Activity of Phyllanthus amarus against Hepatitis C through deactivation of Hepatitis C Virus IRES Pseudoknot domain

(3T4B)

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Abstract: An in-silico study was performed to determine the activity of Phyllanthus amarus against Hepatitis C. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Hepatitis C Virus IRES Pseudoknot domain

(3T4B) enzyme. It was found that Digoxin helped to prevent Hepatitis C.

Introduction: Phyllanthus amarus is known for its medicinal activities. P.amarus is an important plant of Indian Ayurvedic system of medicine which is used in the problems of stomach, genitourinary system, liver, kidney and spleen. It is bitter, astringent, stomachic, diuretic, febrifuge and antiseptic. The whole plant is used in gonorrhea, menorrhagia and other genital affections.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Malpighiales
Family	Phyllanthaceae
Genus	Phyllanthus
Species	amarus

Major phytochemicals present in the plant are:

a. Sulforaphane
b. Digoxin
c. Isorhamnetin
d. Rosmarinic acid

One of the major enzymes required for the survival of the organism causing Hepatitis C is Hepatitis C Virus IRES Pseudoknot domain