



International Symposium on Induced Mutations in Plants (ISIM)

**12-15 August 2008
Vienna, Austria**

ANNOUNCEMENT AND CALL FOR PAPERS

1. BACKGROUND

The year 2008 will mark the 80th anniversary of mutation induction in crop plants. The application of mutation techniques, i.e. gamma rays and other physical and chemical mutagens, has generated a vast amount of genetic variability and has played a significant role in plant breeding and genetic studies. The widespread use of induced mutants in plant breeding programmes throughout the world has led to the official release of more than 2600 mutant crop varieties. A large number of these varieties (including cereals, pulses, oil, root and tuber crops, and ornamentals) have been released in developing countries, resulting in enormous positive economic impacts.

The International Symposium on Induced Mutations in Plants (ISIM) will be the eighth in the Joint FAO/IAEA Programme's Symposium series dedicated exclusively to harnessing and disseminating information on current trends in induced mutagenesis in plants, the first of which was held in 1969 and the last in 1995. These previous symposia dealt with themes relating to the development of efficient protocols for induced mutagenesis and their role in the enhancement of quality traits, as well as resistance to biotic and abiotic stresses in crops and the integration of in vitro and molecular genetic techniques in mutation induction.

Since 1995, there has been an increased interest within the scientific community, not only in the use of induced mutations for developing improved crop varieties and for the discovery of genes controlling important traits and in the understanding the functions and mechanisms of actions of these genes, but also in deciphering the biological nature of DNA damage, repair and mutagenesis. A symposium that brings together the key players in basic research, as well as in the development and application of technologies relating to the efficient use of induced mutations for crop improvement and empirical genetic studies, is therefore justified and necessary.

2. MAIN TOPICS

Topics to be addressed at the symposium:

- Molecular genetics and biology of physical, chemical and transposon-induced mutagenesis
- New mutation techniques, e.g. ion beam implantation, and their integration with other molecular and biotechnological techniques
- Induced mutations in crop breeding programmes
- Mutation induction for gene discovery and functional genomics, including targeting induced local lesions in genomes (TILLING) and other reverse genetic strategies
- Mutational analysis of important crop characters (tolerance to abiotic stresses, resistance to diseases and insects, quality and nutritional characters, etc.)
- Socio-economic impact of widespread mutant varieties.

3. TARGET AUDIENCE

It is envisaged that this symposium will not only attract eminent basic research scientists but also active plant breeders from all over the world. Therefore, the symposium will at once provide the platform for the exposition and rigorous discourse on current research and technology development in this field and establish linkages among scientists in order to develop knowledge-based breeding strategies and mechanisms for sharing information and resources. It will also be a venue for project managers of international and national organizations, as well as multinational and private companies engaged in plant breeding activities, to gain insights into the applications of, and current trends in, mutation techniques.

4. EXHIBITS

Limited space will be available for commercial vendors' displays/exhibits during the symposium. Interested parties should contact Mr. Shu Qingyao, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture IAEA, at email: q.shu@iaea.org.

5. CONTRIBUTED PAPERS AND POSTERS

Concise papers on issues falling within the topics outlined in Section 2 above may be submitted as contributions to the symposium.

(a) Submission of synopses

Persons who wish to present a paper or poster at the symposium must submit an extended synopsis (in English) of 800 words maximum (i.e. two A4 format pages of single spaced typing or the equivalent, including any tables or diagrams and a few pertinent references) on one of the topics listed under Section 2. The extended synopsis should be submitted together with the completed Form for Submission of a Paper/Poster (Form B), and the Participation Form (Form A) to the competent national authority for official transmission to the IAEA in time for them to be received by the IAEA by **14 December 2007**. In addition, the synopsis must be sent electronically to the IAEA scientific secretariat, email address: plant.mutation@iaea.org.

Authors are urged to make use of the Synopsis Template in Word on the symposium web page (see Section 15). The specifications and instructions for preparing the synopsis and how to use the synopsis template are given in the attached instructions. Also attached is a sample extended synopsis.

The synopsis should give enough information on the contents of the proposed paper to enable the selection committee to evaluate it. Introductory and general matters should not be included. The synopsis — if accepted — will be reproduced in **unedited** form in the Book of Extended Synopses; the original must therefore be submitted as a camera-ready copy in a form in which the author will wish to have the work presented. The general style and presentation should be as in the attached sample.

