

## Activity of *Syzygium jambos* 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 jambos* 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 Tannic acid helped to prevent Herpes.

**Introduction:** *Syzygium jambos* is known for its medicinal activities. A decoction of the leaves is used as a diuretic, herpes, a remedy for sore eyes and for rheumatism. The seeds are used to treat diarrhoea, dysentery, diabetes and catarrh. A decoction of bark is administered to relieve asthma and bronchitis.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Myrtales
Family	Myrtaceae
Genus	<i>Syzygium</i>
Species	<i>jambos</i>

Major phytochemicals present in the plant are:

- Ellagic acid
- Gallic acid
- Tannic acid
- Theobromine

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.