

# Directorate of Rice Research

Hyderabad

### Courses

- 1. Rice-based Cropping Systems
- 2. Integrated Pest Management in rice
- 3. Hybrid Rice Seed Production Technology

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E-mail: pdrice@drricar.org The Directorate of Rice Research was established as All-India Co-ordinated Rice Improvement Project in 1965 to provide leadership by bringing together the scattered efforts of rice researchers in the country under a single umbrella at the national level. The project was elevated to the level of Directorate during 1975 by the addition of lead research functions to its mandate. DRR has developed many location-specific and cost-effective technologies with its unique advantage of over 120 testing centers located in almost all major ecosystems in the country. The DRR conducts short-term refresher courses for the subject matter specialists and senior level extension functionaries of various state agricultural departments and state agricultural universities. It established the communication and Training Centre (CTC) in the year 1978, which is actively engaged in rice production technology. Directorate of Extension (DoE), ministry of Agriculture, Government of India strengthened the training facilities by sanctioning the Advanced Training Centre (ATC) on rice, latter on it has been chaged as centre of excellence for training in rice.

## 1. Rice-based Cropping Systems

The objectives of the course are:

- To identify the major constraints limiting cropping intensification under different rice ecosystems.
- To impart the latest know how technologies for rice based cropping systems under different rice growing ecologies.
- To develop location-specific action plan by the participants in order to implement the new innovations in next cropping seasons in their respective working areas.

#### Faculty

Experienced scientists of DRR and guest speakers from other ICAR Institutes and Acharya N.G. Ranga Agricultural University (ANGRAU), Rajendranagar, Hyderabad will constitute the faculty.

Course Director	: Dr Surender Pal Singh
Duration	: 3 weeks (3-23 September 2009)
Course fee	: US \$ 1,250 per trainee
No. of trainees per course	: 15-20
Accommodation	: Will be provided at very reasonable cost in institute hostel
Eligibility	: Subject mater specialist/ Scientist/Extn. Functionaries having B.Sc. (Ag.), M.Sc, or

Ph. D. degree

#### Course Contents

- The art and science of multiple cropping-historical background and current developments constraints limiting the increase in cropping intensity Problems and prospects of increasing the cropping intensity in rice-based cropping systems
- Current status of varietals improvement for adjusting different crops in different crop sequences
- Stubble management, conservation tillage and selective mechanization need for land preparation, seeding and stand establishment of different crops in the rice fallows
- Rains water management and moisture conservation for intercropping and moisture conservation for intercropping and / or sequence cropping
- National needs of an explosive agriculture involving high intensity cropping and nutrient disorder
- Regenerative agriculture involving need-based and integrated nutrient management practices for selected cropping systems
- Change in pests, disease and weed associations with the changing systems and integrated pest management
- Harvesting, threshing and processing of component crops and by-product utilization
- Effective communication use of audio-visual aids/training materials and planning and extension programmes for transfer of technology
- Socio-economic consideration governing the acceptability of cropping systems





## 2. Integrated Pest Management in rice

#### The objective

- to impart knowledge to identify the rice pest problems and acquaint with the available pest management options and skill;
- to acquaint the participants in analyzing agro ecosystem for taking pest management decisions and
- to appraise them the methods of educating the farmers and of communication methods for effective transfer of Integrated pest management technology

#### Faculty

Experienced scientists of DRR and guest speakers from other ICAR Institutes and Acharya N G Ranga Agriculture University (ANGRAU), Rajendranagar, Hyderabad will constitute the faculty.

Course Director	: Dr Mangal Sain
Duration	: 3 weeks (24 September-14 October 2009)
Course fee	: US \$ 1,250
No. of trainees per course	: 15-20
Accommodation	: To be provided in institute hostel
Eligibility	: Scientists, Subject Matter Specialists, extension and technical personnel engaged in plant protection activities and

degree



having BSc (Ag) or MSc or PhD

#### **Course Contents**

- Analysis of rice pest (insects, diseases, weeds, rodents, nematodes) problems-seasonal and historical profiles
- Diagnosis of insect pest, disease, weed, rodent, nematode problems and nutrient deficiencies
- Bio-ecology and management of key pests of rice
- Utility of sex pheromones in Integrated Pest Management
- Host plant resistance for insect pests of rice
- Present and future pest management options with emphasis on biological, cultural, behavioral and other non-chemical methods
- Pesticide management methods for effective and safe use
- Economic thresholds calculation and use along with pest surveillance for decision making in pest management
- Agro-ecosystem analysis
- Educating the farmers on IPM Practical experiences
- Communication media for different ecological and crop management regimes



### 3. Hybrid Rice Seed Production Technology

The course has been developed:

- To impart knowledge an skills regarding hybrid rice seed production methods for obtaining higher seed yield
- To develop the skills of participants to perform various operations in parental line purification, CMS multiplication and hybrid rice seed production
- To acquaint the trainees with various innovative approaches in the exploitation of hybrid vigorous

#### Faculty

Experienced scientist of the DRR and guest speakers form other ICAR institute an Acharya N.G. Ranga Agricultural University (ANGRAU) Hyderabad will constitute the faculty.

Course Director	: Dr B C Viraktamath
Duration	: 3 weeks (15 October-4 November 2009)
Course fee	: US \$ 1,250 per trainee
No. of trainees per course	: 15-20
Accommodation	: To be provided in institute hostel
Eligibility	: Subject mater specialist/ Scientist/Extn. Functionaries having B.Sc. (Ag.), M.Sc, or Ph. D degree



#### **Course Contents**

- Global and national status of hybrid rice
- Floral biology of rice, outlines of hybrid rice breeding and seed production
- Synchronization, prediction and adjustment of flowering
- Desirable traits of parental lines, purification and maintenance of parental lines
- Techniques of super high yielding seed production, cultural practices and input management
- Disease and insect pest management
- Harvesting and threshing, seed processing, seed testing and seed certification, economics of hybrid rice seed production, 'Gender sensitization', etc
- Effective communication, planning and implementation of the extension and the training programmes for transfer of improved hybrid seed production technologies

