

KAJAPO SERIES.—TYPICAL ANALYSIS.

Sample No.	Depth.	Available		pH.	Texture.
		Phosphate.	Potash.		
1484	In. 0-6	0.046	..	5.2	Clay.

The Turamoe or peat series covers a fairly large area in the southern portion of the plains. This series, like Paki Paki, has a pumice subsoil and is divided into types according to the depth of peat. The moisture-holding capacity is very low, this being probably due largely to lack of consolidation. Medium phosphate and potash figures are found while the pH is low.

TURAMOE SERIES.—TYPICAL ANALYSIS.

Sample No.	Depth.	Available		pH.	Texture.
		Phosphate.	Potash.		
2251	In. 0-6	0.031	0.018	4.8	Loamy peat.

The Farndon series does not cover a very large area and is of fairly recent origin, being deposited mainly by the Tutaekuri River. The soils are only moderately fertile, and where the texture is open dry out badly. Only medium phosphate figures are found, while the potash values vary. The pH values are invariably high and may be associated with a poorer growth of apples. Soluble salts may be high enough to affect growth adversely. Further data are necessary on this point.

FARNDON SERIES.—TYPICAL ANALYSIS.

Sample No.	Depth.	Available		pH.	Soluble Salts.	Texture.
		Phosphate.	Potash.			
	In.				Per Cent.	
1967 ..	0-6	0.016	0.014	8.3	0.083	Fine sand.
1968A ..	6-12	0.017	0.019	8.2	0.114	Fine sandy loam.
1968B ..	12-18	0.018	0.017	8.3	0.066	..

The Meeanee Series occurs in the north-eastern portion of the plains, and is derived from deposits of the Tutaekuri River. It lies at a very low elevation, being only a few feet above mean sea-level, and a large area until recently was subject to tidal influence. The soils are well supplied with phosphate and potash, but they are neutral to slightly alkaline in reaction and some of the sub-types have a high chloride or salt content which limits their use for agricultural purposes. On the saline types salt-tolerant plants should be grown, as difficulties of drainage may preclude the normal use of these soils for many years.

MEEANEE SERIES.—TYPICAL ANALYSIS.

Sample No.	Depth.	Available		pH.	Soluble Salts.	Texture.
		Phosphate.	Potash.			
	In.				Per Cent.	
1977 ..	0-6	0.046	0.061	7.2	0.801	Clay loam.
1978B ..	12-18	0.015	0.050	8.2	0.664	..

NORTH AUCKLAND SOIL SURVEY: PROGRESS REPORT.

By N. H. TAYLOR and C. F. SUTHERLAND.

During the 1937-38 season the soils of the south-western part of the Whangarei County and neighbouring areas in Hobson and Otamatea counties (an area of 600 square miles) were mapped in fair detail. Both the Whangarei and the Bay of Islands counties and parts of the adjoining counties of Mongonui, Whangaroa, Hokianga, Hobson, and Otamatea have now been covered by the soil survey. The total area surveyed is approximately 2,600 square miles.

During the year Mr. E. B. Glanville, of the Department of Agriculture, assisted in the work of relating farming problems to the soil types as mapped by the soil survey, and it is hoped that a full report of the work in the Whangarei County will shortly be published.

In co-operation with the Department of Health, work has been undertaken in relation to the health of children living on markedly different types of land. As cow's milk is the most important part of the child's diet produced locally, preliminary samples of milk have been collected for spectroscopic analysis in order to obtain some knowledge of the minor elements contained in milk ash.