

Abstract:

The effectiveness of different postharvest treatments to control different levels of quiescent infections of *Alternaria alternata* causing Alternaria rot in mango fruits during storage was compared. A combined hot water spray and fruit brushing (hot water brushing - HWB) treatment for 15 - 20 s with 225 $\mu\text{g ml}^{-1}$ prochloraz was the most effective treatment to control Alternaria rot in fruits with a high relative quiescent infected surface (RQIS) rating of 36 at harvest. Comparable control was obtained with the commercially used treatment of 900 $\mu\text{g ml}^{-1}$ prochloraz spray. However Alternaria rot in mango fruits with intermediate levels of RQIS rating of 25 was controlled by HWB treatment alone or HWB with chlorine (300 $\mu\text{g ml}^{-1}$ Troclosene Na). HWB alone was effective enough to control postharvest decay in fruits with a RQIS of 5. Present results have indicated that effectiveness of postharvest HWB and prochloraz applications, are dependent on the quiescent infected area of the fruit by *A. alternata* at harvest. A RQIS rating, before harvest, has resulted in the use of effective, mild, fungicides as a single postharvest treatment thus avoiding wide use of less friendly synthetic fungicides