



## Treatment of Viruses by Aromatic Plants and Essential Oils

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### Abstract:

Many viruses have no treatment yet as COVID-19. In this research, antiviral properties of aromatic plants and essential oils have been examined and tested against a large number of viruses (Herpes virus-1, Herpes virus-2, HIV, Adeno virus, Hepatite B Virus, Enterovirus 71, JUNV, etc.) and even against SARS-CoV-1 which has 96% of the same genetic background with SARS-CoV-2. Essential oils from eucalyptus, tea tree and thyme and their major monoterpene compounds were examined for their antiviral activity against herpes simplex virus type 1 (HSV-1) in vitro. In addition, (*Laurus nobilis* L.) berry oil, *Thuja orientalis* oil, *Satureja thymbra* oil, *Salvia officinalis*, and *Cupressus sempervirens* ssp. *pyramidalis* oil were characterized. The inhibitory effect of essential oils as of *Lippia alba*, *Lippia organoides*, *Oreganum vulgare* and *Artemisia vulgaris* on yellow fever virus (YFV) replication was tested. The results of this work showed that aromatic plants and their essential oils have exhibited high antiviral activities against several types of viruses. And active materials of essential oils may act as therapeutics agents of these viruses including COVID-19. These can back up the current efforts in molecular docking of viruses as with SARS-CoV-2 protease and pharmacoinformatics in tracing active materials found in essential oils.

### Biography:

Loai Aljerf is a Prof in the Department of Basic Sciences, Faculty of Dental Medicine/Damascus University. He is a specialist in analytical and industrial chemistry. He obtained many awards and published more than 50 peer-reviewed papers (two of them in French) in Environmental Sciences, Green Chemistry, Analytical Chemistry, Synthesis Chemistry, Concrete, Ceramics, Paper Industry, Petrochemical, Extraction, Separation, Lithium-Ion-Batteries, and Oral Chemistry. He is a partner in Advances in Cleaner Production Network, and a member of the



German Chemical Society e.V. (GDCh), Asian Chemical Society, and the American University of Beirut. He is a member of the higher committee of the 6th International Workshop-Advance in Cleaner Production (São Paulo, Brazil (May 24th to 26th - 2017)) and in more than 20 conference organizing committees. Loai Aljerf is in the Cambridge Scholars Publishing-Life Science Advisory Board and an editor of more than 50 journals and a reviewer for Top journals in Industry, Chemical Engineering, and Environmental Chemistry.

### Publication of speakers:

1. Aljerf L, AlMasri N. An assessment of the US and UN safety precautions for pesticides in milk by labeling medicine alarm strategy for all dairy animal products. *Inter J of Drug Safety and Discovery*. 2018; 2(1): 009.
2. Pietrzak-Fielko R, Tomczyński R, Smoczyński SS. Effect of lactation period on the fatty acid composition in mares' milk from different breeds. *Arch. Anim. Breed.* 2013; 56(1): 335-343. doi: 10.7482/0003-9438-56-033
3. Sigl T, Meyer HHD, Wiedemann S. Gene expression of six major milk proteins in primary bovine mammary epithelial cells isolated from milk during the first twenty weeks of lactation. *Czech J. Anim. Sci.* 2012; 57(10): 469-480.

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