

2022 – 2023 Plant Health actions Northern, Central, Caribbean, Andean, and Southern Regions

Agricultural Health, Food Safety and Quality Program



1. Introduction.

IICA manages its technical cooperation model through 7 hemispheric action programs, focused on Innovation and Bioeconomy, Territorial Development and Family Agriculture, International Trade and Regional Integration, Climate Action and Agricultural Sustainability, Agricultural Health, Safety and Agrifood Quality Program - AHFS), Agri-Food Digitalization; and Gender and Youth Equity.

The objective of Agricultural Health, Safety and Quality of Agri-Food is to promote a productive, competitive, and sustainable agricultural sector that provides safe food through local, regional, and global markets, through the generation, improvement, and application of agriculture health policies, food safety and quality.

AHFS Program action lines focus on:

- Strengthen and modernize capacities in food health, safety, and quality.
- Promote the effective implementation of international standards.
- Adopt good practices and improve response to emergency situations.

For AHFS Program action lines implementation, the Program is organized into 4 Pillars: Animal Health, Plant Health, Food Safety and Quality, and Safe Trade and Agro-Food Safety through the Application of Sanitary and Phytosanitary Measures. Transversally to these pillars, the operationalization of One Health approach reemerges, organized as a comprehensive and unifying strategy that seeks harmonized Sanitary and Phytosanitary measures (SPS), as well as networking.

More information Jose.urdaz@iica.int

2. Main actions 2022 – 2023 related with plant health.

2.1. In relation to strengthening and modernizing capacities in animal and plant health, food safety and quality:

Supporting and promoting the implementation of the One Health concept

IICA has worked followed the One Health approach since it was formally set 20 years ago. After the Covid-19 pandemic, hemispheric actions were increased and call for action and implementation highlighting its importance for the agri-food system transformation, message that IICA raised on the World Summit on Food Systems. Likewise, regional projects were carried out, such as the one implemented in the Andean Region aiming to identify common intersectoral and regional priority areas of work, therefore performing workshops, conferences, and publications.

Currently, the SAIA Program has an action plan for the operationalization of One Health in the Americas. This plan seeks to balance and optimize the health of people, animals, and ecosystems. It has three main objectives: promote inter-ministerial policies, promote initiatives in rural communities and advocate for investment and financing of the One Health approach. To achieve these objectives, three implementation phases were defined as follows: research, action, and collaboration. The phases involve evaluation of the approach management, training, execution of pilot plans and strengthening relationships with donors and strategic partners. In September 2023, IICA held the hemispheric meeting "One Health: The importance of inter-institutional collaboration in the hemisphere and its rural communities", more than 50 specialists and authorities from American countries and Regional and International Organizations in the areas of agriculture, animal health, plant health, environment and public health, as well as some delegates from private sector, shared successful experiences and



discuss the challenges for One Health concept implementation, conclusions will enrich the IICA Action Plan. More information Jaime.romero@iica.int

Support to the Inter-American Coordinating Group in Plant Protection – GICSV.

GICSV Members are the Regional Plant Protection Organizations - RPPO from Americas, the North American Plant Protection Organization - NAPPO, the International Regional Organization for Agricultural Health - OIRSA, the Caribbean Agriculture Health and Food Safety Agency - CAHFSA, the Andean Community - CAN and the Southern Plant Health Committee - COSAVE. Created in 1999, GICSV promotes effective and collective actions to prevent pest's introduction and spread in plants and plants products and promote appropriate measures for their control. NAPPO coordinated GICSV from March 2021 to March 2023, and OIRSA assumed GICSV Coordination for the period March 2023 to March 2025. IICA acts as Technical Secretariat, contributing to the achievement of objectives and promoting quality technical cooperation.

GICSV establishes Working Groups (WG) on topics that are considered strategic for the Americas, Working Groups have been prioritized on HLB, FOCRT4, Fruit Flies, Orthoptera Pests, Electronic Certification, *Tuta absoluta* and Phytosanitary Emergencies recently created.

