CO-OPERATIVE EXPERIMENT RECORD.

TURNIPS, YELLOW AND WHITE FLESHED.

SOUTH ISLAND.

1911-12.

A. MACPHERSON.

KAIKOURA DISTRICT.

Manurial and Variety Tests, conducted by J. A. Coup, Kaikoura Suburban. The land selected was a clayey loam, uniform in character, and was in English grass for about eleven years prior to being ploughed up for the tests in November, 1911, when it was ploughed 6 in. deep. It was afterwards disc-harrowed three times, tine-harrowed twice, and rolled once at the beginning of December, 1911. In the manurial test the area was divided into seven manurial plots and one unmanured as a test plot. Plots one-tenth acre each. The fertilizers applied were according to a scheme designed by the Chief Agricultural Chemist. The variety of seed sown was Fosterton Hybrid. In the variety test 1½ cwt. superphosphate per acre was applied. The seeds and fertilizers were sown on the flat in rows 14 in. apart on 16th December, 1911. The roots were pulled and weighed on 25th May, 1912. Results:—

MANURIAL TEST.

Plot.	Manures per Acre.	Cost per		Weight of Cro	Effect of	
		Acre		Roots.	Tops.	Manuring.
		£ s.	d.	Tons.	Tons.	Tons.
1	Superphosphate, 1½ cwt	017	2	22.30	2.94	Gain, 12.70
- 2	Superphosphate, 3 cwt	0 14	3	26.34	4.16	,, 16.74
3	Superphosphate, 2 cwt.; bone- dust, 3 cwt.	0 14	0	25.60	3.95	,, 16.00
4	No manure			9.60	1.85	
5	Same as No. 3 mixture; sulphate of potash, 28 lb.	0 17	9	19.44	3.19	Gain, 9.84
- 6	No. 5 mixture, 1\frac{1}{2} cwt	0 8	11	20.70	2.56	,, 11.10
7	Same as No. 6 mixture; salt, 14 lb.	0 9	2	19.19	2.43	,, 9.59
8	Albatross guano, 2 cwt	0 10	0	14.90	2.01	,, 5.30

VARIETY TEST.

Plot.				Crop per Acre.		
	Variet	ty.		Roots.	Tops.	
	Yellow-fleshed—			Tons.	Tons.	
1	Garton's Green-top Scotch		 	 18.18	2.40	
2	,, Purple-top Scotch		 	 11.86	1.39	
3	" Inche's Bronze-top		 	 12.38	1.26	
4	" Old Meldrum		 	 11.52	1.01	
. 4	" Stobo, Blue		 	 15.91	1.77	
6	Challenge—Waite's Eclipse		 	 19.19	2.52	
7	,, Dale's Hybrid		 	 19.95	2.64	
8	Sutton's All the Year Round		 	 9.09	0.50	
9	,, Centenary		 	 25.00	1.26	
10	,, Early Sheepfold		 	 16.67	0.75	
11	Farranita Dumla tar			 25.00	2.02	
12	,, Perfection Green-top		 	 24.75	1.09	
13	,, Romney Marsh		 	 31.06	1.09	