

# Ethnopharmacological Survey of Medicinal Plants Used in Traditional Medicine by the Communities of Mount Hermon, Lebanon

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## Abstract

**Ethnopharmacological relevance:** Medicinal plant species in Lebanon are experiencing severe genetic loss because of various environmental threats and recent growing global demand. Organized research and information on indigenous medicinal plants and knowledge have been very limited and little efforts have been invested to develop a complete inventory for native medicinal plants and associated traditional knowledge in the country. Recognised as a key biodiversity area of the Mediterranean Basin, Mount Hermon hosts important richness of medicinal plants that has been traditionally used in treatment of many ailments since generations. Novel knowledge gathered by the present investigation is important in preserving indigenous knowledge of Mount Hermon community and revitalizing traditional herbal medicines.

**Material and methods:** Ethnopharmacological information was collected by semi-structured interviews with 53 native informants (herbalists, traditional healers, midwives and local adult villagers) in 13 towns and villages surrounding Mount Hermon. The interviews were conducted through guided field visits and discussion groups whilst collecting plants specimens. Taxonomical identification of plant species was based on the determination keys of the “*New Flora of Lebanon and Syria*” and specimens were deposited at the herbarium of the Research Center for Environment and Development at Beirut Arab University.

**Results:** The results obtained indicate that 124 plant species of Mount flora are still used in traditional medicine by the local communities as an important source of primary health care and treatment of a wide range of different ailments. These species belonged to 42 families and 102 genera. *Compositae* (19 species), *Labiatae* (18 species), *Rosaceae* (11) and *Umbelliferae* (11) formed the dominant families. Consensus analysis revealed that respiratory system (0.94), gastrointestinal and renal systems (0.93), fever and genital diseases (0.92), blood ailments and diabetes (0.91) had the highest informants’ consensus.

**Conclusion:** This study documents for the first time the ethnopharmacological knowledge regarding part of the Lebanese flora in Mount Hermon. The perpetuity of this knowledge through successive generations can be used as an important tool for the future phytochemical, pharmacological, and toxicological studies, as well as conservation and management of medicinal plants as part of the local cultural heritage.

**Keywords:** Ethnopharmacology; Traditional; Medicinal; Plants; Mount; Hermon, Lebanon