

Activity of *Atlantia* sp. 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 *Atlantia* sp. 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 Ajoene helped to prevent Herpes.

Introduction: *Atlantia* sp. is known for its medicinal activities. The flowers, fruit and roots are used to cure herpes, jaundice, fever, headache and asthma.

The plant is classified as follows:

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| Kingdom | Plantae |
| Division | Magnoliophyta |
| Class | Magnoliopsida |
| Order | Sapindales |
| Family | Rutaceae |
| Genus | <i>Atalantia</i> |
| Species | <i>racemosa</i> |

Major phytochemicals present in the plant are:

- a. Allicin
- b. Ajoene
- c. Gallic acid
- d. Ellagic 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.