Report of Plant protection and production team at the FAO regional office for the Near East and North Africa

Prepared by: Thaer Yaseen
On the sidelines of the establishment meeting of the International Date Council held in Al-Ahsa Governorate - Kingdom of Saudi Arabia, the FAO regional office of the Near East and North Africa launched the FAO regional program officially to eradicate the red palm weevil in NENA region. The RPW is a serious transboundary pest of date palm that causes serious damage and impacts the production, farmer livelihoods, and the environment. In 2017, FAO and key partners and stakeholders developed a Framework Strategy for eradicating the RPW and the regional program for RPW eradication from the NENA region. In 2018 following scientific meetings in Abu Dhabi, UAE, and Bari, Italy, the program activated five technical working groups with a focus on improving policies and phytosanitary regulations to control the spread of RPW, supporting research and innovative approaches for monitoring, and sustainable management methods, socio-economic impact assessments, capacity development and enhanced farmers’ and other stakeholder’s involvement and facilitating the transfer of knowledge and technology. Fifteen work packages have been prioritized, and a Trust Fund was established, with generous support from the Kingdom of Saudi Arabia, United Arab Emirates, and Sultanate of Oman to finance the implementation of the regional program.

The International Date Council (IDC) held its establishment meeting in Al-Ahsa Governorate, Kingdom of Saudi Arabia, on February 15 and 16, 2022, with the participation of several agriculture ministers and representatives from date producing and exporting countries, in addition to officials of regional and international organizations. The IDC aims to foster international cooperation between
the members to develop the dates sector, promote the production of quality dates, improve its processing and support its national and international marketing and development of international dates trade. The meeting discussed many important topics and issued several resolutions. The meeting approved the IDC strategy for the period 2022-2026, the five-year work plan, approved the IDC activity plan for the year 2022, and urged the Secretariat to develop the necessary tools for follow-up and evaluation. The Council elected the Chairperson and Vice-Chairperson of the Council of Members, the Executive Board, and appointed the Executive Director of the Council. Dr. Abdulhakim Elwaer, FAO Assistant Director-General and Regional Representative for the Near East and North Africa, addressed the ministerial meeting on February 16. He highlighted the importance of the date palm as a strategic crop for producing countries in NENA Region, contributing to national economies, and constituting an important income-generating crop to the inhabitants of critical parts of the region. Touched on some of the main challenges facing the sector and on some areas where the FAO has provided and continues to provide support to the date palm sector. In his statement, the ADG reiterated FAO’s commitment to supporting the IDC and the date palm producing countries.
Salman Bin Abdulaziz Al Saud for the sake of achieving food security and environmental sustainability. The conference was designed to address the current state of food security at the national, Arab, and global levels and to formulate strategic visions for the adoption of policies that would enhance food security and ensure its sustainability. The conference was attended by high-level personalities from Saudi Arabia along with representatives of Arab, regional, and international organizations. In one of the conference’s sessions, Mr. Thaer Yaseen, the Regional Plant Protection Officer- at FAO Regional Office for Near East and North Africa, delivered a talk on “Environmental sustainability and its role in development”. In his address to the conference, Yaseen stated that FAO has always placed food security issues at the forefront of its strategic plan and works on coordinating efforts to achieve the 2030 Sustainable Development Goals. He highlighted the significant unprecedented challenges to Achieve Sustainable Agriculture in the NENA region. Yaseen stated that the current agricultural production systems are unsustainable and emphasized that the new sustainability approaches require direct action to conserve, protect the natural resources, and enhance the resilience of people, communities, and ecosystems, especially to climate change and the market. Sustainable agriculture is knowledge-based, which requires a holistic view of managing the resources. Sustainable agricultural practices should adopt full use of technology, research, and the integration of local knowledge. This requires the development of technical, policy, governance, and financing frameworks that support this transformation.

FAO and KFU Signed a Letter of Agreement to Support the Sustainable Management of the Red Palm Weevil in NENA Region

March 08 2022, Al Hasa (Al-Hufif)- The kingdom of Saudi Arabia

On the sidelines of the 1st International Conference on Food Security and Environmental Sustainability, hosted by the King Faisal University and held from 7th to 9th March 2022, the FAO, and King Faisal University (KFU) have signed a Letter of Agreement (LOA), to conduct field experiments aiming at finding practical solutions in the sustainable management of the Red Palm weevil. The agreement is part of the Regional Funds program to control the pest in the Near East and North Africa region.
The Regional Farmer Field School Master Trainer’s & Curriculum Development Workshop

February 28 - March 03 2022- Riyadh, Kingdom of Saudi Arabia.

