











KARI E-mimea Plant Clinic



KARI/Mimea Factsheet No.15/2014

Disease: Mango Anthracnose disease (*Colletotrichum gloeosporioides*)
Crop: Mango

			
Unaffected mango flowers	Diseased mango flowers	Unaffected mango leaves	Diseased mango leaves
			
Unaffected mangoes	Clean mango fruits	Diseased young fruits	Diseased mango fruit

Photos from <http://www.google.com>

Disease Name	Mango anthracnose disease (<i>Colletotrichum gloeosporioides</i>)
Description	Anthracnose is a disease of widespread occurrence in the mango fields and in storage. The disease causes serious losses to young shoots, flowers and fruits under favorable climatic conditions (high humidity, frequent rains and temperatures ranging from 24 to 32°C).
Disease Category	Continuos
Symptoms	Anthracnose symptoms occur on leaves, twigs, petioles, flower clusters (panicles), and fruits. On leaves, lesions start as small, angular, brown to black spots that can enlarge to form extensive dead areas. The lesions may drop out of leaves during dry weather. The first symptoms on panicles are

	<p>small black or dark-brown spots, which can enlarge, coalesce, and kill the flowers before fruits are produced, greatly reducing yield. Petioles, twigs, and stems are also susceptible and develop the typical black, expanding lesions found on fruits, leaves and flowers. Ripe fruits affected by anthracnose develop sunken, prominent, dark brown to black decay spots before or after picking. Fruits may drop from trees prematurely. The fruit spots can and usually do coalesce and can eventually penetrate deep into the fruit, resulting in extensive fruit rotting. Most green fruit infections remain latent and largely invisible until ripening. Thus fruits that appear healthy at harvest can develop significant anthracnose symptoms rapidly upon ripening. A second symptom type on fruits consists of a “tear stain” symptom, in which are linear necrotic regions on the fruit that may or may not be associated with superficial cracking of the epidermis, leading to an “alligator skin” effect and even causing fruits to develop wide, deep cracks in the epidermis that extend into the pulp. Lesions on stems and fruits may produce conspicuous, pinkish-orange spore masses under wet conditions.</p>
Conditions prevailing that contribute to success	Wet, humid, warm weather conditions favor anthracnose infections in the field. Warm, humid temperatures favor postharvest anthracnose development.
Control Strategy	The diseased twigs should be pruned and burnt along with fallen leaves. Spraying twice with Carbendazirn (<i>Bavistin</i> 0.1%) at 15 days interval during flowering controls blossom infection. Spraying of copper fungicides (0.3%) is recommended for the control of foliar infection. Postharvest disease of mango caused by anthracnose could be controlled by dip treatment of fruits in Carbendazim (0.1%) in hot water at 52°C for 15 minutes.
Mode of Spread	<p>Disease cycle dissemination: spores (conidia) of the pathogen are dispersed passively by splashing rain or irrigation water.</p> <p>Inoculation: spores land on infection sites (panicles, leaves, branch terminals).</p> <p>Infection and pathogen development: on immature fruits and young tissues, spores germinate and penetrate through the cuticle and epidermis to ramify through the tissues. On mature fruits, infections penetrate the cuticle, but remain quiescent until ripening of the climacteric fruits begins.</p>
Mandate Centres	All KARI centres in the mango producing regions
Reference Links	http://www.plantwise.org/KnowledgeBank/CountryHome.aspx
Geographic Coverage	<p>This is an old mango disease in Kenya. It is found in all major mango producing counties of the country (see map below showing where it has been cited). It has been recorded in Coast, Eastern, Central, Rift Valley, Western, Nyanza and parts of North Eastern regions.</p>
<p>The disease has been reported in the grey highlighted counties but this will expand after a full country survey is conducted. The border counties are likely to have the pest.</p>	

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