

## **Fungicides Result in Mangoes Suitable for Export**

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Commonly known as the "king of fruits," the mango is the most important fruit of Asia. It is grown throughout the tropics and subtropics. World production of mangoes in 2010 totaled 36 million tons with India as the world's largest producer at 16 million tons. Until recently, mango fruit was considered an exotic, specialty item in import markets such as the U.S. and Europe. Currently, many countries are shipping large volumes of fruit to these markets, and they must compete on the basis of price and quality [1]. Exports have increased dramatically (Figure 1).

Postharvest diseases can reduce fruit quality and cause severe losses because blemished fruit does not meet the cosmetic standards for top-quality fruit in the major import markets [1]. Among the postharvest diseases of mango, anthracnose is the most prevalent in humid growing areas. The incidence of this disease can reach almost 100% in fruit produced under wet or very humid conditions [1].

Postharvest anthracnose appears as rounded brown to black lesions with an indefinite border on the fruit surface. Lesions of different sizes can coalesce and cover extensive areas of the fruit. Although symptoms may develop shortly after infection occurs, latent infections are common and may remain quiescent on fruit for months. Thus, fruit that appear healthy at harvest can develop significant anthracnose symptoms upon ripening [5].

Fungicides are used in most commercial mango production situations, especially where anthracnose is rampant due to wet, humid conditions [2]. Although some mango cultivars are moderately tolerant, none are sufficiently resistant to be produced without fungicides in humid areas [2]. During rainy seasons numerous preventive fungicide applications in the field are necessary to obtain acceptable fruit [1]. In extreme situations, where fruit develops completely under disease favorable conditions, up to 25 sprays of fungicides have been reported [1].

Fungicides are highly effective for anthracnose control reducing the severity in treated fruit by over 90% [1]. Research in India showed that fungicides reduced the severity from 54% infected fruit to 5% [3]. Research has clearly shown that low post-harvest decay is associated with effective protection of fruit throughout the growing season [4].

## References

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Anthracnose, above and below

