



S.G.A. GOVERNMENT DEGREE COLLEGE (A)

(Re-Accredited with NAAC "A" Grade with CGPA 3.13)

Affiliated to Andhra University

YELLAMANCHILI, ANAKAPALLI DIST., ANDHRA PRADESH



Report on Work shop

Organized by

Departments of Botany & Zoology

Title: Research methodology in Biology

Departments of Botany and Zoology had organized Workshop on “**Research Methodology in Biology**” with emphasis on Research Aptitude on 12th July 2024. The workshop was focused on providing valuable insights into the field of research methodology, which is essential for conducting scientific investigations effectively. It highlighted the importance of formulating research questions, designing appropriate experiments, collecting and analyzing data, and drawing meaningful conclusions

The objectives of the workshop were

- to develop knowledge on the fundamentals of research
- to build knowledge on research design, application & data analysis
- To equip the students with recent advances in research methodology
- Tools and Techniques used in Research work
- To enlighten the students about importance of research in nation building



SGA GOVERNMENT DEGREE COLLEGE(A) YELLAMNACHILI

ONE DAY STATE LEVEL WORKSHOP ON RESEARCH METHODOLOGY IN BIOLOGY

Highlights:

- Introduction to research methodology
- Selection of available techniques for various research questions
- Recent trends in technological development

Resource Persons



Dr. NSN Swamy
Principal, GDC
Amadalavalasa



Dr. Samuel David Raj.T
Lecturer in Zoology
Dr. V. S. K. D.C
Visakhapatnam



Dr. B. Chandramouli
Lecturer in Botany
Dr. V. S. K. D.C
Visakhapatnam



Dr. Y. Polinaidu
Lecturer in Zoology
GDC (Men)
Srikakulam



KVGK VARA Prasad
Lecturer in Botany
GDC (A), Tuni



**Organized by
Departments of Botany & Zoology**

Committee Members



Chairman

Dr. P. Chandrasekhar

Principal

SGA Govt. Degree College, Yellamanchili



Convenor

Dr. K. Vijaya Lakshmi

Head of Department – Botany



Co-Ordinator

Dr. K. Sujatha

Lecturer in Zoology



Organizing Secretary

Dr. A. Arjuna Apparao

Head of Department – Zoology



Member

V. Tejeswini

Guest Lecturer in Botany

Session I: Inaugural Session: (10.30AM to 11.00AM)

The program started at 10:30 pm with the Welcoming of Guests and participants with Saraswati Vandana and lighting of Lamp. The welcome address was given by the Dr P.Chandra Sekhar Principal, SGA Government Degree College (A), and also highlighted the importance of uplifting the practice of research in the Academic Process followed by the address given by Dr. K. Vijayalakshmi Head of Department of Botany who explained the importance of the research development process and the importance of research

Dr. A. Arjuna Apparao Head of Department of Zoology highlighted the importance of making a strong conceptual groundwork for Research Design. Dr.K. Sujatha, Lecturer in Zoology enlightened the participants and emphasized on the importance and contribution of research in the development of Nation. The Students and staff were benefitted immensely from this workshop. The workshop motivated the students to develop research aptitude.



Session 2: (11.00 AM to 12.00 PM)

TOPIC: METHODOLOGY FOR ETHNOBOTANICAL STUDIES

Resource person : Dr. NSN Swamy

Principal, GDC, Amadalavalasa

Dr. NSN Swamy began the First session of the workshop with basics of Ethnobotanical Studies. He presented different tools and Methods required Ethno botanical research. He focused on the Extensive ethnobotanical explorations are to be conducted in selected tribal pockets with good forest cover and the data to be verified and cross checked with atleast 3-4 informants. He also emphasized that the voucher specimens are to be preserved for the further examination/adjudication. And the Photographs and audio-visual evidence are to be carefully procured. He suggested that Taxonomical enumeration, Data analysis, Results/Discussion & Conclusions/Suggestions are to documented for the welfare tribals



Session 3: (12.00 PM to 1.00 PM)

TOPIC: RESEARCH AND NATION BUILDING

Resource person: Dr. Samuel David Raj . T

Lecturer in Zoology

Dr. V.S. Krishna Degree College (A),

Visakhapatnam

Dr. Samuel David Raj stated that India is one of the major countries in the world powered by its recent economic growth and a scientific research. To fulfil its aspirations, India's greatest challenge will be in educating, recruiting, and supporting its next generation through scientific research.

