

## **Cleaning Scale From Avocados**

**Robert. R. McLean**

*County Agricultural Commissioner*

San Diego County Calavo News, November, 1934

Because of the increasing prevalence of latania scale on mature avocados, a satisfactory method of cleaning the fruit should be devised. Not only does scale injure the tree but it mars the appearance of the fruit and lowers its grade. If the fruit becomes infested when quite small, severe and definite pitting and malformation will result. Under ideal conditions, of course, trees properly cared for should have no scale on tree or fruit, but ideal pest-free conditions have not yet been realized nor are they likely to be for some time to come.

There are at least three factors that are to be considered by the grower in cleaning avocados mechanically. The first is that the method be effective; second, that the fruit be not bruised or scarred in the process; and third, that the operation be relatively quick and inexpensive. In cleaning avocados the green fruits scar more easily than do the dark or purple varieties, and somewhat more care is necessary in handling them. The very thin skinned Mexicans, as Pueblas, also need extra care in cleaning as bruising the skin in the process might be the means of introducing spores of certain fruit diseases.

Growers in San Diego County have tried a number of methods of cleaning scale from fruit. The two most successful to date have been by means of wet sawdust and by the use of soft rubber brushes. The latter method is used by Mr. W. L. McCulloch of the Rancho Santa Fe, who states as follows:

"The brush is merely a rubber face massage brush which appears to have excellent 'traction' on an avocado skin. It can be used with or without water. The scale is pulled loose more or less with the suction of the rubber bristles. Mere brushing is of little value. On the other hand the labor is not excessive and should cost only a fraction of a cent a fruit. I do not believe any harm can result to the fruit itself, as I have used it on a number of individual fruit and they appear to ripen normally. Whether or not the oil cells will break down more easily later on in the season is something that will have to be tested out at that time."

Dean F. Palmer, Agricultural Inspector at Carlsbad, has experimented with a number of methods and his conclusions to date appear here:

"Fruit which has become infested while quite small, is usually pitted, as growth stops at the point of infestation. The scales in these pits, as well as those around the stem or button, are the most difficult to remove, and a manicurist's orange stick is often helpful in removing these, and does little damage providing the point has been covered with moist cotton.

After trying cut various methods, I believe that the most harmless and effective way is by rubbing the fruit with damp sawdust. This sawdust should be rather fine and free from coarse particles and sticks. This method was first suggested to me by Mr. McKenzie of the Citrus Experiment Station. Ordinary scrubbing brushes, even though the bristles appear to be quite soft and pliable, oftentimes do considerable damage. This information of course applies chiefly to the green varieties, particularly those having a thin skin. Dark varieties with a hard shell probably would not be seriously injured if cleaned with the ordinary hand or scrubbing brush, providing the bristles were not too stiff."