

EXPERIMENTS IN GROWING ALFALFA AT THE ONTARIO AGRICULTURAL COLLEGE.

A considerable amount of experimental work has been conducted in the growing of Alfalfa in the Department of Field Husbandry at the Ontario Agricultural College. The College farm is located inland about thirty miles from Lake Ontario, sixty miles from Lake Erie, and seventy miles from Lake Huron, and at an elevation of 740 feet above the level of Lake Ontario, and 1,100 feet above the level of the sea. The average rainfall at Guelph is about sixteen inches for the six months from April to September inclusive, and the total precipitation about twenty-seven inches for the entire year. The mean annual temperature is 43.5° F.

The fifty-acre field, in which most of the experiments were conducted, is what might be termed an average clay loam, and has a gentle slope towards the southwest. Part of the land is underdrained with tile, and the remainder has a fairly dry subsoil. The character of the subsoil varies somewhat in different parts of the experimental field from a fairly stiff clay to a combination of clay and gravel. Alfalfa thrives well on all parts of the field, except on the low land, which will not permit of being underdrained to a greater depth than about eighteen inches. On this low land with a wet subsoil the Alfalfa does not usually live for more than two, or possibly for three, seasons.

THIRTY CUTTINGS OF ALFALFA IN TEN YEARS.

The following table gives the yields per acre of the different cuttings of both green fodder and of cured hay of the Alfalfa crop, as produced in the Experimental Department of the Ontario Agricultural College in each of ten years :

Years	Green crop (tons).					Hay (tons).				
	First cutting	Second cutting	Third cutting	Fourth cutting	Total	First cutting	Second cutting	Third cutting	Fourth cutting	Total
1896	9.96	6.47	4.06	2.06	22.55	3.08	1.91	1.29	..	..
1897	12.04	5.61	4.43	.....	22.08	3.59	1.56	1.23	..	..
1898	9.71	5.85	2.64	.....	18.20	2.30	1.75	.63	...	..
1900	11.93	6.00	1.00	.....	19.53	2.33	1.47	.80	....	..00
1901	9.70	2.20	7.49	.....	19.39	2.03	1.00	1.50	.....	4.53
1902	13.35	8.69	2.06	.....	25.00	2.50	2.02	.54	.....	5.06
1903	13.10	8.53	2.75	.....	24.38	2.50	2.09	.67	.....	5.25
1904	12.45	9.35	4.00	.....	25.80	3.40	2.50	1.08	.....	6.98
1906	9.78	6.60	4.85	.....	21.23	2.55	1.13	.58	.....	4.26
1907	14.55	3.95	.....	.....	18.50	2.95	1.05	.....	.....	4.00
Aver. 10 yrs.	11.66	6.32	3.48	.21	21.67	2.72	1.65	.83	.07	5.27

The foregoing results were obtained from different seedings which took place in various parts of the experimental grounds, mostly in com-