In Vitro Antifungal Activity of Essential Oil Artemisia Absinthium

Authors : Bouchenak Fatima, Lmegharbi Abdelbaki, Houssem Degaichia, Benrebiha Fatima

Abstract : The essential oil composition of the leaf of Artemisia absinthium from region of Cherchell (The south of Algeria) was investigated by GC, GC-MS. 27 constituents were identified correspond to 84, 63% of the total oil. The major components are Thujone (60, 82%), Chamazulènel (16, 62%), ρ -cymène (4, 29%) and 2-carène (4.25%). The antimicrobial activity of oil was tested in vitro by two methods (agar diffusion and microdilution) on three plant pathogenic fungi. This oil has been tested for antimicrobial activity against three pathogenic fungi (Botrytis cinerea, Fusarium culmorum and Helminthosporium Sp.).The study of activity was evaluated by two methods: Method of diffusion in gelose and the minimum inhibitory concentration MIC. This oil exhibited an interesting antimicrobial activity. A preliminary study showed that this oil presented high toxicity against this fungus. These results, although preliminary show a good antifungal activity, to limit and inhibit stop the development of those pathogen agent.

Keywords : artemisia absinthian, extraction process, chemical study, antifungal activity

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

1

Conference Location : Istanbul, Türkiye **Conference Dates :** May 21-22, 2015