

**International training
course announcement:**

**Increasing
genetic gains in maize**
through integration of novel
tools and technologies

Organized by
CIMMYT Global Maize Program

**Nairobi, Kenya
June 19-29, 2017**

Increasing genetic gains in maize through integration of novel tools and technologies



The world faces the challenge of growing more maize, responsibly and sustainably. Development of high yielding maize varieties resistant to different biotic and abiotic stresses quickly and efficiently is the need of the hour. Use of new tools and technologies is critical in achieving rapid progress in development of improved maize germplasm. The CIMMYT Global Maize Program (GMP) actively collaborates with national agricultural research systems (NARS) and private seed companies, universities, and advanced research institutes in development of improved maize germplasm for diverse agro ecologies in tropical environments. CIMMYT is also at the forefront in adapting new and novel technologies that enhance genetic gains. Considering the need for capacity building of collaborating partners in breeding methodologies and new technologies towards increasing the genetic gains in maize breeding programs, CIMMYT is organizing a two week international training course on increasing genetic gains through integration of novel tools and technologies, for maize breeders in Nairobi, Kenya. This course is targeted at both early career and senior maize breeders.

Objective:

To impart theoretical and practical exposure on breeding methodologies for tropical maize improvement and enhance the capability of maize researchers to design and implement modern maize breeding programs using new tools and technologies.

Course content:

During the course participants will learn

- Breeding methodologies for increasing genetic gains for various traits including abiotic and biotic stresses and nutritional quality
- Technologies for development and evaluation of biotic and abiotic stress tolerant maize germplasm
- Germplasm development and evaluation under different agroclimatic conditions in the tropics
- Use of doubled haploids to enhance breeding efficiency
- Use of molecular markers and genomic selection for improving the genetic gains
- High throughput phenotyping technologies to increase the selection intensity
- The application and appropriate use of “state-of-the-art” advanced biometrical techniques and Information Technology tools
- Seed systems for efficient delivery of improved maize varieties

Methodology:

The course duration will be for two weeks. The program includes a series of lectures by CIMMYT scientists, and invited scientists from prominent public and private organizations along with field visits to CIMMYT’s experimental stations at Kiboko and Naivasha in Kenya. These lectures and field visits aim to give broad exposure to different aspects of maize breeding. The course will be thought in English.

Training course fee:

Course fee is US\$3,000 for participant for two weeks, inclusive of accommodation, living allowance (US\$30/day) for major expenses, training materials, internet connection, all local

travel including airport pick up/ drop off and travel to CIMMYT experimental stations and a training fee. The course fee does not include international/ domestic airfare, cost of the Kenyan visa and medical insurance. These expenses should be provided/covered directly to the participant by the sponsoring institution.

CIMMYT may consider providing financial support to cover the costs of course fee and/or travel costs to a few selected participants from NARS institutions in developing countries with limited resources, especially those who are very active collaborators of CIMMYT under MAIZE CGIAR Research Program or special projects.

Selection of candidates:

This course targets researchers from national research programs, small and medium enterprises working on maize germplasm development. Due to logistical reasons, this training course will be open to a maximum of 30 participants, including participants from public institutions in the developing countries (especially in Sub-Saharan Africa and Asia) and private sector with particular preference to small and medium enterprise (SME) companies serving the developing world. All applicants will be screened internally by CIMMYT Global Maize Program and only selected candidates will be informed by 10 May, 2017.

Interested candidates must submit their applications in the following link no later than 30 April, 2017.

To register for the event, please click [HERE](#)

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