PHARMACODYNAMICS OF NAVAYAS CHURNA: A DETAILED EXPLORATION OF ITS THERAPEUTIC MECHANISMS AND APPLICATIONS

by Jana Publication & Research

Submission date: 09-Aug-2025 11:42AM (UTC+0700)

Submission ID: 2690367874 **File name:** IJAR-53188.doc (296K)

Word count: 3521 Character count: 22731

PHARMACODYNAMICS OF NAVAYAS CHURNA: A DETAILED EXPLORATION OF ITS THERAPEUTIC MECHANISMS AND APPLICATIONS

ABSTRACT

BACKGROUND

Ayurveda is one of the oldest branches of knowledge and a system of philosophical principles. Ayurvedic practitioners have effectively used numerous classical formulations to treat a wide range of ailments. In many cases, detailed information about their mechanisms of action is still lacking. *Navayas Churna* is one of them. It is a herbo-metallic preparation (*Rasaushadhi*) commonly used by Ayurvedic practitioners.

According to the World Health Organization, Ayurvedic medicines fall under the category of traditional medicine. These medicines are used for the prevention of illness, diagnosis, treatment and promotion of health.

Understanding the pharmacodynamics of Ayurvedic drugs is essential for the scientific validation of their traditional uses. It helps to explain how these formulations interact with the body and ensures safety by predicting potential side effects. This knowledge also aids in optimizing formulations, guiding evidence-based drug development and meeting global regulatory standards. Especially for complex preparations, such as herb-metallic compounds, pharmacodynamic insights are crucial for integrating Ayurveda into modern healthcare.

The present study aims to compile the available literature regarding the pharmacodynamics, therapeutic mechanism, actions and properties of the *Navayas Churna*.

KEYWORDS: Ayurveda, Rasaushadhi, Navayas Churna, Pharmacodynamic

INTRODUCTION

Ayurveda, the traditional medical science of India, not only focuses on diagnosing and treating diseases but also emphasizes maintaining health through proper lifestyle practices. Its holistic approach aims at both curing ailments and promoting long-term wellness. Ayurvedic practitioners are empowered to choose the most appropriate therapeutic methods to achieve these goals. According to the World Health Organization, approximately 70% of the population in developing countries relies on herbal or traditional medicine for their primary healthcare needs [1]. Traditional systems like Ayurveda are also gaining popularity in developed nations. In India, Ayurveda has been practiced since the Vedic period, with a wide variety of formulations that are considered safe, effective and associated with fewer side effects [2][3]

Ancient Ayurvedic scholars emphasized that a physician's success largely depends on their indepth knowledge of medicinal substances. Ayurveda advocates the use of both plant and mineral-based remedies for managing various health conditions [4]. The pharmacodynamics of Ayurvedic drugs is crucial for explaining how they act at the molecular, cellular and systemic levels, impacting key physiological processes such as metabolism, immune function and blood formation.

Pharmacodynamic insights play a vital role in developing evidence-based Ayurvedic or integrative formulations, especially for managing chronic and lifestyle-related diseases. The action of a drug in the body is believed to be governed by the five fundamental principles known as Rasa Panchaka - namely Rasa, Guna, Virya, Vipaka and Prabhava. These factors, individually or collectively, influence the body by balancing the doshas, correcting Dathu Pradooshana and supporting overall health, Swasthahitha.

Navayas Churna is a classical Ayurvedic herbo-mineral formulation, traditionally used for its potent therapeutic properties. The name itself holds significance - Nava refers to the nine ingredients used in its composition, while Ayas denotes iron, indicating the inclusion of processed iron in the form of Loha Bhasma. This formulation combines nine medicinal herbs with Loha bhasma, creating a synergistic blend that enhances its efficacy in treating a wide range of disorders. Navayas Churna is primarily indicated in the management of Pandu (Anemia) due to its hematinic and blood-purifying properties. In addition, it is widely used in treating Hridroga, Bhagandara, Shotha, Kustha, Udara, Arsha, Mandagni, Aruchi and Krimi Roga. This formulation is described in detail by Acharya Sharangadhara in the Churna Kalpana Adhyaya of the Sharangadhara Samhita, an authoritative classical text on Ayurvedic pharmaceutics. The unique combination of herbs and mineral components in Navayas Churna reflects the traditional principle of combining ingredients to enhance both efficacy and safety of formulation. [5]

AIM & OBJECTVES

AIM

To review the pharmacodynamics, therapeutic mechanism and applications of *Navayas Churna*.

