

**A**gricultural biotechnology encompasses a variety of laboratory methods. These include cell, tissue and embryo culture, clonal propagation of disease free plants; identification of chromosome regions (quantitative trait loci, or QTLs) that carry important multigenic traits, gene identification and isolation, genetic engineering for traits such as pest and disease resistance, better adaptation to environmental stresses, greater nutritive value and reduced post harvest losses and genetically engineered male sterility to facilitate hybrid seed production. World over the genomes of more than 1600 species have been sequenced. The massive amount of data is being generated by genomics approaches like genome sequences, gene expression and protein structures analysis. These data will have to be used in the best possible way by using various functional genomics and bioinformatics approaches. At the turn of this century, biotechnology emerged as a powerful tool that has contributed to increased agricultural productivity in many countries.

The intense debate over agricultural biotechnology and its applications focuses mainly on hypothetical risks and questions related to value, safety and impact (agronomic, economic and environmental). However, the last ten years have seen many of these questions put to rest. Numerous studies and evidence based fact finding missions have shown that biotechnology derived products have been proven to be economically viable, environmentally sustainable and as safe as their conventional counterparts. Properly integrated into traditional farming systems, biotechnology applications could make a difference in improving food security in most of the developed and developing countries at large. Agricultural biotechnology has proven to be the future technology for overcoming drought, poor soil nutrient level and pest and disease infestation occurrences which have been aggravated by changes in global environmental and climatic conditions.

However, in agriculture the effects might actually be underestimated. Clearly three farms exist in the global agric landscape, biotech farms, organic farms and conventional farms. The later, conventional farms are worst hit by drought, diseases and pest infestations. While the organic farms have managed in some cases to overcome challenges of pest and disease infestation, productivity has been quite low giving rise to increasing cost of farm produce. On the other hand, biotech farms have used modern molecular techniques to manage a rising profile of challenges with such outstanding success as is evident in the array of plants and animals with unimaginable field capabilities.

Indeed, one thing remains certain: there has been a catalogue of technologies for improving farm productivity and agro production dating back to the first farmer. Changes in technology have always been initiated by changes in demand and farming conditions. There is a call for change in our time from conventional techniques to modern biotech techniques and it is incumbent on us to advance the change to allow for further change down the line of crop & animal improvement.

The present National Seminar “Conventional and Biotechnological Approaches for Crop Improvement” is focusing on

most relevant themes including the one on making conventional plant breeding attractive to youths. It is a well known fact that in our country the talented agricultural and biological students are more inclined towards biotechnology and molecular biology than conventional plant breeding. As such the quality and quantity of research and innovation that is possible and required to be done in conventional plant breeding is going down. Further, a vast amount of biotechnological and molecular biological tools have been developed which can be used by the conventional breeders. However, lack of a firm understanding and a common meeting ground of the two groups i.e. biotechnologists and plant breeders, mutual aiding and learning from each other are not happening to the extent that they should do for the cause of agriculture. The purpose of the seminar is to initiate the development of such a firm meeting ground.

This conference is being organised in the tribute of Shri. Vasant Rao Phulsing Naik (1<sup>st</sup> July 1913 – 1979) was an Indian politician who served as Chief Minister of Maharashtra from 1963 until 1975. To this date, he remains as the longest serving chief minister of Maharashtra. He is considered the father of the Green Revolution in Maharashtra. The industrialization of Maharashtra is largely the legacy of his progressive industrial policies. Hence, it is designed to provide common forum for all the scholars, scientists, plant breeders and biotechnologists to share their experience and expertise to support the biotechnological approaches being used for crop improvement.

#### THEMATIC AREAS

- Biodiversity conservation and utilization
- Biotechnological and molecular approaches in plant breeding
- Conventional plant breeding and classical genetics
- Climate resilience – biotic and abiotic stress resistance
- Quality improvement and nutritional security
- Bio-fortification and Bio-prospecting
- Bio-informatics and Nano technology

#### CALL FOR PAPERS FOR ORAL/ POSTER PRESENTATION

Abstracts of unpublished research related to the seminar themes are invited for presentation. Abstracts are to be submitted as an electronic copy in MS-WORD, accompanied by a hard copy on A4 size paper typed in Times New Roman with single space and font size 12 points and should not exceed one page (about 300-400 words) with 25mm margin all around. **Poster** (60 x 90 cm) stating title, name and address of author(s), short introduction, material & methods, results and conclusion will be accepted for presentation.

#### IMPORTANT DATES

Submission of Abstract : 31.01.2015  
Acceptance of Papers : 15.02.2015  
Receipt of full-length papers : 28.02.2015  
Registration fee remittance : 05.03.2015

#### KEY SPEAKERS

Eminent Scientists / Policy-makers from the concerned areas are being invited as key speakers to deliver lead lectures on the themes of seminar for the benefit of participants.

