

Transplanting was done entirely by machine; the seedlings were set 18" x 30" apart; they were well watered at planting time.

The distances apart (18" x 30") were modified on a part of the Cuban plantation, with a view to ascertain what distances apart would give the highest yield in weight with an average proportion of nicotine with this variety. This question is dealt with further on in this report.

As soon as the setting out was completed, a mixture of bran and Paris green was spread to protect the plantation from cut-worms and grubs. The seedlings took root extremely well, a warm-rain on the 22nd of May did much good. Only about 3 per cent of the seedlings had to be replaced.

Varieties grown.	Area.	Transplanting.	Topping.	Harvest.	Yield.
Yamaska.....	1 arpent....	May 20.....	July 18.....	Aug. 24.....	965 lbs.
Big Ohio x Sumatra.	1 " ....	" 20 .....	" 18.....	" 24 .....	1,552 "
Cuban .....	1½ " ....	" 21.....	" 29.....	Sept. 2 .....	1,005 "
Turkish tobacco. ..	¼ " ....	" 15.....	" 22.....	Completed Sept 21.....	215 "

A great deal of cultivation was necessary during the year. The summer of 1911 being very hot and dry, cultivators and weeders had to be kept going quite often to keep the soil moist. It may be said that one acre of tobacco this year required three times as much work as in an average year. The curing was rapid and easy, owing to the long open fall. The last of the tobacco was stemmed on December 20, 1911.

#### ST. CESAIRE STATION.

The two arpents of land available on this station were planted in Yamaska and Big Ohio x Sumatra; the object was to compare these two strains with the same varieties as grown at St. Jacques l'Achigan. Another half arpent, not included in the rotation, was planted in Comstock Spanish for seed production. Eight hundred seed plants were selected and 25 pounds of choice seed were harvested. This production of seed was the chief object of our work at St. Césaire station in 1911.

Seeding was done as usual and with complete success; the seedlings were plentiful, healthy and of good quality. Setting out took place on May 19 in a well prepared soil and under favourable weather conditions; however, insects caused a little more damage than at St. Jacques. About 6 per cent of the seedlings had to be replaced in three successive settings. The land had received twelve tons of manure to the acre, ploughed in before the winter of 1910-11; it was harrowed and rolled three times in the spring. A summary of the work done and of the results obtained will be found in the following table:—

Varieties grown.	Area.	Transplanting.	Topping.	Harvest.	Yield of seed.
Yamaska.....	1 arpent....	May 19.....	July 16.....	Aug. 22.....	967 lbs.
Big Ohio x Sumatra..	1 " ....	" 19 .....	" 16.....	" 23.....	963 "
Comstock .....	½ " ....	" 20 .....	.....	Seed-plants.....	25 "