

## Activity of *Lippia alba* against Herpes through deactivation of Herpes virus fusion regulator complex gH-GI (3M1C)

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**Abstract:** An in-silico study was performed to determine the activity of *Lippia alba* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes virus fusion regulator complex gH-GI (3M1C) enzyme. It was found that Pelargonidin and Ascorbic acid helped to prevent Herpes.

**Introduction:** *Lippia alba* is known for its medicinal activities. A tea made from the leaves is used to treat intestinal and respiratory disturbances, including influenza and herpes. A well-sugared infusion is drunk to bring relief of heart problems and to soothe tachycardia.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Equisetopsida
Order	Lamiales
Family	Verbenaceae
Genus	<i>Lippia</i>
Species	<i>alba</i>

Major phytochemicals present in the plant are:

- a. Pelargonidin
- b. Caffeine
- c. Curcumin
- d. Ascorbic acid

One of the major enzymes required for the survival of the organism causing Herpes is Herpes virus fusion regulator complex gH-GI (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.