Most notable actions and products of the last year:

- Coordinating Committee (CC) and Working Groups (WG) Work Program was updated. The Coordinating Committee and the WGs held periodic meetings to monitor their work plans.
- Horizontal cooperation was promoted between the RPPOs that make up GICSV, as well as between the NPPOs.
- RPPOs analyze and shared visions on CPM 17 agenda issues, especially on those that the region considers high priority, common positions were identified.
- "Reference guide for the surveillance and control of *Tuta absoluta* in American region" soon to be published in Spanish and English.
- "ePhyto contingency plan for RPPOs in the region" and "Roadmap for ePhyto based on the GeNS system" are about to be published.
- Improvements to the international ePhyto system were identified and will be shared with ePhyto international group from IPPC.
- GICSV Statement due to the lack of authorized pesticides for locust control.
- Materials for dissemination campaigns on prevention and management of HLB and FOC TR4.
- Identified the characteristics and technical capacity of fruit fly surveillance and management programs for economic and quarantine importance species in the countries of the GICSV region.
- Webinar "Sea Container and Cargo Cleanliness Activities: Updates for GICSV. Webinar "Cleaning activities for maritime containers and their cargoes: updates for the GICSV"
- Conversation: Single window and its phytosanitary context
- Webinar "The new world of phytosanitary treatments"
- GICSV Citrus Conference: "Prospective phytosanitary intelligence as an imminent regional strategy for prevention, suppression and control of pests and diseases in a dynamic international context: Case study for HLB and *Diaphorina citri*" and "Approach to citrus diseases with regional impact"

More information on http://apps.iica.int/GICSV/default.aspx



PROCINORTE. Cooperative Program in Agricultural Research and Technology,

PROCINORTE is a regional mechanism that facilitates cooperative research activities of tri-lateral interest to Canada, Mexico, and the United States. IICA leads PROCINORTE as executive secretary. In its 25th anniversary, PROCINORTE has a task force that focuses on plant health. The objective of this working group is to develop and share knowledge and technology to promote the sustainable management of pests, diseases, nematodes, and arthropod weeds that negatively affect crop production in North America, as well as prevent the introduction, establishment and spread of invasive species that affect plant health. A network of scientists and regulators has been initiated through several training sessions focused on invasive insect pests. PROCINORTE has organized annual workshops, the last one in Mexico in June 2023 on "Reducing pesticide use and the risk of antimicrobial resistance in staple crops through a single vision of health." In 2022, the theme was "Wheat and grapes: mitigating the effects of climate change." More information on: https://www.procinorte.net/

IICA support the coordination of the Procinorte 25th Anniversary Meeting in which plant health workshops the participants shared the achievements, knowledge and technology used in the prevention and control of plant pests. It was highlighted that the exchange of information they carried out at the event is relevant to incorporate scientific findings, technology, and regional initiatives into their work plans, and to strengthen their alliances. https://iica.int/es/prensa/noticias/expertos-en-sanidad-animal-y-vegetal-de-canada-estados-unidos-y-mexico-exhortan. More information horrys.friaca@iica.int

Cooperation Agreement between IICA and COSAVE to strengthen COSAVE's actions.

The objective is to provide technical and management support for the best fulfillment of specific COSAVE functions and purposes, as well as strengthening of regional integration and development of integrated actions, aimed to attend agricultural biosecurity issues within COSAVE member countries interest.

In recent year main issues addressed were actions to promote the public-private interaction within COSAVE scope, support COSAVE modernization and strengthening, promote innovation and technology adoption, reviewing the Regional Standards on Plant Protection - ERPF, Regional Virtual School on Phytosanitary Inspection - ERVIF, Bioinputs / biopreparations regulations, promote capacities for the use of Methodology for Impact Assessment of the Implementation of Phytosanitary Measures - MEIS, and COSAVE induction training for new Members. These topics make up an Annual Operational Plan that has been implemented throughout the year. Support was provided for the "ePhyto Regional Workshop" held in Buenos Aires, Argentina, with successful results. More information Lourdes.fonalleras@iica.int

Supporting Plant Health Systems Enhancement through the Caribbean Plant Health Directors Forum Annual Meeting.

