Information Brochure

Model Training Course on

Maize production technology and management strategies for Fall Army Worm (FAW)

(4 – 11 November, 2019)

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Course Director

Sponsored by Directorate of Extension
Ministry of Agriculture, GOI, New Delhi

Organized by
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500030

Maize production technology and management strategies for Fall Army Worm (FAW)

Introduction

Maize is one of the most widely produced cereals in the world, having great significance as human food, animal feed and raw source material for large number of industrial products. It is one of the most versatile crops grown under a wide range of agro-ecological locations of tropical, sub-tropical and temperate regions. Maize, known as 'Queen of cereals' because of its immense yield potential, is the highest yielding cereal crop of world and is particularly important for food security. It is used extensively as the main source of calories in the feeding of poultry, pigs and cattle. Maize demand and the production will continue to increase with steady adoption of available technology and prospective industries. The success of single cross hybrid technology complemented with appropriate production technology has contributed phenomenal growth in maize production. The growing of specialty maize like baby corn, sweet corn and pop corn also has opportunity for enhancing farm profitability, livestock sustainability and employment generation.

The demand of maize is projected to be 45 million tonnes by 2030. The projected demand for maize will be met either by technological intervention or by bringing more area under maize cultivation. The technological interventions are adoption of high yielding single cross hybrids seeds, improved package of practices in different agro-ecological regions of the country and mechanization from sowing to post-harvest handling. One of the reasons for low productivity of maize is due to the losses caused by various biotic stresses. About 15.6 per cent of loss in yield due to biotic stress is caused by insect pests alone. Maize plant is attacked by 140 species of insect pests causing varying degree of damage. However, only about a dozen are serious in nature. However, due to changing global climatic patterns and due to change in host range of pests, many new pests previously not known on maize may emerge. Further, maize crop may also face challenges from new invasive pests. A new invasive pest, Fall armyworm *Spodoptera frugiperda* (J.E.Smith) has become the most important whorl-feeding insect pest of maize since its first report in the country in May 2018. This pest is reported to cause serious loss in production due to 15-50% leaf and whorl damage. Adoption of appropriate management practices for managing invasive pests, sustaining crop productivity and reducing ecological hazards. Innovative practices are being attempted to improve productivity, resource-use efficiency, managing biotic and abiotic stresses and bringing about livelihood security. These Innovative practices and technologies developed need to be disseminated to the farmers through established research extension line departments. Hence, this MTC is being organized by ICAR-IIMR for exposing the extension personnel and departmental staff regarding the latest technologies and practices in maize production

Course content

The course content will broadly cover the following topics:
(i) Production technology for normal maize, specialty corns and value addition; (ii) Mechanization and post-harvest management of maize; (iii) Hybrid Seed Production; (iv) Morphological identification, scouting of Fall Armyworm on maize; (v) Recent trends in Fall Armyworm pest status, symptomology, biological aspects, monitoring and pest behavior; (vi) Management strategies and IPM modules for fall armyworm; (vii) Biological control of Fall armyworm; (viii) Crop Management Strategies (ix) Field and Storage Pests Management (x) Disease Management.

Objectives

Adoption of improved maize production systems is the need of the hour as a tool of improving resource use efficiency and livelihood security in sustainable manner. The objectives of this course are to update their knowledge in the field of maize production technologies, and to provide needful information on new invasive pest fall armyworm to the trainees. This exposure will provide an opportunity to exchange information with resource persons who have made significant research contributions in this area.

About IIMR Objectives

The ICAR- Indian institute of maize Research (IIMR) is a premier national institute under the aegis of the Crop Science Division of Indian Council of Agricultural Research, New Delhi. IIMR is mandated to conduct basic and strategic research aimed at enhancement of productivity and production of maize, Coordination of multi-disciplinary and multi-location research to identify appropriate technologies for varied agro-climatic conditions, dissemination of improved technologies, capacity building and developing linkages, and Coordinates the All India Coordinated Research Project (AICRP) on Maize and also carries out extension and

outreach programmes It is an ISO 9001:2015 complied institute. Indian Council of Agricultural Research established the first coordinated crop improvement project on maize in 1957. It was upgraded to Directorate of maize research in January 1994. DMR was upgraded to Institute on 9th February, 2015 to strengthen and fortify the maize research programme. In 2016, the head quarter of IIMR was shifted from New Delhi to Ludhiana.

