

fruits in proportion to the soils they are grown upon; but that difference means the difference in the substances in that soil that are required to produce first-class fruit. If there is sufficient lime and iron, and substances of that sort, you will get a high color and a high flavor—in other words, the flavor is brought out better. I believe in a mixture of manures, because in the mixture we find the substances that are required for the purposes we are after. You will find the highest possible color and flavor in a particular variety, for instance, where you place some salt, some sulphate of iron, and a certain quantity of potash; whereas that same variety grown a few feet distant, under slightly different circumstances, will not grade as high, because the flavor is not brought out as well. My experience is that apples grown in a southern section will not, after shipment, compare in any way in a foreign market with apples grown in the far north and east; and if I were in the southern district I would devote myself to those fruits that can reach the highest perfection for those markets that they were to be shipped to.

Mr. ORR (Winona): I have taken nearly all the apple trees out—both clay and sand—and made firewood of them. As to underdrainage of clay, the water never finds its way down to the drains. I have had experience growing pears on clay; but they load so heavily that we do not get size.

The SECRETARY: How about Clapp's Favorite getting rotten in the heart?

Mr. ORR: We have had no difficulty with the Clapp's Favorite on that score.

Mr. HUNTER: I have had Clapp's Favorite rotten on the outside and sound in the heart.

Mr. RACE: Mr. Allan comes from Goderich, which is on a sand belt about twenty-two feet in width. The apple exhibit around Goderich this last fall was the largest and finest I saw in the province. The next finest was at the town of Clinton, only a few miles east of that. These were very much larger and finer than the exhibit at London, and quite equal, if not superior, to the one at Toronto. On enquiring in these and other places I found that the very finest specimens were grown upon a sandy loam, or else a clay-loam underdrained; and in many cases where we found samples which came in competition with those, I found that they were grown on clay which was not underdrained. So I concluded that last year the sandy loam had been the very best, and the second quality was produced on a clay loam underdrained. There are two apples that have come into notice during the last three or four years—the Wealthy and the Ontario. The finest specimens I saw of these anywhere this season were at Stratford, cultivated by Mr. Dempsey.

Mr. ALLEN: It was later in the season when you saw the specimens there?

Mr. RACE: It was about two weeks later than I saw at Goderich.

Mr. DEMPSEY (Stratford): Those that Mr. Race speaks of were grown on blue-clay subsoil. It was highly cultivated, well manured, and a good deal of ashes on it.

Mr. HILBORN: I think that elevation has something to do with it; but I find that sandy soil produces fruit of a better quality, though very often not quite so large. Small fruit crops like strawberries are of better quality on sandy soil—they get more sunshine and heat.

Mr. MORRIS: I think the question of clay or sandy soil depends altogether on what the clay soil is and what the sandy soil is. There is much clay soil that can be thoroughly tile-drained; and I think that kind of soil is as good as any we can get for fruit. There is a good deal of sandy soil that is of a damp, sour nature, that is not fit for fruit. That which is sandy loam and dry grows good fruit. I think Mr. Dempsey has given us the secret of those fine Stratford apples by saying that he used much ashes. Ashes are made from wood, and when fed to land turns to wood—it seems to be a natural manure, and makes a healthy growth of wood. Perhaps many, like myself, have orchards that we do not like to dig up, and we would like to know what varieties we can grow with advantage.

Mr. PATTISON: I did not for a moment purpose to say that all clay soil does not