An ethnobotanical survey of medicinal plants used in Loja and Zamora-Chinchipe, Ecuador

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Abstract

This paper reports the results of an ethnobotanical survey on the uses of medicinal plants by inhabitants of two southern Ecuadorian provinces, namely, Loja and Zamora-Chinchipe. In this region, two surviving ethnic groups, the Saraguros and the Shuar, and the descendants of a now extinct culture, the Paltas, have been identified. The present study reports a total of 275 plant species, having 68 different therapeutical uses.

Keywords: Ethnobotanical survey; Medicinal plants; Saraguro; Shuar; Palta; Ecuador

1. Introduction

Since ancient times, several societies have resorted to nature, mainly to plants as medical and health sources. Today, a great percentage of the world population, in particular in developing countries, uses plants for facing primary needs of medical assistance.

According to the WHO (Roy Chaudhury, 1992; WHO, 1993), 80\% of the world population makes use of natural remedies and traditional medicines, and Ecuador is not an exception. At present, the country’s national sanitary system is malfunctioning and the difficult economical situation prevents a large part of the population from having access to common health practices.

Nowadays, Ecuador – located in Equatorial America – is considered one of the countries possessing the highest biodiversity in the world (Jorgensen and León-Yáñez, 1999), and where the local population maintains their ancestral traditions in the use of natural remedies (Naranjo and Escaleras, 1995).

In fact, ca. 30\% of the whole population belongs to different indigenous groups (Benítez and Garces, 1988), and ethnobotanical knowledge is still transmitted from generation to generation, especially by mouth.

This study was carried out in two southern provinces of Ecuador, namely Loja and Zamora-Chinchipe (Fig. 1).

Loja is crossed by the Andean mountain range that gives rise to a very irregular topography and it is the cause of a difficult access. Altitudes vary between 700 and 3700 m above sea level. The province shows a considerable variety of climates within its boundaries. Actually, a tropical dry climate prevails in the west region, whereas the central region has a subtropical humid climate, and the eastern region is Andean temperate.

Loja comprises a total area of 10.793 km\textsuperscript{2} and ca. 400,000 inhabitants. The province has abundant hydrographic resources, especially rivers, among which Puyango, Catamayo and Macará, the most important, flow into the Pacific catchment basin. Another large river, the Zamora, flows, instead, into the Amazon basin.

The province of Zamora-Chinchipe is located between the foothills of the Andes and Amazonian rainforests, and, like Loja, has an irregular topography. Zamora, Chinchipe and Nangaritza are the largest rivers, and all flow into the Amazon River. The vegetation is abundant, due to a temperate climate, which changes from humid to semi-humid. The province comprises a total area of 16.559 km\textsuperscript{2} and ca. 60,000 inhabitants.

Ethnologically, Loja is characterized by an extensive cross-breeding, a remarkable acculturation of the native inhabitants, the maintenance of a Caucasian race, and the existence of a few aboriginal races, in particular located in the Canton Saraguro in