

United States standards for Florida avocados¹ provide certain tolerances within grades for each of these factors. In grade tolerances for skin blemish, United States standards permit up to 10 percent scab and scar on U. S. No. 1 avocados, from 10 to 25 percent scab and scar on U. S. No. 2 avocados and from 25 to 50 percent scab and scar on U. S. No. 3 avocados.

Fruits used in this test were graded more closely, allowing only 5 percent or less scab and scar on the surface area of U. S. No. 1 fruit, 15 to 25 percent scab and scar on U. S. No. 2 fruit and 40 to 50 percent of the surface area blemished on U. S. No. 3 fruit. This provided customers with an easily recognizable difference in external appearance of the 3 grades of fruit used in this test. Had the Standards been followed, it was felt that some consumers would experience difficulty in visual evaluation of the difference between some of the U. S. No. 2 fruit and either the U. S. No. 1 or U. S. No. 3 fruit in the display.

Similar restrictions were placed on grade tolerances for size and shape variations in the other tests. Grading was supervised by trained Federal-State inspectors at point of shipment. Shipping containers were grade-marked and the grades were maintained throughout each test.

Avocados were purchased from a large handler in the Florida production area and delivered to Philadelphia in refrigerated trucks. Refrigerated storage was provided on arrival and in the test stores prior to display.

A randomized block design was used for 3 1-week periods to test consumers' recognition of external quality factors. Six retail stores, 2 in each of 3 income areas (low, medium and high), required for the tests, were selected by the cooperating chain organization according to the design criteria.

The 6 retail stores used in the study were supermarkets owned by a large Northeastern chain. The test stores, all relatively large,² were located in 3 different income areas in and around Philadelphia, Pennsylvania.

Philadelphia was chosen because it is an important market for avocados and its consumers were believed to be quite conscious of quality differences in fresh produce. It is a large metropolitan area located within the region of greatest potential for the sale of Florida avocados. Philadelphia is on an established

¹ USDA, AMS, "United States Standards for Florida Avocados," (22 F.R. 6205) Effective September 3, 1957.

² Weekly average gross sales of \$40,000 or more.