

THE BRAZILIAN CORE COLLECTION OF CASSAVA

CORDEIRO, C. M. T.; ABADIE, T.; FUKUDA, W. M. G. ; BARRETO, J. F.; BURLE, M. L.; CARDOSO, E. R.; CAVALCANTI, J.; COSTA, I. R. S.; FIALHO, J. F.; MAGALHÃES, J. R. e MARSCHALEK, R.

The Germplasm Collections size has become an important limitation for their use in plant breeding programs. To overcome this limitation the Core Collection concept has been proposed. A **Core Collection** consists of a set of accessions selected to represent the genetic diversity of the total collection with minimum repetitiveness. This insures the conservation of maximum genetic variation, allowing rapid evaluation of germplasm, and better access to the total collection. The Brazilian Cassava Germplasm Collection is the largest national collection, and contains strategic genetic variation for the development of breeding programs worldwide. It consists of approximately 4100 accessions conserved in five regional Active Germplasm Banks. To develop the Core Collection a hierarquical stratification was used. Two criteria were used for the stratification of the accessions: category and origin. According to category the accessions were classified as landraces or improved materials. Within the landraces stratum, accessions were classified according to ecogeographical origin using the Geographic Information System. The selection of the accessions of the Core, was done trying to represent the ecological diversity within each ecogeographic zone, and incorporating the knowledge and experience of breeders and curators. This Core Collection will be a logical and efficient starting point for studying the total Collection using biotechnological tools.