

KEY DEADLINES

31 January 2018 Submission of abstract through INDICO (including submission of Forms A and B through a competent national authority – see Section G of the Announcement)

31 January 2018 Submission of grant application (Forms A and C through a competent national authority – see Section G of the Announcement)

30 April 2018 Notification of acceptance of abstract

Registration only (Submission of Form A through a competent national authority) is not subject to a deadline.

ABSTRACT SUBMISSION

Abstracts must be submitted in electronic format through the IAEA browser-based file submission system INDICO available at the conference web page. Additionally, Forms A and B have to be submitted as explained in the announcement on the conference web page. Submission of abstracts only (without submission of Forms A and B) will not be considered.

REGISTRATION AND FUNDS

No registration fee is charged to participants.

Limited funds are available to assist certain participants. Approved grants will usually cover only part of the cost of attendance. Please see the conference web page for further details.

LANGUAGE

The conference will be held in English.

EXHIBITION

A limited amount of space will be available for commercial vendors' display/exhibits during the conference. Interested parties should contact the Scientific Secretariat by email at ismbb2018@iaea.org by 31 January 2018.

SYMPOSIUM SECRETARIAT:

Scientific matters and paper submissions

Mr Ljupcho Jankuloski and Mr Ivan Ingelbrecht

Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture

Email: ismbb2018@iaea.org

Participation, grants and administrative matters

Ms Martina Khaelss

Division of Conference and Document Services

Email: m.khaelss@iaea.org

GREENING

To demonstrate its commitment to sustainability, the IAEA will organize this symposium as a 'green meeting' according to the guidelines of the Austrian Ecolabel.

There will be a focus on the areas of paper smart documentation, waste reduction and recycling, and environmentally friendly catering.

CONFERENCE WEB PAGE

Detailed information on administrative matters, including registration, paper submission and grants, is provided on the conference web page

<https://www.iaea.org/events/plant-mutation-breeding-symposium-2018>

Please include reference number **IAEA-CN-263** in all communications.



FAO/IAEA International Symposium on

Plant Mutation Breeding and Biotechnology

27–31 August 2018
Vienna, Austria

Organized by the



Joint FAO/IAEA Programme
Nuclear Techniques in Food and Agriculture

BACKGROUND

Over the last fifty years, the Food and Agriculture Organization of the United Nations (FAO) and the International Atomic Energy Agency (IAEA) have played a critical role in supporting their Member States in the use of induced mutations to develop improved crop varieties.

The successful application of gamma rays and other physical and chemical mutagens in plant breeding over the past 90 years has increased crop biodiversity and productivity across the world.

Induced mutation offers many benefits with regard to crop improvement, especially when there is no reliable source of traits (variation) in nature that could be introduced to varieties by conventional breeding techniques such as hybridization. The induced mutation technique is becoming increasingly important to bring about heritable changes in plants and offer new genetic variation to plant breeders.

Plant biotechnologies are crucial to the effective application of mutation breeding techniques, and they are increasingly being considered for crop improvement to ensure that crops are better adapted to climate change. The application of mutation induction coupled with biotechnologies, genomics and molecular marker techniques, can speed up all the main stages of breeding programmes, from the generation of variability, through selection to rapid multiplication of the desired genotypes.

OBJECTIVES

The purpose of the symposium is to review achievements, uncover new developments, trends and challenges in the field of plant mutation breeding, and to foster a broad exchange of information within the scientific community, as well as between the scientific community and the private sector. The symposium will highlight specific challenges faced by Member States, such as emerging transboundary threats to crop production, and will also assess the overall importance of mutation breeding to food security.

The symposium and its deliberations and conclusions will also provide useful feedback to the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture which will help it to address Member States' needs in future programming.

LIST OF TOPICS

The scope of the symposium is meant to cover, but is not limited to, the following topical areas:

1. Contribution and impact of mutant varieties to food security
2. Mutation breeding for adaptation to climate change in seed propagated crops
3. Mutation breeding for ornamental and vegetatively propagated crops
4. Enhancing agro biodiversity through new mutation induction techniques
5. New challenges and technologies in plant genomics and breeding.

PROGRAMME STRUCTURE

The structure of the symposium will be based on selected plenary lectures, thematic sessions with keynote addresses, contributions by participants in the form of oral presentations and posters, as well as panel discussions.

TARGET AUDIENCE

It is expected that this symposium will attract eminent basic research scientists and geneticists and plant breeders from all over the world. Therefore, the symposium will at once provide opportunities to present and discuss current research and technology development in this field and establish linkages among scientists in order to develop knowledge-based breeding strategies. It will also enable project managers from international and national organizations, as well as multinational and private companies engaged in plant breeding activities, to bring themselves up to date on developments in the application of novel technologies in mutation techniques. Accordingly, the target audience for this symposium will include:

- Plant breeders involved in mutation breeding;
- Geneticists engaged in applied research related to crop improvement;
- Molecular geneticists and scientists engaged in basic research;
- Plant pathologists; and
- Stakeholders involved in crop production.