CHEMICAL AND PHYSICAL PROPERTIES OF ACID TROPICAL SOILS

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ABSTRACT

A major constraint to surmount in rice production in the tropics is collecting and dissemination of the chemical, mineralogical, and physical properties of acid soils. The soils used by many research facilities lack standard soil characterization data. For these soils which have been characterized data is not readily available to the international community. Soil Management Support Services (SMSS) through its World Benchmark Soils Project (WBSP) has collected and characterized over 700 soil profiles from the tropics and intertropical areas. A large percentage of these soils are considered to be @acid soils@ and occur in rice growing areas. The data from these soils can be used to supplement lacking data. Some of the measured and evaluated properties were particle-size, bulk density, organic carbon, exchange capacity, exchangeable cations, base saturation, clay and sand mineralogy, net positive and negative charges. and pH. Relationships between these properties were developed and will be discussed.