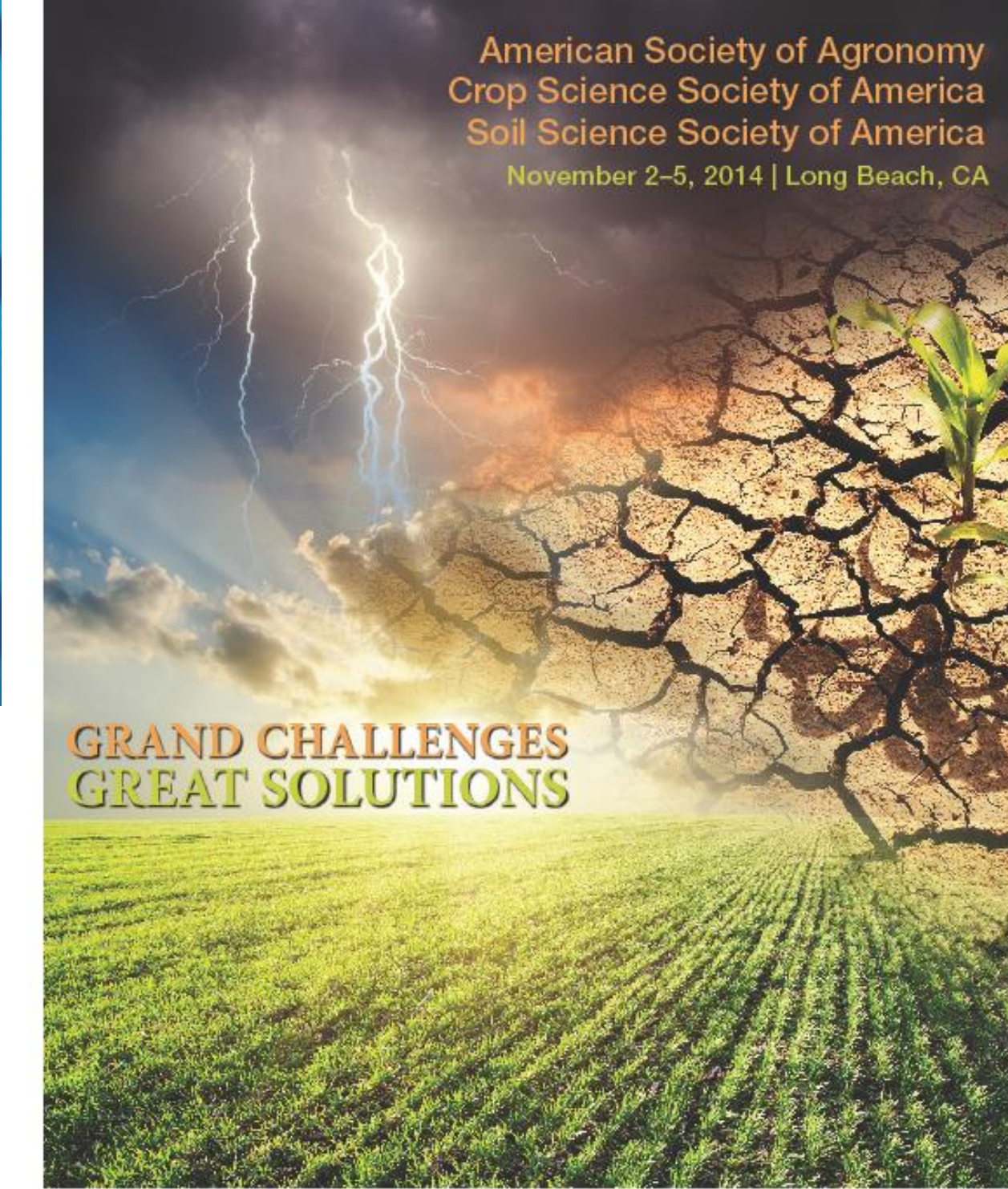


Genetic diversity of sweet potatoes collection from Vale do Ribeira, Brazil.

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INTRODUCTION

The maintenance of genetic variability of a culture is important due to economic aspects, in the case of agricultural production, social, ensuring farmers and population access of this diversity, it touches on issues such as food security, cultural preservation, and, keeping people in the field. Given the above, the present study objective was analyze the genetic diversity through character aerial part of sweet potatoes clones at traditional fields collect in the Vale do Ribeira, São Paulo State, Brazil

MATERIAL AND METHODS

The study was carried out at Sao Paulo State University, in the county of Registro. Collections of sweet potato clones were performed at region, in 2012 and 2013. The access were maintained at greenhouse in pots of 20 liters with substrate composed 1/3 soil, 1/3 sand and 1/3 compost organic. Was used the morphological characterization methodology. Thirteen characteristics of aerial part were evaluated. Was estimated genetic divergence (groups of genetic similarity) by multivariate analysis, using the principal components analysis, and genotypes were grouped by 'Nearest Neighbor' method.

RESULTS

The hierarchical 'nearest neighbor' method enabled the formation of six groups considering their genetic proximity. The characteristics that most contributed to the genetic divergence were the type of leaf lobe (16.26%), pigmentation of the midrib (15.96%) and the predominant branches color (13.75%). The least divergence were the number of leaf lobes (2.22%), leaf size (2.91%) and the general profile of the sheet (2.95%). Given the above explanation, it concluded that there is genetic variability in the sweet potato population analyzed. The genetic similarity between access shall be considered in future studies with hybridization.