



BP-05: In vitro biological activity and molecular docking study of *Ammodaucus leucotrichus*

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Abstract

One plant species from Algeria's Saharan region, *Ammadocus leuchotricus*, is well recognized for its use in traditional medicine. Gas chromatography-mass spectrometry (GC-MS) was used in the current work to examine methanol extracts of *A. leuchotricus* in order to identify significant functional groups and phytochemical constituents. With an IC₅₀ of 966.48 ± 9.95 µg/ml, GC-MS analysis of the methanol extract of *A. leuchotricus* revealed the presence of 62 phytochemical components and shown impressive anti-inflammatory activity. These 62 substances were then examined for their bioactivity using in silico molecular docking techniques. The findings showed that one of the discovered phytochemical compounds may have trypsin inhibiting action.

Keywords: GC_MS- anti-inflammatory -in silico-molecular docking- trypsin.