

others are pointed upwards. The growth of the latter is normal from the start, but the first must twist around and straighten up before beginning to grow upwards. This twisting process of the germ requires a long time, hence the delay in the growth of these seedlings. This is one of the chief causes of the lack of evenness in the stand. This phenomenon can clearly be seen by observing the germination carefully through a magnifying glass.

Of course the use of germinated seed has one advantage: the plants come up quicker, and for this reason it may, at times, be desirable to adopt this method even on warm beds, but in this case the seed should be germinated very slightly; they should only be swollen until the tegument begins to split open.

### NOTES ON GROWING TURKISH TOBACCO IN CANADA.

A plantation of Turkish tobacco was seen by the author in September, 1910, at Ste. Sophie, on the farm of Mr. Schaposnick, who was the first to introduce this tobacco in Canada. The advantages of growing this tobacco are obvious. In the first place there is a great demand for this variety, owing to the increased consumption of Egyptian cigarettes in Canada; then it is a paying crop: an acre of Turkish tobacco may yield as much as 600 lbs. and prices range up to 40 cents a pound.

However, there are some decided objections which did not escape our notice. The numerous hands required in growing Turkish tobacco, owing to the special method of culture, the difficulty experienced in keeping the peculiar aroma which gives this tobacco its market value, and, lastly, the length of time required for its ripening—as many as four months must elapse before it can be harvested—these are three serious drawbacks.

Wishing to ascertain, for ourselves, the value of this crop in Canada an experiment was undertaken at our station of St. Jacques l'Achigan. Two varieties of Turkish tobacco: Katchi and Karchi Yaka were grown. As a whole the experiments were favourable, and though it is not positively known as yet what the aroma will be, still we feel justified in recommending the growing of Turkish tobacco in Canada, but in small areas only (half an acre at most) and only by growers who have a very large family.

The yield obtained was about 200 pounds of tobacco. The cost of production is about 22 cents a pound and the selling price about 35 to 40 cents. Our profit was \$26; which is equivalent to a net profit of \$104 per acre. The most important item is the high cost of labour, which is the chief drawback in the growing of this tobacco.

The growing of Turkish tobacco is quite different from that of other varieties. The warm bed may be employed but sowing should be done at the very beginning of April. The plants are set out at the end of May. They are set very close, 6 x 20 inches; therefore transplanting must be done entirely by hand. The application of manure should not exceed 20 tons per acre; it is this quantity which gives the best yields without affecting the aroma. If more than 20 tons are applied, the growth is too rapid, the aroma poor and the leaf coarse.

Hilling and weeding are done in the same manner as usual. Topping is done very late and very high and it is advisable to leave the first two head buds. By this means the yield is materially increased. At least two months are required before