CONCLUSION AND SUMMARY

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This investigation was carried out on Meet-ghamr local cultivar during the two successive seasons 1984, 1985. 30 trees of the same variety, budded on local Baladi peach rootstocks, were selected. The trees were about the same in vegetative growth and were subjected to the normal treatments of the orchard.

The work done aimed to study the effect of different mothods of picking and different transporting containers on the fruit quality after reaching the packing station. In addition, the effect of the picking stage on the keeping quality of fruits was estimated, while the suitable cold storage temperature was determined. Besides, a study was carried out during the last two successive seasons to determine the effect of some prestorage treatments on the keeping quality of meet-ghamr fruits. Fruits were dipped in hot water (50^{o} C for 5 minutes), in addition to 3 different disinfectants at two concentrations (1000, 2000 ppm) for 5 minutes and dried in open air, compared with the untreated fruits. All stored fruits were then inoculated with Rhizopus stolofiner. Three replicates of 200 fruits were used in every treatment, and every replicate was stored in a plastic box at 5^{o} C and 85% R.H. Physical and chemical properties were analysed for every treatment at regular intervals.

The results obtained can be summarized as follows:

1- Picking by turning the fruit smoothly by hand in a full round turn was the better method of picking used in the two seasons, as compared with other two methods used.

2- As for the effect of transporting containers on fruits quality, the plastic boxes and buckets were obviously better than the palm crate, but when compared with the modified palm crate with card-board perforated liners, the results were about to be similar. In addition, plastic buckets seem to be promising in reducing abrasions, punches and scratches than plastic boxes. This may be for their smaller size.

3- Mature Meet-ghamr fruits were more suitable for storage under 0 ^{o}C, as they showed higher keeping quality than the fruits picked at the semi-ripe stage.

4- Mature Meet-ghamr fruits also showed higher keeping quality when stored under 5 ^{o}C, as compared with those stored under 0 ^{o}C.

5- As for the effect of some prestorage treatments on the keeping quality of Meet-ghamr fruits, the results can be summerized in the following:

1- The percentage of loss in weight during storage under 5 °C was comparatively higher in untreated fruits. On the other hand, the botran and hot water treated fruits significantly showed the lower percent of loss in weight as compared with all other treatments, especially Botran at 1000 ppm.

2- A gradual increase in percentage of decay occured during the whole storage period. The percentage was comparatively lower and slower in hot water during the whole storage period. However, the percentage of T.S.S. was significantly higher in hot water and Botran treated fruits. This may be due to the stimulating effect of these treatments on the ripening rate. On the other hand, the lower rates were found in Bravo treated fruits and control.

6- The titratable acidity showed a gradual steady decrease in all stored fruits. However, the percentage was significantly lower in hot water and Botran treated fruits, especially at 1000 ppm., as compared with other treatments.

7- The T.S.S./acid ratio showed a gradual increase during storage in both seasons, with higher figures in hot water and Botran, while Bravo treated fruits and control showed the lower figures.

8- The total sugar figures gradualy increased during the whole storage period in all treatments. The percentage was comparatively higher in hot water and Botran treated fruits. This trend was previously noticed in T.S.S. and titratable acidity, and may be also due to the stimulating effect of these treatments on the rate of ripening.

9- From the previous results, it can be concluded that the hot water and Botran treatments (at both concentrations) were most promising in attaining the better fruit quality and the longer storage period at 5 °C, followed by the Rovral, the Bravo, then the control in both seasons.