

Activity of *Strobilanthus cusia* 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 *Strobilanthus cusia* 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 Epicatechin helped to prevent Herpes.

Introduction: *Strobilanthus cusia* is known for its medicinal activities. It is used for influenza, herpes, epidemic cerebrospinal meningitis, encephalitis B, viral pneumonia and mumps.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Lamiales
Family	Acanthaceae
Genus	<i>Strobilanthus</i>
Species	<i>cusia</i>

Major phytochemicals present in the plant are:

- a. Tangeretin
- b. Salicylic acid
- c. Epicatechin
- d. Catechin

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.