



CARIBBEAN PLANT HEALTH DIRECTORS

PROTECTING CARIBBEAN AGRICULTURE

Fusarium Wilt of Bananas & Plantains Tropical Race 4 (TR4)

Fusarium wilt known as Panama disease is caused by a fungus called 'Fusarium oxysporum f.sp. cubense (Foc)'. This disease infects the xylem, induces wilt and kills banana and plantain plants. The soil borne pathogen has four races of the fungus. Fusarium Wilt Tropical Race 4 is currently not present in the Caribbean and everything possible must be done to keep this disease out of the Region.

- Race 1 infects Gros Michel and many other banana varieties, but not Cavendish
- Race 2 generally infects cooking bananas such as Bluggoe
- Race 3 infects only Heliconia species and not bananas
- Race 4 not only infects most varieties affected by race 1 and race 2 but also Cavendish on which > 90% of the world banana trade is based.

What does it do?

The Fusarium oxysporum f.sp.cubense has been considered a hemibiotrophic or necrotrophic pathogen since it needs to interact with living plant cells as part of its own life cycle. TR4 has been known to spread through planting materials, irrigation, floodwaters in the loss of Cavendish, vehicles and soil vectored by workers. TR4 can live in soil and prevent any success of future plantings.



What can we do?

- Do NOT bring into your country any soil or agricultural propagative / planting material without the required Plant Quarantine Import Permits/Approval
- When you travel declare all agricultural items.
- Report any suspected signs and symptoms consistent with Fusarium Wilt to your Ministry or Department of Agriculture
- Follow all prevention and control recommendations from your Ministry or Department of Agriculture