STUDIES ON MINIMIZING POST HARVEST LOSSES OF RAMBUTAN IN STORAGE

BY

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Abstract

Post harvest diseases, enzymatic or non enzymatic browning and desiccation are the major problems that limit the storage life of Malwana special selection 1. The major post harvest diseases in storage are Anthracnose (Colletotrichum gleosporioides (Penz.) Sacc, brown spot disease (Gliocephalotrichum microchlamydosporum J. A. Mey B.J. Wiley and E. G. Simmons) and stem- end rot (Botryodiplodia theobromae Pat.) These post harvest diseases could be controlled by the application of 1000 ppm benlate and bavistin. However, the best colour and cosmetic appearence were achieved with bavistin and benlate at 40 ppm.

A maturity indices guide was developed for all three cultivars in order to harvest at suitable maturity for low temperature storage. The brixo, titratable acidity and skin colour were considered as the suitable indices to determine the maturity.

The desiccation and browning of skin were reduced by storing Malwana special selection 1 at 10° C ,and at 95% RH. The storage life was extended up to 14 days at above mentioned storage conditions by selecting

the suitable maturity stages such as the colour stage 5 and 6 of Malwana special selection 1, colour stage 5 of Malaysian red and colour stage 4 of Malaysian yellow.

Application of bavistin 40 ppm+stafresh 7005 concentration-3 or benlate 40 ppm +stafresh 7055 concentration-3 retained the overall quality up to 14 days in above mentioned storage conditions.

Fruits dipped hot water in 48° C for 1 min and stored at above mentioned conditions retained the overall quality as the fruits from the field after 14 days.