Activity of Solanum torvum 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 Solanum torvum 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 Campesterol helped to prevent Herpes.

Introduction: Solanum torvum is known for its medicinal activities. Fruit and leaf decoction is used to treat cough, herpes and to treat liver and spleen enlargement.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Solanales
Family	Solanaceae
Genus	Solanum
Species	torvum

Major phytochemicals present in the plant are:

a. Campesterol
b. Linamarin
c. Glutathione
d. Malvidin

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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