

Activity of *Cedrus libani* against Herpes through deactivation of Herpes Simplex virus type 1 DNA polymerase (2GV9)

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Abstract: An in-silico study was performed to determine the activity of *Cedrus libani* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. It was found that Eugenol helped to prevent Herpes.

Introduction: *Cedrus libani* is known for its medicinal activities. It is traditionally used to treat diseases like arteriosclerosis, water retention, herpes, lymphatic damage, etc.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Pinopsida
Order	Pinales
Family	Pinaceae
Genus	<i>Cedrus</i>
Species	<i>libani</i>

Major phytochemicals present in the plant are:

- a. Luteolin
- b. Carnosic acid
- c. Eugenol
- d. Salicylic acid

One of the major enzymes required for the survival of the organism causing Herpes is Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.