**Chemical Composition and Anti-mycotoxin Activity of Essentials Oils from *Ammodaucus leucotrichus Coss. & Dur.* and Artemisia campestris L. Growing in South-West of Algeria**

 Achraf Khaldi1, Boumedien Meddah1,2, Abdellah Moussaoui1

1 Laboratory of valorization of vegetal Resource and Food Security in Semi-Arid Areas, South West of Algeria, BP 417, University of Tahri Mohamed Bechar, Algeria, achrafsystemdz@yahoo.fr

2 Laboratory of Bioconversion, microbiological engineering and safety health, University of Mascara, 29000 Mascara, Algeria

This work studies the antifungal capacity of the essential oil of spontaneous aromatic plant with vocation medicinal used in the traditional treatments in the South-West of Algeria: Artemisia campestris L. The local plant tested gives a good essential oil yield (0.37%). The physico-chemical analysis of the essential oil of this plant specie has enables to us to even characterize to identify our oil.

Antifungal activity of the essential oil was studied witch 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 Penicilluim 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.

The evaluation of fungal biomass on liquid medium of the seven fungal strains, showed a clear reduction in the biomass formed until a total inhibition showed. Majority of strains were inhibited at concentration as weak as 1/100 (v/v), whereas Alternaria were most sensitive, being inhibited as from 1/370 (v/v).

**Keywords:** Essential oil, Artemisia campestris L, antifungal activity, South-West of Algeria.