

## WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

Coden USA: WJPRAP

**Impact Factor 8.453** 

Volume 14, Issue 21, 1037-1041.

**Review Article** 

ISSN 2277-7105

# ROLE OF GUDUCHI AS A RASAYANA IN ENHANCING IMMUNITY AGAINST INFECTIOUS DISEASES – A COMPHREHENSIVE REVIEW

\*1Dr. Samiksha Chandore, 2Dr. Vinod Choudhari

\* <sup>1</sup>MD Rachana Sharir Shri Ayurved College, Nagpur.

<sup>2</sup>Prof. & HOD, Dept. of Rachana Sharir, Shri Ayurved College Nagpur.

Article Received on 12 October 2025, Article Revised on 01 Nov. 2025, Article Published on 01 Nov. 2025,

https://doi.org/10.5281/zenodo.17538970

## \*Corresponding Author Dr. Samiksha Chandore

MD Rachana Sharir Shri Ayurved College, Nagpur.



How to cite this Article: \*1Dr. Samiksha Chandore, 2Dr. Vinod Choudhari (2025) ROLE OF GUDUCHI AS A RASAYANA IN ENHANCING IMMUNITY AGAINST INFECTIOUS DISEASES – A COMPHREHENSIVE REVIEW. "World Journal of Pharmaceutical Research, 14(21), 1037–1041.

This work is licensed under Creative Commons Attribution 4.0 International license.

#### ABSTRACT

According to Ayurvedic principles, disease (Vyadhi) is seen as the result of an imbalance in the body's *Doshas* and *Dooshyas* when the body's Vyadhikshamatwa (immunity) is compromised. Rasayana is thought to promote dhatuposhan and enhance Oja, thereby boosting immunity. Tinospora cordifolia, often known as Guduchi, has a variety of medicinal characteristics, including those that are anti-inflammatory, antiarthritic, anti-oxidant, anti-allergic, and anti-stress. Guduchi is considered one of the best Rasayanas and is unusual in its potent versatility. The significant actions of Guduchi include promoting Bala (cellular and humoral immunity), Agnideepana, cures fever, eliminates Ama (metabolic wastes and toxins). Guduchi is known to be a rich source of trace elements which act as antioxidants, it is also known as 'Amrita' because it's capacity to rejuvenate and heal damaged cells.

**Aim**– This study aims at public awareness about the benefits of *Guduchi* as a *Rasayana* for promoting health and treating infectious diseases. **Objective:** To study the role of *guduchi* as a *rasayan* against infectious diseases. **Result:** *Guduchi* aids in managing infectious diseases through its *Amapachana*, *Agnideepana*, *Jwaraghna*, and *Balya* properties, it improves digestion and metabolism, relieves symptoms like fever and cough, and supports recovery and strength during the post-infectious phase. **Conclusion:** The *Rasayana* properties of *Guduchi* can be effectively utilized both for treating and preventing infectious diseases.

**KEYWORDS:** *Guduchi*, Infectious diseases, Immunity, Rasayana, Vyadhikshamatwa.

www.wjpr.net Vol 14, Issue 21, 2025. ISO 9001: 2015 Certified Journal 1037

#### INTRODUCTION

Ayurveda places great emphasis on leading a long, happy, and healthy life. Many people are more vulnerable to illness as a result of changing their food, the environment and other factors. On the other hand, some people remain healthy regardless of neglecting dietary rules or weather changes and not get affected by any illness. Numerous microbes penetrate the human body through the water and air, yet are unable to produce illness due to immune response present in the living body. The body's immunity is the most crucial factor when it comes to health and illness. Immunity and the concept of Vyadhikshamatva mentioned in classical ayurvedic text are analogous. Disease results from the combination of vitiated Dosha and Dooshya which happens when Vyadhikshamatwa is reduced. The concepts of immunity and immunomodulation are extensively explored and used in Ayurveda, particularly in Rasayana tantra. [1] Rasayana is considered to enhance Oja and promote the *Dhatuposhana* process, which leads to *Vyadhikshamatva*. In *Ayurveda*, number of medicinal plants are referred to as Rasayana. Guduchi is one of the most highly valued and common herbs known to possess a number of wonderful therapeutic values through its use. It's regarded as one of the best *Rasayana* and unique in its strong adaptability. Over the past few years, significant progress has been attained regarding its biological activity and medicinal applications. Guduchi is known to be a rich source of trace elements (Zinc and Copper) which act as antioxidants and protects cells from the damaging effects of oxygen radicals generated during immune activation. [2]

**AIM**– This study aims at public awareness about the benefits of *Guduchi* as a *Rasayana* for promoting health and treating infectious diseases.

**OBJECTIVE-** To study the role of *guduchi* as a *rasayan* against infectious diseases.

#### **MATERIAL ANDMETHODS**

In this review study we searched data from various *ayurvedic* texts, published review articles, research papers, and various online database like google scholar, PubMed.

### **Infectious diseases**

Infectious diseases are caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another. [3] Some infectious diseases spread from person to person. Some diseases are spread by insect or animal bites. And other are obtained from the consumption of contaminated food

or water, or being in exposed to organisms in the surroundings. These infectious diseases occur due to lack of immunity in the body. Infectious diseases can range from a simple Common cold to diseases like Cholera, TB, Typhoid etc. The general symptoms of infectious diseases include fever, fatigue, cough, muscle aches etc. Infectious diseases can induce host cell responses that may cause additional tissue damage, usually by immune mediated mechanisms.<sup>[4]</sup>

#### Rasayana

Rasayan is one of the eight clinical specialities of traditional Ayurveda, rasayana establishes a basis of well-being and equilibrium in physiology of human body. Rasayana means the way for attaining excellence in all body tissues through some special measures and medicines. [5] Rasayana acts at the level of Rasa, Agni and the Srotas, [6] thus enabling to procure the best qualities of different Dhatus. Rasayana plays 2 roles in the control of infectious diseases - as a medication in diseased people & prevention of diseases in healthy individuals.

