Use and Socio-Economic Value of Wild Edible Plants by the Turumbu in the Tshopo District, DR Congo

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Abstract

The Turumbu (ca. 10,000 individuals) live in the Isangi territory, District Tshopo, near Kisangani, DR Congo. Part of their territory is occupied by the Yangambi forest reserve. During the last decades of war and civil strife with difficult access to the city of Kisangani, the Turumbu were obliged to secure their livelihoods from the tropical rainforest.

Ethnobotanical research was carried out in July–August 2006 in 1 village (Yalungu, 92 km west from Kisangani) and August 2007 in 2 villages (Yoseko at 30 km and Yasekwe at 64 km west from Kisangani). All not cultivated plants used for consumption (fruits, leaves, tubers, roots, bark, etc.) were inventoried. Plants were collected in a reference herbarium and information about uses recorded. To determine their socio-economic value, household interviews were held in 30 households randomly chosen from each village. In addition, a market study was started (September 2007–August 2008) in Kisangani to investigate price fluctuations and quantities of Wild Edible Plants (WEPs) sold.

In total, 71 WEP species in 38 families and 60 genera, were collected in the all 3 villages. 25 WEPs were known in 3 villages, 12 WEPs in 2 villages and 34 only in 1 village. In addition, 15 ethnospecies in 6 families (6 genera) were only identified onto genus level; 1 ethnospecies onto family level and 9 ethnospecies could not be identified.

On average, households regularly consume 32 WEPs. Selling WEPs is good for 14.7% of the cash income of rural households. Fourteen species can also be found on the different Kisangani markets. Most WEPs constitute an important food source in difficult periods (e.g. Dioscorea spp.), some others are becoming more and more a culinary delicacy (e.g. Megaphrynium macrostachyum) or an interesting source of income (e.g. Gnetum africanaum). A selection of plants will be made for further study and domestication with local farmer groups for income diversification and better food security.

Keywords: Domestication, DR Congo, ethnobotany, wild edible plants

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