

FARMER MANAGEMENT OF *MUSA* DIVERSITY IN THE GREAT LAKES REGION OF EAST AFRICA

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Cultivation of *Musa* in the great lakes region of East Africa is an ancient tradition. This is demonstrated by wide range of varieties maintained and the different cultural practices followed by farmers in the region. Complex mixtures of cultivars are grown in perennial plantations and these are used to fulfill the farm family's needs in terms of food security, income and cultural demands. The cultivar proportions maintained depend on the value and potential of each cultivar in relation to on-farm use and income generation. However, diversity on-farm also depends on the farmers' success in integrating and utilizing the necessary cultural/traditional management practices in maintaining a perennial plantation. An understanding of farmers' traditional management practices can shed more light on the factors which affect diversity on-farm and hence assist in developing on-farm conservation strategies.

A study was carried out to determine farmer management practices and investigate the influence of these on cultivar diversity on-farm. 135 farmers were selected from 4 sites, 2 in Tanzania and 2 in Uganda. Two of the sites were from higher altitude areas (>1500 meter above sea level) and two were from a lower altitude area (< 1300 meters above sea level). Informal participatory methods were used to obtain information from farmers about the management of the crop. These included group discussions and individual interviews with a questionnaire and a checklist. The questions covered the entire crop cycle, from the selection of planting materials to the utilization of the crop and its products. A correlation analysis was carried out to see how factors related with each other and with cultivar diversity. The criteria used by farmers to select cultivars were also investigated and compared across sites. Results showed that 39 cultivars are widely cultivated across the region and that their distribution and proportion correlated with the major farmer cultivar selection criteria. Across all sites, the most important factors identified by farmers for selecting varieties were: bunch size, palatability, period of maturity and resistance to pests and diseases. The disappearance of cultivars appears to be linked most closely with pest and disease attack, declining soil fertility and the marketability of the variety. Results indicated that, over time, cultivars have been conserved on-farm mainly through the process of planting material exchange between farmers. In addition the study identified areas of farmer management that will need to be strengthened in order to assist farmers to sustainably conserve their *Musa* diversity.

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