The Caribbean Plant Health Directors (CPHD) Forum in collaboration with the United States Department of Agriculture, Animal and Plant Health Inspection Services (USDA/APHIS), the Greater Caribbean Safeguarding Initiative (GCSI), the Caribbean Agricultural Health and Food Safety Agency (CAHFSA), the Caribbean Community (CARICOM) Secretariat, the Food and Agriculture Organization of the United Nations (FAO) and the Inter-American Institute for Cooperation on Agriculture (IICA) held the Sixteenth (16th) Meeting of the Caribbean Plant Health Directors (CPHD) Forum in Antigua and Barbuda. The meeting was held to facilitate discussions on matters related to safeguarding against and minimizing the impact of pests and diseases on the Region's agriculture and environment, and on harmonization of regional policy relating to phytosanitary measures to facilitate the trade in plant and plant products. More information Janet.laurence@iica.int



Strengthening national phytosanitary systems

Strengthening the Agricultural Health and Food Safety Policy framework in the Caribbean. In 2021, an integrated Policy and Action were developed to improve coherence on matters relating to Plant Health, Animal Health, and Food Safety. This Policy was endorsed by the Governments of the Caribbean in 2022. Work was initiated to improve the policy framework Agricultural Health and Food Safety Coordinated with the CAHFSA the development of Policy Brief for the Regional and National AHFS Policy Documents. The Policy was presented to the Ministerial Committee on Agriculture (COTED) and endorsed by Countries (October 2022). Funded under the 11th EDF SPS Measures Project by the European Union. More information Janet.laurence@iica.int

Increased Capacity of Caribbean National Plant Protection Organizations in Nematology. A Designed and hosted in collaboration with the University of Florida a Virtual Nematology Training Course "Diagnostics, Surveillance and Management Training Course for Economically Important Plant-Parasitic Nematodes" to build the capacity of National Plant Protection Organizations in this area. Thirty plant health professionals from thirteen Caribbean Countries were. From the end of course evaluation, all course participants rated the course at a level 4 or 5 on a scale of 1-5 with 5 being the highest. All participants indicated that the course met or exceeded their expectations, and they were better equipped to manage this important pest group. At a follow-up session one month post the workshop, 90% of participants responding reported that they shared the new knowledge gained and planned to utilize the information and skills gained from the course to train other colleagues, develop information products, and conduct surveys. Funded under the Greater Caribbean Safeguarding Initiative for which IICA is the executing agency (Funding provided by the USDA APHIS PPQ). More information janet.laurence@iica.int

Legislative strengthening for improved market access in Guyana and Saint Lucia. Successfully facilitated the advancement of the work to strengthen the plant health legislative framework through the development of regulations in Guyana and Saint Lucia. Over 100 stakeholders were involved in the consensus and validation process of the updated legislation. More information janet.laurence@iica.int

Building capacity of youths in crop production (Barbados). The IICA Delegation in Barbados hosted the annual Youth Farm for high school students pursuing agriculture as a career. The Youth Farm has several options for the students to receive a national vocational certification including crop production. More than 20 students received the vocational certification in crop production. More information janet.laurence@iica.int

Improving national food security (Barbados). Towards increasing national food security, a series of backyard gardening trainings were conducted for urban dwellers and papaya training conducted for farmers, extension officers. More information janet.laurence@iica.int

In Brazil, the Workshop "Hazard profiling for SEFVIA/CFTR-CGVIGIAGRO/DTEC/SDA inspectors from the Ministry of Livestock Agriculture and Supply was promoted, aimed at phytosanitary inspectors who control people's luggage. More information <u>Lucia.maia@iica.int</u>

Prodefesa, a Brazilian Project, focused on the formulation of the National Phytosanitary Education Plan, was supported to prevent the spread of *Bactrocera carambolae* (Carom Fly). More information Lucia.maia@iica.int

