

GRANNY SMITH APPLE STARCH SCALE

Developed by the University of California, Davis, Department of Pomology in cooperation with the California Granny Smith Apple Association

0 =

¼ of the area within the coreline white, remainder blue, all of



4 =

All area within coreline white, ½ area of cortex white, remainder blue.



1 =

½ area within coreline white, cortex blue.



5 =

All area within coreline white, ¾ of cortex area white.



2 =

All area within coreline white, cortex blue.



6 =

All surface white.



3 =

All are within coreline white, ¼ of the cortex area white,



The reaction of iodine solution on any starch present in the apple turns the cut surface blue. The greater the starch content the greater the area of blue color.

In the starch-iodine index numbering system 0 represents immature, and 6 fully ripe fruit. The following descriptions represent the upper limit of each index point.

When the average of a thirty fruit sample is 2.5 or higher, it meets the minimum maturity requirements. The samples should represent the variation of sizes in the orchard.

The Chart should be used as follows:

1. Use the descriptive terms to determine the numerical value of each sample apple.
2. Compare the sample to the pictures to make sure you are interpreting the chart correctly.
3. Samples difficult to categorize will be assigned the higher value.
4. Each apple is assigned a whole number not a decimal (1.0, 2.0, 3.0, not 1.2, 2.4, 2.7).
5. The 2.5 standard is a mathematical average of the samples (the sum of all scores divided by thirty).

CROSS SECTION OF AN APPLE

