



Agro morphological variability of cassava varieties cultivated in five regions of Côte d'Ivoire based on quantitative traits

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ABSTRACT

Objective: The objective of this study was to assess the morphological variability of cassava accessions from five regions of Côte d'Ivoire based on quantitative criteria.

Methodology and Results: The material used was composed of cuttings from 200 cassava accessions collected in five agro-ecological zones of Côte d'Ivoire. The experimental set-up was a complete block randomised to one factor (accessions), and established on a fallow plot in the Haut-Sassandra region (Daloa/Gosea). Fourteen quantitative descriptors were measured at different stages of plant development. The data collected were subjected to statistical tests. The principal component analysis applied to the 200 accessions showed a variability of 38.13% revealed by the first two axis. The dendrogram produced by the UPGMA method highlighted three groups of accessions based on the 12 characters. These three groups were generally constituted independently of the agro-ecological zones of collection.

Conclusion and Application of results: At the end of this study, it should be noted that the 200 cassava accessions collected in the five agro-ecological zones of Côte d'Ivoire are characterised by a strong morphological variability. This variability was structured into three distinct agro-morphological groups with the height of the first branching and the number of branches of the plant as distinctive characters. The genetic variability observed between groups constituted by the accessions is important for varietal selection work.

Key words: Agronomical, cassava, morphological, variability