10
OBJECTIVES

The objective of this study is to review the therapeutic actions of Navayas Churna by examining the individual functions of its ingredients and exploring their pharmacodynamic properties. This analysis aims to provide a deeper understanding of how the combined components work synergistically to exert their medicinal effects, thereby supporting the formulation's traditional uses and guiding future research.

MATERIALS AND METHODS

Literary resources, including classical texts and contemporary studies, have been studied extensively. All relevant information available from both traditional literature and online sources has been gathered and thoroughly analyzed to facilitate a comprehensive and conclusive discussion.

Sr No	Ingredient	Botanical Name	Family	Quantity
1	Chitrak	Plumbago zeylanica	Plumbaginaceae	1 part
2	Haritaki	Terminalia chebula	Combretaceae	1 part
3	Amalaki	Embelica officinalis	Euphorbiaceae	1 part
4	Bibhitak	Terminalia bellerica	Combretaceae	1 part
5	Musta	Cyperus rotundus	Cyperaceae	1 part
6	Vi danga	Embelia ribes	Myrsinaceae	1 part
7	Shunthi	Zingiber officinale	Zingiberaceae	1 part
8	Maricha	Piper nigrum Linn.	Piperaceae	1 part
9	Pippali	Piper longum Linn.	Piperaceae	1 part
10	Loha Bhasma	-	-	9 parts

Table 1 Ingredients of Navayas Churna

Method of preparation of Navayas Churna

- All the herbal ingredients listed in Table 1 were thoroughly cleaned to remove any foreign materials.
- Individually powdered until they pass through a 100 no. Mesh sieve.
- The required quantities of each powdered herb were accurately weighed.
- All ingredients were mixed thoroughly to ensure a homogeneous blend.
- An equal amount of Lauha Bhasma was then added to this mixture.
- Trituration was carried out to get a homogeneous mixture.

Anupana – Madhu (honey), Ghrita (ghee), Gomutra, Takra (buttermilk)

Sr No	Ingredient	Rasa	Guna	Virya	Vipaka
1	Chitrak ^[6]	Katu	Laghu, Ruksha,	Ushna	Katu
			Tikshna		
2	Haritaki ^[7]	Lavanavarjita	Laghu, Ruksha	Ushna	Madhur
		Pancharasa			
3	Amalaki ^[8]	Lavanavarjita	Laghu, Ruksha,	Shita	Madhur
		Pancharasa	Shita		
4	Bibhitak ^[9]	Kashaya	Laghu, Ruksha	Ushna	Madhur
5	Musta ^[10]	Tikta, Katu, Kashaya	Laghu, Ruksha	Shita	Katu

	12				
6	Vidanga 🎹	Katu, Kashaya	Laghu, Ruksha,	Ushna	Katu
		1	Tikshna		
7	Shunthi ^[12]	Katu, Tikta	Ruksha, Laghu,	Ushna	Katu
		1	Tikshna		
8	Maricha ^[13]	Katu, Tikta	Laghu, Tikshna	Ushna	Katu
9	Pippali ^[14]	Katu	Laghu, Snigdha,	Anushna	Madhur
			Tikshna	Shita	
10	Loha Bhasma	Tikta, Madhur,	Guru, Ruksha	Shita	Madhur
	[15]	Kashaya			
- 11 0			(= .) 0 (4.		(5 .)

