

SUMMARY OF THE WORKSHOP ON  
**BASICS IN PLANT TAXONOMY & CONSERVATION**

3<sup>rd</sup> and 4<sup>th</sup> September 2018

Organized by

Naoroji Godrej Centre for Plant Research (NGCPR), Shirwal

&

Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College,  
Nashik



Plant Taxonomy is one of the important factors in the syllabus of Botany, perhaps it is subject associated with the basic human needs. An identification of plants with their Latin names or binomials is still a nightmare to many botany students. We believe this is due to the lack of precise knowledge and practically based training. It's common saying that 'God Created, Linnaeus Ordered', and if we go back to the basics, identification and classification of the plants are based on their morphology, which is offered by many naturalists including Linnaeus. The theory books taught some of them in briefly, but use and application of these classifications in day to day botany is far behind from our thought. And without naming the plant, its application will not be possible.

Furthermore, considering the declining habitat, competition with invasive taxa and other anthropogenic threats survival of the narrowly endemic plant species becomes critical, most of these are facing threat and struggling to sustain. Though the *in vitro* techniques are spread as a conservation aid, cost-effective and traditional ways to multiply the endangered and indigenous species can play an important role. This can be possible with some basic training in conservation. To procure both the subjects we required just a bit knowledge and clarity in concepts, and to fulfil this workshop entitled '**Basics in Plant Taxonomy and Conservation**' has been organized.

The workshop was funded by Naoroji Godrej Centre Plant Research under the 'Annual Workshop Series for Plant Conservation and Awareness' in collaboration with Department of Botany, Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College at Nashik on 3<sup>rd</sup> & 4<sup>th</sup> September 2018. The Workshop, mainly aimed at M.Sc. Botany Students, was attended by 60 students. A detailed summary of the workshop has been documented below,

### **Day 1 (03.09.2018): Inauguration, Guest Talk and Hands on Training**

The programme was inaugurated by lamp lightening and introduction speech by the Principal V. N. Suryavanshi, and Chief Guest Prof. Milind Sardesai. The Inauguration function was coordinated by Dr. Mayur Nandikar and Dr. Sanjay Auti along with the staff members of the Botany Department. Participants resource persons and faculties were those who attended. With the brief introduction of the programme, the guest talk on 'Plant Nomenclature' was delivered by Prof. Milind Sardesai.



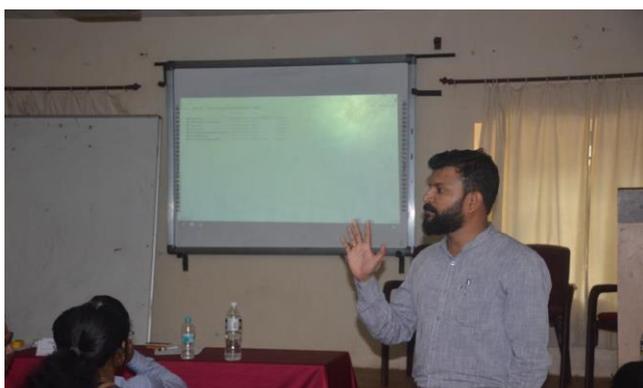
**A view of the inauguration function**

The first talk delivered by Prof. Sardesai, addressed basic plant nomenclature problems where he briefed the participants about the origin and etymology of the plant names. The history of the plant names that he unfolded, was very thought-provoking and covered one of the important aspects of Plant Taxonomy.



**Felicitation Programme and a guest lecture on Plant Nomenclature by Prof. Milind Sardesai**

Dr. Mayur Nandikar (Scientist, NGCPR) explained an importance of this workshop and its implementation in Plant Taxonomy along with the short introduction of his research activities at Naoroji Godrej Centre for Plant Research at Shirwal. He continued the session with his talk on the brief history of Botany in India. The main emphasis was on the post-colonial botanical work and covered most of the important events in Botany, including Charaka Samhita, how trading of spices and condiments started from the West Coast and the contribution of Garcia da Orta's and van Rheedee's contribution in Indian Plant Taxonomy. His narration of the journeys of different Dutch, Portuguese, British Medical officers, surgeons and their interest in exploring plant diversity in India was stunning. When the talk was at its peak, lunch break was announced and the remainder of the Talk was concluded after lunch.



**Dr. Mayur Nandikar delivering his talk on botanical History**



**Dr. Sharad Kambale, expressing key features to identify the plants**

The Post-lunch session was conducted by Dr. Sharad Kambale (Asst. Professor, Trinbak College, Nashik) who effectively delivered a talk on The Basic Key Features of Remembering Plant Species. How common characters have been evolved by the layman to identify the plants. He explained his own studies on different plants, in view of plant morphology and their importance in the field of Plant Taxonomy. The session concluded with a few of the examples from day-to-day life and Introduction to the Practical Session.

Practical Session: This Session was conducted by Dr. Mayur Nandikar, Dr. Sharad Kambale, Dr. KVC Gosavi and Team NGCPR.

The students were divided into two batches and accommodated in the practical halls. Plant material from the different families were allotted and students were asked to write their diagnostic characters, classification and to identify the families based on the reading material provided by Team NGCPR. The students enthusiastically participated in this session and tried to identify the plant families. The expertise was helped them to rise out the characters in the simplest way, which were liked by most of the students. Participants found that the simple practice to identify the families they were never seen before. The session was overextended for three hours, and closed by 6 pm.



