

The Technical Working Group on Tephritid Fruit Fly

OVER VIEW:

The establishment of the technical working group (TWG) on Tephritid Fruit Flies was a decision of the Caribbean Plant Health Directors (CPHD) at their first meeting, convened at the Caribbean Community (CARICOM) Secretariat Headquarters in George Town Guyana on April 23-25th, 2008. This working group was to be one of five groups established as an initial step in the formation of a regional network regarding plant health.

GENERAL OBJECTIVE:

To safeguard the Caribbean from threats and /or the impacts of introduction, economic damage, and spread of tephritid fruit flies through investigation/ research and the provision of advice and training on all matters related to tephritid fruit flies.

SPECIFIC OBJECTIVES:

To investigate the biology and distribution of the TFF through the:

- Compilation of a list of the existing confirmed species
- Identification of newly introduced spp.
- Geographic distribution of the confirmed species (specific location within national borders) in the Region as far as possible
- Determination of the pathways of introduction, and the manner of spread
- Listing of species not present but which pose a threat to the Region

MEMBERSHIP:

Antigua and Barbuda	Jamaica
Barbados	Martinique
Cayman Islands	St. Lucia
Dominica	St. Vincent and the Grenadines
Guyana	Suriname
Grenada	Trinidad and Tobago

Supporting Organizations: IICA, FAO, USDA APHIS GCSI, CAB International and CARICOM Sec.

COUNTRIES AFFECTED:

The 27 Countries occupying the Caribbean Sea

IMPACT:

Fruit flies represent a major threat to the Caribbean's agriculture. The damage caused by larval feeding makes fruit unfit for human consumption, and could have an adverse effect on food security. In addition, the presence of an established population would cause a severe economic impact via restrictions or prohibitions on the export of fresh fruit both domestically and internationally.

ACHIEVEMENTS:

1. The Evaluation of the Fruit Fly Trapping Programme in the Caribbean

From August 2010 to April 2011 conducted an Evaluation of the Fruit Fly Trapping Programme in: Bahamas, Grenada, Trinidad, Guyana, Barbados, St Vincent, St Lucia, St Kitts, Jamaica, Suriname, and Dominica.

The Evaluating Team made several recommendations:

- A. Development of a manual with:
 - Information on fruit fly biology, identification and host preferences.
 - Information on host plants, identification and fruiting patterns
 - Recommended trap types and lures
 - Recommended trap densities, trap servicing schedule and relocations based on host phenology
 - Standardized recording with all pertinent information
- B. Consider adding Multilure traps baited with the two or three component lures to the trapping arrays. The Multilure has a distinct advantage over the McPhail trap baited with hydrolyzed protein (either liquid or pellets) when one considers how long each trap can be left in the field between servicing.
- C. A standard servicing interval of once every two weeks is recommended for all locations. Any extra resources freed up by going from one week to two week servicing should be redirected to putting more traps in the field.
- D. Consider implementing a standard written format to record all fruit fly surveillance activities – create and maintain Survey Books.

- E. Development of geo-coded tapping system to track all activities and develop and implement a computerized database to track fluctuating populations over time.
 - F. Identify and conduct needed training – target areas of concern include fruit fly identification, host identification, fruit fly survey operations, fruit fly control operations, GIS/GPS technologies, sterile insect technique, and biocontrol.
 - G. Develop an Emergency Response Manual with all required protocols needed to react to a new introduction of economic concern.
 - H. Develop of regulatory treatments to support fruit exports such as hot water treatments, fumigations and irradiation.
 - I. Develop enhanced public education/industry information material to sensitize the travelling public about the need to avoid introducing exotic pests to the region.
 - J. Enhance inter-island cooperation and look for program efficiencies though resource sharing.
2. **Implementation of Recommendations of the Fruit Fly Trapping Programme.** Several Recommendations have been implemented in Barbados, Dominica, St Lucia, Cayman Islands, and British Virgin Islands, via Training facilitated by Mrs. Alies van Sauers Muller, Head of the Fruit Fly Unit, Suriname and Chair of the Fruit Fly Technical Working Group and Mr. Paul Graham, Pest Management Unit Grenada.
3. **The Standardization of a Fruit Fly Reporting System for the Caribbean**

USEFUL LINKS:

http://www.cdfa.ca.gov/plant/pdep/target_pest_disease_profiles/mediterranean_ff_profile.html

<http://www.conference.ifas.ufl.edu/flies/english.htm>

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