B-57: Assessment of potentially available nitrogen in Sri Lankan soils

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An evaluation of chemical extraction methods for assessing potentially available nitrogen in Sri lankan soils was carried out. The potentially available nitrogen extracted by some selected chemical methods, from 17 soils was compared with the nitrogen produced by aerobic and anaerobic incubations using simple correlation. The selected chemical methods were: 2M potassium chloride, acidic potassium permanganate, phosphate borate buffer, 0.01M sodium bicarbonate, alkaline potassium permanganate extractions and 0.01M sodium bicarbonate extraction UV method.

Nitrogen extracted by the chemical methods except 0.01M sodium bicarbonate and alkaline potassium permanganate methods showed a significant correlation with the nitrogen produced by aerobic incubation. Acidic potassium permanganate method showed a significant correlation with both aerobic and anaerobic incubation results.

The acidic potassium permanganate method is a suitable method to extract potentially available nitrogen from Sri Lankan soils.