

## Evaluation of Anti-Leishmanial Activity of Albaha Medicinal Plants against *Leishmania amazonensis*

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**Abstract :** Leishmaniasis (CL) is endemic in at least 82 countries and considered to be a major public-health problem (1). The annual incidence of CL is 1-1.5 million cases of which 90% occur in only seven countries: Afghanistan, Algeria, Brazil, Iran, Peru, Saudi Arabia and Syria (2). In Saudi Arabia, the disease was first described in 1973 by Moursy and Shoura (3). Currently, CL is common in the human population in different localities, including the Eastern Province of Saudi Arabia and in particular the Al-Hassa Oasis that is a known endemic area for CL (4). Five methanolic extracts obtained from *Achillea biebersteinii* (flower leaf), *Euphorbia antiquorum*, *Solanum incanum* (leaf and fruit extracts), collected from Albaha region and selected from ethno-botanical data, were screened for their anti-leishmanial activity against *Leishmania amazonensis* (6). The cytotoxic activity against normal peritoneal macrophages from normal BALB/c mice was also determined (6). The five extracts had IC50 values ranging from < 12.5 to 37.8 µg/ml against promastigotes. *Achillea biebersteinii* flower, *Euphorbia antiquorum*, *Solanum incanum* leaf extracts showed anti-leishmanial activities with IC50 between < 12.5 - 26.9µg/mL and acceptable selectivity indices of 8 - 5.

**Keywords :** plant extracts, Albaha, *Leishmania amazonensis*, Medicinal

**Conference Title :** ICABBBE 2015 : International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering

**Conference Location :** Vancouver, Canada

**Conference Dates :** August 06-07, 2015