

Activity of *Bauhinia racemosa* 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 *Bauhinia racemosa* 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 Tannic acid helped to prevent Herpes.

Introduction: *Bauhinia racemosa* is known for its medicinal activities. *Bauhinia racemosa* leaves have been used in the treatment of asthma traditionally because of their antihistaminic action it also used to cure herpes and urethral discharges.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Equisetopsida
Order	Fabales
Family	Fabaceae
Genus	<i>Bauhinia</i>
Species	<i>racemosa</i>

Major phytochemicals present in the plant are:

- Sulforaphane
- Digoxin
- Rosmarinic acid
- Tannic 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.