



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention



Joint FAO/IAEA Programme
Nuclear Techniques in Food and Agriculture



INTERNATIONAL YEAR OF
PLANT HEALTH

2020

PROTECTING PLANTS,
PROTECTING LIFE

**STRENGTHENING FOOD SECURITY
THROUGH EFFICIENT PEST
MANAGEMENT SCHEMES
IMPLEMENTING THE STERILE
INSECT TECHNIQUE AS A CONTROL
METHOD**

**WALTHER ENKERLIN
INSECT PEST CONTROL SECTION
JOINT FAO/IAEA PROGRAMME OF
NUCLEAR TECHNIQUES IN FOOD AND
AGRICULTURE**

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THE PROBLEM

One of the main obstacles to food security and safety and poverty reduction in the Latin America and Caribbean Regions is the presence of native and invasive quarantine fruit fly pests.



THE PROJECT

- The project aimed at increasing fruit and vegetable production in the Latin American and Caribbean region
- This is possible through effective fruit fly control and increased compliance with International Standards of Phytosanitary Measures (ISPMs) to facilitate access to domestic and international markets
- Effective fruit fly control is achieved using Area-wide Integrated Pest Management (AW-IPM) that includes the Sterile Insect Technique (SIT)
- With this approach, it is possible to establish fruit fly free areas as well as fruit fly low prevalence areas, in a systems approach
- The project builds capacity to early detect and rapid response to the incursion of invasive quarantine fruit fly pests.



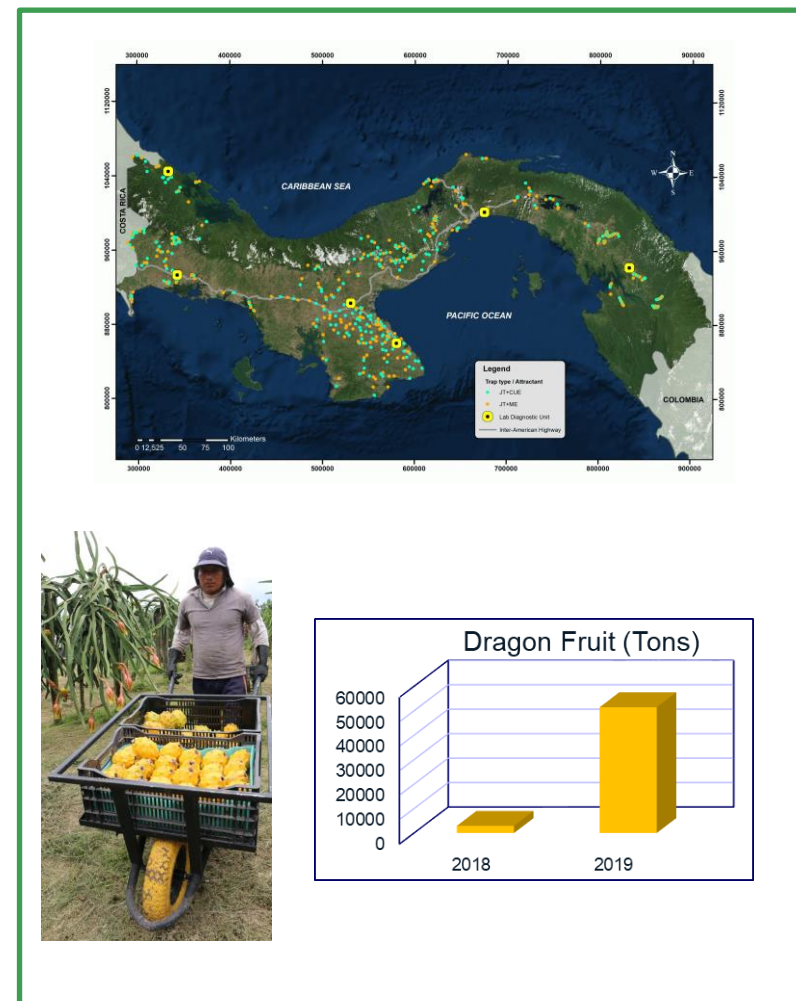
THE IMPACT

Establishment of Surveillance Systems

- 90% of the participating Member States with surveillance systems against fruit flies strengthened
- 284 total number of new risk sites implemented where traps have been placed with 1669 total number of new traps
- Preventing introductions of quarantine fruit fly pests protects billions of US dollars in agricultural products.

Opening of Export Markets Through the Establishment of Risk Mitigation Schemes

- Through phytosanitary measures 5 new areas were declared fruit fly low prevalence areas and 14 bilateral agreements for fruit exports were subscribed
- This includes pitahayas (dragon fruit), goldenberries (uchuva) and tree tomato from Ecuador to the USA, melons from Honduras to Taiwan and Mexico and melon from Brazil to China and mango to South Africa and South Korea.



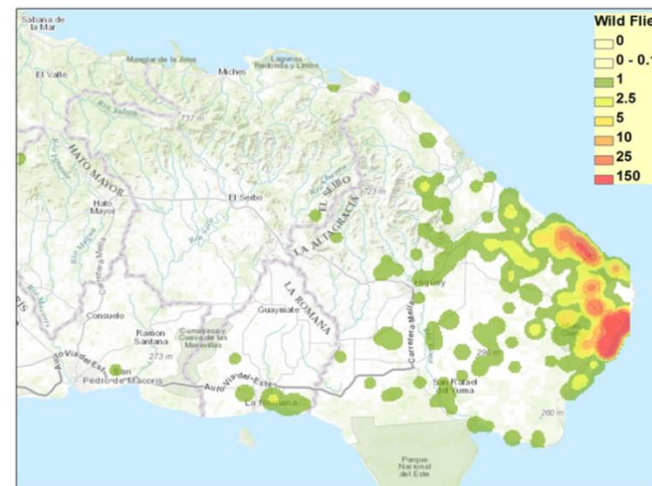
THE IMPACT

Support the Eradication of the Mediterranean Fruit Fly from the Dominican Republic

- An extensive outbreak of the Mediterranean fruit fly was declared eradicated from the Dominican Republic in July 2017
- Export market reopened, thus, recovering the export levels from before the pest outbreak including the US \$40 million worth of horticultural produce that had been lost
- 4 billion sterile flies were used to eradicate the pest benefiting not only the horticultural industry of the country but protected the plant resources of the whole Caribbean Region.

Support the Eradication of *Bactrocera scutellata* from Colima, Mexico

- An outbreak of *Bactrocera scutellata* (Hendel) occurred in Manzanillo, Colima, Mexico and eradicated seven month later using the male annihilation technique (MAT)
- With this action and the strengthening of the trapping network, a total cultivated area of 473,000 hectares was protected with an estimated annual production of 11.3 million tonnes valued at US \$3.3 billion per annum.





CONCLUSION

Substantial contributions were made to the SDGs of the UN, in particular food security and safety, through successful fruit fly pest prevention and control.

STAKEHOLDERS

- ✓ National Plant Protection Organizations (NPPOs)
- ✓ Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA)
- ✓ Interamerican Institute of Cooperation in Agriculture (IICA)
- ✓ FAO Office in the Dominican Republic
- ✓ United States Department of Agriculture (USDA)
- ✓ Regional Moscamed Programme in Guatemala (Guatemala-Mexico-USA)

Contact us

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