Table 2: Constituents of *Navayasa Churna* with *Rasa* (Taste), *Guna* (Attribute), *Virya* (Potency), *Vipaka* (Internal biotransformation of drug)

Sr No	Ingredient	Doshaghnata	Karma	
1	Chitrak	Kapha Vat Shamaka	Lekhan, Uttejaka, Deepan, Pachan, Saraka, Grahi, Rasayan, Krumighana, Shothahara, Kaphghana, Kanthya, Jwaraghana, Arshoghana,	
2	Haritaki	Tridoshahar	Shothahara, Vedanasthapak, Vranropaka, Anulomaka, Mrudurechaka, Kushthaghana, Jwaraghana, Deepan, Pachan, Krumighana, Rasayan, Hrudya, Shothahara	
3	Amalaki	Tridoshahar	Dahaprashamak, Chakshushya, Deepan, Anulomaka, Rochan, Hrudya, Shonisthapan, Jwaraghana, Kushthaghana, Rasayan, Aruchi, Shothaghana,	
4	Bibhitak	Tridoshahar	Shothahara, Vedanasthapak, Deepak, Anulomaka, Krumighana, Arshoghana, Raktastambhaka, Jwaraghana	
5	Musta	Kapha Pitta Shamak	Twachadoshahar, Shothahara, Lekhan, Deepan, Pachan, Medhya, Raktaprasadak, Mutrala, Balya, Vishaghana, Jwaraghana, Aruci, Ajirna, Krumighana,	
6	Vidanga	Kapha Vat Shamak	Jantughana, Kushthaghana, Deepan, Pachan, Anulomak, Raktashodhak, Mutrajanana, Varnya, Rasayan, Balya	
7	Shunthi	Kapha Vat Shamak	Shothahara, Vedanashamak, Deepan, Pachan, Rochan, Arshoghana, Shulaprashamana, Hrudya, Shothahara, Raktashodhaka, Jwaraghana,	
8	Maricha	Vat Kapha Shamak	Lekhan, Balya, Deepan, Pachan, Krumighana, Kushtaghana, Ajirnahar, Hrudya, Jwaraghana	
9	Pippali	Pittashamaka	Krumighana, Deepan, Pachan, Shulahara, Raktavardhaka, Kushtaghana, Rasayan, Jwaraghana, Hrudya, Paduhara	
10	Loha Bhasma	Tridoshaghna		

Table 3 Ingredients of *Navayas Churna* with their *Doshaghnata* (Action on Dosha) and *Karma* (Functions)

г			
	Sr No	Ingredient	Therapeutic Action

		4
1	Chitrak	anti-diabetic, wound healing, anti-carcinogenic activity, contraceptive
		effect, hepato-protective, anthelmintic, anti-microbial, anti-inflammatory.
		[16]
2	Haritaki	antimicrobial, hepatoprotective, anti-mutagenic, anti-inflammatory,
		antioxidant, anti-diabetic, anti-proliferative, radio-protective, cardio-
		protective [17]
3	Amalaki	immune-modulating, anti-diabetic, memory enhancement, antioxidant,
		anti-inflammatory, hepatoprotective [18]
4	Bibhitak	antioxidant, laxative, antidiabetic, analgesic, anti-helminthic, anti-pyritic
		properties, antiulcer, antifungal, antibacterial and anti-hypertensive [19]
5	Musta	stomachic, anthelminthic, emmenagogue, astringent, anti-inflammatory,
		antioxidant, antipyretic, galactagogue, carminative, antidiabetic,
		cytoprotective, antimutagenic and analgesic ^[20]
6	Vidanga	hepatoprotective, antidiabetic, anthelminthic, diuretic, laxative
		antioxidant, anti-bacterial [21]
7	Shunthi	anti-inflammatory, antimicrobial action, anti-oxidative effect,
		bronchodilator, antimicrobial action [22]
8	Maricha ⁾	antibacterial, anti-inflammatory, antifungal, hepatoprotective, antioxidant,
		anticancer, antimicrobial, antihypertensive, antiasthma, insecticidal,
		antithyroid, wound healing activities [23]
9	Pippali	antimicrobial, antiplatelet, antihyperlipidemic, analgesic,
1 1 1		anticancer, antioxidant, antiamebic, hepatoprotective, anti-inflammatory,
		coronary vasodilation, bioavailability-enhancing, immunomodulatory,
		adulticidal, melanin-inhibiting, antidepressant, antifertility, antiobesity,
		larvicidal, radioprotective, cardioprotective, antifungal ^[24]
10	Loha	anti-anemia, aphrodisiac, emmenagogue, stimulant, anti-bacterial, anti-
	Bhasma	inflammatory, antioxidant, astringent, hematogenic, anti-ageing, analgesic,
		antipyretic ^[25]

