



Tropentag, September 17-19, 2014, Prague, Czech Republic

“Bridging the gap between increasing knowledge and decreasing resources”

Traditional Agroecosystems (SHAGRA) and New Approaches in Agriculture: The Case of an Indigenous Community in Pastos-Cumbal, Colombia

DEISY ROSERO

Indigenous Organization for Research ORII-Tierra y Vida, Crop Production Program, Colombia

Abstract

Indigenous communities have been preserving traditional crops as a perpetuity element, thus their cropping method is the base of natural resources conservation in a productive systems according to their perception and worldview. The Indigenous Reserve of Gran Cumbal is located in southwestern Colombia – Nariño. The purpose of this study was to determine the influence of “Shagra” system in sustainable agriculture, food security and *in situ* conservation of agrobiodiversity. The “Shagra” systems from two territories, Boyera and Cuaical, were characterised using system’s view. Species and varieties were identified taxonomically and their role in the agrosystem was recognised according to the use (cultivated or wild). It was observed that the traditional knowledge is used in the Shagra system by drawing an plant interaction and organisation that create a resilient system against negative effects of intensive agriculture. In this study, 79 species were found and clasified in two groups: group A- 44 cultivated species and group B,35 companion or wild species. In the cultivated species, we found that 58.7%were used as food, 28.3 % were medicinal and 13 % were magic-ritual. Of the companion or wild species, 42.2 % were used as forage, 28.9 % were medicinal, 20 % were tolerable and 8.9 % with other uses.Potato (*Solanum tuberosum* L.) had most of the diversity observed in several varieties, followed by oca (*Oxalis tuberosa* Mol.), quinoa (*Chenopodium quinoa* Wild.), olloco (*Ullucus tuberosus* Caldas) and maize (*Zea mays* L.). The Shagra system allows an appropriate interaction between technological intensity and receptivity; although food production is its main role, the presence of wild species confirms its role in biodiversity conservation.

Keywords: Agroecosystem, diversity, indígenous, shagra, traditional system