Under the activities of FAO Program on Red Palm Weevil Eradication in NENA Region GCP/RNE/012/MUL (650076), and in collaboration with the Ministry of Environment, Water & Agriculture (MEWA) in the Kingdom of Saudi Arabia, the regional workshop of Farmer Field School (FFS) was held on February 28- March 3, 2022, in Riyadh. The workshop was attended by experts of FFS and RPW from Saudi Arabia, the State of Kuwait, the United Arab Emirates, the Sultanate of Oman, and the Kingdom of Bahrain. The training program presented the distinguished role of the FAO in establishing and implementing the FFS approach in the region. Given that FAO has successfully implemented the FFS approach in all countries of the world for more than 30 years. The workshop also trained the facilitators on how to analyse the date palm orchard biodiversity and agroecosystem and to overcome the difficulties in adopting the FFS approach. The program included a field day in the Alderea area in which the trainees applied what they had gained from knowledge. The participants effectively shared experiences and technical expertise on the concepts of IPM of RPW. The participants learned the modality of FFS implementation to control the RPW. Two FFS manuals developed by the project were reviewed. The workshop was successfully implemented, and all attendees perceived a distinct regional event. This was reflected by the participants’ positive interaction and practical discussion and the MEWA in all training activities. This workshop was an unprecedented event and considered the first of its kind in the Arab Gulf region. The event reflected what the FAO seeks with its technical and organizational aspects.
March 14–16, 2022, Abu Dhabi, UAE.

Under the patronage of H.H. Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE, the 7th International Date Palm Conference was held from 14th -to March 16 2022 in Abu Dhabi, UAE. The 7th International Date Palm Conference is a global forum that provides an opportunity to update scientific knowledge on various aspects of date palm production, protection, and marketing. In addition to supporting the international technical cooperation in multiple fields of the date production chain. The conference is organized every four years by the General Secretariat of the Khalifa International Award for Date Palm & Agricultural Innovation and the United Arab Emirates University. The conference also organized under the supervision of the Ministry of Presidential Affairs and in cooperation with the Ministry of Climate Change and Environment, Abu Dhabi Agriculture and Food Safety Authority, and the Food and Agriculture Organization of the United Nations (FAO), and 25 regional and international organizations. In the main session of the conference Mr. Abdulhakim Elwaer, the Assistant Director-General and Regional Representative for the Near East and North Africa, presented the state of the date palm industry in the NENA region, the challenges of shifting to climate-smart agriculture and the use of the latest technologies and innovations, and the need to spread awareness about them among farmers to expand the range of solutions that give resilience in the face of climate change and water scarcity. Mr. Elwaer also presented the FAO recommendations, which contribute to improving farmers’ incomes from date exports and palm industries that can enhance the economic status of countries. On the sidelines of the ministerial meeting of the Khalifa International Award for Date Palm, Mr. Elwaer, the Assistant Director-General and Regional Representative for the Near East and North Africa participated in the launch of the Integrated Desert Farming Innovation Platform, organized by KIDPAAAI in collaboration with ICARDA & CGIAR. The platform aims to highlight the best technical solutions and adopt modern technologies to enhance food and water security in light of climate change. He is also considered an essential step towards improving food security in the face of desertification and water scarcity. Elwaer also discussed the UAE’s preparations to host cop28 next year and the prospects for the organization’s participation.
Elwaer also discussed the FAO’s cooperation with the UAE government in a way that achieves the desired goals of holding this high-level international conference. With her Excellency Mariam Bint Mohammed Al Mheiri, the Minister of Climate Change and Environment in the UAE, Elwaer shed light on the cooperation frameworks with the FAO in all fields, including activating regional partnerships to improve the date palm industry and combat pests that threaten the trees.

7 His Highness Sheikh Mohamed bin Zayed praised FAO’s efforts to ensure food security & to support date palm industries in the region

March 14–16, 2022, Abu Dhabi, UAE.

His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the Armed Forces, received the Board of Trustees of the Khalifa International Award for Date Palm and Agricultural Innovation, and the delegation of the 17th International Conference on Date Palm held in Abu Dhabi, UAE. Highlighting the significance of the date palm, being a bountiful symbol of Emirati heritage, His Highness underlined the paramount interest the UAE attaches to this sector to enhance its contribution to food security and the national economy.

