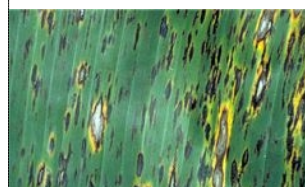


Black sigatoka of banana

Mycosphaerella fijiensis



Brown streaks with yellow areas between; the spots have joined together at the leaf margin causing a blight (Grahame Jackson, CABI)



Close-up of brown elongated spots, most with yellow margins, and some with grey centres (Grahame Jackson, CABI)

Prevention	Monitoring	Direct Control
<ul style="list-style-type: none"> • Use tolerant/resistant varieties if available • Reduce the length of time that the leaves are wet and can be infected by spores: <ul style="list-style-type: none"> • For planting, choose areas that have good drainage, avoiding those with heavy clay soils where surface water remains for some time after rains • Avoid areas where there is shade from trees • If planting on hillsides, choose sites with morning sun to dry leaves rapidly and always plant so that the rows run in the direction of the prevailing wind, to allow air into the plantation to dry the leaf surface, to prevent infection • Plant at wide spacing, about 2.5 m apart (1600 plants per hectare) • Weed frequently • Remove suckers to avoid clustering • Avoid transporting infected plants into disease-free regions • Disinfect farm equipment involved in plot management 	<ul style="list-style-type: none"> • Additional relevant crops: plantain • Take action as soon as symptoms are seen • Symptoms: <ul style="list-style-type: none"> • Leaves: Red-brown streaks, parallel to the veins, about 1-5 mm long by 0.25 mm wide. They are most noticeable on the underside of the third or fourth youngest leaf, especially along the edge of the leaf blade, which is first exposed as the leaf emerges • Leaves: The streaks expand and become noticeable on the upper surface, darkening and later developing grey, slightly sunken centres with black margins and bright yellow halos • Leaves: As the streaks join together they form bands of dead areas several centimetres wide, on either side of the midrib, and the leaves collapse and die • Monitor crop closely when conditions are/have been wet or humid as these are optimal conditions for disease spread • The symptoms of black Sigatoka are very similar to yellow Sigatoka but the disease management method is the same 	<ul style="list-style-type: none"> • Rogue out young infected plants that have just shown symptoms and burn • Collect infected leaves from the mother plant after harvest of the fruit and take them out of the plantation and burn them <ul style="list-style-type: none"> • The fungus spreads on old planting material and on old banana leaves • Remove older infected leaves regularly and burn or stack them in heaps, keeping the lower leaf surface facing the ground to help prevent disease spread

Note: Pesticides may be available to control this pest. Please check with the Ministry of Agriculture in your country to find out which pesticides are registered in your country and the local restrictions for their use.