

International Society for Plant Pathology

(Professor Greg Johnson, President)



Report to ISPP from an Associated Society for 2014-2018

Name of Society: Arab Society for Plant Protection (ASPP), established in 1981

Web address for Society: www.asplantprotection.org

Name (s) of personnel preparing report:

Ms. Cecilia Chami, ASPP Executive Secretary

Nominated Officers: Is the list for your society on the ISPP website correct? **Yes** (http://www.isppweb.org/societies.asp)

Will a Society member be making corrections to the ISPP entry for your society on-line? Yes

Society Contact: Dr. Khaled Makkouk, ASPP Executive Committee member,

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Society membership:

482 members in 2014;

460 members in 2015;

431 members in 2016;

496 members in 2017;

484 members in 2018.

Report for 2014-2018:

Society Activities and publications:

All information on activities and publications of ASPP are found in the society website: www.asplantprotection.org

<u>Publications:</u> The Society publishes three times per year (April, August and December) the Arab Journal of Plant protection (<u>www.ajpp.asplantprotection.org</u>). The society also publishes the Arab and Near East Plant Protection Newsletter (ANEPPNEL), the official newsletter of ASPP, which is published also three times per year in collaboration with the Near East Regional Office of FAO. Both the journal and the newsletter are available only on-line.

In addition, the society published in Arabic so far three books, one on virology (2008), one on nematology (2009) and a third on safe application of pesticides (2011). In 2017, ASPP published the second edition of the "Dictionary of Plant Protection Terms" which includes 15,000 terms in three languages: Arabic, English, French.

Society Conferences and Workshops:

ASPP organized the 11th Arab Congress of Plant Protection (ACPP) in collaboration with El-Balqaa Applied University during the period 9-13 November, 2014 in Amman, Jordan. Around 300 participants from 15 Arab countries and 8 countries outside the region joined this congress. 405 papers were included in the congress program as either oral or poster presentation. ISPP president Dr. Greg Johnson participated in the congress as a keynote speaker with support from ISPP. The congress program also included a one day agriculture/touristic trip to the Jordan Valley.

ASPP also organized the 12th ACPP in collaboration of the Agriculture Research Center in Hurghada, Egypt, during the period 5-9 November, 2017. Around 350 participants from 14 Arab countries and 9 countries outside the Arab region joined this congress. 298 papers were included in the congress program as either oral or poster presentations. Dr. R. Muniyappan from Virginia Tech, USA, gave a keynote address on behalf the International Association of Plant protection Sciences (IAPPS). The congress program included a one day touristic trip to Luxor.

Plant Pathology in the Region:

The Arab and Near East Region is facing several important plant pathology related issues and constraints, whether field-related or research-related. Following are the most important:

Plant Quarantines:

Though most of the Arab countries have established plant quarantine regulatory systems, the implementation of these quarantine regulations remain very limited. Among the most critical factors limiting their implementation are:

Limited human and infrastructure capacities in plant disease diagnosis at the quarantine stations Limited human resources hired and continuously present at the quarantine stations Limited information on pests and diseases (including virulence changes) in the country in the absence of regular disease surveillance

Lack of coordination between the various ministries and authorities concerned with the entry and control of plant material into the country, including the ministry of industry, health and especially the customs

Efforts are underway to improve the regional information sharing and improve national cooperation and coordination. Raising awareness with policy makers remain a critical factor. Many pests and diseases are being introduced into the region through the lack of strict quarantine control and through illegal smuggling of plant materials.

Plant nursery control:

Many countries in the region are still suffering from the lack of control over the quality of vegetative propagative material produced in local nurseries. Many of the nurseries are still non-professional, non-registered and are producing and selling seedlings, especially of fruit trees without appropriate sanitary control. These nurseries could be public or private. Sources of the cutting/ buds used in the nursery are apparently healthy trees often of unknown quality. Many diseases have been spreading nationally and regionally through such nursery activities including citrus Tristeza and other phytoplasma diseases, Mango quick tree decline (*Ceratocystis* sp.), Verticillium wilts on olive and stone fruit trees, crown gall disease, etc.

Pesticides:

The region still is excessively using pesticides and in an uncontrolled fashion, especially in fruits and vegetables. There is ample space for improvement in the area of pesticide regulations and use, including: Control on the use of banned pesticides still used in some areas

Pesticide residue control on foods in the local market. Control is commonly performed on exported material either by the exporting or importing country. However, there is hardly any control on products sold in the local markets.

Pesticide testing laboratories: are still needed whether the laboratories to test the residues in food, water and the environment or laboratories for testing the quality of imported pesticides Capacity building of farmers in the area of Integrated Pest Management for pesticide use reduction, improved ecosystem services, reduced environmental and health hazards and improved yields

Improved forecasting and early warning systems for improved decision making to reduce pesticide use in the field

Elimination and control of the obsolete and expired pesticide stocks still present in many of the

countries of the region, especially those affected by disease epidemics and pest plagues such as the Desert Locust or Sunn pest.

Major threatening diseases in the region:

Several diseases are still threatening crop production and the livelihoods of farmers in the region. Among the most important are the wheat rusts, especially since wheat is a staple food crop for all countries of the Region, providing around 40% of the *per capita* calorie supply, and it is especially important in the diets of the poorest consumers. The emergence of Ug99, the wheat stem rust strain in East Africa and its spread to Yemen, Sudan and Iran is a major threat to the countries in the Region. Ug99 is highly virulent to over 90% of all wheat varieties grown in the Region. Monitoring of the spread of Ug99 and breeding for resistance is on-going in the region. Yellow rust is still also a serious problem for many countries in the Region and the emergence of more aggressive forms of this disease is a continuous threat. Actions needed include surveillance, field management, resistance breeding and seed multiplication and information exchange between countries.

Other threatening plant diseases in the region include *Citrus tristeza virus*, *Plum pox virus*, *Tomato yellow leaf curl virus*, citrus greening disease and Bayoud disease of date palm.

4. Plant pathology research and education in the Arab region:

In the area of plant pathology, and despite the many faculties of agriculture at universities offering plant pathology courses and research facilities, the region is in need of:

Specialists in plant disease diagnosis and taxonomy, not only at the molecular level but more in the field of pathogens identification/characterization as well as plant taxonomy Specialists in the area of forest pathology

Compiled sources of information/publications on plant pests and diseases of the region, prepared from local experience and research. ASPP is presently in the process of publishing specialized books on various diseases of economic importance to the region with special focus on the research conducted in the Arab region. Three books and a dictionary are already published and others are planned for the future.

Funding opportunities:

ASPP is funded mainly through membership subscription fees and through the financial support provided by sustaining members including national and international organizations such as FAO and ICARDA and CNRS of Lebanon as well as local, regional and international private agricultural organizations. In addition, ASPP organizes workshops with co-funding by national and international organizations including FAO. Savings raised from the ASPP congresses organized every 3 years, when these are possible, provide further sources of support to the finances of the Society.