

the Russians, that blight in some places and again are entirely free.

Location and soil have more to do with exemption than perhaps we are willing to admit. Best are high clay ridges with strong soil, with not too much humus, with free circulation of the May, June and July winds. We find less blight on the south side of our orchard than in the center, or north side, and Transcendent, which is inclined to blight badly, is so loaded with fruit this year it has not thought of blighting. This strengthens the idea of an overflow of sap as the cause rather than the frozen sap theory. Blight will follow the pruning knife; in pruning for blight do not prune for anything else.

COMMENTS BY SECRETARY.

I will not join issue with the writer on the subject of blight which has troubled me considerable this season, until he comes to the point where he says in the second list that Hibernial blights only in unfavorable places. With me it has blighted on a high location and clay soil very badly, and several reports from other places confirm this, but I feel as Prof. Hansen of the Dakota College says, its extreme hardiness, standing and bearing where Duchess fails makes it valuable for the extreme north. J. S. Harris reports some blight on his bearing Peerless trees. To the list of non-blighters Mr. Kellogg could safely add the Utter's Red, and with me top worked on Whitney the Haas and Malinda are bearing well and are free from blight. Mr. Kellogg's advice to avoid planting varieties that are inclined to blight is to my mind the best preventive that we can follow.

TREES AND PLANTS IN WOOD COUNTY

The following report of the condition of trees and plants in Wood county after the winter of 1895-6 was written and sent to the secretary by B. M. Vaughan, treasurer of the Wood County Horticultural Society. Mr. Vaughan is a lawyer, but takes great interest in the prosperity and usefulness of their local society. He has collected and is still collecting for

the use of their society quite an extensive library of valuable works and publications on horticulture:

I presume it is in order to report how fruits came through last winter and spring, and how they now look.

Of our two hundred apple trees set in the spring of 1895 all but forty are dead. The trees, when set, looked healthy and vigorous and all but seven started well.

The soil on which they were set was a rich, well drained, deep sandy loam, with clay sub-soil at depth of five to eight feet. Water always stands above this clay to a depth of one to two feet, but nowhere stands within four feet of the surface of the ground.

The trees were cultivated during the season. Potatoes, beans and squash were grown among them. Last fall most of the trees ripened their wood in fairly good condition but did not look as thrifty as I desired. Microscopic examination showed that the cells of the twigs were not as well filled with starch as I thought they should be—were not as well filled as all apple twigs of healthy trees that I had examined in previous years, had been.

This spring the greater part of these trees started new leaves. When the leaves were about $\frac{1}{4}$ to $\frac{1}{2}$ inch long we had a cold night (with frost in some locations) and in a day or two most of these young leaves were dead. Some of the most vigorous looking trees at once grew new leaves and now look well, but most of the trees either failed to start new leaves at all or the new leaves, once started, did not grow to normal size, and these are now all dead but two.

I dug several of these dead and dying trees and found:

1st—That some had roots dead from the graft union down.

2nd—That others had apparently healthy roots and bark but had started no new growth of rootlets, and,

3rd—That others had root, bark and top dead and shriveled.

Quite as large a per cent. of the hardy varieties died as of the less hardy ones. My Minnetonkas all died, also some Duchess and Transcendents.

My tame plums acted in the same manner. Four of the twenty are alive. Ostheim and Early Richmond cherries on

the same soil and location came through the winter in good condition and now look well.

Red raspberries, although well covered with earth, all died. Black raspberries by the side of them, treated in the same way, came through in good condition, fruited fairly well and now look vigorous.

THE PEARL GOOSEBERRY.

The Pearl is a gooseberry grown from seed of the Houghton, crossed with the Ashton Seedling, by Prof. William Saunders, and worthy of special notice because, first, of its good quality; second, its size; third, its productiveness; fourth, its freedom from mildew.

Now, with reference to these points, I will state the result of my observations. The quality was good, very much like the Downing in this respect, as well as in color marking; but in size it averaged nearly double that berry, and that in spite of the prodigious crop under which the bushes were laden. There was a row of some sixty-five bushes one year planted, and most of them were literally bent to the ground with heaps of fruit. The average was eight berries per inch of wood, and on one bush we estimated there must have been 2,500 berries. We have had great loads upon the Smith, the Downing and others, on our own grounds, but we have not seen the quantity of fruit upon the bushes of any variety to equal that upon these bushes of the Pearl. Should this productiveness prove constant, the berry will be of great value for the market. With regard to the mildew, all we can say is what we saw. *viz.*: it was entirely free from it. One bush stood next a Whitesmith, and, while the berries of that kind were covered with mildew and utterly worthless, no trace of the fungus could be found upon the Pearl.

Silas Wilson, of Atlantic, Iowa, a well known authority on horticulture in his state, says:

"The Pearl gooseberry is a great sight. There could be no more berries on the stem without crowding off the leaves. It is wonderfully productive, and I am pleased to find the quality