

basic-slag plots both in weight and clover content. It was noticed throughout the past season that the growth of clover in the Nauru plots had improved considerably, and at time of cutting no difference was noticeable in the two sets of plots. In control plots 2, 4, 7, and 9, however, the absence of vigour in the growth of the clover-plants was discernible without any very close examination, and the botanical examination showed that in the controls (no-manure plots) generally the clovers were approximately 50 per cent. less than in the basic-slag and Nauru plots.

Table 3.—*Botanical Analysis.*

Subdivisions and Plots.	Grasses.	Clovers.	Weeds.	Subdivisions and Plots.	Grasses.	Clovers.	Weeds.
	Per Cent.	Per Cent.	Per Cent.		Per Cent.	Per Cent.	Per Cent.
A, 1, 3, 5	76.75	16.00	7.25	B, 6, 8, 10	75.70	17.20	7.10
B, 1, 3, 5	75.24	17.81	6.95	C, 6, 8, 10	78.50	12.40	9.10
C, 1, 3, 5	78.80	12.25	8.95	D, 6, 8, 10	75.85	15.15	8.00
D, 1, 3, 5	75.85	16.00	8.15	E, 6, 8, 10	77.01	14.09	8.90
E, 1, 3, 5	76.88	15.20	7.92	C, 2, 4, 7, 9	80.71	9.88	9.41
A, 6, 8, 10	75.75	16.25	8.00				

In previous reports it has been mentioned that the clover content of the pasturage from the burnt-lime plots was not so great as that from the carbonate-of-lime plots. The average clover content this season, as ascertained by analysis, is as follows:—

	Carbonate of Lime. Per Cent.	Burnt Lime. Per Cent.
Basic slag	16.90	15.60
Nauru phosphate	16.72	14.62

When dry weights were compared with green weights it was found that the loss amounted to 34 per cent. in the basic-slag and Nauru plots, while in subdivision C, plots 2, 4, 7, and 9, where neither lime nor phosphate had been applied, the loss in drying amounted to almost 45 per cent. The growth on these plots was not so far advanced as in the other plots, and the greater loss in drying can no doubt be put down to the immature condition of the herbage at time of cutting.

Four years' results are now available from the manurial experiments conducted on Block 3. In the first and second seasons good results were obtained from the use of basic slag, with negligible results from Nauru phosphate. In the third season there was an appreciable improvement generally in the condition of the Nauru plots, and, as will be seen by this report, the Nauru plots have shown a most marked improvement in the fourth year. Thus the indications are that under Southland conditions finely ground Nauru rock phosphate may be considered an efficient factor in pasture-improvement.

Fireblight Regulations.—Amending regulations under the Fireblight Act, 1922, were gazetted on 12th January, and took effect as from that date. They make certain alterations regarding the commercial fruitgrowing districts—Thames and Whangarei in particular.