

this purpose a Beaume hydrometer is recommended. Test the mixture, compare with the accompanying table compiled by Mr. A. B. Mansfield, Orchard Instructor, Auckland, and dilute accordingly.

Referring to the chart, it may be explained that the top line of figures represents spray mixtures, varying in strength from 1 in 10 to 1 in 125. The column of figures on the left represents lime-sulphur solution, varying in density from 25° to 35° Beaume.

To prepare a spray of any standard strength first find the specific gravity of the solution by means of a Beaume hydrometer. Mark the figures in the column on the left of the chart corresponding with the reading of the hydrometer. Next select the figures in the top line representing the strength of the spray required. The figures where this column and the cross-line denoting the specific gravity of the solution intersect represent the quantity of water required to make a spray mixture of equal strength to that given at the top of the column.

For instance, suppose the specific gravity to be 28° Beaume, and the strength of spray required is 1 in 80 standard. The figures at the intersection are 67.9. This means that one part of the 28° Beaume solution with 67.9 (say, 68) parts of water added is of equal strength to 1 part of a 33° Beaume solution with 80 parts of water added.

STRENGTH OF SOLUTION RECOMMENDED.

The various strengths at which lime-sulphur based on a 33° Beaume test is recommended for use is as follows:—

Winter.—Sucking-insects and Fungoid Diseases.

Pip-fruits: 1-10, applied preferably just as the buds begin to swell.

Stone-fruits: 1-15, applied in autumn and as the buds begin to swell.

Spring.—Fungoid Diseases.

Pears: 1-15 to 1-20.

Apples: 1-25 to 1-30.

Applied as the buds show colour or as the most advanced burst into bloom.

Summer.—Sucking-insects and Fungoid Diseases.

Pip-fruits: 1-100 to 1-120 throughout the season, combined with arsenate of lead.