He also enlightens the students that Research in India potential sector of economic growth and an important component in India's national health agenda. He Appreciated the role of biological research in nation building that's why the Indian government is expanding as well as starting several new biological research institutes, which will open up many new positions for life science researchers. He emphasized that Funds also are available to provide and to support research facilities. He also specified that India is becoming an increasingly viable location to conduct biological research attracts and supports its best young people to do research.



Session 4: (2.00PM to 3.00 PM)

TOPIC: METHODOLOGY IN ANCIENT PALM LEAF MANUSCRIPT

Resource person: Dr. B.Chandra Mouli

Lecturer in Botany

Dr. V.S. Krishna Degree College (A),

Visakhapatnam

Dr. Chandra mouli sir explained in detail about the meaning of Manuscript , materials used for writing manuscripts and the countries which used these manuscripts for preserving their ancient cultural history. He described the importance of palm leave manuscripts in India. He emphasized that palm leave manuscripts bears testimony to the rich cultural heritage of India that include folk literature, native medicinal formulae, religious writings, astrological facts, records of cultural practices etc., He highlighted that a typical palm leaf text would last for about 600 years



Session 5: (3.00PM to 4.00 PM)

TOPIC: RECENT TRENDS IN RESEARCH METHODOLOGY

Resource person: Dr. Y. Polinaidu

Lecturer in Zoology

Govt. Degree College (Men)

Srikakulam

Dr. Y. Polinaidu addressed the session and he specifically focused on the on the emergence and current trends in research methodology. He emphasized that Technology today is evolving at a rapid pace, enabling faster change and progress in the field of research. He explained about the tools for dealing with the complexity in research and he also mentioned that to overcome these problems there is a need for the adaptation and application of emerging technologies .He described the important recent tools that are or will be needed, some of those having highest priority are bioinformatics, computational biology, functional imaging tools using biosensors and biomarkers and nanotechnology



Session 6: (4.00PM to 5.00 PM)

TOPIC: RESEARCH METHODS IN PLANT SYSTEMATICS

Resource person: Dr. K.V.G.K Vara Prasad

Lecturer in Botany

Govt. Degree College (A),

Tuni

Dr. Vara Prasad initiated the discussion through concept of Plant Systematics and explained the significance in dealing the interrelationships among the plant species and their evolutionary descent. He emphasized that determining the evolutionary history of a particular group i.e., the phylogeny is the primary goal of Systematics. He also mentioned that Systematics aims at developing classifications based on different criteria and, often a distinct methodology is employed for the analysis of data. Dr. Vara Prasad sir also stated that in plant Systematics, different approaches to classify plants viz. cladistics and phenetics are used. Cladistics relies on the evolutionary history behind a plant to classify it into a taxonomic group by using Cladograms (Phylogenetic trees) i.e. Phylogenetic Systematics. Phenetics does not use evolutionary data but relies upon an overall similarity to characterize plants. In his very engaging talk he also mentioned that now a days Molecular Systematics approach is widely employed in solving the research problems in Plant Systematics by using various kinds of bioinformatic tools and programmes



Session 7: Valedictory Session (5.00PM to 5.30 PM)

The Valedictory function of the One Day State Level Workshop on Research Methodology in Biology was held at 5:00 PM on 12th July 2024. Kum V. Tejeswini, Member of the Workshop & Guest Lecturer in Botany gave the Vote of Thanks. The student participants gave a positive feedback on their learning experience during the one day workshop in the feedback session.



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YELLAMANCHILI

ONE DAY STATE LEVEL WORKSHOP ON
RESEARCH METHODOLOGY IN BIOLOGY

CERTIFICATE OF PARTICIPATION

This is to certify that -----
----- has participated in One Day State Level Workshop entitled
"Research Methodology in Biology" on 12.07.2024 organized by the
Departments of Botany and Zoology, SGA Government Degree College,
Yellamanchili

K. Vijaya Lakshmi

Convenor

Supriya

Co-Ordinator

P. Chandraiah

Chairman