



BANANA FUSARIUM WILT- KENYA

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About KEPHIS



- KEPHIS (Kenya Plant health inspectorate service) is the national plant protection organization in Kenya.
- Mandate-offer regulatory services in the agricultural sector with special focus on protecting the country from entry of harmful organisms.
- Services:-phytosanitary certifications of imports and exports, seed certification, diagnosis , plant variety protection and analytical chemistry.
- The Organization is a signatory to IPPC and WTO



Pest Survey-Fusarium wilt

- *Fusarium oxysporum* is a threat to banana cultivation in Kenya
- Under plant health services, pest surveillance activities are planned and carried out every year for priority pests.
- Among the pests of concern is *Fusarium oxysporum* TR4.
- Samples are collected and analyzed using both classical and molecular methods at the KEPHIS Plant Quarantine and Biosecurity Station.
- Previous surveys did not detect presence of the disease.

Observations



- A great percentage of planting material is either from own farms or exchanged with Neighbours.
- Such material carry disease risk. Sometimes movement can be as far away 70km-100 km.
- FOC was identified in all major banana growing areas. Extensive damage was observed in Western part the country.
- Other Fusarium isolates detected *F.equisetti*, *F.lycopersicum*,
- *Pests: Thrips, Weevils*
- Planting material from nurseries are expensive and not affordable to farmers.
- There is need for enhanced awareness on pests management measures.



Interventions

- Identified high risk zones for introduction of FOC TR4
- Organized and carried out farmer awareness for the Banana Fusarium wilt and Banana Xanthomonas wilt in these zones.
- Staff awareness for extension staff and inspectors at the border points.
- Adopted recent techniques in diagnosis using latest molecular markers.
- Developed an emergency preparedness plan incorporating Improved prevention of entry and containment, Improved awareness on disease management and enhanced collaboration with stakeholders.

Symptoms observed in the field.



Fig. 2 Fusarium wilt symptoms as observed

a-wilting and 'skirting' of lower leaves, b-Split pseudo stem, c and d-brown-red discoloration of vascular bundles

Thank You

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