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Cantaloupe Seed.

— BY —

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PLATE I.

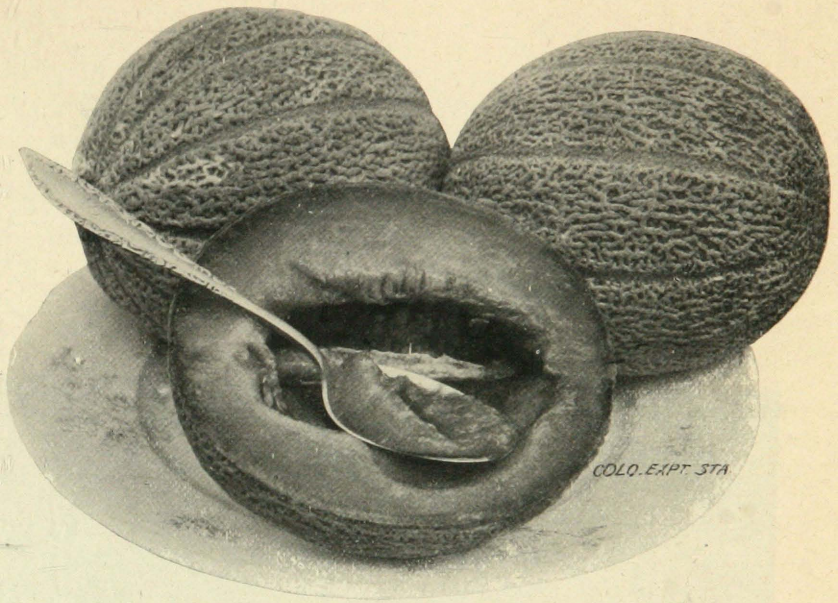


PLATE II.

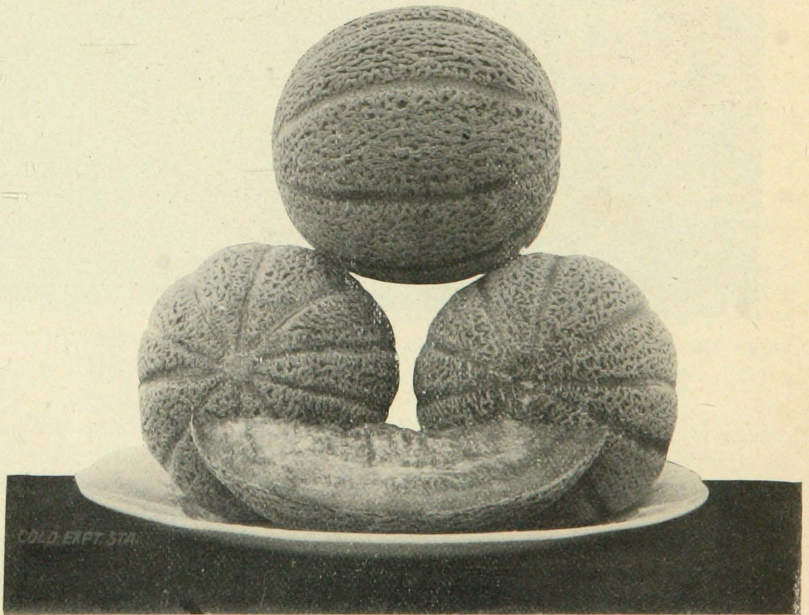


PLATE III.



PLATE IV.

CANTALOUPE SEED.

IMPROVEMENT BY SELECTION.

BY PHILO K. BLINN.

The cantaloupe now known as the Rocky Ford was originally Burpee's Netted Gem, but under the favorable conditions which prevail in the arid regions of Colorado, it has developed into a melon surpassing in quality the parent stock, and its superior merits have won for it a new name and a popular reputation.

In the early days of the cantaloupe industry at Rocky Ford, the growers relied on Eastern seedsmen for their supply of seed, and to a certain extent had satisfactory results until the growth of the industry exceeded the supply of reliable seed, when a number of growers were supplied with seed which produced a mixed lot of varieties, wholly unfit for market as Rocky Ford cantaloupes. The loss not only fell heavily on the disappointed grower, but through the agency of bees and other insects carrying the pollen, the injury was easily transmitted to neighboring fields of choice melons, producing crosses of an undesirable nature.

On account of the introduction of these mixed strains, and the varying ideas of seed selection, the Rocky Ford cantaloupe lacks uniformity in many respects ; a large percentage of melons are unmarketable on account of size and form, which renders them unfit to crate. Defective netting and thin, soft flesh are also common imperfections. Because of these defects, the growers sustain a loss that could largely be prevented by planting a better grade of seed.

The cantaloupe is a product of years of systematic selection, and it requires the same methods to maintain its excellence as were employed in its development. Without care in selection, the natural tendency of all cultivated plants to vary will soon cause a good strain of cantaloupes to revert to an undesirable type.

There is a marked contrast between the products of carelessly selected and pedigreed, *i. e.*, carefully selected, melon seed ; the one is inclined to be irregular in size and form, with the netting thin and often wanting, and with a decided tendency to

ripen prematurely, turning yellow and soft ; a loss not uncommonly of twenty to forty per cent. in culls, while choice seed produces melons that are uniform in size and shape, the netting thick and complete, the marketable stage more prolonged, and practically no loss in culls.

