FAO REGIONAL CONFERENCE FOR EUROPE

Thirtieth Session Antalya, Turkey, 4 - 6 May 2016

> Side Event 2 Thursday, 5 May 2016 12.30h – 13.30h SEDIR Meeting room

Area-wide Integrated Pest Management: The Successful Integration of the Sterile Insect Technique

Background/objective

Peaceful use of atomic energy for development is one of the major mandates of the International Atomic Energy Agency (IAEA). Since 1964, the FAO and IAEA have been cooperating through the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture to support and promote the safe and appropriate use by member countries of nuclear and related technologies in food and agriculture, with the aim to contribute to global food security and sustainable agricultural development. An integral part of the FAO-IAEA partnership is the FAO/IAEA Agriculture & Biotechnology Laboratories that spearhead the use of 'atoms for peace', with particular emphasis on training and applied research for development. Applying cutting-edge isotope and radiation technologies these laboratories add critical value to global agricultural research in the areas of animal production and health, food and environmental protection, insect pest control, plant breeding and genetics, and soil and water management & crop nutrition. Their extraordinary expertise contributes significantly to worldwide efforts to fight global hunger and malnutrition, improve environmental sustainability, protect plants and livestock, improve farmers' incomes and ensure safe food for consumers. This collaborative model, unique in the UN system, plays a pivotal support role in the success of nuclear applications in food and agriculture.

Major global trends that will frame agricultural development over the medium-term include rising food loss and waste, lingering food insecurity, malnutrition, proliferation of insect vectors and the detrimental impacts of climate change. In the over fifty years of the FAO/IAEA partnership, cooperation has expanded and focuses on the main areas of work in which the nuclear techniques can contribute to implementing and achieving the FAO Strategic Objectives.

Nuclear applications serve a multitude of purposes as they address specific issues of agricultural importance, filling gaps and adding value. To optimize on-site implementation the Joint FAO/IAEA Programme strives to connect scientists and research, testing and regulatory laboratories directly with farmers, their fields, crops, animals and production processes. Hence, the work of the Joint Programme is more than just science – it is the application of science from the laboratory to the field and engaging with the needs of producers and consumers.

The side event will provide a select overview of some successful applications of nuclear and related techniques in the area of area-wide integrated pest management in the European region.

Target participants: FAO members attending the ERC, in particular focus countries for 2016-17.

Key messages

- A. The IAEA, through the FAO-IAEA partnership, supports national efforts to sustainably control insect pests using sterile insect technique (SIT) in the region
 - The comparative advantages of SIT contribute effectively to sustainable agricultural development and food security.
 - Capacity building through technical cooperation projects and activities of the FAO/IAEA Agriculture & Biotechnology Laboratories in Seibersdorf, Austria.
 - Impacts of IAEA support, increase trade in international markets and contribute to vector management and the reduction of mosquitoes-borne diseases.
- B. Using biocontrol to reduce the use of pesticides and other agro-chemicals for improved food safety and security
 - Benefits of an integrated area-wide approach.
 - Increasing importance of reducing pesticide use and residues, thereby promoting ecosystem services.

C. Quarantine pests (zero tolerance) and international trade

- Pre-harvest SIT integrated with post-harvest approaches.
- Contribution to IPPC standards setting process (the commission and committees including working groups), provision of scientific advice.
- Supporting the implementation of IPPC guidelines through provision of methods of analysis (through IAEA based database) and hosting of technical panels.
- Technical support to the fruit fly detection systems for an early detection and rapid response to eradicate outbreaks of invading new pests.

More information:

- More on SIT: Using Nuclear Science to Control Pests
 www.youtube.com/watch?v=yV7WLrlzbLk&feature=youtu.be
- More information on the Joint FAO/IAEA Division:

http://www-naweb.iaea.org/nafa/index.html

• More information on the use of the Sterile Insect Technique: <u>http://www-naweb.iaea.org/nafa/ipc/index.html</u>

Language: The Side Event will be interpreted in English, Russian and Turkish language

Provisional Agenda

Moderator: Mr Qu Liang, Director, Joint FAO/IAEA Division

12:30-12:35	Welcoming remarks	Mr Vladimir Rakhmanin, FAO Assistant Director-General and Regional Representative
12:35-12:40	Presentation on the FAO/IAEA Partnership	Mr Qu Liang, Director, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, Austria
12:40-12:50	The control of fruit flies by the sterile insect technique to overcome trade barriers and address insecticide resistance in Valencia, Spain	Mr Vicente Dalmau Sorlí, Project Leader, Plant Protection Services, Government of Valencia, Spain
12:50-13:00	The control of fruit flies by the sterile insect technique to reduce insecticide use and protect wetlands in Neretva valley, Croatia	Mr Mario Bjeliš, Institute for Plant Protection, Croatian Centre for Agriculture, Food and Rural Affairs, Ministry of Agriculture, Croatia
13:00-13:10	Context, Progress and Perspectives in the SIT project against <i>Aedes albopictus</i> in Reunion Island	Mr David Damiens, French Research Institut for Development (IRD), Reunion Island, France
13:10-13:30	Discussion	