

Nutrients Dynamics in Cocoa Soils, Leaf and Beans in Ondo State, Nigeria

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ABSTRACT Soil samples, young but matured foliage and Cocoa beans were collected from the farms of some Cocoa farmers across Idanre, Owena and Bamikemo in Ondo State. Samples were prepared according to standard procedure and analyzed chemically in the laboratory to determine the nutrient status of the samples. Result showed that the soils were deficient in Magnesium and Phosphorus. Foliar samples had some of the vital nutrients below critical level. Potassium was found limiting in the foliage which is at variance with K content in the soil. The findings showed that, old cocoa soils in the studied area were depleting in some vital soil nutrients which is a consequence of continuous mining of nutrient from the soil by cocoa without replacement. Result also showed that, leaf litter may not be sufficient to replace the lost nutrient. However, to correct the nutrient deficiency in the investigated soils for optimal Cocoa yield and quality, farmers within the area investigated need to adopt the use of inorganic fertilizer which must be applied according to recommendation.