Tropentag, September 17-19, 2018, Ghent

"Global food security and food safety:
The role of universities"

Ethnobotanical Study of Medicinal Plants Used in Papantla, Veracruz

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Abstract

Ethnomedicine is still used as primary health care resource by several indigenous communities and people who live in rural areas. In Mexico, most of the indigenous population live in rural areas (61.1 % in communities with less than 2,500 inhabitants).

The aim of this study was to record, analyse and identify the medical plant knowledge of the Totonaca ethnic group in Totonacapan region in the state of Veracruz, Mexico. The Totonacos descendants are keen consumers and have a historical background with traditional medicinal uses and are well-known for preserving a wide variety of plants.

In the present study, semi-structured interviews were performed with 85 informants aged between 18–85 years old (53 % male and 47 % female). Ethnomedicinal indexes were applied to analyse the collected data. A total of 102 medicinal plant species belonging to 94 genera and 52 families were documented. The families Asteraceae (111 UR) and Rutaceae (99 UR) have the highest number of species with eight plants each one and were the best-represented families in the study area. The highest informant consensus factor (ICF) was calculated for the autoimmune diseases (ICF=0.91) with a unique ailment of cancer. The highest number of use report (N=251) was determined for the diseases of the digestive and gastrointestinal system. The most culturally important species was *Hamelia patens* Jacq., obtaining the highest importance cultural index (CI) with 0.906 (77 UR), it presented the widest spectrum to treat problems followed by *Persea americana* Mill, with CI=0.682 (58UR) which is used to treat gastric problems.

The collected information represents a base of knowledge for future research in the ethnobotanical field in the state, and it will contribute to the understanding of proper usage of medicinal plants. This study proved that the knowledge on medicinal uses of plants is not strictly related to isolated communities. When knowledge is transformed in goods, culture, income and health it can be promoted through the demand of tourists that visit the place searching better options to treat their ailments.

Keywords: Ethnomedicine, indigenous communities, Totonacapan

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