



ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED IN HOLGUÍN, CUBA

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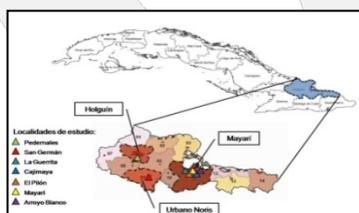
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1. INTRODUCTION

The World Health Organization (WHO) reports that about 65–80 percent of the world's inhabitant in emerging nations depends principally on plants for their primary health care. In Cuba, current traditional medicine is also the result of influences of Aborigines, Spaniards, Africans and Chinese. Few ethnobotanical studies have been carried out in some regions of Cuba, especially in the Eastern Region. **The present study is aimed to explore and report the ethnomedicinal knowledge of plants used by inhabitants of Holguín, Eastern Region, Cuba.**

2. METHODS

The study was conducted in 7 villages belonging to three municipalities of Holguín province: Mayarí, Urbano Noris and Holguín. The ethnomedicinal information was collected through interviews based on a semi-structured questionnaire. The collected data were analyzed through use value (UV), informant consensus factor (Fic) and fidelity level (FL).



3. RESULTS

- A total of **223 men** (33 %) and **443 women** (67 %) were interviewed through face-to-face interviews.
- In the study, **195 medicinal plants** species belonging to 70 families and distributed in 166 genera were documented. Those medicinal plants were used in the treatment of 152 ailments grouped into 17 categories.
- The principal diseases that are treated using the plants include **gastro-intestinal and liver problems** with 967 citations, **respiratory systems diseases** with 845 citations and **pathologies of the urinary system** with 470 citations.
- The part of the plant used with most frequently were **leaves (1632 citations)** followed by **aerial part**

(**807 citations**), fruits (337 citations), whole plant (293 citations) root (261 citations) and flower (215 citations).

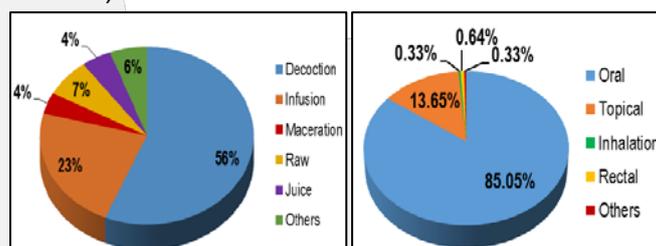


Figure 1. Preparation mode and routes of administration of medicinal preparations informed.

The **most commonly used species was *Lippia alba* (Mill.) N.E. Br. ex Britton & P. Wilson** with 157 use reports by 666 informants, giving the highest UV of 0.236. It was followed by *Annona muricata* L. (0.194) with 129 use reports, *Plantago mayor* L. (0.189) with 126, *Solanum americanum* Mill. (0.177) with 118 and *Cymbopogon citratus* (DC.) Stapf (0.137) with 91.

Of the reported plants, **19 species had FL levels of 100 %**, most of which were used in single ailment category for multiple informants. **Cancer and tumors had the highest Fic of 0.94**, with 67 use reports for 9 plant species.

The *Caesalpinia echinata* Lam. was invariably reported for de treatment of kidney infections; nevertheless, in Cuba there are not pharmacological studies to support the use of this plant in kidney infections.

4. CONCLUSIONS

This was the first ethnobotanical survey conducted in Holguín region, which will contribute to preserve valuable information of medicinal plants that may otherwise be lost to future generations. Further attention is necessary on plant species which are having high fidelity level and endemic species, which can be candidates to explore their phytochemical and pharmacological potential.