

Fusarium Wilt or Panama Disease on Bananas

Fusariumoxysporium

	Prevention	Monitoring	Direct Control	Direct Control	Restrictions
<p>Yellowing of older leaves (Rose Kamau-MoA Kenya)</p>	<ul style="list-style-type: none"> ◆ Use plant tolerant varieties like; Dwarf Cavendish, Giant Cavendish, Apple, Lacatan, Valery and Poyo ◆ Select a clean field with no disease history. ◆ Always use clean planting materials and avoid movement of materials from infected areas to uninfected sites. ◆ Sterilize working tools by dipping them for one minute into bleach, Methylated spirit and Formalin after working with infected plants. ◆ Before planting can sterilize the planting materials by dipping into a fungicide solution (see yellow direct control) ◆ Use only clean suckers from plants that are healthy or use tissue cultured materials. ◆ Avoid runoff water from diseased areas as fungus can be distributed with the water. ◆ Can use the Kitchen manure on the plants 	<ul style="list-style-type: none"> ◆ Continuously monitor for light yellow colouration on the lower leaves. (Mainly around the margins. The yellowish colouration progresses from older to younger leaves leading to wilting of the whole plant. ◆ The stool of the affected banana shows purple-brown patches when cut across. ◆ The pseudo stem show a distinctive symptoms of brown, red or yellow ring like lines on the cross-section ◆ On the infected plants; leaves collapse and drop towards the pseudo stem. ◆ Apply direct control when Fusarium wilt is first detected. 	<ul style="list-style-type: none"> ◆ Incorporate <i>Trichodermaspp</i> at the rate of 10g per plant as dried banana leaf formulation. ◆ Mix ash with water and pour onto the basal part of the plants. ◆ Uproot the affected banana stools in the farm and leave them on the surface to dry. Can also bury them or put into plastic bags and burn. Isolate the infected stool then inject with an herbicide like glyphosate ◆ Add urea to catalyse decomposition of the uprooted diseased materials 	Dip stools before planting: <ul style="list-style-type: none"> ◆ Mancozeb and Metalaxyl ◆ Didecyldimethyl ammonium chloride ◆ Propamocarb ◆ Fludioxinil solution 	<ul style="list-style-type: none"> ◆ Mancozeb: WHO U (unlikely to cause harm) ◆ Metalaxyl: WHO III (slightly hazardous) ◆ PrepomacarbWHO U ◆ Fludioxyl WHO U
<p>Brown red ring like lines (Rose Kamau-MoA Kenya)</p>				<ul style="list-style-type: none"> ◆ Treat with herbicide (Glyphosate) to kill infected stool ◆ Treat infected soil with Metam sodium (soil fumigation) 	<ul style="list-style-type: none"> ◆ WHO III (slightly hazardous) ◆ WHO II (moderately hazardous) ◆ Should only be applied by a professional ◆ No plants must be present during treatment ◆ Very toxic to aquatic organisms ◆ Keep unprotected persons, livestock and pets out of treated areas for at least 24 hours ◆ Allow several weeks to dissipate

Country

CREATED/UPDATED: July 2013

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