The institute has two regional stations, Winter Nursery Centre, Hyderabad (Telangana) and Regional Maize Research & Seed Production Centre, Begusarai (Bihar). Winter Nursery Center was established at Amberpet, Hyderabad in 1962 to cater the need of north Indian AICRP centers to grow their off-season nursery. Subsequently, the centre was shifted to Rajendranagar in 2008. The Winter Nursery centre is located within the campus of Agriculture Research Institute of Prof. Jayashanker Telangana state Agriculture University at Rajendranagar, Hyderabad. It is located at a distance of 15.1 km from Nampally railway station and 21.6 km from Secunderabad Rly station, 19.9 km from Kacheguda Rly station, 13.6 km from MG Bus Station and 18-22 km from airport (RGIA). The weather in Hyderabad during September will be moderate, with mean minimum and maximum temperature around 27-35 ^{0}C. The boarding and lodging will be provided to the participants in the guest house of NAARM/other ICAR institutes in Rajendranagar, Hyderabad.

Who can participate

The course is meant for young active scientists/officers/subject matter specialist/ADOs of the state agricultural/developmental departments, SAUs/KVKs/ICAR institutes who are working at field level and involve in extension activities. The applicant should normally be less than 45 years of age. The maximum number of participants shall be 25.

How to apply

Application for participation in the course may be made in the prescribed format as given herewith and duly forwarded by the competent authority of the department where the candidate is employed. Applicants may send an advance copy if they anticipate delay in forwarding through proper channel. However, the final selection will be made only if the application duly recommended by the competent authority is received, which must not be later than one week after the closing date. The closing date for receipt of applications is 20th September, 2019. The selected candidates will be intimated by 30th September, 2019. After the candidates are intimated of their selection, they should immediately reply with acceptance. Cancellation at the last moment for casual reasons after acceptance will be regarded as a serious breach of ethical conduct since it may deprive other eager candidates who could have availed of the opportunity.

Travel, Boarding and Lodging

The trainees are entitled to travel by train as per their entitlement restricted to AC II-tier rail/bus who are nominated by state Development Departments. The TA for the participants from SAUs/KVKs/ICAR institutes may be borne by their respective organization/institutes. However, free boarding and lodging will be provided to the all participants in local ICAR Guest houses

Course Coordinators

Dr. J.C.Sekhar, Principal Scientist
Dr. N.Sunil, Principal Scientist
Dr. P.L.Soujanya, Scientist
Sri.Yathish, K R, Scientist
ICAR-Indian Institute of Maize Research

Application may be sent to

Dr J.C.Sekhar, Principal Scientist, Winter Nursery Centre, ICAR-IIMR, ARI campus, Rajendranagar Hyderabad- 500030
Telephone No.: 040-29701340,
Mobile: 9908600340,
Fax: 040-24018457,
Email: pdmaize@gmail.com,
jcswnc@rediffmail.com,
jc.sekhar@icar.gov.in

This circular is also available on: https://iimr.icar.gov.in/

For further details please write to:

Dr. Sujay Rakshit,
Director, ICAR-IIMR,
PAU Camus, Ludhiana-141004
Phone: 0161-2440047; 0161-2440048
Email: s.rakshit@icar.gov.in

NOMINATION FORM NOMINATION FOR MODEL TRAININGCOURSE ON

Maize production technology and management strategies for Fall Army Worm (FAW)
(4-11 November, 2019)

Name and designation:_____

Affiliation:_____

_____

Address for communication:_____

Phone (Office):_____
Residence:_____
Mobile: _____

Email:_____
Date of birth:_____Sex:

Male/Female

Area of Specialization: _____

Expectations from Training Course:

Signature of the applicant (indicate name of place and date)

Recommendation of the forwarding Department

(Signature with date, designation and address)

CERTIFICATE

It is certified that the information furnished by the office record and was found correct.

(Signature and designation of the sponsoring authority)

Note: Photocopy of the form may be used