

Training Course on Quantitative Genetics in the Era of Genomics

Quantitative genetics is fast approaching its centennial. Though Yule remained as the person to establish the relationship between the biometrical and Mendelain genetics, the first publication of Fisher (1918) made the real beginnings of quantitative genetics. Quantitative genetics has been around for a long time, during which it has developed with very large statistical foundation that is still in the process of being tested. Early work focused on the contribution of quantitative genetics to animal and plant breeding. The role of quantitative genetics in understanding the evolution of organisms was realized only in the recent past.

The success of quantitative genetics heavily depends on the resolution of understanding on the quantitative variation of a particular phenotype that could be a single trait or a set of traits. Trait or traits making a phenotype may be under the control of genes with varying levels of interactions among themselves. Considering this complex genetic control of a quantitative trait(s), compartmentalizing the quantitative variation of a phenotype into genotypic, environmental and genotype x environment interaction components remain elusive even today. Though many models are available not all the models are not precise and right under all situations. Various estimates derived using the parameters of a quantitative trait still remain enigmatic to many involved in crop breeding. The recent breakthroughs in the filed of genomics made the possibilities of moving from genetic maps to physical maps in major crop plants and animals including human being. However, linking the phenotype(s) and underlying genes need better understanding on the phenotype. In the forthcoming training an attempt will be made

to exploit the potentials of quantitative genetics in the era of genomics.

Objective

The major objective of this training programme is to make the importance of quantitative genetics in the era of genomics. The training programme will cover the topics in the following areas: Historical perspectives of quantitative genetics, Role of quantitative genetics in crop improvement, Models evolved for selection and evaluation in crop breeding, Recent advances in quantitative genetics, Molecular marker technology and quantitative genetics and Quantitative genetics and genomics.

About the training

The training will comprise lecture and practical sessions handled by experts from this university and also by invited experts from other universities/institutions.

Date and Venue

The training programme will be organized for 21 days from **16th November, 2012 to 6th December, 2012** at Centre for Plant Breeding and Genetics, Tamil Nadu Agricultural University, Coimbatore.

Accommodation and Travelling Allowance

Free boarding and lodging will be provided to the participants during the training period at the Tamil Nadu Agricultural University Campus, Coimbatore according to the budget provided by the ICAR. The expenditure on travel will be borne by the centre. Travel in the train (other than Shatabdi or Rajdhani) by AC II tier or AC III tier will be reimbursed to the concerned, subject to the proof of travel and availability of funds.

About TNAU

Participants reaching Coimbatore by road or by rail (Railway Station) can use the State Transport Buses (1A, 1B, 1C, 1D) plying to Vadavalli and get down at Botanical Garden, University gate. Alternatively for information, they can make use of auto rickshaws available at the outside of bus/ railway station. During November the weather at Coimbatore will be normal and pleasant.

Number of participants

The number of participants is upto 25.

Eligibility

Participants are invited from SAU's/ ICAR/National Institutes. The candidate should possess M.Sc (Ag.) / Ph.D in Plant Breeding and Genetics/Genetics/ Agricultural Botany / Botany with the minimum of two years of teaching or research experience. The age of the scientist/teacher should not exceed 45 years.

How to apply

The application for participation may be sent in the format given duly forwarded by their employer. Last date for receiving application is **10.10.2012**. Candidates can send their applications through email as an advance copy, but selection will be based on the official copy.

Last date for the receipt of application through the sponsoring institute	10 th October, 2012
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The circular can also be downloaded from the website <http://sites.tnau.ac.in/cpbg/>

**Application form for Participation in Training
Course on
Quantitative Genetics in the Era of Genomics
(16.11.2012 to 06.12.2012)**

1. Full name (in block letters)
2. Designation
3. Present employer and address
4. Postal address to which reply should be sent (in block letters) (Give telegraphic/fax/ Email addresses)
5. Permanent address
6. Date of birth
7. Sex: Male/Female
8. Teaching/Research/Professional experience (mention post held during last 5 years and number of publications)
9. Marital status (Married/Unmarried)
10. Mention if you have participated in any research seminar, summer, winter schools/ short courses etc. during the previous years under ICAR/other organizations.
11. Academic record

Exam passed	Main/ Subsidiary Subjects	Year of passing	University/ Institution
Bachelor's			
Master's			
Ph.D.			

Other certificates/diploma/degree etc.

Current field of Research:

Date:

Place:

Signature of the applicant

Recommendation of the forwarding Institute

Signature with designation
and address of the recommending authority

Certificate

It is certified that the information furnished has been verified with the office record and found correct.

Signature with designation

(Office seal)

Course Director

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Course Coordinators

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Centre for Plant Breeding and Genetics
Tamil Nadu Agricultural University
Coimbatore - 641 003 , Tamil Nadu

**All the communications are to be made to the
Course Director**

**TAMIL NADU AGRICULTURAL
UNIVERSITY**



**ICAR - CAFT
Training on**

**Quantitative Genetics in the Era
of Genomics**

16th November to 6th December, 2012

Circular & Application

**Centre of Advanced Faculty Training in
Genetics and Plant Breeding**

**Centre for Plant Breeding and Genetics
Tamil Nadu Agricultural University
Coimbatore - 641 003
TAMIL NADU**