

The essential oil of Algerian *Ammodaucus leucotrichus* Coss. & Dur. and its effect on the cholinesterase and monoamine oxidase activities

Auteurs

Nesrine Sadaoui, Nicole Bec, Véronique Barragan-Montero, Nabil Kadri, Frederic Cuisinier, Christian Larroque, Karim Arab, Bachra Khettal

Date de publication

2018/10/1

Revue

Fitoterapia

Volume

130

Pages

1-5

Éditeur

Elsevier

Description

This study aims at performing a chemical analysis of the essential oil (EO) of *Ammodaucus leucotrichus* Coss. & Dur. and investigating the anticholinesterase and anti-monoamine oxidase activities.

The EO of the *A. leucotrichus* aerial part was analyzed by Gas Chromatography Mass Spectrometry (GC-MS). The inhibitory potency against Acetylcholinesterase (AChE) and Butyrylcholinesterase (BChE) were evaluated *in vitro* using modified Ellman's method. Monoamine oxidase activity was measured using the spectrophotometric method described by Weissbach.

The chemical analysis of EO showed that the main constituents were perillaldehyde (by about 58.3%) and limonene (by about 23.33%). Further, the essential oil extracted from *A. leucotrichus* exhibited a promising anti-butyrylcholinesterase activity with an IC₅₀ of about 95.2 µg/mL, where the perillaldehyde and limonene IC₅₀ corresponded to 42.7 µg/mL ...

Nombre total de citations

Cité 7 fois

Articles Google Scholar

The essential oil of Algerian *Ammodaucus leucotrichus* Coss. & Dur. and its effect on the cholinesterase and monoamine oxidase activities

N Sadaoui, N Bec, V Barragan-Montero, N Kadri... - Fitoterapia, 2018