



KALRO/NAVCDP Programme Factsheet No. 072/2024

YELLOW SIGATOKA OR LEAF STREAK DISEASE

Disease name: Yellow Sigatoka or Leaf Streak Disease (*Mycosphaerella musicola*)

Description of the disease: Yellow sigatoka or leaf spot is a fungal disease that attacks bananas in all banana growing regions. The disease reduces the plant photosynthetic potential and subsequent bunch size. It can also shorten the green life of fruit, resulting in reduced fruit quality. It is more prevalent at the end of the wet season, particularly in plantations that have not been sprayed with fungicides.



Healthy banana seedlings
(KALRO)



Banana leaf infected with yellow sigatoka (<https://flicker.com>)



A closeup of yellow sigatoka symptoms on a banana leaf
(E Moses, CSIR-Crops Research Institute)

Diagnosis/Identification Symptoms

Disease symptoms develop progressively as indicated below:

- A tiny yellow spot or light green streak on the upper surface of leaves.
- The spots stretch out into yellow streaks of 3 - 4 mm.
- The streaks widen into large spots; the center developing a rusty colouration.
- The lesion reach can size of 12 -15 mm on 2 - 5 mm) with a yellow halo; the centre is dark brown to black.
- The central zone of the lesion dries up and turns gray with a black ring and a yellow halo. It is referred to as the 'necrosis' stage. At this stage, the ascospores appear and are then dispersed by the wind.

Conditions prevailing that contribute to success of the pathogen

- The disease requires living plant material to survive and propagation of spores to infect other leaves and plants.
- The disease is more severe and spreads fast in moist and warm conditions, particularly during the dry spell.





Conditions prevailing that contribute to failure of the pathogen

- Wet season is unfavourable for disease progression.

Management Strategy

The following management options are recommended:

Cultural practices:

- Remove and destroy badly spotted leaves from banana plantations to reduce inoculum levels.
- Bury heavily diseased leaves within the plantation or piled on top of one another to prevent the effective discharge of ascospores from most leaves.
- Provide proper drainage and avoid water logging in banana orchards, which favours infection.
- Keep the banana orchard weed free and carry out timely de-suckering
- Avoid planting at close spacing.

Chemical management

- Apply Carbendazim or Propiconazole or Mancozeb at two weeks interval starting from initial appearance of leaf specks.

Note: Agro-chemicals should be used in consultation with professional practitioners and considering existing cautionary/safety measures, particularly the manufacturer's instructions.

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Disclaimer: The content of this publication is for general information to banana farmers and technical staff only and no person should act, or fail to act on the basis of the information herein without professional advice from crop health experts affiliated to Kenya Agricultural and Livestock Research Organization (KALRO).

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