Activity of Ventilago denticulate against Herpes through deactivation of Herpes virus fusion regulator complex gH-Gl (3M1C)

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Abstract: An in-silico study was performed to determine the activity of Ventilago denticulate against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes virus fusion regulator complex gH-Gl (3M1C) enzyme. It was found that Hesperidin helped to prevent Herpes.

Introduction: Ventilago denticulate is known for its medicinal activities. Stem bark is powdered and mixed with sesame oil, externally applied to skin diseases and sprains. Root bark—used for atonic dyspepsia, mild fever, herpes and debility. Sap is used for the treatment of deafness.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Rosales
Family	Rhamnaceae
Genus	Ventilago
Species	denticulate

Major phytochemicals present in the plant are:

a. Allicin
b. Hesperidin
c. Ferulic acid
d. Epicatechin

One of the major enzymes required for the survival of the organism causing Herpes is Herpes virus fusion regulator complex gH-Gl (3M1C) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.