

Activity of *Rubia cardifolia* against Hepatitis C through deactivation of Hepatitis C Virus protease

(3M5O)

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Abstract: An in-silico study was performed to determine the activity of *Rubia cardifolia* against Hepatitis C. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Hepatitis C Virus protease

(3M5O) enzyme. It was found that Malvidin helped to prevent Hepatitis C.

Introduction: *Rubia cardifolia* is known for its medicinal activities. *Rubia cordifolia* role in supporting heart health is evidenced by traditional and reported activities which show that it act as potent blood purifier, antioxidant, diuretic, calcium channel blocker, antiplatelet, antidiabetic, antiinflammatory, antistress, immunomodulator etc.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Gentianales
Family	Rubiaceae
Genus	<i>Rubia</i>
Species	<i>cordifolia</i>

Major phytochemicals present in the plant are:

- a. Theobromine
- b. Peonidin
- c. Limonene
- d. Malvidin

One of the major enzymes required for the survival of the organism causing Hepatitis C is Hepatitis C Virus protease