF BOTANY

The participants will get an opportunity to get preferences in certificate / mooc/ interships / training courses useful for completion of their research and publications

TECHNICAL SESSIONS 24TH OCTOBER 2019

9.30 AM - 12.30 PM
GIS APPLICATION IN ECOLOGY AND CONSERVATION BIOLOGY
MR. ANOOP CHANDRAN/ MS. ASWINI A
KERALA GIS COMMUNITY

12.30 PM - 1.30 PM LUNCH BREAK

1.30 PM - 4.30 PM
METHODS OF VEGETATION - ECOLOGICAL DATA ANALYSIS
DR. K. H AMITHA BACHAN

25TH OCTOBER 2019

9.30 PM - 12.30 PM (PARALLEL SESSIONS)
VENUE -1
ESSENTIALS OF ADVANCED ANGIOSPERM TAXONOMY
(NOMENCLATURE PROBLEMS, TAXONOMIC KEYS & ILLUSTRATIONS)
DR. C. N. SUNIL
ASSO. PROF. & RESEARCH GUIDE (RTD.)

APPLICATION OF NUMERICAL TAXONOMY AND PHYLOGENY
MR. SREEHARI S. NAIR
FELLOW, HORNBILL FOUNDATION

VENUE -2
ESSENTIAL STATISTICS FOR ECOLOGY USING SPSS
DR. SHAFEEER P.S.
DEPT. OF COMMERCE, MES ASMABI COLLEGE.
12.30 PM - 1.30 PM LUNCH BREAK
1.30 PM - 4.30 PM

INTERPRETATION OF DATA AND RESEARCH WRITING
DR. K.H. AMITHA BACHAN





















MES Asmabi College is a NAAC Accredited Institution with its Research Department of Botany specialized in systematics and ecology of tropical wetlands and forests.
www.mesasamabi.com





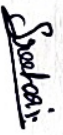





Western Ghats Hornbill Foundation focus primarily indigenous community based conservation, monitoring and ecorestoration of on tropical forests, riparian ecosystems, hornbills and river basins
www.hornbillfoundation.org

List of Participants
3 Day national workshop for Research scholars and Students
23rd to 25th October 2019

Sl. No.	Name	Email	Organization	Designation	Institutional Address	Signature
1	Nazeema M K	nas10814@gmail.com	MES Kalladi College, Mannarkkad	Faculties Doing Research	MES Kalladi College, Mannarkkad College Post Mannarkkad Palakkad	
2	Vivek Chandran A	avivekchandran@gmail.com	Department of Geology and Environmental Science, Christ College, Irinjalakuda	PhD Student	Department of Geology and Environmental Science, Christ College, Irinjalakuda, Thrissur	
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21	C.T.Anitha	anithasajeev913@gmail.com	Sree Narayana College Natika	Others- employed interested in Research	Assistant Professor, Dept. Of Botany, S. N. College Natika	
22	Sheeja P.Parayil	shjparayil@gmail.com	SNCCollege, Natika	Faculties Doing Research	Asst. Prof. Dept of Botany SNCCollege, Natika	
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