Table 4 Ingredients of *Navayas Churna* with their therapeutic actions

Analysis as per Guna

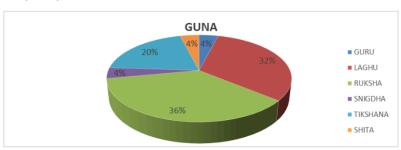
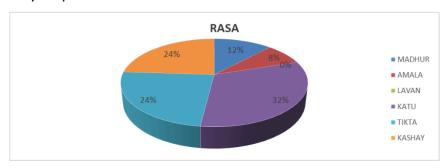


Table 2 indicates that *Ruksha Guna* dominates the composition with 36%, followed by *Laghu Guna* at 32% and *Tikshana Guna* at 20%. The remaining *Gunas Guru, Snigdha* and *Shita* each constitute 4% of the composition.

Ruksha is Kaphanashak, Shoshana, Laghu is Laghavakaraka, Vranaropaka, Utsahavardhaka and Sphurtikar. Tikshana is Shodhana, Lekhan Gunatamaka. Guru is Brihana, Truptikar. Snigdha is Kledana, Balya, Varnya and Snehamardavakar. Shita is Stambhana, Murcha, Dah, Trushna and Swedanashaka.^[26]

Analysis as per Rasa



In Navayas Churna, the major Rasa is Katu, forming 32% of the composition. Tikta and Kashaya each account for 24%, while Madhur is 12% and Amla is 8%.

Lavana Rasa is entirely not present in its composition

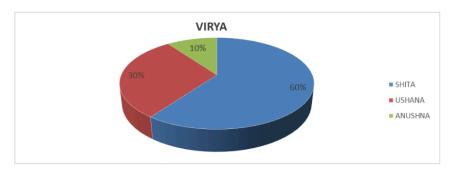
According to Acharya Charak, katu rasa has stotas shodhana, Kandunashana and Vrana Avasadaka properties.

Kashaya Rasa is characterized by Sandhankar, Snashamaka and Sangrahi Gunas, along with actions like Sleshma, Pitta, and Rakta Prashamaka.

Tikta Rasa shows Deepak, Pachaka, Lekhana, Mansaposhaka, Jwaraghana, Vishaghana, Krumighana and Kandughana effects.

Madhura Rasa is Saptadhatuposhaka, Indriya Prasadak, Balavarnakar, Ayushya Vardhaka, and acts as Pitta, Visha, Trushna and Daha Prashamanaka, it is Balya, Jivaniya and Tarpaniya. Together, these attributes aid in Samprapti Vighatan as indicated in the Phalshruti of Navayas Churna. [27]

Analysis as per Virya

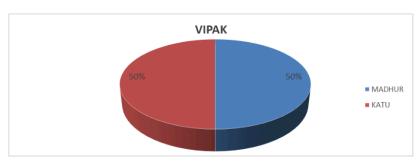


According to Table 2, the analysis of *Virya* shows *Shita Virya* constitutes 60%, *Ushna Virya* 30%, and *Anushana Shita Virya* 10% in the composition.

Ushna Virya exhibits Vatakaphashaman, Pittajanana, Dahan, Pachan, Swedana, Vilayana and Laghu properties.

Shita Virya provides Prasadan, Sthrikaran Vishyandan Jivaniya and Balya properties.

Analysis as per Vipak



As per Table 2, based on the *Vipak* analysis, *Madhur* and *Katu* each account for 50% of the composition.

