

CLASSIFYING GENOTYPES USING MOLECULAR MARKERS: A BILOT METHODOLOGY APPROACH*

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In the last few years the use of molecular techniques has improved the study of the genetic diversity of crops and the development of genomic and bioinformatics tools and has thus increased our knowledge of genome structure and gene function. Nevertheless, in most of the papers published the classification of genotypes using molecular markers has continued to use classical clustering methods. In this paper we review these classification techniques and compare them with Biplot methodology. We review such aspects as: number and quality of groups; discriminatory capacity of the molecular markers; and its quality of representation. We report the genetic diversity of Venezuelan cassava collection using dominant and codominant DNA markers. We show how this approach using Biplot methodology generates a quality grouping and in addition facilitates genetic interpretation.