

Evaluation of the Agronomic Characteristics of 16 Varieties of Sweet Potato (*Ipomea batatas*) Grown in the Agro-ecological Conditions of Southern Benin

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ABSTRACT The aim of this study was to analyse the yield and agronomic traits of 16 sweet potato varieties in Benin. The experiment was done in a randomized complete block design with three replicates where each variety is a treatment. Data were collected on both the qualitative and quantitative characters. Analysis of Variance and General Linear Model metrics was done to highlight the variability in the varieties. The analyses revealed an inter-cultivar variability in the shape and size of leaves, colour of skin and flesh of the tubers. Also, intra-cultivar variability in lengths of the internodes, the petiole of the leaf, stem and number of leaves was observed. China variety (440029) has highest performance with 24 t/ha above average Africa tuber yields (10 and 14 t/ha). The existence of such variability could be a starting point for genetic improvement of sweet potato in Benin.