Local marketing of citrus fruits

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CITRUS fruits are always popular on the local market but recently supplies from South Australia have made the market a very competitive one. The situation demands the marketing of high quality citrus from growers in Western Australia.

The need to harvest the bulk of the Navel orange crop over a rather limited period and the resultant tendency for oversupply during that time also necessitates high standards of presentation to maintain firm prices.

In general, the marketing of poor quality citrus can only result in depression of prices with the associated poor returns to the grower, and also decline in consumer demand and confidence.

Citrus fruits come under local sales restrictions this year, just as apples and pears are, and recommendations from the Citrus Sales Advisory Committee have resulted in measures to stop the sale of poor quality fruit.

The sale of Inferior grade fruit is prohibited and more attention is being given to the supervision of the other grades being offered for sale. Any fruit which is degraded from Plain grade is withheld from sale.

Oranges particularly are affected by imports from South Australia by the necessity for competitive quality on the local market.

The following points are recommended as being very important to ensure a good quality product:

**Picking**

If possible fruit should be dry when picked. When picked wet the softness of the skin predisposes the fruit to bruising injury and rots.

If the fruit has to be picked wet or following wet weather, a few days' shed storage before packing should be given.

Oranges have to be mature when picked as they do not ripen off the trees—not even in the colouring room. Whether gas colouring is used or not the fruit must not be immature when harvested.

Immaturity is one of the biggest factors causing buyer resistance when the new season's fruit comes on to the market. A set-back at this stage can cause a buyer to lose interest until later, when he is sure the fruit is mature; in the meantime sales have been lost.

Fruit should not be left so long on the tree that it becomes overmature or dry. With certain trees and in certain seasons granulation and regreening can also be a problem if the fruit is picked too late.

During harvesting operations care has to be taken that the fruit is not injured by the picking bag being caught between the picker and the ladder. Picking boxes must not be defective or overfilled.

*Any handling operation requires care and even finger nails can cause serious injury.*

**Colouring**

If gas colouring is used certain provisions are necessary to produce a fruit which is of a quality acceptable to the market. There have been many instances when growers have not improved the acceptance of the fruit by colouring, particularly when it is immature. Also, the shrivelling of the fruit and dropping of buttons which accompanies poor colouring methods produces further buyer resistance.
In general, if there is noticeable wilting of the fruit after colouring, this means that the humidity has been allowed to fall too low, or that the temperature has been too high or the heating rate too rapid.

On the other hand, excessive breakdown of the fruit means that the ventilation or air circulation has been insufficient, or that the humidity has been too high. Other causes of breakdown include too much gas, or gassing for too long a period.

**Washing**

Washing of the fruit removes dirt, spray residues, insect excreta etc. and results in a more attractive fruit. Heating the water (preferably to 100°F) gives better results than using cold water.

While detergents aid the cleaning of the fruit they do not reduce decay and if this is a problem a fungicidal additive such as sodium ortho-phenyl phenate is necessary.

The use of a wax emulsion gives a very attractive finish to the fruit.

Spray residues, especially Bordeaux, on fruit are unsightly and while they may be removed by adequate washing and brushing this need can be obviated to a large degree by good agitation of the spray mixture while spraying. The consequent even application of mixture to the fruits prevents “clots” of spray and makes cleaning much easier.

The use of hypochlorite solution aids the cleaning of fruit affected with sooty mould.

**Grading and sizing**

Grading should be as strict as the grade requires. Grades have been adopted as the standards of quality set by regulation to maintain uniformity and consistency of quality for the purchaser. Degrading by the inspector shows that the fruit has not met these standards and definitely lowers the confidence of the buyer and depresses prices. It may even mean that the fruit cannot be sold.

Grading is a very important aspect of the preparation of the fruit for marketing as the final packed case can only be as good as the fruit in the bins from which it is packed. Often, cases of citrus are degraded because insufficient attention has been paid to sorting and a large proportion of good fruit is spoilt by the small proportion of poor quality fruit which should not have reached the packing bin.

The sizing of the fruit should be carefully checked before packing. When it is realised that the standard packs are based on the sizing of fruit to the small difference of $\frac{1}{8}$ in. diameter—and that some packs have further divisions again—the care needed to set up a grader at the outset for a different type of citrus fruit is well warranted.

The greatest attention to grading will be marred if the final pack is unattractive.
Packing charts give details of the various packs but personal advice is available from officers of the Department of Agriculture whenever required.

Such matters as the evenness of belt speed and the correct use of rollers are important for uniform sizing. With a “positive drive” machine (where the rollers cannot be put out of drive) a normal speed for belt and rollers is best for oranges. If the roller can be left free, so much the better.

Standard packs should be maintained at all times in standardised containers. If the packs are not coming to the correct height the size of the fruit packed should be varied, not the pack. Should the range of sizes within the bin be not sufficient to maintain the correct pack, then a slight alteration to the sizing machine should be made.

If there is one point local growers can learn from the South Australian fruit, it is that the supply of well graded, sized and packed fruit of consistent quality ensures a ready market at a good price.

**Scale control**

Scale insects must be controlled in the orchard in order to obtain scale-free fruit for packing for market. Periodic inspection of trees and careful noting of the fruit from each tree will allow the grower to know when scale is building up in a certain part of his orchard. Adequate spot spraying under these conditions will allow him to control this pest which otherwise can flare up and involve considerable cost for an overall treatment.

A practice which is to be deplored when preparing fruit for marketing is the use of hard bristle hand brushes to remove scale.

While most scale are ultimately removed by such methods the damage to the skin from the hard scrubbing often leads to rot development and fruit being withheld from sale at the markets.

**Windfalls**

Windfalls generally should be relegated to factory grade. If the fallen fruit is quite clean and sound then inclusion in packed fruit is permissible but the grower must realise that this practice can depress the quality of an otherwise good line of fruit. Buyer resistance develops to certain growers because of their habit of including windfalls in their packed lines and consequently reducing the shelf life of the fruit.

**In general...**

One point that should not be overlooked is that at times the factory price is higher during periods of oversupply and for border-line fruit, than the price that can be received on the local market. Under these circumstances it would pay the grower to send the fruit to the factory.

The grower should be very conscious, too, of the tightening of regulations which has taken place under the direction of the Citrus Advisory Committee. Inspectors have been directed to ensure the grades as defined in the regulations are adhered to. “Scaly” fruit will be closely watched by inspectors and any unsightly lines will be rejected from sale.

Always ensure that a quality product carries your name at the markets. This is the best way to ensure consistently good returns and to meet outside competition.