IICA supported an Argentinian initiative to SENASA strengthening and modernizing, which aims to strengthen and modernize the institutional framework and processes, as well as its technical capacity, and adapt the institutional framework and processes oriented to the concept of "Local Systems". health" — SILOS — promoted by the World Health Organization — WHO. More information Tomas.krotsch@iica.int



The project "Strengthening institutional capacity in Argentina, Chile and Bolivia to control the Mediterranean Fruit Fly in free areas using SIT with cold insect TIE-TAF" allowed strengthening the countries capacity to use the Sterile Insect Technique with cold insect. Technical and management recommendations were obtained from an international expert for the implementation of the technique, according to the implementation place characteristics, and a workshop was held to articulate the implementation of the technique at the regional level, identifying the challenges in each case. More information Tomas.krotsch@iica.int.

In Argentina, IICA supported the Advisory Committee on Bioinputs for Agricultural Use – CABUA/SAGyP and its working subgroups" and activities such as trainings organized with the MINCyT within CABUA scope, the "Virtual Seminar "Biological inputs: Bioinputs and biopreparations" was also supported, in conjunction with SENASA and the "Strengthening Innovation and Rural Development" foundation (FORINDER), the Latin American Workshop "Differentiated institutional strategies for bioinputs regulation to promote reflection and a comprehensive approach to the bioinputs within a regional perspective, exchanged regional experiences on regulatory frameworks, a future vision and reflection was made on concepts, categories and regulation for industrial and artisanal bioinputs. More information Tomas.krotsch@iica.int

"On the table with food from farms of small and medium-sized producers organized in the Regional Agricultural Marketing Center (CERCA)" is a project financed by the Global Alliance against FOC TR4 to strengthen in Paraguay producers capacity on Integrated Food Management. It was trained 95 small farmers on pest management, biosecurity, and technology application for main pests in tomato and pepper crops. More information jose.arrua@iica.int

The project "Support for the organic production and marketing of medicinal plants to improve the family farming producer's income and quality of life in Paraguay" financed by Spanish Agency for International Development Cooperation (AECID). More than 100 attendants, technicians, producer leaders, agricultural schoolteachers, and university professors. Likewise, a training plan with a biological approach to phytosanitary management of mother and seed plants was implemented, 140 small farmers benefiting from the project, in 6 different country regions. More information jose.arrua@iica.int

In Guatemala, IICA support activities to improve the interpretation of RTCA 65.05.67:18 on labeling of agricultural inputs in coordination with SECAC / CorpLife and Agrequima and in support of the working groups of the pesticide MRL project. More information fernando.conde@iica.int

In Mexico IICA support SENASICA on exchange of digital technical experience in plant health - Costa Rica, El Salvador, Spain, Guatemala. Honduras, Nicaragua, Paraguay, Uruguay, several Caribbean countries, Ministries of Agriculture and Livestock, ECLAC, ICAFE, IICA, Veolia, and support for the holding of the 1st National Congress of Agri-Food Health and Safety, organized by the National Agricultural Council in which the SAIA Manager participated. https://iica.int/es/prensa/noticias/fortalece-el-iica-la-sanidad-e-inocuidad-del-sector-agroalimentario-de-las-americas More information horrys.friaca@iica.int

IICA coordinated a parallel event "One Health Approach in agricultural product markets" — disseminate IICA's One Health approach, publicize the results of the market study carried out in Mexico in 2021 and make the experience and technical cooperation available to the authorities from IICA https://iica.int/es/prensa/noticias/especialistas-promueven-la-creacion-de-un-grupo-consultivo-para-impulsar-en-mexico https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es/">https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es/">https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es/">https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso?idiom=es/">https://www.gob.mx/senasica/es/articulos/una-salud-un-compromiso/es/articulos/una-salud-un-compromiso/es/articulos/una-salud-un-compromiso/es/

In Mexico, under the framework of technical cooperation agreements between IICA and SENASICA different operational programs carried out activities that contribute to strengthen phytosanitary diagnosis and pest management activities; confirm the absence of regulated pests in the national territory and detection of citrus canker in non-agricultural areas of Matamoros and Reynosa,



