

INTRODUCTION.

The growing of flue-cured tobacco in Canada dates back to the first experiment conducted by Messrs. Fox Brothers, in the vicinity of Ruthven, Ont., where very light sandy loams, somewhat gravelly, were first devoted to that type of leaf. From Ruthven it rapidly extended to the very light sandy loams along the lake shore, which proved very suitable for the raising of tobacco of the Bright Virginia type.

The area that can be devoted to the growing of that leaf in Canada is rather limited. In Eastern Canada we can hardly expect to see the culture of the flue-cured tobacco extended to other parts than South Ontario, as this is the only tobacco district where the season is sufficiently long and warm to allow the full ripening of the leaves before they are taken to the kiln. As to the possibilities of British Columbia for that type of tobacco they have not yet been considered. Therefore it is very probable that the growing of that type of leaf will become a specialty in the hands of the farmers who own land really suitable for this purpose. The price of land on which flue tobacco can be grown has considerably increased during the last few years, and has now reached the price paid for orchard land in the fruit belt of the Niagara peninsula.

While an overproduction of White Burley was experienced in Canada a few years ago, it can be said that, owing to the limited acreage than can be devoted to the growing of flue-cured tobacco, this need hardly be feared as far as the latter type is concerned. The growing of flue tobacco in South Ontario is therefore one of the safest undertakings.

Apart from the successful curing of the crop in order to obtain as large a proportion of bright leaf as possible, the most important problem at present is the maintenance or even the improvement of the fertility of the soils devoted to bright tobacco. Generally the fertility of those very light sands is much below the average; in fact the best land for flue tobacco in Ontario has been found where it was practically impossible to raise successfully any other crop except, in some instances, tomatoes or other vegetables, at the cost of very heavy applications of manure and fertilizers. But it is better to foresee that war conditions will not be long maintained, and that with normal prices the net return in money per acre might in a few years fall short of what it has been for the last two or three seasons, unless a serious effort is made with a view to increasing the yield per acre while maintaining the quality of the leaf.

This is the main problem which we are trying to solve at present. The objective of the grower of flue tobacco should be to obtain the best colour and the maximum possible yield at the same time. This will require the maintenance of the fertility of the tobacco land to a nice degree of equilibrium so as to prevent the leaf becoming too coarse for a successful curing.

On the other hand, the curing process by itself requires expert handling, the knowledge of which so far, at least in Canada, has been mastered by very few.

A comprehensive description of the curing process, as far as conditions in South Ontario are concerned, will be found in the first part of this bulletin. There is no absolute rule, as much depends upon the condition of the crop at the time it is taken into the kiln and the weather conditions during the process. Still, we believe it will be possible for the Ontario grower of flue-cured tobacco to derive much benefit from the comments on the methods of curing as practised at Harrow. In our opinion this is the first intelligent and practical description of the flue-curing process so far published in Canada dealing with special conditions in South Ontario.

As will be noted by the reader, the soil of the Tobacco Station at Harrow is considered a little too heavy for the growing of the brightest leaf, but, even in spite of