FAO Assistant Director-General-Regional Representative for the Near East and North Africa, Abdulhakim Elwaer, met with His Highness General Sheikh Mohamed bin Zayed Al Nahyan during the reception of the Board of Trustees the Khalifa Award. His Highness Sheikh Mohamed bin Zayed praised FAO’s efforts to ensure food security and its support of date palm industries. Mr. Abdulhakim Elwaer, spoke high of the UAE’s efforts in driving innovation in palm cultivation and date production.
In the technical session on “Global efforts for Red Palm Weevil (RPW) management”, at the 7th International Date Palm Conference, Thaer Yaseen, the Plant Protection Officer in the Regional Office, gave a presentation on the state-of-the-art techniques to combat the RPW and the strategies adopted by the FAO regional RPW eradication trust fund program in the NENA region. Yaseen shed light on farmers’ participation in sustainable RPW management. Mr. Yaseen also moderated the session where experts speakers from Saudi Arabia, Spain, and Italy presented the recent RPW monitoring, remote sensing, and detection technologies. The Susa-Hamra- App and Platform for RPW monitoring and management was introduced. During the session, Mr. Ibrahim El Dukheri, Director of the Arab Organization for Agricultural Development (AOAD), highlighted the Socio-economic impact of the RPW in the region. Mr. Mekki Choubani, president of the Near East Plant Protection Organization (NEPPO) pointed out the governance and regional phytosanitary systems. Mr. Thaer Yaseen presented the updates of the technical working groups of the regional RPW eradication trust fund program. Mr. Yaseen indicated the established networks with 15 regional and national stakeholders
Another technical session was organized under the topic of Date Palm value chain development and regional collaboration chaired by Ms. Maryam Rezaei, Industry Officer, FAO-RNE, who delivered a presentation on Enabling sustainable development of date palm value chain; followed by four technical lectures: Date Palm Byproducts, A Springboard for Bioeconomy; Model projects for the investment of date palm and agricultural by-products; The Economic Feasibility of Byproducts as a Part of the Value Chain of the Date Palm Sector; and the current situation and prospects for manufacturing date products and palm waste in Sudan. Discussions enriched the session with more applicable measures to encourage investing in date palm and other vegetation by product.

On March 15, 2022, in one of the Emirates Palace halls on the sidelines of the 7th International Conference on Date Palm meeting was held with Libyan delegates who attended the conference discussing many issues of concerns affecting date palm and other plantations, especially the green scale insect, red palm weevil, dust mite (Boufarwa), fall armyworm and others. The participants raised their urgent needs from the FAO regional office, such as providing pheromone traps, conducting training programs on IPM of RPW, FAW, Green scale insects, and agricultural quarantine in the State of Libya, and marketing of the dates solving
the storage of the date, especially dates. The meeting was attended by Dr. Abdel Hakim Al-Waer, Assistant Director-General of the Food and Agriculture Organization (FAO), Thaer Yaseen, the Plant Protection Officer in the Regional Office, Mohammed Al-Aidaroos, Media Officer in the Regional Office of the Food and Agriculture Organization, Dr. Ibrahim Al-Jboory, President of the Arab Society for Plant Protection, Engineer Bashir Embarak, representative of the Ministry of Agriculture and Livestock Resources, and a member of the Board of Directors of the National Center for Protection and Agricultural Quarantine, Engineer Saleh Al-Dipri, Director of the Protection Department of the National Center for Protection and Agricultural Quarantine, and Dr. Mohamed Fennir, Department of Agricultural Engineering, Faculty of Agriculture, University of Tripoli. Postharvest laboratory. The meeting concluded by working on developing proposed operational solutions in the field of pest prevention mentioned previously.

11 FAO signed the “Abu Dhabi Declaration” at Khalifa Award

March 14–16, 2022, Abu Dhabi, UAE.

On the side of the sessions of the Khalifa International Award for Date Palm and Agricultural Innovation (KIADPAI) and the 7th International Date Palm Conference, FAO renewed its partnerships in the region to support the development of the regional date palm network and to promote the exchange of experiences at a regional level.

Mr. Abdulhakim Elwaer, the Assistant Director-General and Regional Representative for the Near East and North Africa, signed a Memorandum of the Understanding (MoU) (declaration), which formed the International Network for the development of the palm cultivation and date production sector in the Near East and North Africa. The declaration calls on stakeholders to develop and implement comprehensive strategies and programs that support the sustainable development of date palms.

12 The closure of FAW emergency project (TCP/EGY/3706) in Egypt

All activities within the framework of the project (TCP/EGY/3706) entitled: “Emergency response to enhance the national capacity of Egypt for early warning, monitoring, and management of fall armyworm (FAW)” was successfully implemented to manage FAW in Egypt. The project was officially terminated after fully achieving all the objectives. Significant contributions to FAW control in Egypt were achieved under this project, which supported the Egyptian Government’s programming framework. The results of the project are therefore expected to contribute to the protection of livelihoods and food security of smallholders, including women and youth, who live in FAW affected areas in Egypt through developing capacities in awareness, surveillance, monitoring, and IPM of the FAW. The project raised awareness among all stakeholders, including farmers,
extension specialists, pest control specialists, researchers, agriculture directorates, sugarcane factories, the Rice Research and Training Centre, and other stakeholders. A total of 905 stakeholders was benefited from all implemented activities. Furthermore, the project assisted the Ministry of Agriculture and Land Reclamation (MALR) in setting up a national FAW network and an efficient monitoring and early warning system. The project also supported the MALR in building capacities for the mass production of biopesticides for FAW control. Moreover, the project succeeded in establishing Farmer Field Schools (FFSs) in the maize-infested areas as a successful model to be disseminated to other FAW-infested hosts and governorates. An environmentally friendly approach was recommended for controlling FAW in Egypt throughout the project activities. The project promoted the mass production of biopesticides and the conservation of FAW’s natural enemies by enhancing the infrastructure of related laboratories and carrying out training programs on these topics.

