

Overview of African Traditional Vegetables Germplasm Collection, Characterization and Conservation in Tanzania

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Abstract

A study on African Traditional Vegetables (ATV) germplasm collection, characterization and conservation was carried out in Tanzania at TARI–Tengeru (formerly HORTI Tengereu) from April 1999 to 2003, with the purpose of broadening genetic base from which plant breeders can obtain desirable genotypes found among landraces and wild plants. The objectives of the study were (i) To collect Germplasm and Characterize (ii) To conserve and maintain the collected Germplasm (iii) To stimulate use of the collected germplasm (iv) Documentation of the collected species The collection mission targeted the highly potential vegetables, the preliminary results indicated the accessions assembled were 350 of seed, leafy and fruit African Traditional Vegetables of 15 species. Seed collected were multiplied, characterized using a standard set of descriptors developed by World Vegetable Center (AVRDC). Accessions with potentials for promotion and domestication were identified. A high level of variability was observed among the accessions collected. From this study, results showed that *Amaranthus blitum*, *Cleome gynandra* (purple & green), *Corchorus olitorius* and *Solanum scabrum* (52) were recommended for domestication. African Traditional Vegetables appear to be very important in the food system given their role in nutritional, medicinal, economical values and the diversification of the agricultural environment. From this study we are recommending that a concerted effort on domestication of ATV should be emphasized given their role in the food system in the rural and urban community of Tanzania.

Keywords: Germplasm Collection, Characterization, African Traditional Vegetables, Conservation.