

Activity of *Taracetium vulgare* 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 *Taracetium vulgare* 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 Pelletierine and Quercetin helped to prevent Herpes.

Introduction: *Taracetium vulgare* is known for its medicinal activities. In larger doses the plant can procure an abortion, though these doses can be poisonous. Externally, tansy is used as a poultice on swellings, herpes and some eruptive skin diseases.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Asterales
Family	Asteraceae
Genus	<i>Taracetum</i>
Species	<i>vulgare</i>

Major phytochemicals present in the plant are:

- Pelletierine
- Alliin
- Theobromine
- Quercetin

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.