A laboratory for mass rearing of the natural enemies of FAW was inaugurated in Shandaweel village (Upper Egypt), which is considered the first laboratory equipped with materials and pieces of equipment in Egypt. The mass Bio unit started mass-rearing and releasing the most important parasitoid Telenomus remus. Several predators were also reared to face the population increase of fall armyworm. Upon closing the project, it was recommended that ongoing financial support be provided to MALR to ensure replication of the FFS model in other FAW-infested areas, disseminate IPM practices, and support biopesticide production and the release of FAW’s natural enemies in Egyptian governorates.

13 The closure of TCP/SUD/3703 project in Sudan

All the activities of the TCP project on the development of date palm products and by-products Value Chains in Sudan were implemented. Seven Workshops have been conducted in different sites in the Northern States and River Nile State. The main activities included two training of Trainers (TOT) workshops on the serious pests & diseases affecting date palms in Sudan, training on IPM for date palms to assist selected IPM trainers to refine their states strategies for project implementation, helped them to develop FFS-based area-wide IPM. Training of Trainers (TOT) workshop for Date Palm Sudanese Producers Organizations (POs) and Supporting Staffs in (Date palm Production, Protection and Post-harvest in Sudan) was organized. TOT workshop on by-products and capacities of date Producers to meet market needs was conducted. The project activities improved the capacities for research and extension and promoted the knowledge transfer to foster sustainable production of date palm products and by-products.
14 Book on Sustainable practices to improve the date palm value chain in Sudan

To establish a complete database on the necessity of the value chain in Sudan, a team of more than ten authors puts all the project outcomes in one document, which is in the editing and revising phase. The book of 450 pages will be a unique reference for scholars, academia, and the authorities in Sudan and elsewhere.

15 Updates on the “Upgrading the Sudanese Sesame seeds value chain” project in Sudan

With the overall aim to enhance the competitiveness of small farmers’ sesame-seeds value chain and reinforce them to face the competition in the global market, FAO strengthened the capacity of farmers to improve compliance with Sanitary and phytosanitary measures by enhancing the implementation of Good Agricultural Practices (GAP). Provided support included the organization of farmers in producers’ associations and provision of season-long training using the Farmer Field School (FFS) approach, training of extension officers on the concepts of FFS and GAP, and introduction of modern equipment to clean the sesame seeds and extract oil to support the small-scale farmers to increase their yield and their profits with value-added sales. Through the project support, targeted farmers gained better production, improved links with private sections and microfinance institutions, and enhanced relations with research and extension officers.

16 The closure of the “Strengthening improved seeds production capabilities” project in Yemen

The project “strengthening improved seeds production capabilities “TCP/YEM/3702” provided training courses to the technical staff from the Ministry of Agriculture. Six training workshops were conducted in the country; four training workshops were handled and delivered by the senior team of the agricul-
17 The closure of the project on “Emergency response to enhance technical capacity for early warning, monitoring, and management of FAW” in Yemen

The activities of TCP/YEM/3701 were implemented. A round of 18345 farmers gets benefited from the project interventions. A total of 11 225 ha area was surveyed, and 3 204 ha were treated in 22 governorates. The project distributed 4800 pheromone traps with 3 refill kits each (total 14400) and 7400 liters of bio-pesticides Neem product and more than 50 smartphones with FAMEWs application, around 100 technicians were trained on using FAMEWs application and FAW biology and integrated management. In addition, national natural enemies were surveyed conducted in 4 governorates, and several bioagents were identified, two biological labs were rehabilitated, and several Farmer field schools were implemented.

18 The use of Neem and Melia azedarach extracts for the biological control of FAW in Yemen.

In collaboration with FAO in Yemen, the Ministry of Agriculture launched a campaign to combat the Fall Armyworm by using the bioproduct Neem in several regions in Yemen. The farmers were trained on the method of spraying and the biopesticides application. Also, the use of Melia azedarach extract in the biological control of FAW was performed during the activities of the farmer field schools in the Hajjah region of North Yemen.
Global Action on Highly Hazardous Pesticides (HHPs) in NENA Region

The National Focal Points of North Africa and NENA countries on The Global Action on Highly Hazardous Pesticides (HHPs), held on February 23, 2021. The meeting was facilitated by the Regional Plant Protection Officer of NENA and Dr. M. Jamal Hajjar (Pesticide Analyst, FAO Consultant NSPDD). The meeting was attended by 11 national focal points, representing 11 countries in the North Africa and NENA regions. In addition to the participation of Baccouri, Sarra, FAO (NSP) Agricultural Officer, Ibrahim Al-Jboory FAO Consultant, and Ahmed ElSayed FAO Consultant RNE.

