

For table use, the French is preferred by many. Mr. BARRY, of the *Horticulturist*, says that it is generally preferred by the Parisian *cuisiniers*, or cooks.

For stock feeding, the long orange, and Belgian, or white carrot, can be grown. We noticed a patch of white carrots in the grounds of a neighbor last fall, at the time they were being gathered, and learned that from about two-fifths of an acre he had raised 325 bushels of the white variety; very fine, large, well-shaped roots. The white variety grows much more above the ground than other kinds, and is hence much easier to gather, but they should be gathered in time to avoid injury by frost.

Sugar beet, and mangel wurtzel seed should be soaked several days in luke-warm water, changed daily, until fitted for quick germination, and sown to a greater depth than is proper for carrots. They should be thinned so as to stand from six to nine inches apart in the rows, and the rows should be for the wurtzels from twenty to twenty-four inches apart. Wurtzels are the hardier beet, and will do better on strong clay soil than most any others, but whatever may be the soil, it should be deeply broken up and made loose and friable.

WHERE SHALL I PLANT MY ORCHARD?

This is a question which, though easily asked, is not so easily answered. To enter into all the details respecting the location of an orchard, preparation of the soil, choice of trees, their successful transplanting and subsequent cultivation, would require more space than we have at command. Our limits will only permit us to present a few brief suggestions as to location and preparation of the soil. It is not with fruit trees as with many other things cultivated. When frosts are over for the season we can sow our seeds in hope, and wait for the harvest, but especially, if we have the more tender and delicate kinds of fruit, we must guard against the effects of late spring frosts upon their tender buds and blossoms. And now let us advert to a common mistake respecting what is considered as a warm and sheltered spot. For a half-hardy plant you can not place it in a spot that will more probably insure its destruction, than to put it in a locality sheltered from northern winds, and fully exposed to the warm sun on a mild winter's day. We have repeatedly seen on our grounds the buds prematurely developed by a few days continuance of warm weather in March, and when a change of temperature took place, gone were our hopes of fruit

for that season. During the intense cold of a winter's day after a severe frost, when the thermometer has sunk in the neighborhood of zero or below it, it is an essential point that the early rays of the morning sun should not strike upon the frozen buds, but that they should have time to thaw gradually. We are satisfied that effects often times attributed to an east wind, are due to the rupture of the tender cells of the bud, consequent upon the action of the sun's rays upon them, when their vessels are congested by intense cold. The lowest grounds are not the most free from the effects of a frost.

A few months since we saw an account of some experiments on the temperature of different localities, made by Lieut. MAURY, of the National Observatory. At the same time that a thermometer placed on a hill showed a temperature of 33° or 1° above the freezing point, a thermometer which was in a valley beneath, showed a temperature of 28° or 4° below. Not satisfied with the observations, he changed the positions of the thermometers and the result was the same. There was a difference in the temperatures of the hill and valley of 5°, a difference at the time of the blossoming of fruit trees which would save or destroy the germs of the crop. In the spring of 1852, by a late spring frost, the buds and blossoms on many fruit trees in low grounds were destroyed, while trees on hill sides and hill tops almost wholly escaped. A bud, while protected by its natural envelope can endure a great degree of cold without its vitality being impaired; but when influenced by the genial warmth of spring it has thrown off those protecting envelopes, and closely folded tissues, its power of enduring cold is gone, and it remains for the intelligent cultivator to aid in the protection of his budding fruits. By the radiation of heat into the atmosphere, the strata of air next the ground become colder than the other portions. These cold air currents following the laws of gravitation, descend to the lower portions of ground, and into the valleys, and then become in a manner stationary, while by currents moving briskly over any surface, radiation is prevented, and substances will remain at the temperature of the moving current. Arrest that current, and radiation will cause a greater degree of cold than is due merely to external temperature. So in these valleys and lower portions of ground, the temperature soonest becomes reduced to the freezing point, and consequently plants then growing must suffer. Every cultivator knows that corn on his low grounds is soonest affected by autumnal frosts, and the reason is obvious from the explanation just given.