



*Cooperative Program in Agricultural Research and Technology for the Northern Region  
Programa Cooperativo en Investigación y Tecnología Agrícola para la Región Norte*

## PROCINORTE ACTIVITY REPORT

### 1. Identification:

<b>Task Force</b>	Plant Health
<b>Name and Position</b>	
<b>Participants in the activity</b>	As per Attached list
<b>Name of the Activity</b>	<b>Workshop :</b> <i>Trilateral Workshop on Vector-borne Viruses affecting Crops in North America</i>
<b>Location</b>	Mérida, Yucatán, México
<b>Duration</b>	<b>Start Date:</b> 25 September, 2018
	<b>End Date:</b> 27 September, 2018
<b>Date of Report</b>	

### 2. Objective:

To focus on viruses affecting fruits and vegetables that are vectored by insects and nematodes that are of common interest to US, Canada, and Mexico. This workshop allows researchers from each of the three countries to exchange ideas and build collaborative relationships to address shared issues that impact agricultural productivity in North America.

### 3. Summary of Activities Undertaken:

- The agenda was designed to address viruses of trilateral interest that affect agricultural crops and the insect and nematodes that serve as vectors. Advances in the identification and management of vectors such as whiteflies, thrips and aphids as well as nematodes impacting agricultural crops were shared. In addition information related to genetic diversity and management of Geminiviruses, Begomoviruses, Potato virus Y, and Plum Pox virus, vectored by these insects and nematodes was communicated.



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- There were 82 participants to the workshop. Seventeen scientific presentations were made on topics related to plant viruses and their insect vectors.
  - Six AAFC scientists from Fredericton, NB, London, ON and Vineland, ON presented on their specific related research projects.
  - Other presentations included scientists from USDA (5), INIFAP (2), SENASICA (1) Universidad Autónoma Agraria Antonio Narro (1) and Instituto Tecnológico de Conkal (2).
  - Students from: Instituto Tecnológico de Conkal, Yucatán (13 students); Colegio de Postgraduados, campus Montecillo (1 student); Universidad Autónoma de Tamaulipas (1 student) were also in attendance.
- A technical field tour to the Comité Estatal de Sanidad Vegetal de Yucatán (Yucatán State Plant Health Committee) Laboratory for the mass-production of beneficial organisms was conducted.
- Participants took the opportunity to network among themselves as well as with students, resulting in potential collaborative activities being identified.

#### **4. Key Take away points:**

- The workshop provided an opportunity for researchers from the three countries to exchange ideas, provide feedback, and identify research areas of common interest.
- Several priority areas for collaboration were identified during the workshop, including: RNA interference technology to manipulate host gene silencing pathways; development of integrated pest management strategies for cryptic species, and the use of novel diagnostic tools for virus and vector detection.
- The field tour to CESVY laboratory was highly valued and truly appreciated. Participants were pleased with the opportunity to view the facility and learn about the insect rearing methods.



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## **5. Recommendations and Follow-up:**

- Continued discussions between researchers involved in viruses and their insect or nematode vectors will take place in an effort to coordinate research that may benefit all three countries, including the exchange of specimens from different areas.
- Identification of potential funding sources for collaborative research projects between the three countries on viruses and insect/nematode vectors of concern is recommended.
- Canada was recommended as the location for the next PROCINORTE-Plant Health Task Force workshop in 2019. Regulatory agencies - APHIS (USA), SENASICA (Mexico), and CFIA (Canada), in addition to technicians, students and growers could be invited.

## 6. Photographs of the Activity

