

THE DIOSCOREA BATATAS,

AS CULTIVATED BY MURPHY & LYONS, OF SIMCOE, C. W.

Now, that the "summer is past and the harvest is ended," it is pleasant and profitable to compare notes, and report progress. To nothing will this remark apply more appropriately than to the new *Chinese* potato of which we have heard from so many sources, and about which so many conflicting statements have been made.

Being the first to introduce this new esculent into this Province, and having cultivated it somewhat extensively, and feeling interested in its success, we propose to give the history of our experience in its growth during the past season,—hoping soon to hear from others who have also given attention to it. The *Dioscorea Batatas*, your readers will remember, is a native of the eastern portion of Asia, and belongs to the order of *Dioscoreaceae*, represented in this country by the *Dioscorea Sillosa*, or "wild yam root." The *D—Sativa* and other species produce yams, which are very important in tropical climates, but it is somewhat remarkable that several of the genera of the order above mentioned possess very acrid properties, which in some species render them poisonous. Thus the large fleshy tubers of the *Tamus Communis* have been employed as stimulating plasters, while the *Dioscorea Triphylla* and *Dæmona*, when boiled, exhibit dreadfully nauseous properties. The history of the new species, the subject of the present article, dates no further back, in our annals, than 1850. In this year, the French Consul at Shanghai sent tubers of the plant to France for the purpose of testing its value in that country. Not, however, till three years after was special attention called to it, and experiments commenced to prove its hardiness and productiveness. From this time it seems steadily to have advanced in public favor in France and England, and lately the United States and Canada have been added to the list of those countries in which its cultivation has been attempted.

The plant is trailing in its habits, with annual stems and perennial roots. Several of these stems frequently arise from the same root, and, if left undisturbed, entwine themselves firmly around each other. The leaves are deep green, glossy, and borne upon petioles or foot-stalks of a violet color and channeled. They are of nearly equal length and breadth, being cordate, or heart-shaped, and veined.

The root is peculiar in growing perpendicularly into the ground, with its largest end below, in being thickly studded with rootlets, and in the pearly whiteness of its interior, which possesses very little flavor, and is free from fibrous tissue. In size it varies from 15 to 22 inches in length, its lower end attaining a maximum diameter of two inches, and gradually lessening towards the other end. Writers speak of its extending into the soil to the depth of three feet, but this we suppose occurs only in exceptionable cases, and in permeable land. The plant is said to be most extensively cultivated in every part of China, and to constitute, in some instances, the principal food of the inhabitants.

The advantages claimed for the *Dioscorea* by its friends are:—It is more valuable as food, is more productive, and less liable to disease than the common potato. The root may be kept either in or out of the ground for a long period uninjured, and may even be ground into flour. The plant is hardy, and may profitably be left growing for two or more years. It possesses little foliage, and may be cultivated in close rows. The objections to the culture of this new esculent are obvious. The ground must be very deeply cultivated, and the harvesting may sometimes prove troublesome. To these some persons would add a third, having reference to its being unable to flourish in such a climate as ours. Our experience, however, leads us to regard the yam as hardy,—equalling in this respect many of the field crops of this country. The same frost that cut down corn and