ABOUT ANAND

Anand is popularly known as "Milk City" of India. Anand is located in Central Gujarat and well connected by rail and road from all parts of the country. The campus is 5 km away from the Anand railway station. It is 65 km from Ahmedabad and 40 km from Vadodara on Mumbai-Ahmedabad Western Railway line. The participants are advised to reach a day earlier to the commencement of the programme. The climate at Anand is pleasant during August with temperature ranging from 24 to 32°C. Participants may contact Course Director on telephone for necessary guidance.

NOMINATION AND REGISTRATION

Interested candidates may send their applications in the prescribed format enclosed, duly recommended by the competent authority, through proper channel to the Director, Summer School along with a non-refundable registration fee of Rs 50/- in the form of IPO/DD drawn in favour of Anand Agricultural University Fund Account, payable at Anand. Candidates may send their applications through e-mail as an advance copy but selection will be based on the official copy only. The last date for receiving the nomination is 1st July, 2014.

Note: The candidates will be notified about selection latest by 15th of July 2014.

IMPORTANT DATES

- **Last date for receipt of applications: 1st July**
- **Intimation to the selected applicants: 15th July**
- **Confirmation for participation: 20th July**

For any query contact

Dr. Kalyanrao

Mo: 7600869603; Email: patil_kalyan@rediffmail.com

Dr. Jyotindra N. Patel

Mo: 9427858216; Email: jnp15862@gmail.com

ICAR Summer School on "New frontiers in hybrid seed production and genetic purity testing", August 5 to 25, 2014

APPLICATION FORM FOR PARTICIATION IN SUMMER SCHOOL

(To be sent directly to the Course Director of summer School)

Full name (in block letters) _____

Designation:_____

Full Address with PIN to which correspondence should be sent (in block letters):_____

_____

Telegraphic address & e-mail ID_____

_____

Date of birth & Age:_____

Sex:_____

Experience (post held) during the last 5 years Research / Teaching No. of

Publications:_____

_____

Discipline and Field of specialization:_____

_____

Please mention, if you have participated in any Summer/ Winter School / Short course, etc. earlier organized by ICAR or and other

organization:_____

Academic record starting from graduation:

Degree	Discipline	Year of passing	Class/Rank/ Distinction	University
Ph.D.				
Master				
Bachelor				
Other				

Payment details:

Postal order/DD No:_____ Dated_____

of Rs. 50. (Not refundable) for registration of application.

Date:

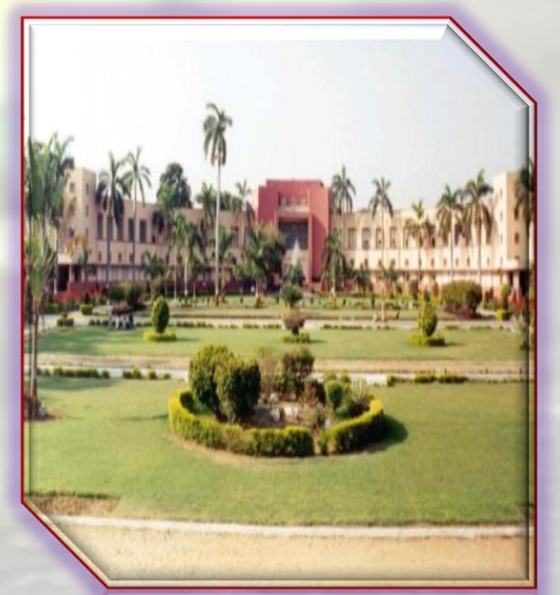
Place: Signature of the applicant

Recommendation of the forwarding institution.

Date: Signature & Designation with official Seal

ICAR sponsored Summer School on New frontiers in hybrid seed production and genetic purity testing

(August 5 to 25, 2014)



Course Director
Dr. Sasidharan N.

Course Co-ordinator
Dr Kalyanrao
Dr. Jyotindra N. Patel

Department of Genetics & Plant Breeding
B. A. College of Agriculture
Anand Agricultural University
Anand-388 110, Gujarat, India
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INVITATION

I on behalf of Faculty of Department of Genetics and Plant Breeding, B. A. College of Agriculture, Anand Agricultural University, Anand invite the faculty members of various Agricultural colleges, ICAR institutes, State Agricultural Universities and KVK's for participation in Summer School on "New frontiers in hybrid seed production and genetic purity testing ”