The national focal points and the participants discussed and proposed the following steps to be considered in the next phase to reduce the risk of highly hazardous pesticides. In terms of regulations and registration system of pesticides. In addition to management, handling, distribution and use of pesticides. The participants suggested several recommendations for the Food and Agriculture Organization of the United Nations to be considered in its annual programme and activities in the Middle East and North Africa region:

1) National Pesticide restriction programmes
2) Implantation of integrated pest management (IPM) approaches
3) Improving/or building the system of pesticides risk assessment
4) Improve/ or build pesticide national registration and management systems
5) Ban the HHPs
6) Improve medical management of pesticide poisoning
7) Improve/or introduce the precaution and safety measures
8) Improve the implementation of international environmental conventions
9) Inventory, safe gardening and disposal of Obsolete Pesticides
10) monitor and Combat Illicit Trade in agrichemicals

The participants agreed that the regional Plant Protection Officer for the Near East and North Africa, FAO-RNE, in collaboration with the regional consultant, will develop a program for the activities proposed by the NFPs with a sequential plan. However, the proposed actions and capacity building should be scheduled in a planned timetable to achieve harmony between the Near East and North African countries within five years.
The FAO Red Palm Weevil (RPW) Eradication Programme organized 12 coordination and training meetings with donor countries, program committees, technical working groups, partner organizations, and project national focal points and signed LOAs with project partners. The program organized a meeting in Al-Ahsa, Saudi Arabia, on February 17, 2022, to mark the launch of the field activities of the RPW program. Participated in many events, including the establishment meeting of the International Date Palm Council, convened in Al-Ahsa, KSA, on February 15-16, 2022, and in the 7th Int. Date Palm Conference, Abu Dhabi, UAE, March 15-16, 2022. Within the 7th Date Palm Conference, the RPW program organized a session dedicated to the regional RPW eradication trust fund program. The baseline data needed for technical assessments of the RPW status and management capacity from member countries have been collected and analyzed, and the status of RPW and plans to manage the RPW in 16 NENA countries were reviewed. Developed a Farmer Field Schools (FFSs) facilitator manual for RPW management in NENA Region, organized a regional workshop on FFS curriculum development and master trainers in Riyadh from February 28 to March 03 with the participation of experts and participants from FAO and Gulf countries and launched the training of FFS facilitators in southern Egypt. Finalized Proceedings of the scientific meeting held in Bari in October 2018 and contributed to the published FAO manual “Guidelines on RPW Management Practices”, and produced several media communications about the FAO RPW Eradication Programme. Partner preparations are underway for testing RPW detection sensors, field evaluation of Remote Sensing technology to locate palms and detect RPW infestations, and arranging for trials in Jordan and Tunisia for validation of “Susa-Hamra” platform for RPW monitoring. AOAD experts are pursuing Ex-ante impacts assessments to understand the socio-economic consequences of the RPW problem in Egypt and
Saudi Arabia. A review of national phytosanitary systems and the development of measures and protocols on RPW phytosanitary and palm certification systems is underway. A working group of experts in RPW phytosanitary systems and certification of date palm propagative material is being established. Activities of the University of Genoa on testing Microwave technology for sanitization of date palm started.

Planned activities in the next semester include trials on fumigation techniques for RPW eradication, testing efficiency and effectiveness of low-cost trapping and the “Attract & Kill technique”, testing of RPW repellents (nonhost volatiles), evaluation of effective RPW insecticides and application techniques and control of RPW apical infestation. A revised national action plan to manage RPW to be implemented by each country will be developed. The program will develop and conduct communication campaigns to raise awareness and strengthen the engagement of stakeholders in enforcing phytosanitary regulations and RPW management. The FFS manual developed will be used to facilitate FFS implementation in project countries. The FAO regional RPW eradication program will organize training of facilitators and will implement 50 FFS Field Schools (targeting 1,000 farmers) in Egypt, Saudi Arabia, Iraq, Jordan, and Tunisia. The FFS program will be implemented in cooperation with ACSAD and participating countries. The RPW program activities involve updating the RPW program Webpage, hosted by FAO, for dissemination of information and communication in addition to capacity building and dissemination of developed technologies.

Activities of the project “Emergency Preparedness and Response to Strengthen Capacities of NENA Countries to Mitigate the Risk of Fall Armyworm (FAW) in the Region – TCP_RAB_3803

The regional office of the Food and Agriculture Organization of the United Nations (FAO) in the Near East and North Africa (NENA) has launched the activities of the regional emergency project to strengthen the national and regional capacities to manage the risk of Fall Armyworm (FAW). The project started through a regional virtual inception workshop on February 23, 2021. The representatives of the Ministries of Agriculture in Jordan, Lebanon, Syria, and the West Bank have expressed their appreciation for the efforts of FAO to support the countries affected by FAW or countries that have taken proactive measures to delay the arrival of the pest and reduce the potential economic damage.

