LITTORAL AND OTHER SOILS .- MECHANICAL ANALYSES. (Results are percentages on air-dried soil.)

	Description of Soil. (Classification of United States Department of Agriculture modified.)		Analysis of "Fine Earth" passing 2 mm. Sieve.							
Lab. No.			Fine Gravel.	Coarse Sand.	Fine Sand.	Silt.	Fine Silt.	Clay.	Moisture and Loss on Ignition.	Stones and Gravel.
O 809	Fine sandy loam		Nil	5.6	28.7	15.4	20.6	13.0	16.8	Nil.
O 810	Sandy loam	2.5	11	13.8	47.6	8.9	12.4	9.0	8.6	99
0 816	Coarse sandy soil	4.4	24.4	61.9	3.0	2.2	1.9	0.5	5.8	22
0 817	,,		35.4	40.2	5.6	5.7	4.7	1.7	7.4	22
M 636	Fine sandy loam		Nil	3.7	23.9	24.6	16.9	10.9	17.3	>>
M 651	Clay loam		33	1.0	2.1	22.8	27·I	30.3	17.1	11
M 652	Fine sandy loam	**	13	0.7	27.6	40.2	12.1	10.1	7.9	33
R 58	Medium sandy silt		3.4	24.9	14.6	14.6	10.2	2.8	29.8	11
R 60	Fine sandy silt	**	1.2	14.2	22.3	24.3	9.0	1.2	25.9	:27
P1245-6	Not analysed.									
P 399	Sandy loam		0.4	20.0	40.5	11.6	10.0	II.I	6.0	7.0
P 400	Fine sandy silt		0.3	11.4	35.5	23.2	15.2	5.6	9.1	Trace
P 401	Fine sandy loam		0.1	7.5	36.7	18.9	14.2	15.8	6·1	1.0
P 402	,,		0.1	9.3	26.4	23.7	19.8	10.0	10.3	1.0
P 973	Fine sandy silt		Nil	2.8	44.9	24.7	7.1	4.I	17.1	Nil.
P 974	Fine sandy loam		12	2.7	10.3	26.0	16.7	8.7	35.1	19
P 272	Fine sandy silt		0.2	8.5	25.7	25.8	15.8	2.6	21.6	34.4
P 273	"		0.1	10.4	24.9	28.6	15.9	4.1	16.6	2.6
P 341	Not analysed.									
M 362	Silt loam	44	0.2	7.1	18.6	34.1	8.2	4.0	27.2	Nil.
759	Fine sandy silt		Nil	0.2	26.8	37.3	12.4	6.6	16.3	- 11
0 714	Fine sandy loam		>>	1.7	31.7	28.9	10.2	11.8	15.4	Trace
0 715	17		0.1	5.0	33.8	29.8	12.5	8.4	11.3	2.5
0 716	13		Nil	1.9	31.3	34.3	11.5	11.0	10.6	77

PUWERA AND ALBANY EXPERIMENTAL AREAS.

NOTES ON OPERATIONS, SEASON 1922-23.

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THE issues of the *Journal* for May, 1921, and December, 1922, contained accounts of the operations at the Puwera and Albany gumland experimental areas. For details of cultivation and cropping those interested should refer to these reports. It may be repeated that Puwera is situated some eight miles from Whangarei, while Albany is near Auckland. The same general aim has been pursued on both areas—namely, the investigation of the most suitable grass-pasture for the gum lands represented, and the selection and growing of fodder crops to keep up adequate supplies of feed chiefly for autumn and winter, when pastures are not producing sufficient feed for the stock.

PASTURES.

The area under pasture at Puwera has been increased during the year. Field 3A (4 acres) was put down in permanent pasture last autumn. Half of the field, nearest the main road, was sown on 17th April with the following mixture: Perennial rye-grass (Poverty Bay), 8 lb.; Italian rye-grass, 3 lb.; cocksfoot, 12 lb.; crested dogstail, 2 lb.; paspalum, 6 lb.; white clover, 2 lb.; cow-grass (colonial), 3 lb.; chicory, $\frac{1}{2}$ lb.; total, $36\frac{1}{2}$ lb. per acre. remainder of the field was sown on 30th April with the same mixture, except that the cocksfoot was cut out and the paspalum increased to 8 lb.