CURRENT BOTANY

Curr. Bot. 2(1):15-16, 2011

SHORT COMMUNICATION

Effect of physical factors on development of anthracnose of mango fruits

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CB Volume 2, Year 2011, Pages 15-16

Anthracnose is most important post harvest fungal disease of mango. It is the major disease, limiting fruit production in all countries where mangoes are grown, especially where high humidity prevails during the cropping season (Gadgile et al., 2009). Environmental factors such as temperature and Relative Humidity (R.H.) play vital role in the development and spread of post–harvest fungal diseases of fruits. (Bagwan and Yeole, 2003; Bagwan and Meshram; 2003; Cherian and Mani, 2007, Gadgile et al, 2009, Gadgile et al, 2009a, Gadgile et al, 2009b, Gadgile and Chavan, 2010,). Severity of post-harvest fungal diseases depends upon enirmental fatcors like temerature and relative humidity. Present paper deals with the study of impact of environmental factors on development of anthracnose of mango fruits. Mango fruits Alphanso variety was collected from Osmanabad fruits market, India and surface sterilized with 0.1 % $HgCl_2$. Two mm sized injury was made. That fruits were dipped in spore suspension of *Colletotrichum gloesporioides* for 2 minutes and placed in sterilized polythene bags as on fruit per bags. It was incubated to different level of temperature and R.H. percentages adjusted level were maintained (Buxton and Mellanby, 1934). On 8th day of incubation severity of rot was recorded as percent fruit area infected.

At 25^{0}C and at 100% R.H. anthracnose severity was highest. Disease development was absent at 10^{0}C and at 30% R.H., so at this physical environment there is a very less rotting of mango fruits. Percentage of severity was increased from 30 to 100% R.H. (Table 1). Gadgile et al. (2009b) reported similar findings.

It can be concluded at 10^{0}C and at 30% R.H.; anthracnose is less sever in mango fruits. Whereas, at 25^{0}C and at 100% R.H. antracnose development is maximum.

Table 1 Effect of temperature and R.H. on disease severity anthracnose of mango fruits

Temperature (^{0}C)	Disease development %	R.H. (%)	Disease development %
10	0.0	30	19.5
25	63.0	50	30.4
30	52.5	80	50.9
40	33.4	100	61.3

Acknowledgement

Thanks are due to UGC, (WRO, Pune) New Delhi, India for fincial support in the form of minor research project. Author is also grateful to Principal, Shrikrishna Mahavidyalaya, Gunjoti, Dist.Osmanabad (M. S.), India for providing research facilities.

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