

Question referred to Elizabeth C. White at the meeting of the New Jersey State Horticultural Society, at Atlantic City, N. J. December 2, 3, 4, 1918.

What berry is worth more commercially in the United States than all the other berries combined?

When this question was referred to me by our secretary with the expression of a hope that it would bring forth some up to date blueberry information, it seemed to me a joke, and that I certainly could not at the present time claim the blueberry to be worth more commercially in the United States than all the other berries combined. I knew the wild crop to be enormously valuable, and I believe that with the introduction of cultivation and improved varieties it might in a few years easily become the most valuable, but yesterday I was told by our friend, Horace Roberts, that statistics had been presented at the last meeting of the Pomological Society showing it to be now worth much more commercially than all the other berries combined.

If you wish to know more about these statistics you will have to ask Mr. Roberts. I can only tell of the prospects of the cultivated fruit.

The tremendous quantity of wild blueberries which is now sold often in exceedingly messy, unattractive condition, proves what a general favorite is this fruit. When greatly improved blueberries are offered in carefully prepared packages, it would seem that the market should be almost unlimited.

Our blueberry plantation is now yielding a small interest on the investment, and it seems justifiable to reveal the foundation of our air castle as to the commercial value of the cultivated berry.

To date we have about 15 acres planted, 8 of which may be expected to produce more or less fruit next summer; Of this, the oldest piece of any uniformity is a lot of about 1075 seedlings which were planted in the field in September of 1913, when they were one year old from seed. Spaced 4 ft. apart in rows 8 ft. apart they would occupy about $\frac{4}{5}$ of an acre.

In 1916, the third summer in the field, we picked from this lot of plants 370 quarts which were sold at 25¢ a quart. In 1917 we picked 826 quarts which also sold for 25¢ a quart. In 1918, the fifth summer in the field, we picked 585 quarts which sold for 30¢ a quart. Now in using this as a foundation for air castles, it should be remembered that these plants are seedlings from selected wild parents, and while the average quality is much above that of an equal number of wild plants it varies enormously.

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Nearly 10% of the plants were removed after the first fruiting in 1916 because the berries were so much below the average in size; some plants are unproductive, many others are only moderately productive.

Of the 1075 plants, one, which we call 620 A, is much better than the others. This bush is no larger than the average, but in 1917 it produced 2 1/2 quarts of berries compared to an average production per bush of less than 3/4 of a quart. In 1918 it produced 1 1/4 quarts compared to an average per bush of about 1 pint. This was only about half a crop, for the blueberries this year suffered from the severe early frost of September 11, 1917, which checked the formation of fruit buds, and also from unfavorable weather conditions at blooming time. The summer of 1917, the plant 620 A was picked four times, and the berries of the third picking, 1 1/2 pints were counted and all measured. More than 92% by count were 1/2 inch and more in diameter. The largest berries of the first picking measured 18 mm, or about 11/16 of an inch in diameter. If all the bushes had been like this one we would have picked at the rate of 3400 quarts per acre instead of at the rate of 1030 quarts per acre, the quality of the fruit would have been twice or thrice as good, and undoubtedly would have commanded a much higher price.

These bushes are very young yet. They will grow several times their present size, and probably yield for years. There are wild bushes with some marked characteristic which are known to have been picked for thirty or forty years.

The largest berries of 620 A are 18 mm in diameter, and the bush is from a seed produced by Mr. Frederick V. Coville by hand pollination in the greenhouses of the Department of Agriculture at Washington from two parents, the largest berries on one of which reach their greatest diameter at 16 mm (about 5/8 of an inch) while those of the other rarely surpass 14 mm.

These were the finest berries we knew at the time this cross was made, - since then several wild bushes have been found with berries larger than 620 A, one with berries surpassing 19 mm, or fully 3/4 of an inch in diameter.

Crosses of these have been made, but as yet have not yielded fruit. If among these seedlings we should get a plant producing fruit as much larger than its parents as does 620 A we should have blueberries an inch in diameter.

We also have great improvement in flavor and texture over the average wild berries with prospect of even finer quality.

You see that on these foundations an air castle can be built reaching above the clouds.

The pinicles of the air castle may never be reached by the reality, but we feel sure of a goodly structure. To further

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its building, and the achievement of the time when blueberries will be worth twice as much commercially in the United States as all other berries combined, we are working hard at the problems of blueberry propagation, and believe that within two years we will be able to offer some of the better varieties of blueberry plants in considerable quantities.