The speakers have revealed their strong intentions to deepen the cooperation with regional and international organizations and the national governments of the neighboring countries. Such collaboration is essential to manage transboundary pests, and any fragmented national efforts will remain inefficient compared to regionally coordinated plans. Officials of FAO have briefly presented FAO’s regional and international efforts to assist the countries facing the risk of FAW, exemplified by FAO Global Action (GA) against FAW. FAO coordinates interre-
gional efforts through the GA and evaluates proposed integrated pest management (IPM) programs against FAW.

Officials of FAO have also highlighted the previous activities implemented in terms of training sessions, procurement of traps, and lures to establish a surveillance system. Also, FAO has supported the capacity development for mass production of natural enemies, which FAO is considering a priority for sustainable management of FAW. The experts have illustrated the major guidelines for pesticide use against FAW, including the importance of pesticide selection and the responsible use of pesticides for effective control of pests and reducing the adverse effect on human health and the environment. That cannot be achieved unless pesticides are used as one option in a more comprehensive and integrated
The project’s outcomes were thoroughly discussed awareness and extension services, capacity building and training, planning and coordination of surveillance, and integrated management.

- Twenty regular Zoom meetings were conducted to follow up and promote FAW project;
- Training of the trainers and facilitators on insect biology, behavior, monitoring, and control;
- Establish 12 FFS to train farmers, strengthen their skills, transfer knowledge and guide them to implement the best practices to manage FAW;
- Increasing the capability of using the FAMEWS application for monitoring fall armyworm;
- Surveying biological enemies associated with FAW in corn fields and identifying the most important ones;
- Enhancing the 5 bio units in Syria by facilitating a training program in the coming weeks;
- Corn diagrams were designed to show the management program process;
- Demonstration fields were performed during the first year of the project showed very impressive results in using only the FAO suggested biorational insecticides;
- Leaflets, brochures, and posters were prepared and distributed during the FFS training;

22 Rearing and Mass production of Bioenemies

In partnership with the International Centre for Insect Physiology and Ecology, FAO has committed to advanced training courses on the mass production of natural enemies; furthermore, audio-video training materials were developed on the laboratory process and quality measures for mass production of biological control agents.

23 Invitation of International Scientists on FAW bioagents

Several interventions were presented by international experts on bioenemies rearing, handling, conservation, and field release. Trichogramma and Telenomus parasitoids were the most important ones to suppress the Fall armyworm population on corn.

Dr. Malik Ba, from Nigeria, delivered a talk on the Selection of Effective FAW Parasitoids for Mass rearing in Egypt and highlighted the host rearing and Trichogramma, Telenomus as beneficial candidates. Another lecture was given lately by Ms. Liu Huamei on BT Mass production and application in China. She is from the private sector Kernal Wuhan company sheds light on Bacillus thuringiensis as an important biorational insecticide to combat fall armyworm and other lepidopteran larvae.
24 New Report, First Detection of Fall armyworm in the Kingdom of Saudi Arabia

The Ministry of Environment, Water, and Agriculture in the Kingdom of Saudi Arabia has officially announced the first finding of Fall Armyworm (*Spodoptera frugiperda*) on maize plants. The pest was detected on October 27, 2021, with low infestation rates in two different Governorates: Najran Governorate and Al-Kora. The ministry has implemented phytosanitary measures, including destructing the infested maize crop, installing traps around the two infested sites, and spraying the neighboring crops with appropriate pesticides. The situation of *Spodoptera frugiperda* in Saudi Arabia can be described as present and is not widely distributed.

25 In Collaboration with IPPC a Successful Coordination Meeting with Regional Organization Committee (ROC)

The 1st meeting of the Regional Organization Committee (ROC) of the IPPC Regional Workshop- 2022 was held virtually on March 10 2022. The meeting was attended by 11 participants, including NENA Regional and Sub-Regional Plant Protection Officers, members of the IPPC Secretary, IC, CPM Bureau, SC, NEPPO, ASPP, and the hosting country. The global draft agenda of the IPPC regional workshop under the theme of “Plant Health Innovation for Food Security were intensively discussed, and valuable comments were shared by the participants. The ROC members agreed to hold the regional workshop from the 1st to the 4th of August 2022 and to be hosted by Tunisia.

26 The 20th Meeting of the FAW National Focal Points at NENA region

The 20th meeting of the National Focal Points to support the planning & implementation of the Global Action for Fall Armyworm Control was held virtually on March 22 2022. The meeting was attended by 30 participants, including the FAO regional and sub-regional Plant Protection and Technical Officers, National Focal Points, National Project Coordinators, the Project team at FAOR Offices, and the national and international consultants. The updates on the progress and planning of the Global Action for FAW in NENA region were shared with the participants.

