Application of consumer preference and sensory evaluation to sweetpotato research in East Africa

Tomlins K.I.1, Van Oirschot Q.E.A.1, Rwiza E.2, Amour R.2, Ngendello T.2, Kapinga R.3, Rees D.1 and Westby A.1

1Natural Resources Institute, University of Greenwich at Medway, Central Avenue, Chatham Maritime, Kent, ME4 4TB, United Kingdom
2Lake Zone Agricultural Research and Development Institute, Ukiriguru, P.O. Box 1433, Mwanza, Tanzania
3International Potato Center, P.O.B 22274, Kampala, Uganda

Abstract. Sweetpotato is a major staple food and income source in several regions of Tanzania and other countries of sub-Saharan Africa. Research, funded by DFID Crop Post Harvest Programme, has sought to expand the potential for introducing improved cultivars, extend the storability of sweetpotato at the farm and prolong the shelf-life during marketing. Consumer preference and sensory evaluation can play an important role in these research projects and has been applied at the rural village level. This paper explores the sensory and consumer approaches developed and applied and outlines some of the statistical tools used to analyse and interpret the results. For example, in cultivar selection, sensory panels and consumer preference studies have been used to investigate regional and seasonal variations in the preference and sensory characteristics of sweetpotato cultivars. Models were developed to relate sensory attributes used by a trained panel to consumer preference. In other studies, simple techniques were developed for use by farmers so that sweetpotato could be evaluated under field conditions. Implications and approaches for future research are discussed.