

## **Assessment of standard rapid lime requirement methods on acid soils of Trinidad**

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There are no established lime requirement (LR) tests for acid soils of Trinidad and probably none at all for the Caricom region. In the USA for example buffer methods have been developed specifically for low activity- and another for high activity-clay soils and are widely used and are very simple allowing for many soils to be assessed by a laboratory at any given time. Traditionally, in Trinidad, the most common LR test has been one based on developing a titration curve (TC) with incremental additions of lime water. However, this and none of the buffer methods have been properly evaluated to ascertain their accuracy in determining liming needs for soils in Trinidad. A study was therefore conducted on twelve acid soils of agricultural importance in Trinidad to compare the LR determined by two buffer methods and two TC procedures. These were compared with two incubation methods which served as control standards. The study also looked at changes in  $[Al^{3+}]$  and some nutrient heavy metals in the longer-term incubation procedure spanning a couple months to simulate the extent of hydrolysis that may occur after liming in the field. The findings of this study will be provided in the paper.

**Palabras Claves/Key Words:** acid soils, liming, lime requirement, titration curve, buffer methods