## Registration Form

**XVI**  
**Shri Vasant Rao Naik Memorial**  
**National Agriculture Seminar**  
**on**  
**Conventional and Biotechnological**  
**Approaches for Crop Improvement**  
**March 19-20, 2015**

1. Name \_\_\_\_\_

(In block letters, Surname First)

2. Designation \_\_\_\_\_

3. Mailing Address \_\_\_\_\_

Phone : \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail : \_\_\_\_\_

4. Accommodation required : Yes / No

If Yes : Guest House / Hotel

5. Registration Fee : \_\_\_\_\_

Enclosed Draft No. \_\_\_\_\_

Date \_\_\_\_\_

6. Abstract enclosed : Yes / No

(Two copies)

7. Title of paper : \_\_\_\_\_

Author(s) : \_\_\_\_\_

Date :

Signature

To,  
**Director of Research**  
Dr. Panjabrao Deshmukh Krishi Vidyapeeth  
P.O. Krishi Nagar, Akola - 444 104 (Maharashtra)

#### **GOLD MEDAL**

Two best papers selected on the basis of research work and presentation performance will be awarded "SHRI VASANTRAO NAIK MEMORIAL GOLD MEDAL" instituted by Shri Vasant Rao Naik Smruti Pratishthan, Pusad (Maharashtra).

#### **BEST POSTER AWARD**

A best poster will be selected by panel of judges and will be awarded with certificate from the organizers.

#### **REGISTRATION FEE**

**Scientist/Delegate :** Rs. 2500 late after 5<sup>th</sup> March 2015 - Rs. 3000

**Student :** Rs. 1000 late after 5<sup>th</sup> March 2015 - Rs. 1500

The Demand Draft may be drawn in favour of Section Officer, Directorate of Research, Dr. PDKV, Akola. The local cheques will also be accepted. Spot registration facility will also be available.

#### **VENUE**

The seminar will be held at University Head Quarter, Dr. PDKV, Akola. The city is 250 km away from Nagpur and is well connected by road and railway. The weather during March is pleasant.

#### **ACCOMMODATION**

Arrangement of accommodation for delegates will be made in the University Guest Houses. Good Hotel accommodation at affordable rates (Rs. 1200 - 2000/- Non-Ac / Ac) also available in Akola city. The expenses towards TA, DA and accommodation will have to be borne by the sponsoring organization / institution. Delegates are requested to inform about their participation well in advance.

#### **Patron**

##### **Dr. R. G. Dani**

Hon'ble Vice Chancellor, Dr. PDKV, Akola

#### **Chairman, Organizing Committee**

##### **Dr. D. M. Mankar**

Director of Research

Dr. PDKV, Akola - 444 104 (M.S.), Phone : 0724 - 2258419,

Fax : 0724-2258419 Mo. : 7588962837 e-mail : director\_res@pdkv.ac.in

#### **Co-ordinator**

##### **Dr. R. S. Nandanwar**

Head, Dept. of Agril. Botany, Dr. PDKV, Akola - 444 104 (M.S.)

Phone : 0724 - 2258419, Fax : 0724 - 2258419 Mo. : 9011097478

e-mail : nandanwar\_18@yahoo.com

#### **Organizing Secretary**

##### **Dr. Shyamsunder Mane**

Head, Department of Plant Pathology, Dr. PDKV, Akola-444 104 (MS).

Phone: Off. 0724 - 2258359 Fax: 0724 - 2258359

Cell No. 9422803247 e-mail : drssmane68@gmail.com

**Communication :** All the correspondence regarding the seminar including submission of abstracts should be addressed to the organizing secretary/co-ordinator. For more details please visit [www.pdkv.ac.in](http://www.pdkv.ac.in).

**E-mail ID for electronic submission of abstract**  
[naikseminar2015@gmail.com](mailto:naikseminar2015@gmail.com)

## **XVI SHRI VASANTRAO NAIK MEMORIAL NATIONAL AGRICULTURAL SEMINAR**

on

## **Conventional and Biotechnological Approaches for Crop Improvement**

**March 19-20, 2015**



**Organised by**

**DR. PANJABRAO DESHMUKH KRISHI VIDYAPEETH,  
AKOLA – 444 104 (Maharashtra)**



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**NATIONAL AGRICULTURAL SEMINAR**

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**Conventional and Biotechnological**  
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**March 19-20, 2015**



Book-Post

To,

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**From :**

**Director of Research**

Dr. Panjabrao Deshmukh Krishi Vidyapeeth,  
P.O. Krishi Nagar, Akola - 444 104 (Maharashtra)