## Activity of Syzygium aromaticum 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 Syzygium aromaticum 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 Digoxin and Limonene helped to prevent Herpes.

**Introduction:** Syzygium aromaticum is known for its medicinal activities. Traditionally, cloves have been used for centuries in the treatment of vomiting; flatulence; nausea; liver, herpes, bowel and stomach disorders; and as a stimulant for the nerves.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Myrtales
Family	Myrtaceae
Genus	Syzygium
Species	aromaticum

Major phytochemicals present in the plant are:

- a. Lutein
- b. Digoxin
- c. Pelargonidin
- d. Limonene

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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