Economic Importance of the Different Strains.

The strains in Group 1 do not appear to be suitable for use in New Zealand on account of their low total production (see Table 4) and relatively early maturity, although their autumn and winter growth has been fairly good.

Group 2 contains strains which have grown particularly well at all periods. This is shown in the following Tables 3 and 4, which give actual green weights, also in Tables 1 and 2, which have been computed from figures allotted by an eye-estimation method.

Table 3.—Green Weights of Herbage (Pure Subterranean Clover) cut and weighed on 29th November, 1935, and again on 4th May, 1936.

	29th November, 1935.		4th May, 1936.	
	Average Green Weight per Plot.	Yield relative to Group 3 = 100.	Average Green Weight per Plot.	Yield relative to Group 3 = 100.
	lb.		lb.	
Group 1	6·7	21	16·75	184
Group 2	41·32	129	17·9	197
Group 3	32·0	100	9·1	100
Group 4	44·75	140	13·4	146

The total average yield for both dates then is as shown below :—

Table 4.—The Total Average Yield of Green Material from Both Weighings.

	Total Average Yield per Plot.	Yield in Tons per Acre.	Yield relative to Group 3 = 100.
	lb.	Tons.	
Group 1	23·45	9·15	57
Group 2	59·62	23·20	145
Group 3	41·10	16·00	100
Group 4	58·20	22·60	142

The two weighings were made at periods when seasonal growth was almost completed, so the figures giving total yields practically represent one year's production from a pure sowing of subterranean clover under local climatic conditions.

Each of the strains Burnerang, Nangeela, Myall, and Bacchus Marsh, which constitute Group 2, is likely to be of considerable economic importance in New Zealand, because of the exceptionally good total production, together with good growth at seasons when any clover-growth is exceptionally valuable—*i.e.*, winter, early spring, and early autumn. In growth-form the Burnerang is quite distinct from all other subterranean-clover strains tested. The plants themselves are characteristically erect leafy bunches of very slender stems and medium-sized leaves. (All other strains are prostrate and spread laterally.) The Nangeela is more like a large-leaved strong-growing white clover. It has leaves very distinctly marked with a white band across them. Both Bacchus Marsh and Myall appear like vigorous forms of the average commercial (Mount Barker) type. The essential difference noted is that in the Mount Barker at the base of the calyx-tube of the floret there