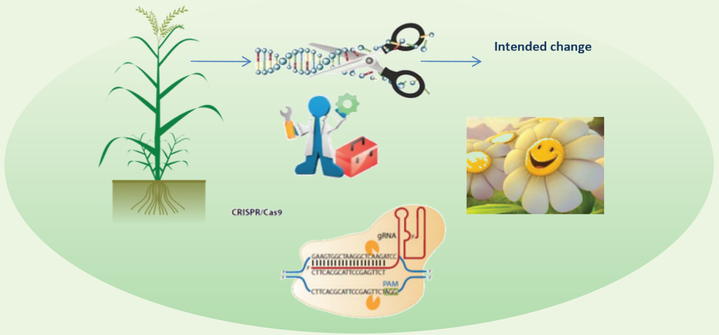
Workshop on
Gene Editing for Enhancing Plant Productivity and Stress Tolerance
(10-12 November 2019)

Organized by

Society for Plant Biochemistry and Biotechnology and ICAR-IIRR, Hyderabad



Venue

ICAR-Indian Institute of Rice Research, Hyderabad

Deadline for receipt of applications: 15th October 2019

Coordinators

Dr. Satendra Kumar Mangrauthia
Dr. Divya PS
Dr. Kalyani M Barbadikar

Background

CRISPR/Cas driven genome editing is one of the most precise and advanced biotechnology tool for introducing site specific changes in crop genomes. This provides new avenues for the genetic improvement of crops to increase yield and stress tolerance. Although this research field is quite new, the possibility that genome editing can be used in crop improvement has been proven. Genome editing finds its application not only in trait improvement but also in functional genomics. This 3 days workshop is aimed to give ample theoretical as well as practical exposure to the research scholars/ academicians/ faculty/ researchers in the area of genome editing.

Registration Details

The applications will be considered on first-come-first-serve basis. The interested candidates should send a requisition letter along with enclosed application form for attending the workshop through email to geeppstspbbiirr@gmail.com or by post. A maximum of 25 participants will be selected. Registration fee has to be paid after the acceptance of application.

Technical Program

10th November 2019	
02:00-02:30	Registration
02:30-03:00	Inaugural address and Introduction
03:00-03:45	Genome Editing: History & Basics
03:45-04:00	Tea break
04:00-05:00	CRISPR Technology for gene editing: Basic Tools and applications in plants
11th November 2019	
09:00-09:30	Advancements in CRISPR technology: nucleases and base editing
09:30-10:00	Web and reagent resources for initiation of gene editing research
10:00-10:45	**Hands on experience:** Designing of guide RNAs and selection of CRISPR vectors
10:45-11:00	Tea break
11:00-11:30	Applications of CRISPR technology for enhancing plant productivity
11:30-01:00	**Hands on experience:** Cloning of guide RNAs and development of CRISPR vectors
01:00-02:00	Lunch break
02:00-03:45	**Hands on experience:** Transformation of CRISPR vectors into rice
03:45-04:00	Tea break
04:00-04:30	Applications of CRISPR technology for enhancing stress tolerance in plants
04:30-05:00	Tools for detection and confirmation of gene editing
12th November 2019	
09:00-09:30	Bio safety and IPR issues of gene editing
09:30-10:00	Off targets in gene editing
10:00-11:00	**Hands on experience:** Detection of mutations in gene edited lines
11:00-11:15	Tea break
11:15-12:00	Exercise based on gene editing experiment
12:00-12:45	Participants view point on gene editing (2-3 minutes each)
12:45-1:30	Certificate distribution and closing
01:30	Lunch break and group photo

Registration Fee

1. Research scholars
   (pursuing or completed M.Sc., Ph.D., Post doc):
   Rs. 8000/-
2. Academicians/ Faculty/ Researchers:
   Rs. 10000/-
3. Corporate participants:
   Rs. 25000/-

Payment Mode

E-Transfer/Demand Draft details for transferring the registration fee will be sent to selected candidates by email.

Target Audience

Research scholars/ Faculty/Industry/PhDs/Post Docs

Note

Candidates should make their own arrangement for the travel. No TA/ DA will be provided. Accommodation and food will be provided during the workshop.

For further details please contact

Dr. Satendra Kumar Mangrauthia

Senior Scientist

ICAR-Indian Institute of Rice Research

Hyderabad, Telangana State

email- skmdrr@gmail.com

Phone- 040-24591342

APPLICATION FORM

Workshop on
Gene Editing for Enhancing Plant Productivity and Stress Tolerance
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Scanned passport size photo

Personal information and contact details

Name (First name, middle name, surname)	
Gender	
Date of birth (dd/mm/yy)	
Designation	
Educational qualification	
Employment details	
Organization/ Institute/ State Agricultural University	
Email	
Phone number	
Contact address	

Research experience

Area of expertise	
Current nature of research work	
Publications in national and international journals	
Publications in related area of the workshop	

What is your motivation for applying for the workshop? (Not more than 100 words)

How the workshop will be beneficial for your future research work? (not more than 100 words)

Declaration

I hereby certify that the information provided in the application is true to my knowledge and belief

Full Name	
Signature	
Date	
Place	

(Signature of the head of the institute/ forwarding authority)