

SUGAR TESTING & ADJUSTMENT

Many grapes grown in the Northeast are found to be low in sugar and consequently may not develop the amount of alcohol required to aid in preserving the wine for its lengthy stay in the carboy and bottle. The sugar content of the juice prior to fermentation should be in the 20 to 24% range. This is commonly expressed in degrees Brix as 20° to 24°Brix. This will produce an alcohol content of about 10 to 12%.

To determine the amount of sugar in the juice, test with a hydrometer. This is a simple test and the equipment required is inexpensive. A hydrometer with scales reading in °Brix and a hydrometer jar or cylinder to hold the sample being tested, are all that is required.

The jar or cylinder should be filled sufficiently to float the hydrometer, about 2/3 full. The hydrometer is then carefully lowered into the juice where it will suspend at a level that is dependent on the sugar content of the juice. The sugar content in °Brix is then read on the scale of the hydrometer where it is intersected by the lowest surface of the juice. The accuracy of the reading is effected by the amount of suspended solids and by the temperature of the juice. Refer to the instructions that came with your hydrometer.

If you are purchasing juice from a reputable supplier, you can usually rely on that supplier to have both the acid and sugar readings available at the time of pick-up.

If the sugar content is below 20°Brix, sugar can be added. It can be in the form of common cane sugar and can be added directly to the juice, however dissolving it first in a small amount of hot tap water will insure a better mixing.

For each 1°Brix that the sugar content is to be raised, cane sugar should be added at the rate of 1/8 of a pound per gallon. For example, if the sugar content of a 5 gallon batch of juice tests out at 17°Brix, but a 21°Brix is desired, 2 1/2 pounds of sugar should be added; ($4^{\circ}\text{Brix} \times 1/8 \text{ lb}/^{\circ}\text{Brix}/\text{gal} \times 5 \text{ gal}$) = 2.5 pounds.

For juices that are found to contain excess sugar, greater than 24°Brix, such as found in some of the juices or grapes from California, water may be added.

After the adjustments are made, test again and readjust if required.

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www.nys-homewine.info