ppm K. This explains the higher critical limits obtained in the case of heavy alluvial black soils compared to light soils, though the yield of K from non-exchangeable sources was high in the heavy alluvial black soils.

P AVAILABILITY IN SOILS

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Phosphorus in tropical soils: assessing deficiency levels and phosphorus requirements

P. ROCHE AND L. GRIERE
Institut Mondial du Phosphate, 8, rue de Penthièvre-75008, Paris, France

At the Edmonton Congress, conclusions for IMPHOS' study were presented on 168 soil samples. The complete study dealing with 500 samples can be summarized as follows:

Pot trials are a good approach to phosphorus deficiency.
P deficiency is often quite serious since 65 per cent of the soil samples under study were seriously, or clearly, deficient.
Proposals have been put forward for the various FAO/UNESCO pedological groups with respect to the best assessment methods and P-deficiency thresholds below which response to P applications is great.
A simple method appears among these proposals for assessing P deficiency: 48-hour P desorption. Assessment of the extent of deficiency in the soils under study was as precise as with the L value.
Experimental results in fields allow for defining five groups of soils with clearly distinct responses to P and for selecting simple criteria for classifying any soil within one of the five groups.
The study of P desorption in soils previously enriched with increasing amounts of P led to graph proposal for speedy calculations of the P levels required for correcting deficiency.

A soil phosphorus atlas for Rwanda

P. VANDER ZAAAG¹ AND R.L. FOX²
1. International Potato Centre, Rubengeri, Rwanda; 2. University of Hawaii, Honolulu, USA

Phosphate sorption curves, based on surface (0–15 cm) and subsurface (30–45 cm) soil materials from 121 sites in Rwanda, East Africa, were used to determine quantities of P required to establish two levels of P in representative soils. The two levels of P were 0.2 μg/ml, used as a standard concentration for comparing
Abstracts

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