#### Guduchi

Throughout India, guduchi is a large, glabrous, perennial, deciduous, climbing shrub with a weak, mushy stem. It is a common herb in traditional and Ayurvedic medicine. The listed chemical components from this shrub are members of many classes, includes steroids, glycosides, alkaloids, and diterpenoid lactones, aliphatic chemicals, sesquiterpenoid, and polysaccharides. The properties of the plant are Tikta, Kashaya Rasa, Guru, Snigdha Guna, Ushna Veerya and Madhura Vipaka. [7] It pacifies all the three Doshas and maintain their balance with each other i.e. why it is said to be having Rasayana character. When taken with Ghruta (Ghee), it balances Vata with Guda (Jaggery) Pitta and with Honey the Kapha. Guduchi is having Vayasthapana, Dahaprashamana, Trishnanigrahana, Stanyashodhana, Triptighna, Rasayani, Samgrahini, Balya, Agni deepani, Valeepalitanashini and Medhya actions. [8] The commonly used parts are dried stem, roots and leaves. Guduchi is given as Swarasa, Kashaya, Satwa etc.

#### Action of *Guduchi* in infectious diseases

The infectious pathogen produces *Ama* (endotoxins), which damage tissue components (due to *Agnimandya*) and cause disease (*Vyadhi*). *Guduchi* acts in infectious diseases through *Amapachana*, *Agnideepana*, *Jwaraghna* & *Balya* property. Guduchi helps to increase the killing ability of macrophages.

## Immunomodulatory action of *Guduchi*<sup>[9]</sup>

The alcoholic and aqueous extracts of T. cordifolia are reported to have beneficial effects on the immune system and have been tested successfully for their immunomodulatory activity. The novel (1,4)-alpha-D glucan derived from the plant activates the immune system through the activation of macrophages via TLR6 signaling, NFkappaB translocation and cytokine production. The aqueous extract of T. cordifolia was found to enhance phagocytosis in vitro. The aqueous and ethanolic extracts also induced an increase in antibody production in vivo. T. cordifolia extract (TCE) treatment caused significant reduction in eosinophil count and improved haemoglobin in HIV patients. [9] The alcoholic extracts showed potent immunomodulatory action as evident by enhancement in the bone marrow cellularity as well as  $\alpha$ -esterase activity in the rat's groups. [10]

#### **RESULT**

In Ayurveda, Guduchi is counted amongst the 'Rasayana'. Acharya Charaka described rasayana as anti-aging methods, which increase the life span, promote intelligence, improved memory and ultimately ensure freedom from diseases, all of these indicating its immunestimulant effect. Guduchi aids in managing infectious diseases through its Amapachana, Agnideepana, Jwaraghna, and Balya properties, it improves digestion and metabolism, relieves symptoms like fever and cough, and supports recovery and strength during infectious & post-infectious phase.

#### **CONCLUSION**

Today, individuals are more concerned about their health and associated issues. *Guduchi's Rasayana* effect can be used for therapeutic purposes & Prevention of infectious diseases. The term "*Amrita*" fits the plant extremely well as it acts as nectar in bringing back the afflicted Cells return to normality & prevent the development of any disease. Thus, *Rasayana* properties of *Guduchi* can be effectively utilized both for treating and preventing infectious diseases.

#### REFERENCES

- 1. Misra.S.K. Immunomodulation: An Ayurvedic Perspective. International Ayurved Conference-. (Ayurved- Modern Medicine Interface for Futurist Medicine) Lucknow: Sanjay Gandhi Post Graduate Institute of Medical Sciences, 1997; P.12.
- 2. Shankar AH, Prasad AS. Zinc and immune function: the biological basis of altered resistance to infection. Amer J Clin Nutr., 1998 Aug; 68(2 Suppl): 447.
- 3. Infectious diseases. Available from http://www.who.int/ topics/infectious diseases/en/ dated, 20.01.2016.
- 4. Marina Kos. General Pathology of Infectious diseases. Available from http://mse.mef.unizg.hr>slike>dir365> pdf0 dated 22.01.2016.
- 5. Sharma P.V. CharakaSamhita Part 2, Chikitsasthana, Varanasi: Chaukambha Orientalia; 2011. P.4. Sloka no:1/8
- 6. Joshi Y G.Kayachikitsa. 4th ed. Pune: Pune Sahitya Vitaran, 2001; 35-60.
- 7. ShriBhavamisra. Bhavaprakasa Nighantu, commentary by Dr.K.C.Chunekar, edited by Dr.G.S.Pandey, Varanasi: Chaukambha Bharati Academy, 2006; Page 269,
- 8. Acharya Priyavrat Sharma & Dr. Guruprasad Sharma. Kaiyyadeva Nighantu Varanasi: Chaukambha Orientalia, 1979; Page 5.
- 9. Avnish K. Upadhyay, Kaushal Kumar, Arvind Kumar, and Hari S. Mishra. Tinospora cordifolia (Willd.) Hook. f. and Thoms. (Guduchi) - validation of the Ayurvedic pharmacology through experimental and clinical studies. International Journal of Ayurveda Research. 2010 Apr-Jun; 1(2): 112–121.
- 10. Vaibhav D. Aher, Arunkumar Wahi. Pharmacological study of Tinospora cordifolia as an immunomodulator. International Journal of Current Pharmaceutical Research, 2010; 2(4).