

## Activity of *Bidens pilosa* against Herpes through deactivation of Herpes Simplex virus type 1 DNA polymerase (2GV9)

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**Abstract:** An in-silico study was performed to determine the activity of *Bidens pilosa* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. It was found that Apigenin helped to prevent Herpes.

**Introduction:** *Bidens pilosa* is known for its medicinal activities. Roots, leaves and seed have been reported to possess antibacterial, antidysenteric, anti-inflammatory, antimicrobial, herpes, antimalarial, diuretic, hepato-protective and hypotensive activities.

The plant is classified as follows:

Kingdom	Plantae
Division	Magnoliophyta
Class	Magnoliopsida
Order	Asterales
Family	Asteraceae
Genus	<i>Bidens</i>
Species	<i>pilosa</i>

Major phytochemicals present in the plant are:

- Eugenol
- Apigenin
- Luteolin
- Carnosic acid

One of the major enzymes required for the survival of the organism causing Herpes is Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.