

Traditional Knowledge on Living Fences in Andean Linear Plantations

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Abstract : Linear plantations are a common practice in several countries as living fences (LF) delimiting agroecosystems. They are composed of multipurpose perennial woods that provide assets, protection, and supply services. However, not much is known in some traditional communities like the Andean region, including the species composition and the social and ecological benefits of the species used. In the High Andean Colombian region, LF seems to be very typical and diverse. This study aimed to analyze the traditional knowledge about LF systems, including the species composition and their uses in rural communities of Alto Casanare, Colombia. Field measurements, interviews, guided tours, and species sampling were carried out in order to describe traditional practices and the species used in the LF systems. The use values were estimated through the Coefficient of Importance of the Species (CIS). A total of 26 farms engage in LF practices, covering an area of 9283.3 m. In these systems, 30 species were identified, belonging to 23 families. *Alnus acuminata* was the specie with the highest CIS. The species presented multipurpose uses for both economic and ecological purposes. The transmission of knowledge (TEK) about the used species is very heterogeneous among the farmers. Many species used were not documented, with reciprocal gaps between the literature and traditional species uses. Exchanging this information would increase the species' versatility, the socioeconomic aspects of these communities, increases the agrobiodiversity and ecological services provided by LF. The description of the TEK on LF provides a better understanding of the relationship of these communities with the natural resources, pointing out creative approaches to achieve local environment conservation in these agroecosystems and promoting socioeconomic development.

Keywords : ethnobotany, living fences, traditional communities, agroecology

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