Tamaulipas, Mexico; carry out phytosanitary diagnoses highlighting pest identification (example: detection of khapra weevil); assistance in the import and export processes of fruit and vegetable products to more than 50 countries and in Phytosanitary Protection activities (Campaigns); support for the Phytosanitary Management Project for Production for Wellbeing; strengthening actions regarding safety, to reduce risks associated with fresh agricultural products; strengthening the regulation and procedures and pesticides for agricultural use; phytosanitary diagnosis — thanks to which an emergency operation was carried out to detect a fertile male specimen of the Mediterranean fly in the urban area of Cancún, Quintana Roo; state coordination and evaluation — (support and supervision for the application of regulations on plant health); inspection - more than 900 inspectors with the support of 73 canine units, in 90 Agricultural Health Inspection Offices (verification of compliance with the regulations applicable to phytosanitary protection); and verification at origin (support for foreign trade of products of plant origin).

Other SAIA Program relevant activities in Mexico were:

- Technical mission of SAIA Manager and specialists to the sterile fruit fly production plant.
 https://www.gob.mx/senasica/documentos/together-we-prevent-the-entry-of-the-mediterranean-fruit-fly
 and
 https://www.gob.mx/senasica/documentos/technical-cooperation-between-agriculture-and-iica-is-essential-to-prevent-the-entry-of-the-mediterranean-fruit-fly
- Participation in the third edition of the International Coffee Festival 2023.
 https://iica.int/es/prensa/noticias/exhorta-el-iica-favorecer-la-capacidad-de-las-americas-para-tener-un-manejo-0
- Collaboration in the preparation of an experience exchange workshop between SENASICA México and the Department of Food and Agriculture of California, USA – fruit fly surveillance programs - Tentative date 1st quarter /2024.
- Organization of a visit by the SAIA manager and specialists to Mexico to learn about some of the activities carried out under the IICA-SENASICA Agreement, highlighting a meeting with plant health authorities (federal and local level) and banana producers where requested support for preparation for the FOC-R4T threat.
- Participation in the training course on priority pests of banana crops, with emphasis on Fusarium wilt of Musaceae - carried out by SENASICA as part of its annual training and surveillance program - approximately 100 attendees.
- Organization of the discussion among banana producers on the prevention and care of infection by the fungus *Fusarium oxysporum* cubense tropical race 4, in coordination with the Global Alliance against TR4 https://iica.int/en/press/news/international-organizations-private-sector-and-producers-ecuador-colombia-costa-rica-and
- Coordination of meetings between SENASICA and APHIS-USDA personnel for the implementation a "Don't pack a pest" campaign.

More information horrys.friaca@iica.int and rocio.campuzano@iica.int

2.2. Impulsar la implementación efectiva de los estándares internacionales.

 Supported the hosting of the IPPC Regional Workshops for the Caribbean an Latin America Regions (2022 and 2023).

IICA working in collaboration with IPPC, FAO, CAHFSA, CAN, COSAVE and OIRSA to plan the IPPC Regional Workshops for the Caribbean and Latin America which seek to promote participation of Caribbean and Latin America Countries in the IPPC standard setting processes and encourage compliance with international phytosanitary standards. In 2022, fifty-three Plant Health Professionals



from seventeen Caribbean countries and seven regional/international institutions participated in the standard setting process and have an increased awareness of capacity building tools developed by the IPPC. Latin American workshop met 78 Plant Health Officials from 18 countries and 8 regional/international institutions. In 2023, for Caribbean workshop 20 persons from fourteen Caribbean countries attend the workshop which was held in-person in Antigua and Barbuda, and 95 Plant Health Professionals from 17 countries and 6 regional / international organizations attend the workshop which was held in hybrid format in IICA Headquarters, Costa Rica, for Latin America Region. More information Janet.laurence@iica.int and Lourdes.fonalleras@iica.int.

