The Culture of the Melon for Profit*

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FOUR principal things have to be considered in order to assure success in the culture of the melon—the kind of soil, the best method, the best cut and the best care. A sandy loam soil is most favorable. Every means should be taken to render the ground suitable, whether by special manures or by peculiar improvements in order that the ground may contain all the best fertilizing principles.

METHOD OF CULTURE

The best method of culture is that which makes the plant profit from the solar influence, which facilitates the free circulation of the air, and which makes the fruit absorb solar rays. This method exposes them to the influence of light. The culture of the melon upon knolls appeals to all these conditions in preference to any other method. I recommend, therefore, hotbeds and windows (sashes) in preference to the flat ground. This kind of culture assures a greater quantity of fruit and gives more strength to the plants. The ascending direction of the sap and the descending direction of the branches, are the two great factors in this method.

By this method one can get at least ten melons a mound and even more. This is the smallest number I raise from my mounds; generally I have more. If you cultivate only one plant on a mound, your melons will be bigger but, if the fruit is to be sold, it is far better to leave two plants a mound which will give twenty melons. On an acre, at a distance of six feet from each other, you have 900 mounds. At twenty melons each mound this will yield 18,000 melons which, at ten cents each, will give a revenue of \$1800.00.

In spring as soon as the ground is in order and the weather favorable, I place my hotbeds six feet apart on the ground, which was well prepared in the fall. I then dig only the ground where the hotbed should be placed. I fill the hotbed with the best mould containing twenty per cent. of pigeon's dung thoroughly mixed with the mould, leaving two or three inches between the hotbed and the ground. The front part of the hotbed should be nine inches high while the back twelve inches. The width of the base of the hotbed should be twenty-six inches, and of the top nineteen inches. The depth at the base should be twentysix inches and at the top twenty inches. Each pane of glass should measure fifteen by sixteen inches. The size of the hotbed can vary in size as one wishes, and consequently that of the frames. My

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frames are made of one inch spruce boards.

SOWING THE SEEDS

Now, having made the surface of the mould even in the hotbed, I sow'from ten to fifteen melon seeds with proper spacing. When the plant has sufficiently grown, I sort the plants, keeping the best ones. Then, gradually, I clear the ground so as to leave one or two a mound.

VENTILATION

As soon as the seeds begin to grow I move the window somewhat to allow the air to circulate through the corners of the box. I move the window thus between seven and eight o'clock in the morning. According as the sun gives more heat and as the plant grows, I move the window more and more.

At night I push the window back into its place about an hour before sunset so as to keep the heat inside the box. I then cover the hotbed with a heavy covering. The hotbed should be surrounded by dirt at least six inches thick and two-thirds of the height of the hotbed frame. The covering made with empty salt-bags should be thick enough so as to preserve mounds from low temperature, and should be put on the frame every evening, as soon as the melon seeds are sown, and then taken off after sunrise.

WATERING

We should never water nor warm melon plants at night, when the nights are cold, but in the morning. On the contrary, when nights are warm, we should water them an hour at least before sunrise, then close the frame and cover it. Rain water heated by the sun is preferable to all waters, because it contains more fertilizing principles. For want of rain water, we can use other waters—but waters which have been heated by the sun.

I water the melon plants with purin (French word)—a liquid manure—and common water; then, I warm with onequarter of purin mixed with three-fourths of water. My melons are very aromatic and juicy. During the period of the culture of the melon, the watering should be made so that it may reach the interior of the mound three or four times, according to the dryness of the mound and to the temperature of the weather. The warming should be done every night or every morning, according to moisture of the night, because leaves are the soul of the plant or in other words, its pulmonary surface.

CUTTING AND PINCHING

When the melon plant has four leaves and the fourth one is big like the nail of a thumb, I cut the stem under the third; and I put dust-land on the wound;

yet one is not obliged to do that. We should never cut cotyledons (the seed leaves). The operation causes great harm to the plant. I never touch branches that come out from the arm-pit of cotyledons, because from these, appear the first female flowers; but, if they do not give any female flowers I pinch them without intrenching them.

When the fourth leaf appears on new branches I again cut the stem under the third leaf. This is the second cut.

New branches appear, and when they have four leaves, that is to say, when the fourth one appears, this time I cut above the third. This is the third cut. By this cut male and female flowers appear.

I make a fourth cut, also a fifth one. If the female flowers do not appear at the fifth leaf, I then pinch the branches just after the fifth leaf. It is necessary to see and to know how, and when, we should pinch. When the female flowers appear we should not pinch branches immediately, because you would destroy the coming fruit in bringing the plethora of the sap to the branch before the vessels of the peduncle (stalk) of the female flower have taken enough development to receive it with profit. Likewise too great dryness at the interior of the mound brings a considerable diminution of the sap; consequently, the death of the plant and of the female flower. Therefore we have to wait three or four days before the female flower opens in order to pinch the extremity of the branch. Then you fold slowly the extremity of the branch while having it form an acute angle on the right of the insertion of the peduncle in such a manner that the latter may appear to form the lengthening of the branch and we fix it thus by means of two small branches. This is the best way to have the fruit knotted. If on the mound there are no male flowers but female flowers, and though draughts, bees, etc., would favor the transportation of the pollen; yet it is prudent to gather flowers from the nearest mound—also to shake the stamens on the pistil of the female flower, in order to assure fertility.

When the fruit is knotted, that is to say when it has acquired the size of an egg, we cut the branch about two or three inches above the melon. If other branches come forth in the arm-pit it is better to take them off. If there are branches not bearing fruit we should take out some of their wood with great precaution.

We should not forget that, if we wish to get excellent melons, the solar rays have to reach them entirely and continually. This is the reason why we should