# SAFEGUARD the Region from TR4

## PRE-EMPTIVE ACTION to reduce loss and costs

**A CALL TO POLICY MAKERS AND PUBLIC OFFICIALS TO BE VIGILANT AND TAKE PRE-EMPTIVE ACTIONS TO**

**KEEP OUT TR4**

**AND HELP SAFEGUARD THE BANANA AND PLANTAIN INDUSTRY IN PRODUCING AND EXPORTING COUNTRIES OF THE REGION**

## THE FOCUS

- **What is the TR4 threat?**
- **Who feels the impacts?**
- **How can we safeguard the industry?**

## MAIN MESSAGES

- **TR4 is not yet present in the Caribbean**, but is spreading rapidly among banana producing countries, including Venezuela.
- **TR4 spreads** from infected planting materials and contaminated soil particles on farm tools, shoes, clothes, animals, and vehicles, and through irrigation, drainage water and high winds.
- **TR4 is a 'forever threat'** to bananas, plantains, and the entire Musa family because there is **no treatment**!
- **Prevention is the most effective action.** If detected, take immediate action to contain the spread to clean areas.
- **The time to act is now** by producers, exporters **and especially importers** of bananas and plantains. **Safeguard the Region against introduction**!

## WHAT is the TR4 (Tropical Race 4) threat?

- **What is TR4?**

**A FUNGUS!** Tropical Race 4 (TR4) is a fungus, and an invasive species that affects bananas, plantains, and all varieties of the Musa family. More than 80% of bananas and plantains cultivated and traded globally, is thought to originate from TR4 susceptible germplasm.

- **Why is TR4 a threat?**

**NO TREATMENT!** The fungus is soil-borne and deadly. TR4 attacks the roots and can cause 100% yield loss once established in a field. Fungal spores can remain dormant in the soil or on several host plants for decades. This can limit the ability to cultivate bananas, plantains, and other members of the Musa family, long after the original outbreak. Containment is extremely difficult and costly.

- **How urgent is theTR4 threat?**

**RED ALERT!** TR4 was detected in Latin America in 2019, where around two-thirds of global banana trade originates. In January 2023, TR4 was notified as present in Venezuela, which is very close to the main southern Caribbean gateways for trade and travel. Frequent movements (legal and illegal) of transportation vessels, people, live plants and animals, and products, place the entire Region at high risk of introduction.

CARIBBEAN PLANT HEALTH DIRECTORS CAHFSA USDA IICA

## WHO feels the impacts?

### • FARMERS

In 2022, Dominica, Jamaica, St. Lucia, St. Vincent and the Grenadines, and Suriname were listed among the world 100 banana exporters. If TR4 is introduced, their farmers will be wiped-out: entire fields, farm income and livelihoods. With no treatment, TR4 will spread. Farm recovery will be expensive as the fungus survives in soil long after the original outbreak. Investment in alternative soilless or protected banana and plantain production is beyond the capacity of these producing countries.

### • PROCESSORS

Agro-processing, using raw material from farmers is important to develop the Region's agriculture value chain. Bananas and plantains are used in several popular consumer foods, produced by micro and small processors, and medium to large scale manufacturers. The inability to obtain raw materials, whether locally, from regional farmers, or imported from extra-regional sources will impact industry growth, livelihoods and employment, food supplies, retailing, and exports.


### • EXPORTERS

Of the US$12.5 Billion bananas exported by 100 countries in 2022, St. Lucia, Suriname, Jamaica, Dominica, and St. Vincent and the Grenadines ranked 63 (US$2.6M), 68 (US$0.93M), 69 (0.90M), 71 (US$0.74M) and 74 (US$0.61M), respectively[1]. A TR4 outbreak in these countries would mean an automatic ban on their banana/plantain exports, and possible export restrictions on other fresh agriculture produce and planting material. The threat of TR4 being re-exported or transported by other means is enough for importing countries to take actions to safeguard their borders.

### • IMPORTERS

Between 2016 and 2020, Antigua and Barbuda, Barbados, Guyana, St. Kitts and Nevis, and Trinidad and Tobago imported roughly US$10 and US$1 Million per year, of fresh bananas/plantains, respectively. Trinidad & Tobago imported 74%, and Antigua and Barbuda, and Barbados, 13% and 11%, respectively. These Caribbean neighbours are actively promoting bananas/plantains in home gardening food security projects. Their tourist establishments also use wild/ornamental varieties in landscaping, including the popular Heliconia. Access to all Musa varieties could be prohibited as such imports will be deemed high risk.

### • CONSUMERS

Ultimately, consumers will suffer. Pressures on public social and economic welfare programs will increase, as school feeding programmes and food insecure households may no longer be able to access such as a basic and nutrient-dense food staple as the banana, and the range of food products made from bananas and plantains.