• International Plant Health Day - IPHD

To commemorate the "International Plant Health Day", IICA shared key messages on its social networks. More information Lourdes.fonalleras@iica.int

2.3. In relation to adopting good practices and improving response to emergency situations:

• Preparing the Caribbean to Safeguard its Borders against Priority Plant Pests.

To strengthen National Plant Protection Organizations to prevent/manage the entry of key priority plant pests into the Caribbean, a series of capacity building activities were conducted. The first activity trained plant health professionals from NPPOs on an approach to assess the status of their National Emergency Pest Response Systems through the conduct of Tabletop Simulation Exercises. This resulted in twenty-one (21) plant health professionals from six countries being trained (Antigua and Barbuda, Dominica, Jamaica, Grenada, Saint Lucia and Trinidad and Tobago). These trained individuals utilized the knowledge gained to conduct tabletop simulation exercises for priority pests, including the Tomato Leafminer, Citrus Canker and Potato Brown Rot. More than 120 stakeholders from the emergency pest response system participated in these exercises across the target countries. Based on these exercises, countries were able to assess the status of their emergency response systems and identified key areas which need to be strengthened to protect their borders from pest incursions. Funded under the Greater Caribbean Safeguarding Initiative for which IICA is the executing agency (Funding provided by the USDA APHIS PPQ).

More information Janet.laurence@iica.int

 Development of GAP Audit Course and Manual for improved trade of fresh produce in the Caribbean.

Towards strengthening the competence of public and private sector professionals in GAP Auditing, an e-course and Manual were developed. The course covers the principles and practice of GAP Auditing and targets in the main extension and field officers, and producers. This course was delivered through IICA's e-learning platform with over 200 persons completing the first edition of the course. More information Janet.laurence@iica.int

 Support Barbados and the OECS in managing IAS threats posed by the horticulture trade pathway particularly those that pose the greatest risk of becoming invasive

Within the above context, IICA was contracted by CAB International to undertake a study to generate information on managing IAS threats posed by the horticulture trade pathway particularly those that pose the greatest risk of becoming invasive. The information will inform appropriate policy, legal and institutional frameworks for all aspects of management of IAS in Barbados and OECS. The following were successfully completed:



- Identification and prioritisation of key species in the Horticulture trade pathway (ornamental non-food plant species -including aquatic and marine plant).
- Documented the existing measures to manage threat of introduction of IAS posed by the Horticulture trade pathways and determined their efficacy.
- Recommended measures for managing the risks associated with these potential invasive species within a SMART Action framework.

CAB International Funded Initiative. More information Janet.laurence@iica.int

Fusarium oxysporum Tropical Race 4

"ALER4TA Project to strengthening capacities and biosafety in Ecuador, Colombia and Peru, against Fusarium oxysporum tropical Race 4 (Foc RT4) in musaceae"

With GIZ support, a Field School (ECA) was developed with IICA methodology, on Foc RT4 biosafety with 32 attendants from Ecuador, 22 from Colombia and 23 from Peru. Musaceae producers have been trained in biosecurity, to date 467 attendants in Ecuador (29.6% female), 621 in Colombia (26.6% female), and 314 in Peru (13.1% female). A cabinet drill was developed to analyze relevant issues for each country. Project will be extended to Bolivia with the same activities in the last half of 2023. Support was provided for the provision of Biosafety kits for Agrocalidad and Musaceae producers in the country.

Support for the implementation of Good Agricultural Practices (GAP), supporting Agrocalidad process and the updating of GAP regulations for processed grains (cocoa and coffee), as well as the updating of the GAP+ regulations which increases a component of deforestation free.

IICA support Agrocalidad first Foc R4T field drill in Machala and shared by streaming, and training workshops for Musaceae producers nationwide on Moko disease *Ralstonia solanacearum*.

More information lorena.medina@iica.int

"Strategy to strengthen production and agro-export in Venezuela."