(Sasidharan N.)
Director, Summer School

ABOUT THE COURSE

India is a country of diverse agro-ecosystems and cropping preferences. It is predominantly rainfed (~60%) with size of the farm holdings rather small (~67%). The wide gaps reported between the potential and realized productivity in most of the crops could be bridged to a large extent by using the seeds of improved hybrids/varieties after the advent of green revolution. Transformation of the country’s status from a food-deficient to food sufficient nation could be achieved primarily due to the combined efforts of the crop scientists in developing High Yielding Varieties (HYVs) and hybrids in major food crops such as wheat, rice, maize, sorghum and pearl millet. However in the changing scenario where there are more mouths to feed than before, a reduction in the arable land and rise in the cost of agricultural inputs, calls for an urgent need to rethink our agricultural strategies. One way to achieve this, is by introducing more number of high yielding hybrids in different crops catering to the needs of Indian population through public and private participation. It is also imperative that introduction of new hybrids should be also accompanied by regulatory systems to check the variety or authentication of these hybrids, which can be achieved through molecular tools.

Since the success of hybrid seed production is dependent on the genetic purity of parental lines and both out crossing and the inadvertent mixing of seed can compromise seed quality, genetic purity tests are critical tools for seed producers and plant breeders which includes 'grow-out test, isozyme electrophoresis and DNA-based genetic purity evaluation through the use of RAPD, SSR, and SNP markers. With comprehensive tests and high-throughput capability, it is possible to enhance the accuracy of the genetic purity testing.

In this context, it gives me immense pleasure to inform you that Department of Genetics and Plant Breeding, B. A. College of Agriculture, Anand Agricultural University, Anand, Gujarat is going to organize 21 days Summer school on “New frontiers in hybrid seed production and genetic purity testing” during 5th to 25th Aug 2014. This course will also help to refresh and upgrade existing knowledge of hybrid seed production and genetic purity testing.

OBJECTIVES

The intention of conducting proposed course is to provide background knowledge and hands-on training on hybrid seed production and genetic purity and to update theoretical and practical knowledge of crop improvement scientists with the recent developments to face the challenges ahead. The understanding of basic and applied aspects of hybrid seed production and genetic purity will indubitably influence the success of a scientist in developing High Yielding Varieties (HVYs) and hybrids in different crops.

COURSE CONTENTS

- Role of pollinators in hybrid seed production
- Parental line multiplication and purification
- Role of gynoecious lines in hybrid seed production techniques of bitter gourd
- Hybrid seed production techniques in Bt cotton
- Genetic purity test of commercial hybrids by grow out test
- Genotypic identity based on morphological DUS descriptor
- Genetic purity test of commercial hybrids by biochemical tests
- Genetic purity test of commercial hybrids by molecular methods
- DNA finger printing of commercial released varieties and hybrids
- Applications of somatic embryogenesis
- Role of biodiversity in seed conservation
- Bt and Ht technology for crop improvement
- Applications of synthetic seed in Agriculture
- SPT technology in rice
- Business skill for small scale seed producer: a trainers
- Role of biodiversity in seed conservation
- Indian regulatory system for variety testing, release and notification

ELIGIBILITY

Participants not below the rank of Assistant Professors/scientists with minimum three years experience in the fields of Seed Science & Technology, Genetics & Plant Breeding, Plant Physiology, Plant Biotechnology and Biochemistry in ICAR institutes, State Agricultural Universities and KVK's can apply.

DATE AND DURATION

August 5 to 25, 2014 (21 days)

BOARDING AND LODGING

The boarding and Lodging facilities will be provided free of cost to the participants at AAU campus. No DA will be paid to the participants. The candidates selected for participation in the training will be provided travelling expenses as per their entitlement restricted to II tier AC rail fare by the shortest route only after submission of the original tickets. To the places not connected by rail, the bus fares will be paid as per the council's rules.

Note: Participants are advised not to bring their spouse/children along with them during training period.

ABOUT THE DEPARTMENT

Department of Genetics and Plant Breeding is an important Department of B. A. College of Agriculture, Anand Agricultural University (erstwhile Gujarat Agricultural University), Anand which was established in the year 1947, for imparting education to undergraduate and post-graduate students in disciplines of Genetics and Plant Breeding, Seed Science & Technology and Plant Physiology. The Department is embellished with a highly qualified faculty in all the above disciplines who regularly guide M.Sc. and Ph.D students in these fields.

The Department has a well established seed and molecular laboratory with ‘State of the art’ equipments necessary for genetic purity testing and molecular studies. The Department is regularly involved in training of farmers in seed production, seed testing and seed health and had conducted one long and six short trainings during the last three years.