27 FAO to Launch A New Project to Strengthen Capacities For Fall Armyworm Management in Maghreb Countries

Increasing the resilience of livelihoods to threats, and crises in NENA countries, supporting early warning, integrated management systems, building community-level resilience as well as responding to emergencies on time, are among the objectives of a new, 500,000 $ project to be implemented by FAO in Maghreb countries. The new project matches the country’s needs, priorities, and Country Programming Frameworks of all beneficiary countries (Mauritania, Algeria, Libya, Morocco, Tunisia). The project will kick off with an inception workshop, focusing on the direct and indirect beneficiaries in the Maghreb countries. Experts from
First BOOK on Fall Armyworm in Arabic language

The first Arabic-language management guide for FAW has been published, filling a large gap in existing information in this language concerning best practices to manage and control the voracious insect pest that is spreading rapidly.

Fall Armyworm: Invasive pest threatening crops and food security provides advice, assistance, and proposals for mitigating FAW spread and minimizing crop losses, and was produced by FAO’s Regional Office for the Near East (RNE) in collaboration with the FAW Secretariat. The FAW GA secretariat interviewed the authors to cover this vital publication and published the interview on the FAW GA webpage.


Farmer Field School Manual on RPW

A guideline to establish comprehensive, thorough information on Red Palm Weevil biology, ecology, damages, control measures and how to implement integrated pest management properly. The book includes the difficulties facing the operators, experts and farmers and how to eliminate the failures faced by the control workers. The second part of the manual sheds light on the farmers’ field school (FFS) concepts, theory, development, establishment, developing curriculum for facilitators, trainers and farmers. The manual contents have been discussed with the trainees and facilitators in the Riyadh workshop in March 2022, and suggestions were collected and appropriately considered. The book of around 200 pages will be ready in the coming weeks.

The agriculture sector in Jordan is a source of income for about 80 thousand families in the rural and urban areas. However, some Jordanian farmers still lack the appropriate extension support to achieve the most benefit of this sector. Fall armyworm (FAW) is a dangerous transboundary pest that directly threatens live-
lihoods and food security in Jordan and across the NENA region. Farmers will need significant support to manage and prevent the spread of FAW sustainably. The FAO has taken a lead role to support the implementation of a sustainable pest management program for small-scale farmers in many countries in the region. The Farmer Field Schools is a possible key to providing small-scale farmers with skills to adapt the recommended best management practices. Jordan is one of the earliest countries in the region to adopt the FFSs approach in the IPM programs. Within the framework of the regional activities of the FAO project, “Emergency preparedness and response to strengthen capacities of NENA countries to mitigate the risk of Fall Armyworm (FAW) in the region” (TCP/RAB/3803(E)), and in cooperation with the Ministry of Agriculture in Jordan, three Farmer Field Schools (FFSs) were implemented in different regions: Deir Alla, Shouneh Al-Janoubiyah and Ghwar Al-Safi. The main goal of FFSs was to build the capacity of Jordanian farmers on the IPM approaches to combat the FAW. The practices included identifying and monitoring FAW, trapping the pest, using FAMEWS App., and applying the registered and recommended pesticides. FFSs were successfully implemented, and farmers had learned to effectively prevent the spread of FAW and thus, reduce damage to crops and food supplies.

30 A Demonstration field for Integrated Pest Management of Fall Armyworm in Palestine

A demonstration field was implemented in Kardala, Palestine, within the activities of the “Emergency Preparedness and Response to Strengthen Capacities of NENA Countries to Mitigate the Risk of Fall Armyworm (FAW) in the Region – TCP_RAB_3803 (E)” project funded by the Food and Agriculture Organization (FAO). The field demonstration aimed to choose the best methods for fall armyworm management, ensure good profitability for farmers, and conserve the environment (including the natural enemies). Farmers were educated on the importance of timely application of the recommended pesticides and how to profit from the best agricultural practices effectively.

31 FAO regional office of the Near East and North Africa participates in the International Workshop on “Xylella fastidiosa in the Mediterranean region”

March 28 - 30 2022 - Bari and Lecce in Apulia Region – Italy

The Mediterranean Agronomic Institute of Bari (IAMB- CIHEAM), in Bari, Italy, is hosting the international workshop on Xylella fastidiosa (Xf) in the Mediterranean region: spread, socio-economic impacts, actions, and measures adopted to avoid or counteract its entry, establishment, and dissemination. FAO invites other NENA countries to be part of the international workshop. The Assistant Director-General, Regional Representative for Near East, and North Africa Mr. Abdul Hakim ELWAER will participate in the opening session of the workshop along with Mr. Maurizio RAELI, Director of CIHEAM Bari, and Mr. Teodoro
MIANO, Italian Delegate and Vice President of CIHEAM Governing Board. During five days of the workshop, important topics will be reflected related to the State of the art of Xylella fastidiosa in the Mediterranean area, the Puglia Region strategies for the regeneration of areas devastated by Xylella fastidiosa, the Socio-economic impacts of Xylella fastidiosa in the Mediterranean region. Mr. Thaer Yaseen, the Plant Protection Officer in the Regional Office, will present the updates of Xylella fastidiosa in the NENA Region (context and actions). Representative delegations from Albania, Algeria, Bosnia & Herzegovina, Egypt, Iraq, Jordan, KSA, Lebanon, Libya, Morocco, Oman, Palestine, Syria, and Tunisia will share their country’s insights. The program of the workshop includes a visit to the conservation and production center at the University of Bari, a field visit to olive-growing areas infected by Xylella fastidiosa, and a visit to the Plant health laboratory - CIHEAM Bari.

