Achievements of Date Palm Integrated Pest Management and Agricultural Extension and Technology Transfer Systems in Abu Dhabi

Published on: January 7, 2021, Submitted by Zaib Un-Nisa on: November 1, 2016

ADFCA is tackling major date palm pest infestations in Abu Dhabi through precision-system-informatics, farm-system optimization

Photo credit: International Center for Agriculture Research in the Dry Areas. ICARDA - /International Center for AgriculturalResearch in the Dry Areas

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This project is enhancing agricultural production systems in Abu Dhabi through initiating a comprehensive research program and a digital extension system addressing integrated pest management for tackling major date palm pest infestations, as well as crop, water and production management of vegetables, date palms and irrigated forages in Abu Dhabi. Project is developing suitable technology packages like a precision-system-informatics which can provide accurate, on-time and interactive information base for developing, testing and implementation of improved-integrated pest management IPM, crop varieties, inter cropping, inputs use efficiency, soil-water-nutrient-balance, agronomic practices, market economics etc.

After evaluating the existing agricultural extension and technology transfer systems, it turned out that the existing e-diary was used for exclusively statistical and farm registration purposes for various farming systems in Abu Dhabi Emirate (date palm, forage crops, open-field vegetables, fruit trees, soil and soil-less crops in green houses) which will be replaced by “Smart Extension Diary (SED)" (software for tablets) through this project. It is being designed to bring improvements in the agriculture extension system. Till now, field testing of SED hardcopy has been done, coupled with some short training courses on Agricultural extension targeting capacity building of Subject Matter Specialists and Farmer’s Relation Managers only. Later on, Field extension staff will use these tablets during their regular farm visit.

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biological control measures are replacing conventional use of pesticides and insecticides.

ICARDA (IPM specialist)

strongly advocates the enforcement of strict quarantine measures in the country to avoid re-infestation of “cleaned” regions and entry of new pests to the country/regions. He provided a full fledge research and training work plan for the next 4-5 years. On the

other hand, after doing a thorough socio-economic review and assessment on date palm IPM, Dr Kassam Shinan, ICARDA socio-economist, highlighted in his report, an imperative role of state in updating policies related to farm settlement, coupled with the nature of mobility of south Asian and Egyptian farm in the provision of extension and advisory services. These advisory services are meant to impart knowledge and education in order to address concerns about resource efficiency and aimed at improving farm profitability. However, from a migrant farm labor perspective, the adoption of IPM may pose significant risks. So, according to him, the decision to adopt IPM must be made by farm owners as opposed to migrant farm laborers and farm managers. The adoption of IPM is, therefore, likely to require regulatory oversight and enforcement and given the federal mandate of the Ministry of Environment, a consensus among all Emirates. Apart from IPM regulation, he proposed that broad uptake of IPM options is feasible through introduction of new commodities, economic incentives for adoption of IPM and presence of effective agricultural innovation systems.

suggested.

Cactus - a drought tolerant plant is also being used as fodder bank to alleviate livestock feed shortages during prolonged dry periods.

Buffel grass fields to the farmers.

The major risk to the crops can be a dust event. The UAE is one of the places where dust storms are becoming more frequent, said Dr Abdullah Al Mandoos, executive manager of the National Meteorology and Seismology Centre in Abu Dhabi, Todorova, V. (2013, May 7). As we know that Abu Dhabi lies in dust prone region where dust storms are frequent and considered as a seasonal event, it can pose a serious threat to the production and management of cash crops in the region, it is expected that some important preventive measures will be taken into account for safe execution and continuity of the project.

Acknowledgement

This research & development project is being conducted by Abu Dhabi Food Control Authority in collaboration with ICARDA, under CGIAR research program on Dryland Systems which is expected to be complete in the end of the year 2016.

Projects

- Enhancing date palm integrated pest management and agricultural extension and technology transfer systems in Abu Dhabi

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CRPs, & Partners

CRP on Dryland Systems - DS

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Keywords

- integrated pest management
- pest management
- agricultural technology
- technology transfer
- agricultural extension
- smart extension diary
- agricultural production system
- bio-pesticides
- salt-tolerant forages

Countries

- United Arab Emirates

About the author

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