

potatoes to the very ground, was the first to affect it in the least. Up to this time it showed no signs of being affected by cold sufficient to kill melon vines; and when the tubers were taken up, upon the 7th of November, they seemed, from the appearance of the rootlets, to be in a state of vigorous growth. Add to this, also, that a few were left in the ground during the intense cold of last winter, in the nursery of Wm. R. Prince, of Flushing, and were taken up uninjured in the spring, and we can hardly deny to the plant the credit of hardiness.

Referring to the first of the above objections, we naturally speak of the soil most suitable for this new yam. Experience this year has shown, without doubt, we think, that a warm, dry, sandy loam is by far the most profitable for its cultivation. Even poor soils seem to be able to compete quite successfully with the richer. Our tubers were planted last year in three separate localities, and in four different varieties of soil. The first was a poor beachy sand; the second, a sandy loam, light, warm, and dry; the third, also, a sandy loam, but rich and damp; the fourth, a still heavier loam, with clay sub-soil, newly cleared, and somewhat shaded by a forest hickory. The sandy loams were trenched to the depth of $2\frac{1}{2}$ to 3 feet, with the exception of the last, which, as an experiment, was cultivated to the depth of 15 inches only. Upon the 16th of April, the tubers were placed in small, well-drained pots, and these plunged into the earth of the hot-bed. Upon the 9th June, they were planted out in the open ground, and afterwards received ordinary attention in hoeing and watering. A few (foreign tubers) were started with difficulty, and were not transplanted till later. We began to harvest those growing upon the second variety of soil above mentioned, and were certainly gratified upon finding their size fully equalling what we expected. Extending our observations, however, to the richer and damper land in the vicinity, we found the roots not so large, when we expected to see them larger. So also in the poor soil, No. 1, the product was quite as great as in the last instance, and this with less care and labor. Upon the new sandy loam, the roots were very small.

Our readers will notice, from the above report, that in the very soil most adapted, in a dry, warm summer like the past, to most root crops the *Dioscorea* did not succeed so well as in the adjacent warm and dry spot; and that in the shaded and shallow cultivated land it succeeded worst of all. In a letter from Wm. R. Prince, of Flushing, who is by far the most extensive cultivator of the yam upon the continent, he says that the only kind of soil unsuited to the root is a "rich and moist one;" and it will be seen that this is in accordance with the facts above mentioned. There is, therefore, a two-fold reason why we should prefer sandy land for the culture of this root;—this character of soil is warm, and more suited to the habits of the plant, and, being permeable, is more easily worked to the requisite depth. It seems strange, and we can hardly believe it, that a plant bearing so little foliage as the *Chinese* potato should succeed in poor soils; and yet we know the cranberry, with the same characteristic, flourishes and bears large crops of fruit on the salt marshes near Cape Cod. Can it be, that the subsoil furnishes food for vegetables of this class, which energetically push their roots far into the soil beyond the reach of other plants?

In the U. S. Patent Office Report, vol. iii., for 1854, is a very interesting article upon this new yam, from the pen of D. J. Browne, Esq., and upon page 172 is the following paragraph:—"It is even thought that its cultivation in large pots, buried under ground, might be successfully adopted in some cases, particularly where the soil is of a permeable nature, which will allow it to extend its roots to a depth of more than a yard." This, we believe, will never be realized. Potting we found to be a decided injury to the plant, and will be tried next year only as an experiment. It seems to grow well in the open