



Original Research Article

<https://doi.org/10.20546/ijcmas.2017.604.229>

Phosphorus Movement and Vertical Distribution in Four Soil Orders of India: Column Leaching Experiment

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ABSTRACT

Keywords

Reactive phosphorus, Vertisol, Inceptisol, Alfisol, Ultisol, Phosphorus leaching.

Article Info

Accepted:
15 March 2017
Available Online:
10 April 2017

A soil column leaching experiment was conducted with different levels of P application to P accumulation and vertical distribution of phosphorus in some major soil orders (vertisol, inceptisol, alfisol and ultisol) of India. The result showed that soluble reactive P (RP) content in four soils increased with P application rates and decreased with number of leaching events. Phosphorus leaching mainly occurred during the initial five leaching events accounting to 55-60% of total P leached over whole period. The Olsen and bray P content in all the four soils were higher beneath 0-10cm depth and increased with P application and decreased in untreated column section. The study showed that inceptisol have higher potential for P leaching and that is associated with soil texture and P sorption capacity of the soil.