SOLUBLE SOLIDS IN THE WATERMELON

(WITH ONE FIGURE)

In October, 1931, tests were made of the variations in percentage of soluble solids in different areas of a watermelon grown in the Snake River Valley near Payette, Idaho. This melon was a black-seeded strain of the Angeleno variety. It was cut in half and then in quarters, as shown in figure 1. Juice was squeezed from small pieces of pulp removed from each zone and tested for soluble solids by use of the Zeiss refractometer. Most of the soluble solids in a watermelon are sugars.

As is shown in the figure, the juice in the green area just under the

Fig. 1. Distribution of sugars in the black-seeded Angeleno watermelon.

\footnote{Contribution from the Department of Horticulture, University of Idaho, no. 107.}
rind was low in soluble solids, containing 4.1 to 6.8 per cent. The red area between this green portion and the whorls holding the seeds was higher, containing about 9 or 10 per cent. in this melon. The core area ranged next with about 11 to 12 per cent., and the area around the seeds highest, with about 11 to 15 per cent. The concentration seemed higher in the tissues leading to the seeds as compared with those leading elsewhere, and also higher near the large seeds than near the small seeds toward the blossom end.—Lowell R. Tucker, Department of Horticulture, University of Idaho, Moscow.