

scribed under the second aspect, and is similar to that seen in 1850, '51, '53, and '55.

In 1850, hot, damp weather began with July 14th, and ended with Aug. 20th—lasting five weeks. In 1851 it began June 14th, and lasted until July 28th, or about six weeks. In 1853 the early and central summer was very hot and dry; the season of wet and only moderately warm weather reached from July 26 to August 7th, that is twelve days. During this period there was an entire revival of the growth of the potatoe crop, and a rapid and large expansion of its foliage. In this State, steady and close hot weather began on the 7th of August, and lasted through the 18th, that is twelve days. The resulting mildew began to be seen on about the 8th, and was at its height on the 14th, constituting the most rapid, and, for the term of its continuance, the most destructive visitation of disease I have ever witnessed. Happily, however, very early crops were too far advanced to be impelled into a second growth by the rains preceding the disease, and so mostly escaped.

In 1855 the season bore a very close resemblance to 1851, that is, the hot wet weather began June 21st, and reached to Aug. 6th, when the weather became cool and dry. In these three principal cases (1850, '51, and '55,) the mildew began to show itself towards the close of each of these periods, and extended its ravages on the foliage into the subsequent good weather, and its effects on the tubers into the following harvest.

The weather of the present year has not been very like that of any of the years just particularly noticed, but most resembles that of 1855. May and June were wet, cold and cloudy beyond all remembered precedent. The growth of the potatoe crop, like that many others during this period, was slow and dwarfish. With July 4th began a season of hot steady, impulsive weather, such as we rarely see; and notwithstanding the lateness of the spring planting, and the slow progress of the early part of the summer, this weather brought up the potatoe crop nearly to its usual state of forwardness. Since the 19th of July, the weather has been damp as well as hot, rain having fallen in considerable quantities on the 19th, 20th, 21st, 27th, 28th, 30th and 31st, besides many light intervening showers—the whole amounting to 3½ inches of water. Again, yesterday, (Aug. 4th) there fell 2½ inches more.

3. As a consequence of this hot and damp weather, mildew began to manifest on the grapevine, especially where planted in rich and heavy soils, more than a week ago. Even the Isabella and Catawba have not wholly escaped. Mildew was not noticed upon the potato until four days ago, and then on the leaves but not on the vines. Such however is the state of rapid growth in the potato crop, and such the continued hot and damp state of the weather, that a wide pervasion of mildew may be feared, the law of progress in this case being the same as with eruptive diseases, is from merely beginnings to general diffusion. The Early Mountain June, Early Pink Eye, Carter and Kidney, usually show it first, and nearly simultaneously. Then follow the Early Shaw, Flesh Colored, and Western Red. The New Jersey Black or Purple Yam, usually is the last to be struck with disease, and though affected in foliage is rarely injured in tuber.

These remarks on the succession of morbid appearance in the different sorts, are based on the supposition that they are all treated alike in soil, aspect, culture, time of planting, &c. My imported Rough Purple Chili rarely shows any mildew on the leaf, and still more rarely on the tuber. The new seedlings which I am sending out have a similar exception, except in the case of two or three varieties, in which I have acknowledged a slight liability to disease.

4. The cultivators of potatoes will most certainly deceive themselves, if they expect to avoid, or even mitigate this disease, by any other than general means, such as are comprehended in dry, loose soils of moderate fertility, early planting, and the use of the strong varieties.

Under these conditions, the presence of disease, even in such seasons as 1846, '50 '51, and '55, will be comparatively light. To the use of the Yam, and Rough Purple Chili for general crops, there are strong objections—to the first on account of its intensely purple flesh, and to the second on account of its hollowness and irregular shape, when cultivated in rich soils. All these objections, however, are overcome in the character of some of the new seedlings, which have been sent out by different individuals. It must be acknowledged, however, that few of these new and hardy seedlings have obtained that high character for the table that is found in the Meshannock, Carter and Winter Pink Eye. Although the experience of the present generation confirms the sentiment of the past—that new varieties of potatoes, however valuable they may eventually become for the table, are slow in obtaining that character of excellence; yet few cultivators have the