Prevention

**Containment**
Prevention of pathogen moving out of TR4-infested area

**Exclusion**
Prevention of pathogen moving into TR4-free area

Source: www.abc.net.au; Jeff Daniells
Actors need to work together at different levels

Policy makers, governments

• In countries that already have TR4 - responsibility to undertake everything they can to contain it:
  • declare that TR4 is present in country, as soon as possible after it is confirmed
  • take measures to ensure that TR4 does not spread within country: encourage and support growers with implementation of on-farm containment/exclusion measures (work with affected farmers to help them contain / support unaffected farmers to protect their farms)
  • take measures to ensure that TR4 does not spread beyond country’s borders

• In countries that do not yet have TR4 - responsibility towards growers to ensure it does not enter:
  • designate TR4 as a quarantine pest
  • raise awareness with banana-growing communities, and encourage and support growers with implementation of on-farm exclusion measures
  • set up a monitoring system to promptly detect incursions
  • enact regulations that allow national plant protection organization to intervene should TR4 be confirmed
Aists need to work together at different levels

Producers

• Biosecurity measures aimed at preventing TR4 from escaping an infested farm are essentially the same as those that growers can take to protect their farm.

• TR4 is mostly spread by infected planting material and contaminated soil and water --> biosecurity measures should be designed to halt the movement of TR4 along these pathways.

• This includes, amongst others:
  • exclusion of entry of all non-essential visitors, vehicles and plant material
  • strict rules and guidelines for entries that cannot be avoided.
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Travelers

[Note: If the 2 levels above are taken care of correctly, this one should already be covered. But since this is not the case in most situations, travelers should be informed of what they should/should not do.]

• One should not visit a farm where TR4 has been reported, unless absolutely necessary (e.g. if person lives or works there) --> e.g. journalists or bystander scientists should not be allowed to visit TR4-infested farm

• When visiting a farm, one should always inform the grower beforehand, ask permission to enter, and follow the rules that exist on the farm (and that may be in place to contain the pathogen in case the farm is infested, or to exclude the pathogen in case the farm is free of TR4)

• These measures could include, amongst others:
  • changing boots, walking through a footbath
  • being restricted from certain areas, following particular footpaths/roads
  • not bringing in own vehicle or equipment, making sure that everything that you bring in/take out is clean and disinfected when you arrive/leave
  • not bringing in/take out any plants or plant parts, ...
Resources

- http://www.promusa.org/Fusarium+wilt
- http://www.promusa.org/Fusarium+oxysporum+f.+sp.+cubense
- http://www.promusa.org/Tropical+race+4+--+TR4
- www.musalit.org ~ >600 publications with “Fusarium” in title