

International Conference on

ENVIRONMENTAL MICROBIOLOGY AND MICROBIAL ECOLOGY

&

International Conference on

ECOLOGY AND ECOSYSTEMS

September 18-20, 2017 Toronto, Canada

Antifungal activity of essential oil from *Artemisia campestris L* on fungal species developmentKhaldi A¹, Meddah B^{1,2} and Moussaoui A¹¹University of Bechar, Algeria²University of Mascara, Algeria

This work studies the antifungal capacity of the essential oil of spontaneous aromatic plant with vocation medication used in the traditional treatments in the South-West of Algeria: *Artemisia campestris L*. The local plant which was tested gave good essential oil yield (0.37%). The physico-chemical analysis of the essential oil of this plant species has enabled us to even characterize to identify our oil. Antifungal activity of the essential oil was studied with respect to seven fungal strains with various concentrations. The results of direct contact method show that the oil of *Artemisia campestris L* is proven very effective on the mycelial growth of the moulds. All strains were inhibited at concentration as weak as 1/70 (v/v), *Fusarium oxysporum* f.sp. *albedinis* and *Penicillium expansum* were most sensitive, being inhibited as from 1/800 (v/v) and 1/500 (v/v) respectively. This essential oil has a fungistatic effect. In addition to the growth of the mycelium, the essential oil of plant showed, in vitro, an antifungal activity at least important on the two other developmental stages, germination and the sporulation, of all fungi. All strains were inhibited at concentration as weak as 1/100 (v/v). *Fusarium oxysporum* f.sp. *albedinis* was most sensitive, being inhibited as from 1/1500 (v/v).

Biography

Khaldi A is a Ph.D student at the University of Bechar, Algeria. He received a Master of Science from the Division of Graduate Studies.

achrafssystemdz@yahoo.fr

Notes: