

**SHORT COURSE ON
CROP WILD RELATIVES:
IDENTIFICATION, COLLECTING AND
UTILIZATION**

(August 19-28, 2015)



**Sponsored by
Indian Council of Agricultural Research
New Delhi**

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**Organized by
ICAR-National Bureau of Plant Genetic
Resources, New Delhi 110 012**



Background

The Indian gene centre is rich in diversity of crop plants and their wild relatives. Increasing importance of wild species of crop taxa, as a source of germplasm for pre-breeding and genetic enhancement of crops have made them a priority for collection and conservation. Gradual decline in population of crop wild relatives (CWR) due to destruction of natural habitats is a national as well as global concern. Moreover this group is poorly known and least understood for their occurrence, reproductive biology and taxonomy to make use of their potential in crop improvement.

Realizing the role of wild relatives in crop improvement, domestication and use of native diversity, the ICAR-National Bureau of Plant Genetic Resources (ICAR-NBPGR), has actively been engaged nearly for the past four decades in CWR germplasm collecting and conservation in collaboration with the officials of National Agricultural Research System (NARS). It is observed that in absence of adequate knowledge on diversity distribution, taxonomic identification, appropriate collecting strategies, seed storage behaviour, etc., exploration and collection of CWR is challenging. Hence there is need to sensitize the researchers/ scientists working with plant genetic resources (PGR) under NARS through regular trainings on CWR.

With this aim, ICAR-NBPGR is organizing a **Short Course on “Crop Wild Relatives: Identification, Collecting and Utilization”** with the financial support of Indian Council of Agricultural Research. This course would have lectures/ practicals from expert faculty having wide experience in this area. Organizing this course now is not only relevant in this endeavour but also very timely, which will benefit the participants in enhancing their knowledge on native diversity

in CWR, and identification, collection and their use potential. Course contents are well structured to cover wide arena of topics relevant to management of CWR.

About ICAR-NBPGR

ICAR-NBPGR is the nodal organization to carry out research, education and service activities in managing PGR. Plant exploration and germplasm collection is the first and foremost activity in this venture. This activity is executed by the Division of Plant Exploration and Germplasm Collection with the involvement of Regional Stations/ Base Centres through planning, co-ordinating and undertaking collaborative explorations for collection of different agri-horticultural crops and their wild relatives from various diversity-rich regions of the country. This division has organized six trainings and a brainstorming session on Plant Taxonomy and Biodiversity with focus on taxonomy and CWR. This division is also teaching courses on plant taxonomy, exploration and germplasm collection to PG and Ph.D. students affiliated to PG School of ICAR-Indian Agricultural Research Institute (ICAR-IARI). Students from different schools and universities/ organizations are also imparted technical know-how on importance of plant taxonomy, herbarium techniques and procedures for germplasm collection.

To conduct short course on CWR, ICAR-NBPGR has well defined technical programme with focus on germplasm collection and conservation of CWR; wide array of germplasm maintained in field genebanks/experimental fields and National Genebank, cryo-genebank and tissue culture repository at the Headquarters/ Regional Stations/ Base Centres to carry out research on various aspects of CWR; National Herbarium of Cultivated Plants (NHCP) with significant representation of herbarium specimens and seed samples of crop taxa and CWR; laboratory facility to carry out research in morphological,

biochemical and molecular systematics; and facilities such as library, important floras and books, committee rooms and guesthouse.

Topics to be covered

- Plant identification, use of taxonomic keys
- Studies on morphological variation, phylogeny, biosystematics
- Use of molecular tools in species identification, delimitation and systematics
- Prioritization, planning, execution of CWR collecting missions
- Passport data recording and post collection handling
- Documentation of information
- Geo-informatics (use of GIS) and diversity mapping

This course will provide an excellent opportunity to have both theoretical and practical experience. The information to be disseminated among the participants on identification, collecting procedures, sampling strategies, handling of material and safe conservation of CWR can sensitize, generate action, and create understanding on effective management of germplasm resources within the Indian National Plant Genetic Resources System.

Duration and Venue

This course of 10 working days duration is offered during **August 19-28, 2015**. The participants are expected to arrive latest by the evening of August 18, 2015 and can leave after 16.30 hrs on the last day of the programme. The programme will be held at the ICAR-NBPGR, Pusa Campus, New Delhi-110 012.

Eligibility

The programme is mainly targeted for entry-level scientific professionals working not below the rank of Scientist/Assistant Professor and equivalent under

ICAR institutes/ State Agricultural Universities/CAU/AMU/BHU/Vishwa Bharati/Nagaland University, who are actively involved in PGR collecting, conservation and utilization.

Registration Fee

There is no course fee. However a non refundable registration fee of Rs. 50/- (Rupees Fifty) will be charged only from selected participants towards supplementing the student's welfare activities of ICAR-NBPGR.

Selection of Participants

Maximum intake for the programme is 25 participants. As per the eligibility criteria, participant's selection would be based on work, experience and involvement in PGR management. Participant's nomination from the respective heads of organizations does not entail confirmed participation in the programme. **Application/nominations will be accepted only through CBP Vortal (<http://www.iasri.res.in/cbp>) in online mode**, and the scanned copy of application form approved by the Competent Authority should be uploaded in the Vortal on or before **July 10, 2015**. The list of selected participants will be displayed on CBP Vortal by **third week of July 2015**, and subsequently informed through e-mail. Selected participants are expected to bring their present assignment pertaining to PGR collecting/ conservation/ utilization.

TA/DA

Participants will be paid to and from fare for journey performed by the shortest route by rail or bus. The payment will be made as per their entitlement but restricted to the maximum of AC-II tier train fare as per ICAR norms. If any participant chooses to travel by air, he/she may do so, but their claim shall be restricted to AC-II tier train fare only, provided they travel by Air India. Participants are required to produce originals of the rail / bus / air tickets

(only by public transport) and original onward journey tickets for reimbursing the travel expenditure.

Boarding and Lodging

Participants will be provided accommodation, wholesome meals and refreshments. However, local participants will be provided lunch and inter-sessions refreshments only.

Travel

New Delhi is well connected by air, rail and road from all parts of the country. One can reach ICAR-NBPGR, New Delhi, located in ICAR-IARI Campus, by state transport services or by Metro rail or by hiring taxi / auto. Participants are advised to make their return reservations well in advance at their end.

For further information about the programme please see CBP Vortal (<http://www.iasri.res.in/cbp>) or ICAR-NBPGR website (<http://www.nbpgr.ernet.in>) or may contact:

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