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MOROCCO SYMPOSIUM ON PHYTOSANITARY MANAGEMENT OF MAJOR CROPS

The Moroccan Association of Plant Protection (AMPP) organized a symposium on phytosanitary management of the major crops: cereals, pulses and sugar plants. This meeting was held at the National School of Agriculture, Meknes on November 14, 2017.

This event reviewed the recent advances in the area of plant protection of the most important pests and diseases of major crops in Morocco. The areas covered during the symposium were:

- Screening for resistance to diseases and insect pests.
- Chemical and biological control.
- Identification/epidemiology of pests and their natural enemies;
- Progress in integrated pest management;

A total of ten oral presentations were given at this meeting, which covered leaf rust and scald of barley, Sitona weevil and stem borer of faba bean, leafminer and pod borer of chickpea and root rot disease of sugar beet. The symposium was attended by some 70 participants (students, researchers, professors and representatives of national offices and private companies).

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INTRODUCING THE LITHUANIAN RESEARCH CENTRE FOR AGRICULTURE AND FORESTRY

The Lithuanian Research Centre for Agriculture and Forestry (LRCAF) is a State research institute, whose strategic objective is to conduct R&D in the fields of agronomy, forestry, as well as related fields of ecology and environmental sciences, biology, biophysics, botany and zoology. Researchers are involved in national (funded by the Lithuanian Research Council, Ministry of Environment, Ministry of Agriculture, Ministry of Economy and other state authorities) and international projects (funded from HORIZON 2020, European Territorial Cooperation and other EU funds).

According to the EU directive „Sustainable use of pesticides“, growers have been required to implement IPM in their production since 2014, with the aim to reduce the impact and usage of pesticides. The total production area of crops managed under IPM guidelines is growing every year.

The Institute of Horticulture of LRCAF carried out several investigations in accordance to the above IPM guidelines. The first study involved warning equipment Metos D and was initiated in 2001–2006, which was subsequently extended in 2007using internet based system iMETOS®sm (Pessl Instruments, Austria) for prediction of infection risks of apple scab. iMETOS®sm systems are equipped with sensors for capture and transmission of data on temperature, relative humidity, rainfall, leaf wetness and other data needed for prediction of apple scab infection. Scab warning systems allow growers to optimise the use of fungicides against scab and to reduce spray applications per season. Fungicides are applied on scab sensitive varieties immediately after infection appears. The same active ingredients of plant protection products are not used more than two times consecutively, and the preharvest interval is now 1.5 times longer than indicated on the label. In Lithuania, plant protection products labelled as “very toxic” and “toxic” are not permitted.

Research on the efficiency the Alternaria leaf blight forecasting model for carrot under Lithuanian conditions was carried out in 2007–2008. According to the Alternaria forecasting model provided by iMETOS®sm, favorable conditions for Alternaria leaf blight infections formed in June, July and August, corresponding to conducive weather conditions. Fungicide spraying according to the Alternaria forecasting model was effective at 91.73% compared to conventional spraying.

Influence of the onion disease forecasting model on the fungicide application timing and efficacy was investigated at the LRCAF Institute of Horticulture in 2012-2014. Onion cv. 'Stuttgarter

Riesen' was grown from sets. During the three years of the experiment, first fungicides applications according to the iMETOS®sm forecasting model were made 19, 6 and 23 days earlier compared with conventional spraying, and gave a yield increase of 3.51 tha^{-1}, 3.87 tha^{-1} and 3.40 tha^{-1} compared to control, respectively.

Research for adaptation of the iMETOS®sm *Botrytis cinerea* risk forecasting model for grey mould management was carried out in 2008-2009 and 2013-2014. The preventive applications according to the model were done while the symptoms of grey mould were still not detected. Analysis of the forecasting model data indicates that the most favourable conditions for strawberry grey mould development in Babtai region (Lithuania) were in June.

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INTERNATIONAL CONFERENCE ON BIOLOGICAL CONTROL

An international conference on biological control will be held in Bengaluru, September 27 - 29, 2018 under the main theme - Biological Control: Approaches and Applications

Globally, up to 30% of agricultural yields are affected by pests and diseases despite intensive chemical pesticide use. Biological control of insect pests and diseases is one of the major ecosystem services provided to agriculture worldwide. Natural enemies such as predators, parasitoids and pathogens play a major role in limiting damage caused by nature and exotic pests. The main theme of the conference is to address issues related to various biological control approaches in the context of biodiversity, increased chemical pesticide pressure and climate change. The emphasis would also be on the challenges faced by researchers, farmers and other stakeholders in implementing biological control programs. The conference would include keynote addresses, plenary and oral presentations and poster sessions.

The conference would cover the following Sub Themes related to Biological Control:

- Biodiversity and Biosecurity
- Conservation Strategies
- Biotechnological Approaches in Biocontrol
- Production and Utilization of Macrobials for Insect Pest Management
- Production and Utilization of Microbials for Insect Pest and Disease Management
- Biological Control Compatible Approaches
- Biological Control of Invasive Pests and Weeds
- Biological Control: Industrial Perspective and Policy Issues
- IOBC Parthenium Working Group Workshop
- IOBC Tuta Working Group Workshop

For more information: http://www.icbc2018bengaluru.com/

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IAPPS Mission: to provide a global forum for the purpose of identifying, evaluating, integrating, and promoting plant protection concepts, technologies, and policies that are economically, environmentally, and socially acceptable.

It seeks to provide a global umbrella for the plant protection sciences to facilitate and promote the application of the Integrated Pest Management (IPM) approach to the world's crop and forest ecosystems.

Membership Information: IAPPS has four classes of membership (individual, affiliate, associate, and corporate) which are described in the IAPPS Web Site www.plantprotection.org.

The *IAPPS Newsletter* welcomes news, letters, and other items of interest from individuals and organizations. Address correspondence and information to:

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