

Activity of *Heliotropium marifolium* against Herpes through deactivation of Thymidine Kinase of Herpes Simplex virus (1KIM)

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Abstract: An in-silico study was performed to determine the activity of *Heliotropium marifolium* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Thymidine Kinase of Herpes Simplex virus (1KIM) enzyme. It was found that Pelargonidin helped to prevent Herpes.

Introduction: *Heliotropium marifolium* is known for its medicinal activities. *Heliotropium marifolium* is used against syphilis, asthma, herpes, UTI and wound.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Boraginales
Family	Boraginaceae
Genus	<i>Heliotropium</i>
Species	<i>marifolium</i>

Major phytochemicals present in the plant are:

- a. Campesterol
- b. Linamarin
- c. Naringin
- d. Pelargonidin

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