

Activity of *Pinus massoniana* against Herpes through deactivation of Thymidine Kinase of Herpes Simplex virus (1KIM)

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Abstract: An in-silico study was performed to determine the activity of *Pinus massoniana* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Thymidine Kinase of Herpes Simplex virus (1KIM) enzyme. It was found that Genistein helped to prevent Herpes.

Introduction: *Pinus massoniana* is known for its medicinal activities. The chopped or decocted leaves are used in the treatment of rheumatism, herpes and intestinal parasites.

The plant is classified as follows:

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

Major phytochemicals present in the plant are:

- a. Genistein
- b. Daidzein
- c. Peonidin
- d. Quercetin

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