

National Meet- Distant Hybridization in Horticultural Crop Improvement

Jan 22nd & 23rd, 2015



Indian Institute of Horticultural Research
Hessaraghatta Lake Post, Bangalore-560089



Distant Hybridization in Horticultural Crop Improvement

(22nd and 23rd January, 2015)



First Circular

The main objective of a breeding programme is to develop recombinants having desirable traits. Success of a hybridization programme depends on the available source of genes present in the parents and their inheritance. In many crop plants it is seen that apart from effecting inter-varietal hybridization there becomes a need for harnessing genes from their wild or otherwise relatives (species/genus). This is necessitated, as the source of genes for particular trait/traits is not available within the species. In such cases distant hybridization is resorted to for developing desirable recombinants. It is increasingly becoming apparent for the plant breeders to conserve, evaluate and utilize the wild species in the breeding programme, especially with respect to introgression of biotic and abiotic tolerant genes.

In crops like papaya, the resistance source for virus *viz.*, 'PRSV' is available in other genera like *Vasconcellea*. In ornamental crops, the discovery of the several wild spp. has paved way for new types that are of tremendous commercial value. In the case of medicinal and aromatic plants with increased emphasis on natural medicines, improvement of active ingredients through distant hybridization is also a distinct possibility. As the incompatibility and sterility remain the biggest hurdle in the success of distant hybridization, the knowledge and availability biotechnological tools to address these issue is seen as a boon

While, in several of the annual vegetable crops like tomato, peppers, cucurbits, okra, onion and legumes inter-specific hybridization has been very widely used. However, there is great scope considering new emerging biotic and abiotic stresses. In crops like mango the wild relatives have not yet been evaluated/utilized. Hence, there is vast scope for sharing ideas

and experiences. Keeping this in view a two-day meet is being organized to discuss the issues, problems related to distant hybridization and to adopt further approaches in horticultural crops with the aegis of “**Society for Promotion of Horticulture**”. This two day meet is undoubtedly unique in bringing together researchers and students and anyone interested, and also to those who intend to work in the area of distant hybridization or utilization of wild relatives of horticultural crop plants as it provides the platform for the exchange ideas and expertise.

Oral Presentation

The main theme area of the meet is ‘*Distant hybridization in horticultural crops*’. Original research paper on this aspect on any of the horticultural crops will be accepted for presentation. The screening committee would go through the abstract (see the guidelines below for abstract submission) and decide about the acceptance for oral presentation. The presenter of the accepted oral paper presentation will be allocated a total of 15 minutes (including discussion time) to make the presentation. Presenter should avoid lengthy introductions and deal more with the subject.

Poster presentation

- Poster papers are invited for presentation. Each delegate can present two posters.
- Abstracts are invited on inter-specific hybridization on any of the horticultural crops.
- The abstracts should be prepared in MS word not exceeding 250 words with a clear title, name and affiliation of authors.
- The name of the presenting author with e-mail should be given at the end.
- The abstract may be submitted through e-mail and /or by post along with a soft copy.
- The detailed specification for preparing the poster paper (size 4.5 ft x 3.0 ft) would be mailed to those authors whose abstracts are accepted for presentation.

Registration fee

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| • Registration fee for the SPH members | Rs.2000/- |
| • Registration fee for non-SPH members | Rs.2500/- |
| • Registration fee for students | Rs.500/- |

Important Dates

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|---|--------------------------|
| • Last date for receiving abstracts | November 15, 2014 |
| • Last date for sending acceptance | December 5, 2014 |
| • Last date for sending registration fee | December 15, 2014 |

About the city

Bangalore the IT hub of India is known for its salubrious climate. It is also fast becoming the hub for horticultural growth. It is home to several enchanting places of historical importance viz., the Lalbagh, Cubbon Park etc., The historical city of Mysore, which was the capital of erstwhile rulers of Karnataka is 120 km from Bangalore.

Accommodation

Accommodation is available in Guest houses owned by ICAR/Govt. agencies in a limited scale. Good hotel accommodation is available in the city. Details of the hotels will be made available at the IIHR website with announcements from time to time.

Organizing Committee

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REGISTRATION FORM

National Meet on “Distant Hybridization in Horticultural Crop Improvement” on 22nd and 23rd January, 2015

Indian Institute of Horticultural Research
Hessaraghatta Lake Post, Bangalore-560 089
Phone: 080-28466420/21/22/23, 28466353
Extn: 297 and 299, Fax: 080-28466291
E-Mail: fruits@iihr.ernet.in

Name :
Designation :
Address for Correspondence :
Pin Code :
Mobile Phone No. : Fax :
E-mail :
Presenting a poster paper : Yes / No
If yes, Title of the paper :
Registration fee details :
DD No. and Date :
Bank / Place :
Accommodation required : Yes / No

Date _____

Signature _____

Please mail the duly completed form and DD to :

**The Principal Scientist & Head
Division of Fruit Crops**

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(Photocopies of this form are also accepted)