

Analysis.

Organic matter and moisture	...	...	40.70, containing nitrogen, 3.01.
Silica and insoluble matter	...	...	4.30
Tricalcic phosphate	...	...	20.05
Iron and alumina oxides	...	...	4.15
Calcic carbonate	...	...	26.92
Alkalies, &c.	...	...	3.88

100.00

Value, about £3 7s. 6d. per ton.

APPENDIX No. 2.

REPORT OF THE NATURAL SCIENCE DEPARTMENT, FIRST TERM, 1891.

The examination and identification of seeds, plants, &c., received from the public has been carried on, and the results, since the last report, may be tabulated as follows:—

No.	Name.	Source.	Germinating Power per Cent.	Impurities per Cent., and Remarks.	Total Impurities per Cent.
49	Grass-seed ..	North Island ..		Is doub-grass (<i>Cynoden dactylon</i>).	
50	Meadow-fescue ..	College farm ..	5	Weevil-eaten fescue-seeds, 12; rye-grass, 11½; dog's-tail, 2; Bromus sp., 1½; small fescue and Poa, 1	16
51	White-clover ..	Gore ..		Sorrel, 3; and occasional timothy and plantain or rib-grass	3
52	Alsike ..	" ..		A few odd seeds of white-clover, sorrel, plantain, timothy, &c.	
53	Grass-seed ..	Masterton ..		Is a tussac-grass (<i>Poa anceps</i> , var <i>B. foliosa</i>).	
54	Red-clover ..	College farm ..		Occasional undetermined.	
55	Lucerne ..	" ..		Occasional plantain.	
56	<i>Poa trivialis</i> ..	" ..		Pure.	
57	Crested dog's-tail ..	" ..		"	
58	Italian rye-grass ..	" ..		"	
59	Cow-grass ..	Christchurch	84	Occasional seeds of sorrel, plantain, timothy, white-clover, and undetermined.	
60	Mixed turnip ..	" ..		Contains about equal proportions of two sorts.	
61	Grass ..	Greymouth ..		Is meadow-fescue.	
62	" ..	" ..		Is Italian rye-grass.	
63	White-clover ..	Masterton ..	59	Sorrel, 3; alsike, 1; and occasional undetermined	4
64	" ..	" ..	58	Similar to above, with occasional chickweed ..	4
65	American red-clover ..	" ..	90	Pure.	
66	Alsike ..	" ..	71	Occasional white-clover.	
67	" ..	" ..	67	Hedge-mustard, 1; undetermined, 1; and occasional black-medick	2
68	English cow-grass ..	" ..	78	Occasional plantain.	
69	" ..	" ..	83	Pure.	
70	American cow-grass ..	" ..	91	Occasional timothy, hedge-mustard, and sorrel.	
71	" ..	" ..	89	Apparently same as No. 70.	
72	Japan clover ..	" ..	52	A grass (<i>Trisetum</i> sp.) and undetermined	5
73	Trefoil ..	" ..	90	A Caryophyllaceae seed ..	2
74	Lucerne ..	" ..	86	Red-clover, 1; plantain, 1 ..	2
75	Sheep's fescue ..	" ..	48	Misnamed for hard fescue; occasional <i>Anemagrostis spica-venti</i> .	
76	Hard fescue ..	" ..	47	Pure.	
77	Crested dog's-tail ..	" ..	6	Yorkshire fog ..	3
78	" ..	" ..	10	" ..	7
79	Timothy ..	" ..	95	Pure.	
80	" ..	" ..	81	Undetermined, 3; white-clover, 1; various, 3 (chiefly sorrel, plantain, chickweed, and sp. of composite plant)	7
81	Meadow foxtail ..	" ..	12	Occasional wavy mountain hair-grass.	
82	<i>Poa trivialis</i> ..	" ..	7	A small percentage of <i>P. pratensis</i> .	
83	<i>P. nemoralis</i> ..	" ..	3	Indistinguishable from <i>P. pratensis</i> .	
84	<i>Poa pratensis</i> ..	" ..	5	Pure.	
85	Fiorin ..	" ..		Pure, but nearly all chaff.	
86	Lawn-grass mixture ..	" ..	36	Sheep's fescue, var. 57; rye-grass, 24; meadow-fescue, 11; dog's-tail, 6; foxtail, 1; small Poa, 1; and occasional sorrel and plantain	12
87	White stubble turnip ..	" ..	98	Pure, but variety not vouched for.	
88	Plantain ..	" ..	56	Red-clover, 13; alsike, 4; sorrel, 2 ..	19
89	Meadow-fescue ..	Christchurch	80	Rye-grass ..	20
90	" ..	" ..	10	Pure.	
91	Colonial red-clover ..	Waimate ..	47	Dock, 2; occasional rye-grass (with ergot), Scotch thistle, plantain, and sorrel	2
92	Devonshire evergreen ..	Christchurch		Rye-grass, 49; cocksfoot, 49; Yorkshire fog, 2; and occasional sorrel, fiorin, goose-grass, dock, plantain, thistle, and lesser clover	51
93	Seed ..	Masterton ..		Is black-medick (<i>Medicago lupulina</i>).	
94	Plant ..	Ohaiawai ..		Is buttercup (<i>Ranunculus rivularis</i> var.).	