**Practical session to recognize plant families and their classification**

## Day 2 (04.09.2018): Practical session, Guest Talk and Valedictory

The morning session began with a demonstration on how to make a herbarium, the importance of a herbarium and the world's herbaria.

The session was conducted by NGCPR research students Ms. Priyanka Giranje and Ms. Durga Jadhav. They briefed the gathering about the history of the herbarium, worlds and India's largest herbaria along with the method of herbarium preparation and their role in plant taxonomy. The demonstration session was carried out using different plant materials while explaining their particular care in the preparation of the herbarium, various treatment, pressing, drying, poisoning methods, etc. The session helped the participants to understand the basic concept in the herbarium preparation.

The Session was followed by a guest talk of Dr. Avinash Adsul (Asst. Prof. at Jawhar College) on 'common vs. endemic and threatened plant species and their conservation'. He expressed his thoughts about conservation and his experience in the field. His previous experience on conserving the endangered *Ceropegia's* through the plant tissue culture and his remarks were found to be the best guidance for the students who were willing to have a career in applied botany. Also, he expressed the difference between native and non-native plant species their value and different traditional ways of conservation. The lecture was informative. In his concluding remarks Dr. Nandikar explained how NGCPR was working in the area of conservation through the traditional way with his own best examples of *Frerea indica* and *Abutilon ranadei*.



### **Dr. Avinash Adsul sharing his thoughts with participants on endemic plants and their conservation**

After the lunch break, Dr. Nandikar continued with the 'History Chapters on Indian Botany' and his remarks on the best opportunities in the subject of Botany. The session was very explanatory and unfolded many

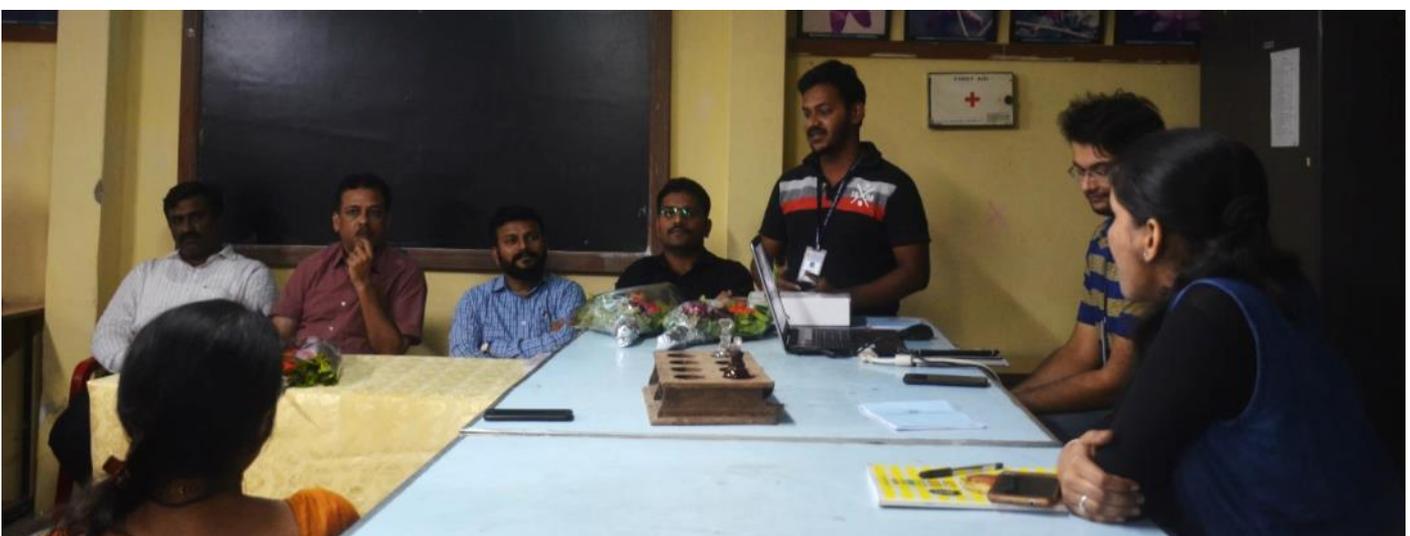
historical events. With a small tea break, the next lecture was again rolled back the participants to basic of plant taxonomy through the different systems of Plant Classification.

The lecture on classification and merits and demerits in Botany delivered by an eminent lecturer Dr. Nilesh Malpure (Kopargaon College, Ahmednagar), was the added knowledge of different systems of Classification from Linnaean, Bentham and Hooker, Hutchinson to present APG IV with pictorial examples, which were very informative. In the end, he spoke about the merits and demerits of different systems, which will be more useful in field and theory classes and how one could understand these systems.



#### **Dr. Nilesh Malpure explained the different systems of Plant Classification**

The Valedictory Function was chaired by Prof. Ms. Deshpande, Vice-Principal of the college in the presence of organizers and invitees. Thought and views were shared by Dr. Kambale, Dr. Nandikar with their concluding remarks. Few of the student participants enrolled their feedbacks, which were very promising, enthusiastic and appreciative of the organizer's efforts. They expressed that it was an excellent learning opportunity they had in addition to the regular botany courses. Dr. Auti expressed a Vote of Thanks while thanking NGCPR and the college authorities and staff for making this workshop successful and providing an opportunity for having it in short period. The Workshop officially concluded with the National Anthem.



#### **Feedback from the participants on the occasion of Valedictory**