The wide reputation of the Rocky Ford cantaloupe has created a great demand for Rocky Ford seed, as it is claimed to produce a higher grade of cantaloupes than seed from other States, and each year large quantities are saved to fill this demand, but unfortunately for the industry, the quality of this supply is not what it should be ; it is principally produced from the cull piles.

After frost, at the close of the shipping season, everything in the line of a cantaloupe, green or ripe, large or small, is gathered and run through a melon seeder, with no attempt at selection.

This seed is bought by the jobber and seedsman for ten to twenty cents per pound, and when it is on the market it cannot be distinguished from well selected seed, and doubtless is sold as such.

There would be nothing to commend such seed to any practical grower if he realized its source.

As the seed market has been so abused, to procure good seed one must either save it himself, or have seen the melons from which it was saved, or purchase it from a reliable grower before it has passed through several hands.

The fact that seed can be had cheap and growers are willing to plant it, is an evident reason for its existence on the market, but the lack of information as to what constitutes a good seed cantaloupe may also be responsible for poor seed selection. In this bulletin we wish to show what a good melon is and that it pays to plant and save good seed.

STANDARD OF PERFECTION.

The form and outward appearance of a perfect Rocky Ford cantaloupe is well represented in the several plates shown in this bulletin ; as to size, it requires a melon slightly over four inches in diameter and about four and five-eighths inches long ; it should have silver grey netting that stands out like thick, heavy lace, practically covering the entire melon, save the well-defined slate colored stripes ; these should run the whole length of the melon clear cut as if grooved out with a round chisel, and terminating at the blossom end in a small button, well shown in the melon on the left side of Plate III. The interstices in the netting should be light olive green, that turns slightly yellow when the melon is ready for market. A melon with a black skin under the netting is not so attractive in appearance. The proper netting is well brought out in Plate I.

But the outward appearance is not the only basis for selection in saving seed ; the inside points are as essential to consider as any external quality, and no one can determine that a melon is fit for seed until it has been cut open and the inside qualities examined ; for this reason the machine seeder is of no use in selecting choice seed ; the melons should all be cut and examined by hand.

The flesh should be thick and firm, of a smooth texture, and free from watery appearance, rich and melting in flavor. The shipping and keeping qualities depend largely on the solidity of the melon, so the seed cavity should be small and perfectly filled with seed. The color of the flesh near the rind should be dark green, shading lighter toward the seed cavity, which should be salmon or orange in color. The flesh is often mottled with salmon, and not uncommonly the entire flesh is of that color. The flavor is usually quite uniform, though it is sometimes affected by the health of the vines or other conditions of growth.

The seed will bear close inspection, as it is sometimes cracked or sprouted, which renders it of no value for germination.

The first steps in seed selection should be made when the melons are growing. Extra prolific hills should be marked with stakes, and the earliest ripening specimens conforming to the above ideal should be saved as choice seed, and planted in a place isolated from other melons, and the same care should be exercised in the years that follow.

The grower can and should save his own seed, as he can give it more careful attention than any commercial seed grower.

A few growers, realizing the importance of systematic selection, have made the proper choice of seed for their own use.

As an illustration of what can be done in this line, the plates shown in this bulletin represent photographs of melons developed after five years of careful seed selection. Beginning with a melon as nearly perfect as could be found, the old saying that "like produces like" has been exemplified to a marked degree. Each year the number of perfect melons has increased, so that now, when soil, fertility and all growing conditions are favorable, the over-sized melons are eliminated ; all melons are completely netted, and practically all are marketable.

Plates II. and IV. represent an average product of the choicest of this seed.

Improvement is still possible, yet the value of careful seed selection has been so demonstrated that if melon growers would adhere to a strict selection of perfect, early-ripening melons, not only would the returns from the melon crop be increased, but the cantaloupe would become a more staple article by virtue of its improved shipping and keeping qualities.

VALUE OF CHOICE SEED.

Unless one has a well developed strain of seed, it is not probable that he can save more than one or two pounds per acre of extra selected seed, so the supply of choice seed is limited.

The market value of the cantaloupe at the time the seed is saved should determine the price of seed. Thus, it requires about as many melons to produce one pound of seed as will fill a standard crate, and actually more, because some melons need to be rejected. This cannot be fully determined until the melon is cut, when, if it proves unfit for seed, it is also lost for market. So the price of seed must be equal to or exceed the price of a crate of melons at the time the seed was saved.

During the first week or ten days of the shipping season at Rocky Ford, it is common to realize from two to six dollars per crate. No one at this time can afford to save seed to sell at the ordinary price per pound. Indeed, few growers are wise enough to save for their own use.

At the average price of cantaloupes through the shipping season, the grower must realize at least a dollar per pound to warrant him in saving seed for the market. At the close of the shipping season, when melons are no longer marketable, the seed is willingly saved for what it will bring. This is the source of a large part of the seed on the market.

The difference in value between seed saved early from perfect melons, of high market worth, and that saved six weeks later, from immature, frost-bitten melons which cannot be marketed, is not often appreciated; yet, if the higher priced seed should yield only one or more crates per acre of early melons, or increase the total yield by several crates, which the extra vitality and superior points of perfection can easily do, the higher priced seed is cheaper at any price, and its value to the melon industry cannot be estimated.