

BULLETIN LXXXVI.

ROOTS, POTATOES AND FODDER CORN.

The returns from the Bureau of Industries give the area of the root crop grown in 1892 as 161,594 acres with a yield of 77,719,476 bush.; that of the potato crop as 145,703 acres with a yield of 12,289,817 bush., and that of the fodder corn crop as 91,403 acres with a yield of 948,907 tons. The importance therefore of these crops to the farmers of this province amply justifies the attention that is being given to them by way of experiment at the station during recent years.

The following are the principal objects of this bulletin, viz.: (1) To give comparative results obtained from growing leading varieties of roots, potatoes and fodder corn side by side and under the same conditions for one year and in the case of some of them for a longer term; and (2) to give comparative results from growing fodder corn at different distances apart between the drills and also in the drills.

In 1892, 62 varieties of turnips, 38 of mangels, 23 of carrots and 10 of sugar beets were grown at this station and practically under the same conditions. Each plot was one one-hundredth of an acre in size. In all instances the drills were $3\frac{1}{2}$ links or 27.7 inches apart, and they were ridged. The soil was a clay loam; it had been in sod for a number of years and was broken up after the removal of the hay crop in 1890. Potatoes followed in 1891. Fresh farm-yard manure was applied in the winter of 1891-2 at the rate of about 15 tons per acre.

Swede Turnips. 44 varieties were grown. The seed was sown June 15th. The plants were thinned to an average distance of 12 inches in the drill. The following table gives the results from the 6 varieties which gave the highest yields:

Varieties.	Yield of tops per acre, 1892.	Average weight per root for two years.	Yield of roots per acre, 1892.	Yield of roots per acre, average two years.
	tons.	lb	tons.	tons.
1. White Swede	5.98	2.53	23.13	22.53
2. Hazard's Improved	5.00	2.70	19.50	21.31
3. Sutton's Champion	4.58	2.55	19.03	21.29
4. Our Selected purple top	3.90	2.49	19.45	21.20
5. Green top	6.18	2.44	21.36	21.05
6. Hartley's bronze top	4.00	2.37	17.96	20.95