



Tropentag, September 14-16, 2010, Zurich

“World Food System —
A Contribution from Europe”

Ethnobotanical and Ethnoecological Knowledge of Natural Resource Use and Management: A Case of Hani People from SW China

ABDOLBASET GHORBANI, JOACHIM SAUERBORN, GERHARD LANGENBERGER

University of Hohenheim, Dept. of Plant Production and Agroecology in the Tropics and Subtropics, Germany

Abstract

Nabanhe National Nature Reserve (NNNR) with total area of 266.6 km² located in Xishuangbanna Dai Autonomous Prefecture, SW China is rich in biological and cultural diversity. Plant diversity includes 1954 species of vascular plants, 896 genera and 50 families, many of them being endemic to the area. NNNR is topographically mountainous especially in its western part and more than 55% of the total area is above 1000 m asl. With exception of Han Chinese, five ethnic minority groups are living in NNNR including Dai, Lahu, Bulang, Yi and Hani. Hani are living in 7 villages in highlands of the area. Ethnobotanical survey was conducted to document and analyse plant knowledge of Hani. Data collection was done through conducting freelisting interviews, semi-structured interviews, field walks and botanical sample collections. Botanical samples were identified scientifically and cultural importance of useful plants has been calculated. A total of 143 species of wild food and 199 medicinal plants are used by Hani in NNNR. Most culturally important food plants for Hani are *Callipteris esculenta* (Retz.) J. Sm. (Salient Index: 0.509), *Oenanthe javanica* (Bl.) L. (0.431), *Solanum americanum* Mill. (0.381) and *Musa acuminata* Colla. (0.356). Most salient medicinal plants include *Dendrobium crepidatum* Lindl. ex Paxt. (0.41), *Aristolochia* sp. (0.306), *Microstegium ciliatum* (Trin.) A. Camus (0.129), *Eupatorium coelestinum* L. (0.119) and *Litsea martabanica* (Kurz) Hook. F. (0.116). Used plants were categorised based on habitats and collection sites. The results show that most of the food species are collected from farm edges, road sides or stream banks near rice fields whereas most of the medicinal plants are collected from collective or secondary forest. The presented data could be used in land use planning and management as well as sustainable harvest planning in the area.

Keywords: Ethnobotany, ethnoecology, Hani people, wild medicinal and food plants