

Activity of *Myrica rubra* 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 *Myrica rubra* 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 Mangiferin helped to prevent Herpes.

Introduction: *Myrica rubra* is known for its medicinal activities. The stem bark is used as a wash in the treatment of arsenic poisoning, skin diseases, wounds and ulcers. The fruit is carminative, herpes, pectoral and stomachic.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Fagales
Family	Myricaceae
Genus	<i>Myrica</i>
Species	<i>rubra</i>

Major phytochemicals present in the plant are:

- a. Theobromine
- b. Tannic acid
- c. Mangiferin
- d. Digoxin

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.