PROPOSED ACTIVITIES

1 **FAO Organizes Training on the Production of FAW’s Natural Enemies and Bio Pesticides in Egypt**

May 08 to May 12 2022- Egypt

Under the activities of the regional emergency readiness project, TCP/RAB/3803” funded by the Food and Agriculture Organization (FAO) and in collaboration with the Ministry of Agriculture in Egypt, training on the production of natural enemies and biopesticides will be held from May 08 to May 12 2022. The training will be delivered to three members of the project team in Syria. The program will include practical training on the mass production of entomopathogens and biopesticides of fall armyworm at the biological control Unit- in Giza, and on the mass production of natural enemies at the Biological Control Lab- Suhag.
2  **FAO-RNE participates in the 13th Arab Congress of Plant Protection**  
**October 16 -21 2022- in Hammamet, Tunisia**

The Arab Congress of Plant Protection, organized by the Arab Society of Plant Protection (ASPP), is one of the most important scientific events in Agriculture in the Arab region, with 300-500 scientists in attendance. So far, 12 congresses have been organized in different Arab countries starting in 1982, and the 13th Congress will be organized in Hammamet, Tunisia, during the period 16-21 October 2022. In all the previous congresses, FAO-RNE collaborated with ASPP by supporting symposia within the scientific program of the congress focusing on important plant protection issues of significant importance to the Arab and Near East region. In the coming congress, FAO-RNE will support three symposia focusing on the following themes: Symposium I. will be focusing on “Plant Health for Food Security and Safety”, Symposium II. focusing on “Research and Innovation for Sustainable Crop Protection” and Symposium III focusing on Advances in Molecular Plant Protection and its Applications in Pest Management. In each symposium, 3-4 leading scientists from around the world, including the Near East and North Africa region, will be invited to participate. The organizing committee is open to having a session on the FAO pest of interest, which should be proposed at the earliest.

3  **FAO-RNE conducts an inception Workshop on “Strengthen Capacities to Contain and Manage Fusarium oxysporum f. sp. cubense Tropical Race 4 on Bananas” in Lebanon**  
**May 2022- Lebanon**

In the framework of activities of the TCP/LEB/3803 project, the FAO-RNE in collaboration with the FAO office in Lebanon and the Ministry of Agriculture will organize an inception workshop by the mid of May 2022. The two-day-workshop will focus on introducing the project objectives, reviewing the logical framework, the proposed work plan, and the expected outcomes of the project.
FAO-RNE follows up on the Farmer Field Schools activities on RPW in Egypt and in the Gulf countries

Following the FFS curriculum development workshop held in Riyadh from February 28 to March 03 2022, the FAO regional RPW eradication program has compiled the suggestions of participants, updated the 2 FFS manuals, and preparing to issue revised versions to be used by the member in facilitating the farmer field schools in their countries. A working group of FFS workshop participants has been formed, and active exchanges take place of materials related to FFS and date palm. This year, the FAO regional RPW eradication program will focus on completing curriculum development and training of facilitators. The second-year program includes the implementation of 50 Farmer Field Schools (targeting 1,000 farmers) in Egypt, Saudi Arabia, Iraq, Jordan, and Tunisia. The FFS program will be implemented in cooperation with ACSAD and participating countries.

Proposal for Establishing a Natural Enemies unit in UAE

The FAO-RNE experts prepared a detailed, comprehensive proposal to establish a bio-enemies rearing unit submitted in September 2021 to ADAFSA in Abu Dhabi. The report composes equipment, tools, devices and others to enhance the technician starting to rear selected parasitoids such as Trichogramma spp. and Telenomus. The rearing unit is suggested to be in Kuwaiat station, Al-Alien. The idea of settling a bio lab was discussed in training on Fall Armyworm organized by FAO in December 2019. A follow-up initiative is running by the Regional Plant Protection Officer of NENA to facilitate such a vital lab in the GCC area.
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Status and Future Potential of Date Palm Industry in the NENA Region

H.E. Dr. Abdullahkım Elwaer, Assistant Director-General, FAO Regional Representative for the Near East and North Africa

Xylella fastidiosa in NENA Region: context and actions

Thamer Yassen
Regional Plant Protection Officer
Regional Office for the Near East and North Africa Region (NENA)
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