Identification, preliminary phytochemical evaluation and ethnobotanical uses of selected plant flora of Mariwan

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Abstract:

Background and Purpose: Considering the diversity of climate and plant flora, nowadays we are witnessing growing progress in the cultivation and use of medicinal plants in our country. Study of plant flora of different regions, identifying major industrial and medicinal plants and phytochemical study of plants are appropriate solutions for scientific organization. The present study is aimed to collect, identify and evaluate preliminary phytochemical and ethnobotanical properties of the most important plants in Mariwan region.

Methods and Materials: Most prevalent and important plants of Mariwan were collected in 2013 and 2014. Voucher specimens were made, and the plants identified scientifically by a botanist. A selection of collected plants was subjected to preliminary phytochemical analysis for important secondary metabolites, while folklore and traditional uses of plants were recorded through interviews with local knowledgeable individuals.

Results: One hundred and seventy collected plant species were belonged to 41 families, among them the families of Papilionaceae, Compositae, Labiatae, and Umbelliferae had the largest ratio. Phytochemical analyses revealed the presence of tannins and flavonoids and the absence of anthraquinones and cardiac glycosides in most of the plants. Alkaloids and saponins were also found in some of the plants. Most important ethnobotanical uses of plants were medicinal applications including treatment of gastrointestinal, neurological and respiratory diseases and the use of plants as a condiment.

Conclusion: The results of the present study suggest a broad distribution of plant species, including valuable medicinal plants in the Mariwan region. More research in this respect can lead to herbal medicines' production or identification of important medicinal plants' secondary metabolites.

Keywords: Phytochemical, Plant flora, Mariwan, Ethnobotany, Medicinal Plants.

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