[1] Source: https://www.worldstopexports.com/bananas-exports-country/?expand_article=1)

## HOW can the risk be reduced to SAFEGUARD the industry?

**No Caribbean country is insulated from the TR4 threat. Detection in ONE is a threat to ALL!**

**Caribbean Plant Health Directors (CPHD) Technical Working Group (TWG) - Musa Species**

The CPHD TWG-Musa Species is a special emergency mechanism to lead and coordinate actions across the Region, the wider Caribbean and Latin America, and with international partners.

| SAFEGUARDING THE INDUSTRY – SECTOR – REGION FROM TR4 | |
|---|---|
| **WHAT** | **WHO: Partners supporting the CPHD Forum** |
| **PREPAREDNESS** | |
| Declare TR4 as a notifiable pest | **All National Competent Authorities**<br>**NB**: the United States, a non-banana/plantain producer, has declared TR4 as a notifiable pest |
| Strengthen port biosecurity: install mats & signs | |
| Increase national surveillance | |
| Inform - educate - sensitise the public | **IICA, USDA APHIS, FAO, OIRSA, CIRAD, CABI, CARDI, UWI,** have developed/are updating information products for public awareness and hosting webinars for technical training |
| Train farmers, customs officers in biosecurity measures | |
| Strengthen plant protection units' capacity in detection, exclusion, and management | **National Plant Protection Officers (NPPOs)** |
| Strengthen national and regional diagnostic capacities (**NB:** TR4 was possibly in Venezuela two years before detection and formal declaration) | |
| **READINESS** | |
| Create, resource, and activate a TR4 Rapid Response Team | **CPHD** and the Ministry of Agriculture, TT conducted a Detection Simulation Exercise (Sept. 2023) with support from **OIRSA** and financial/logistical support from **IICA, USDA APHIS** and **CIRAD** for eleven Caribbean countries |
| Simulate emergency response exercises | |
| Research TR4 tolerant or resistant varieties | **CIRAD**, in collaboration with **UWI** and **CARDI** undertaking agronomic evaluations and testing. **IICA, USDA APHIS, FAO, CABI** to support access to/introduction of improved varieties |
| Establish capacity for promissory germplasm and support safe introduction of certified TR4 resistant-tolerant germplasm | |
| Support implementation of priority actions in the Regional and National TR4 Action Plans | **National Plant Protection Officers (NPPOs)** supported by Regional and Development organizations |
| Endorse mobilization of resources for Strengthening Regional Safeguarding and Preparedness actions | **GCSI-IICA-USDA APHIS-CPHD Forum** developed NAPs for Barbados, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago.<br>**ALL technical partners** to support implementation, coordinated by the CPHD TWG-Musa Species |
| Participate in international coordination mechanisms | **GICSV** (Inter-American Coordinating Group in Plant Protection, with IICA as the Secretariat). Their efforts led to the USDA declaring TR4 as a notifiable pest |
| **RISK AND IMPACT ASSESSMENT** | |
| Quantify financial, economic and biodiversity impacts on Musa species | **ALL Technical partners - IICA, USDA APHIS, CAHFSA, CABI, UWI, OECS COMMISSION, CARDI, FAO, CATIE and CIRAD** - committed to supporting the CPHD TWG-Musa Species to undertake these activities and disseminate results and capacity building |
| Evaluate the cost/benefits of pre-emptive action and consequences of inaction/delayed action | |
| Formulate a national recovery plan in the event of the entry of TR4 | |

**TR4 is a 'high priority' in pest prioritization activity. The CPHD TWG-Musa Species is taking rapid action in the banana producing countries to build readiness to safeguard the Region!**

# Policymakers

## BE YOUR BROTHERS' KEEPER

| Safeguard borders | Safeguard farms | Notify TR4 detection |
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| first line of defence! | first zone of impact! | first signal to act! |

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| **Reinforce** | your border control systems (Importers and Exporters of bananas and plantains) |
| **Declare** | FoC TR4 as a priority pest and pest of quarantine importance and enact the necessary legislation to ensure exclusion |
| **Provide** | the requisite financial and logistical support for implementation of the regional plans and programmes for the prevention and exclusion of FoC TR4 |
| **Support** | the NPPOs in developing and implementing a FoC TR4 National Action Plan |
| **Enhance** | the RPPO, CPHD Forum, regional and international organisations efforts to develop and implement a coordinated regional response to the threat of FoC TR4 |

## PROTECT - SIMULATE - DETECT - ACT



| For more information contact the CPHD TWG Musa Species | |
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| Credible Resources | cphdforum.org \| Caribbean Plant Health Directors Forum<br>http://apps.iica.int/GICSV/programas/SanidadVegetal/default.aspx \| GICSV<br>fusarium_lac@dgroups.org \| The FAO World Banana Forum newest initiative: Comunidad de Práctica sobre Fusarium en Musáceas para América Latina y el Caribe |

October 2023. Prepared by IICA-TT for the CPHD TWG - Musa Species