Activity of Pinus massoniana against Herpes through deactivation of Herpes Simplex virus Type II Protease (1AT3)

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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 Herpes Simplex virus Type II Protease (1AT3) enzyme. It was found that Quercetin 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	Pinus
Species	massoniana

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 Herpes Simplex virus Type II Protease (1AT3) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.

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