

B-19 Status of selected chemical characteristics of vegetable growing lands in the upcountry intermediate zone

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The agriculture in the upcountry areas is characterized by intensive cultivation of potato and vegetable crops throughout the year. Potato, cabbage, bean, tomato and radish etc., are the main crops which occupy a major part of the cropping sequence in this region. Unlike the general pattern of low fertilizer use in Sri Lanka, many farmers in this area use large amounts of poultry or cattle manure together with high rates of chemical fertilizers. This has resulted in the accumulation of high amounts of phosphorus and potassium in the soils of the region.

A total to 290 soil samples (0-15cm depth) were collected from the vegetable growing lands in the area and analyzed for phosphorus (Olsen's bicarbonate extraction) and potassium (NH_4OAC extraction). In addition, pH (1:1 H_2O) of the soils was measured.

Results indicated that of the samples collected, 25% had P up to 20 mg/kg, 7% had P between 20 and 30 mg/kg and 68% had P more than 20 mg/kg. Results further revealed that of the soil samples collected, 44% had K upto 160 mg/kg, 50% had K between 160-400 mg/kg and 6% had K more than 400 mg/kg

In addition, results showed that, 8% samples had pH below 4, 66% samples had pH between 4-5, 22% samples had pH between 5-6 and 4% samples had pH between 6-7.