



Tropentag, October 5-7, 2011, Bonn

“Development on the margin”

## Multipurpose Tree Species used by Small Farmers in the Region Ucayali, Peruvian Amazon

LUKAS HUML, BOHDAN LOJKA

*Czech University of Life Sciences Prague, Dept. of Crop Sciences and Agroforestry in Tropics and Sub-tropics, Czech Republic*

### Abstract

Trees provide a range of significant products and services to rural and urban people. An alternative to the traditional slash-and-burn agriculture, which plays a crucial role in deforestation of the Peruvian Amazon, is known as agroforestry, a sustainable land use system. Before carrying out extensive agroforestry programs, it can be necessary to make an assessment of preferred and useful multipurpose tree species. This step is essential for further research such as revealing of species genetic improvement potential, leading to more efficient utilisation of genetic resources. Primary objectives of this study were to assess tree species preferred by small farmers and compare results with a previous study of Villachica (1995) to see if preferences around Pucallpa city have changed. The methodology was based on the process developed by ICRAF and ISNAR with modifications to the study conditions. In total, 64 farmers were surveyed by semi-structural interviews within four areas of Ucayali region. They listed 77 local species names. Among top ranking native ones were: *Swietenia macrophylla*, *Inga edulis*, *Theobroma cacao*, *Cedrela odorata*, *Guazuma crinita*, *Calycophyllum spruceanum*, *Mauritia flexuosa* and *Croton draconoides*. From the results, it is possible to observe that preferences among farmers have changed quite significantly over the last 15 years. Respondents mentioned only 15 introduced species which proves an important role of native trees within the region. According to the increase in fruit species' preferences, it seems that our efforts should aim at the domestication and improvement of native fruit trees, as probably the most promising option for the small farmers.

**Keywords:** Agroforestry, preferences assessment, priority trees, species improvement, sustainable development