



Deutscher Tropentag, October 9-11, 2002, Witzenhausen
“Challenges to Organic Farming and Sustainable Land Use
in the Tropics and Subtropics”

**Local Perspectives on Legume Based Technologies: a Holistic
Approach to Target and to Promote the Utilisation of Herbaceous
Legumes in the Derived and Northern Guinea Savannahs of West
Africa**

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Abstract

Two “baskets” of selected legume options with the potential to improve resource management while providing food and livestock fodder, were introduced in four representative villages in the Derived (DS) and the Northern Guinea Savannahs (NGS) for participatory testing and evaluation. The aim of this participatory investigation was to assess farmers’ views of the suitability of the introduced legume options to contribute to their livelihoods and to identify species favoured in each environment as well as the intervening driving and inhibiting forces. Additionally, the knowledge of generic situational factors influencing legume adoption will help to appropriately target the right legumes for the right environment, or to develop an appropriate message to suit farmers’ criteria and perceptions. Assuming that farmers’ needs and perceptions would vary both according to biophysical and socio-economic factors such as human/livestock population density and market access, the DS and the NGS have been systematically divided into domains representing different intensification levels within which the research villages have been selected. Results of field discussions and constraint analyses at village level were used to design the basket of legume options as well as the emphasis for the message to be conveyed during introductory workshops. Throughout this process farmers’ self selection occurred and seeds were distributed according to farmers’ requests of the species they wanted to evaluate. The results presented in this paper were obtained during different phases of the evaluation period using workshops, field discussions and field days as collective evaluation techniques which were complemented by a semi-structured survey including matrix scoring and general ranking as participatory tools. The outputs show a contrast in the farmers’ acceptability behaviour with respect to the legumes between the NGS and the DS. Furthermore they indicate driving forces likely to improve farmers’ attitude towards legume based technologies and suggest further approaches that may contribute to the sustainability of resource use in West Africa.

Keywords: Action research, herbaceous legumes, participatory evaluation, savannah