With the objective to know the pathogens involved in the disease known as sudden wilting or false Panama disease, the study "False Panama disease or sudden wilting status in Panama Musaceae". Sampling was carried out in Aragua and Carabobo States, looking for diseased plants with symptoms of yellowing of leaves, necrosis, and wilting. Fusarium oxysporum f.sp. Cubense was identified causing the symptoms, predominant in most of the analyzed samples. Other organisms identified were Ralstonia solanacearum and a bacterium that causes soft rot, presumed to be Pectobacterium carotovorum or Dickeya paradisiaca. Within this framework, IICA supported the Seminar "Current situation of Foc RT4 in Venezuela and disease experience managing", more than 300 NPPO technicians, academics and producers strengthened their capacities.

IICA, with Global Alliance against TR4 financing, in alliance with the Agronomy Faculty of Central University of Venezuela (FAGRO-UCV), the Venezuelan Institute of Scientific Research (IVIC) and the Musaceae Network of Venezuela (MUSAVEN), supported the study for the molecular determination of the races or strains of Foc, Moko and black Sigatoka, in Venezuela bananas producing areas, it was possible to identify *Fusarium oxysporum* f.sp. Cubense RT4 in the sampled areas. Sampling and diagnosis are being expanded and deepened to the Aragua State.

More information yanira.vasquez@iica.int



Strengthening the emergency response capacity on FOC TR4 in Nicaragua

IICA contributed to support drills in 4 departments to strengthening the response capacity and territorial coordination of government agencies related to plant health, against the risk of this pest for the Musaceae production areas in the country. It was involved the Institute of Agricultural Protection and Health - IPSA, the Ministry of Health - MINSA, other ministries and decentralized entities such as the Institute of Agricultural Technology - INTA, the Agricultural Ministry - MAG and the Ministry of Family Economy - MEFCCA. Altogether, this effort strengthens the capacities of 340 people, 85% technicians from public services that support producers in the territories. More information Mauricio.carcache@iica.int

Strengthening the emergency response capacity in FOC TR4 in Mexico

IICA support a training on priority pests of banana crops, with emphasis on Fusarium wilt of Musaceae - carried out by SENASICA as part of its annual training and surveillance program - approximately 50 attendees. As well as the exchange, between banana producers, on good practices on the management of Fusarium in Ecuador, Colombia, Costa Rica and the Soconusco Region, Mexico, with 200 online attendants. More information rocio.campuzano@iica.int

Support to the GICSV FOC TR4 Working Group

This WG is a forum for analysis and coordination of the Regional Plant Protection Organizations - RPPOs - of Americas to coordinate actions, address and disseminate the most relevant aspects to have a hemispheric strategy. More information http://apps.iica.int/GICSV/default.aspx

Support to the Global Alliance against FOC TR4

The efforts of the Global Alliance against TR4 focus on prevention and training, genetic improvement, and control methods. More information about the Global Alliance against FOC TR4. More information https://iica.int/es/global-alliance

IICA Network on Musáceas - Fusarium oxysporum Raza 4 Tropical (Foc R4T)

Created to contribute to knowledge management and development of joint, articulated and synergistic actions, supporting the efforts of member countries to *Fusarium oxysporum* Tropical Race 4 prevent and control in Musaceae. More information Erika.soto@iica.int

Huanglongbing (HLB)

"Strategy to strengthen agriculture production and export in Venezuela."

The study "Strategies for the Comprehensive Regional Management (MIR) of HLB in the High Valleys of Yaracuy and Carabobo in Venezuela" was carried to know the HLB status in High Valleys of Yaracuy and Carabobo areas, as well as identifying the needs to strengthen national capacity to control this pest. Within this framework, the Workshop "Preliminary Proposal for Regional Integrated Management of the Huanglongbing in the High Valleys of Carabobo and Yaracuy" was held to identify actions for a consensual proposal for an HLB IPM project in the VACyY, establish the HLB Technical Council for Integrated Pest Management in citrus fruits production in the Country, and promote a technical mission to Brazil. More information yanira.vasquez@iica.int

Good Agricultural Practices - GAP

In Costa Rica, the implementation of GAP and GMP in cacao chain has been supported, to ensure high-value markets for fine and aroma cocoa. More information sacha.trelles@iica.int