SOIL AND PLANT TESTING IN NEW ZEALAND – THE PLAYERS, CLIENTS, METHODS AND ISSUES

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There is evidence of soil analysis being carried out in the 1850's in New Zealand but it was in the 1860's that the Government Analyst in the Colonial Laboratory is recorded as conducting analyses on 33 soils from throughout the country using water and acid extraction. In the twentieth century a strong tradition of soil and plant analysis developed around the MAF laboratories of Ruakura and Invermay, DSIR Soil Bureau and the Soil Science departments of Lincoln and Massey Universities.

Throughout the period 1930-1970, New Zealand invested heavily in publicly funded soil classification and soil fertility research. The relative smallness of the country and the close links between staff in all of the institutions (aided by organisations such as the Soil Science Society and Grasslands Association) meant that a unified set of methodologies was adopted for agronomic analyses. MAF took a lead role in this area while DSIR Soil Bureau developed methodologies for soil characterisation and classification with strong input by the Universities to both purposes.

In the modern era the Government has essentially withdrawn all funding support for soil fertility and soil classification studies. Private laboratories now provide the suite of analyses developed with Government funding in an earlier era, while CRI laboratories and Universities are mainly involved in analyses in support of research programmes.

This paper provides an overview of the status of soil and plant testing services in New Zealand, examines the methodology used and the effect of differences in this methodology. In addition it looks at the increasing emphasis on analyses for environmental monitoring and research into nutrient and carbon cycling.

Quality issues will be discussed as will an issue that threatens the uniformity of the soil and plant analysis scene in this country.