Importance and Relevance

The proposed lecture workshop covers all the major aspects and/or branches of phyto-taxonomy including herbarium techniques and advanced molecular techniques as an aid to solve plant identity problems. All the relevant branches were highlighted with basic investigations and use of molecular tools for an integrative taxonomy based on evidences from multiple resources. These lecture series are expected to deliberate the importance of plant science in general and plant taxonomy in particular. Therefore the deliberations will give immense strength, inspiration and ignite the young minds of the rural area.

Tentative list of Topics to be covered in the Workshop

- 1. Plant Taxonomy-Nomenclature
- 2. Endangered Species and their Conservation
- 3. Species Concept
- 4. Plant Identification
- 5. Herbarium Concept and Technique
- 6. Molecular Taxonomy
- 7. BSI and its role in Plant Research
- 8. Plant Taxonomy and Phytoremediation

Dates of Workshop: 4th & 5th September, 2017

Invited Lectures by:

 Dr. R.R. Rao Director, Grade Scientist, NBRI, Lucknow

Dr. M. Sanjappa
 Emeritus Scientist
 University of Agricultural Sciences, Bengaluru

3. Prof. M. N. V. Prasad University of Hyderabad, Hyderabad

4. Prof. Vastavaya S. Raju
Department of Botany, Kakatiya University, Warangal

Venue: Department of Botany, Kakatiya University, Warangal-506009 Telangana, India

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SCIENCE ACADEMIES' LECTURE WORKSHOP IN

"PLANT TAXONOMY - CURRENT CHALLENGES AND PERSPECTIVES"

4th & 5th September, 2017







Sponsored by

Indian National Science Academy, New Delhi Indian Academy of Science, Bengaluru National Academy of Sciences, Allahabad



Organized by

DEPARTMENT OF BOTANY KAKATIYA UNIVERSITY WARANGAL-506009 TELANGANA STATE



Convener

Prof. R. Raghavendra Rao

Coordinator
Dr. Md. Mustafa



About the University

Kakatiya University was established in 1976 in sprawling 650 acres of land adjoining Warangal city to serve the educational needs and its inception has heralded the long cherished aspiration of the rural people of Northern Telangana.

The University has 24 departments on the campus with a network of eleven constituent colleges and 471 affiliated colleges. It is offering about 120 programmes at undergraduate and post graduate level in the faculties of Arts, Science, Pharmaceutical Science, and Engineering.

About the Department

The Department of Botany, one of the oldest departments of Kakatiya University, was established in 1968 in the erstwhile PG centre of Osmania University. The founding fathers with their foresight and vision have laid strong foundation for teaching and carrying out research in plant sciences. Over the years, it has steadily progressed into one of the prestigious departments in the university. The faculty members are engaged in active research through the plan funds of UGC, CSIR, NRSC, IIRS, DBT, DST, ICAR, AICTE and other funding agencies. Most of the teaching faculty members have worked in research labs in UK, USA, Germany, France, Australia, Netherlands, Singapore, Thailand, Brazil, etc. under UGC education and exchange programmes. In recognition of excellent research conducted by the faculty, UGC, New Delhi has sanctioned funds under 7th to 12th plan period and also under SAP-DRS-I, DRS-II, DRS-III & BSR programmes. DST, New Delhi has sanctioned FIST scheme for improving infrastructure for advanced research.

The infrastructural facilities were greatly expanded. The research wok carried out by the faculty and their scholars has received appreciation and the department is able to carve its own uniqueness in diverse areas of plant sciences. The testimony of these efforts and hard work is measured in terms of quality research publications in reputed national and international journals. The students after completion of M.Sc. course are leaving the portals of the department with great confidence. The department is a vigorous one with all its academic activities. It has organized a number of national seminars, symposia and workshops. The department has been instrumental in starting Microbiology and Biotechnology departments as regular and M.Sc. Environmental Science, M.Sc. Botany and M.Phil. in distance mode. Non-teaching faculty also played a vital role in the growth and development of the department.

Theme of the Lecture Workshop:

Plant Taxonomy-Current Challenges and Perspectives: Plant taxonomy mainly deals with the identification of plants, naming and classification. It is the science that finds, describes, naming and classifies the plants. Origin of plant taxonomy began with in the early stage of human evolution. The food gatherers classified the plants as of edible, non-edible, poisonous and medicinal. This process was gradually and steadily developed and has become an important subject for nomenclature, classification communication. Taxonomy is an integral part in terms of biodiversity protection, eco-development, product development and remediation. It is significant in areas of forestry, social forestry, agroforestry, ecotourism, horticulture, landscape development, aesthetics and many fields with relevance to needs of human kind. Identification is as important as the knowledge of alphabet. Without knowing alphabet, it is not possible to learn any language. Botanists are hesitant to develop expertise in the art of naming and field identification. The correct identification, nomenclature, herbarium preparation are indispensable functions of a phyto-taxonomist. However, taxonomy is in crisis like funding for taxonomy is inadequate, there is a lack of taxonomists, the recruitment of young scientists into taxonomy and systematics field is extremely low, the impact factor of taxonomical journals is very low, and taxonomists have not been able to get the society and other disciplines concerned about the importance of taxonomy. Now-a-days, the knowledge of phyto-taxonomist has much improved and even using molecular techniques to solve identification problems which leads to taxonomy as fashionable.

The *main aim* of the lecture workshop is to promote the study of plant taxonomy and advanced molecular techniques to solve identification problems. We wish to share and transfer the knowledge of the National Academies' eminent scientists, experts, the popular lectures to our affiliated institutes which are located in rural areas of Telangana State. To develop expertise in the art of identification and naming of plants among the graduate and post-graduate students, research fellows and teaching faculty working in plant biology.