

Application of Medicinal Plants in the Treatment of Leishmaniasis

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Abstract

Leishmaniasis is one of the most important and common protozoan diseases in the world. More than 88 countries are infected with the parasite. In visceral leishmaniasis (kala-azar) the risk of mortality is particularly high in children. Also in cutaneous leishmaniasis, dermal lesions have severe economic and psychological consequences. One of the major challenges in leishmaniasis is the treatment and control of this disease. The purpose of this systematic review study was to introduce appropriate medicinal plants for the treatment of clinical forms of cutaneous and visceral leishmaniasis.

In this systematic review study, a series of research papers published during the last 13 years (2019-2006) on the use of medicinal plants in the treatment of leishmaniasis were collected by visiting reputable scientific databases including Web of Science, Elsevier, Google Scholar, PubMed, SID, Magiran and Irandoc were collected.

Based on the findings of 216 articles, it was found that the therapeutic effects of 79 medicinal plants have been evaluated for the treatment of leishmaniasis. Eight of these herbs were identified as the most effective and suitable combination for treatment of leishmaniasis: *Satureja hortensis*, *Nigella sataria*, *Zizyphusspina christi*, *Gossypium hirsatum*, *Olea europea*, *Arnebia eurchorma*, *Ceasalpinia gilliesii* and *Thymus migricus*

From the results of this study, it is concluded that medicinal plants, especially 8 identified herbs, may be more suitable alternatives for the treatment of leishmaniasis more effectively and with less side effects, in comparison with chemical compounds and drugs.

Biography

Mohammad Taghi Ahady is currently an Assistant Professor of Parasitology, Department of Biology, Ardabil Branch, Islamic Azad University, Ardabil, Iran. Originally he was a first class Masters & Doctorate in Biochemistry from Department of Biochemistry, University of Calcutta, India. He completed his Post Doctoral in Biochemistry from

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