(b) Acceptance of Papers for Oral Presentation and Poster Presentation

Given the number of papers anticipated and the need to provide ample time for discussion, the number of papers that can be accepted for oral presentation is limited. Authors who would prefer to present their papers in a poster session are requested to indicate this preference on Form A with which they send the extended synopses.

Authors will be informed whether their papers/posters have been accepted for presentation on the basis of the extended synopsis. Guidelines for the preparation of the papers and the deadlines for their submission will be provided at that time.

The IAEA reserves the right to decline to present or publish any paper that does not meet expectations based on the information in the extended synopsis.

Further details about the preparation of papers and oral presentation at the symposium will be sent to the authors of the papers accepted together with notification of acceptance.

6. EXPENDITURES

No registration fee is charged to participants.

As a general rule, the IAEA does not pay the cost of attendance, i.e. travel and living expenses, of participants. However, limited funds are available to help meet the cost of attendance of selected specialists mainly from **developing countries with low economic resources**. The grants awarded will be in the form of lump sums usually covering only part of the cost of attendance. Generally, not more than one grant will be awarded to any one country.

If governments wish to apply for a grant on behalf of one of their specialists, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants are submitted by **14 December 2007** and are accompanied by a duly completed and signed Grant Application Form (as attached). Applications that do not comply with these conditions cannot be considered.

7. SYMPOSIUM PROCEEDINGS

The proceedings of the meeting will be published by the IAEA as soon as possible after the symposium.

8. DISTRIBUTION OF DOCUMENTS

A preliminary programme of the symposium will be sent to participants in advance. The final programme and the book of extended synopses will be distributed at registration.

9. WORKING LANGUAGE

The working language of the symposium will be English.

10. PARTICIPATION

All persons wishing to participate in the symposium are requested to **register in advance online**. In addition they must send a completed Participation Form (Form A) and if relevant, the Form for the Submission of a Paper (Form B) and the Grant Application Form (Form C) through the competent official authority (Ministry of Foreign Affairs, Ministry of Agriculture, national FAO committee, or national atomic energy authority) to the IAEA. A participant will be accepted only if the Participation Form is transmitted through the government of a Member State of the Sponsoring Organizations or by an organization invited to participate.

Participants whose official submissions have been received by the IAEA will receive further information on the symposium approximately three months before the meeting. This information will also be posted on the symposium web page.

11. ACCOMMODATION

Detailed information on accommodation and other symposium related information will be sent to all designated participants well in advance of the symposium. This information will also be available on the symposium website.

12. VISA

Designated participants who require a visa to enter Austria (Schengen State) should submit the necessary applications to the nearest diplomatic or consular representative of Austria or any other consular authority of a Schengen partner State representing Austria as early as possible (please note that it could take up to three weeks to obtain a visa).

13. CHANNELS OF COMMUNICATION

The Participation Form and as applicable, the Form for Submission of a Paper/Poster, and the Grant Application Form, should be sent to the competent national authority (Ministry of Foreign Affairs, Ministry of Agriculture, national FAO committee, or national atomic energy authority) for official transmission to the IAEA.

Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on administrative matters to the IAEA Conference Services Section.

14. SYMPOSIUM SECRETARIAT

The address of the Secretariat is:

International Atomic Energy Agency
IAEA-CN-167
Vienna International Centre
P.O. Box 100
Wagramer Strasse 5
1400 Vienna, Austria
Telephone No.: +43 1 2600 (0) plus extension
Telefax No.: +43 1 26007
Email: official.mail@iaea.org
Email for paper submissions: plant.mutation@iaea.org

The Scientific Secretary of the symposium is Mr Qingyao Shu, Plant Breeding Section, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture (telephone extension 21617, email address: Q.Shu@iaea.org). Symposium organizer is Ms K. Morrison, Conference Services Section, Division of Conference and Document Services (telephone extension 21317, email address: K.Morrison@iaea.org).

15. SYMPOSIUM WEB PAGE

Please visit the IAEA symposium web page regularly for new information regarding this symposium: <http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=167> .