Analysis as per Doshaghanata

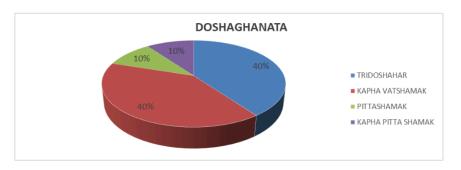
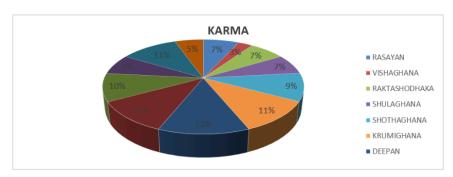


Table 3 indicates that Navayas Churna consists of 40% Kapha Vatshamak,

40% Tridoshahar and

10% each of Pittashamak and Kaphapitta Shamak properties.

Analysis as per Karma



The analysis reveals that Deepan constitutes 12.32%, while

Krumighana, Pachan and Jwaraghana account for 10.95%.

Shotaghana and Kushtaghana comprise 9.58%.

Rasayan, Raktashodhana, Hrudya and Shulaghana Karma collectively make up 6.84%, Arshoghana Karma is 5.48% and

Vishaghana Karma contributes 2.73%.

DISCUSSION

In today's world, however, there is a growing interest in Ayurveda for its timeless principles, highlighting the importance of demonstrating their relevance in the modern age. It is crucial to revisit the traditional remedies to encounter the various challenges. *Navayas Churna* being one such remedy that needs exploration, and this is why it has been selected for review. *Navayas Churna* is composed of nine herbal ingredients and one mineral component, as previously mentioned.

According to Ayurvedic literature, the therapeutic indications (*Rogadhikar*) for *Navayas Churna* include *Pandu, Hridroga, Bhagandara, Shotha, Kustha, Udara, Arsha, Mandagni, Aruchi* and *Krimi Roga*.

Here, now will discuss how the ingredients of *Navayas Churna* help in the *Samprapti Vighatana* (breaking the process of disease formation) of the above diseases through their properties

Pandu

Navayasa Churna is an effective Ayurvedic formulatin for managing Pandu (anemia), primarily by increasing serum ferritin and hemoglobin levels. Amalaki is a rich source of iron and vitamin C, which enhances iron absorption. Haritaki is rich in minerals and vitamin C and acts as a potent Rasayana that nourishes all Dhatus. [28] Musta has manganese and copper present, which help the metabolism of iron and synthesis of Hemoglobin. [29] Lauha Bhasma supports the regeneration of hemoglobin. [30] Trikatu enhances the bioavailability of nutrients [31] while Vidanga combats parasitic infections, a common cause of anemia, and supports digestion, liver function and blood health through its deepana, anulomana, hridya and shonitasthapana actions. Together, these ingredients work to correct all types of anemia and promote overall vitality.

Hridaroga

The chief ingredient in *Navayasa Churna* is *Loha Bhasma*, which primarily acts on the *Rakta Dhatu* by increasing hemoglobin levels. This nourishes the heart through oxygenation. Many ingredients in this formulation also possess *Rasayana* properties, which help rejuvenate and strengthen cardiac function. As the blood becomes purified, the efficiency of the heart improves, helping to prevent further complications. Additionally, the ingredients exhibit antioxidant properties that reduce oxidative stress on cardiac tissues, protecting the heart from degenerative changes.

Aruchi and Mandagni

Since *Ama* (toxins) is widely recognized as the root cause of most diseases, initiating treatment with *Deepan* and *Pachan* therapies is essential for effective disease management. According to the analysis of *Karma*, nearly all the ingredients in the formulation possess *Deepan* and *Pachan* properties, which help eliminate *Ama* from the body. Additionally, *Triphala* acts as a mild laxative, alleviating constipation and subsequently relieving symptoms associated with *Strotas*

Avarodha. Katu is the predominant Rasa in this preparation, which also plays a vital role in correcting Strotas Shodhan means clearance of minute channels in the body. Furthermore, Trikatu and Trushna stimulate the liver, promoting bile secretion, which is essential for the digestion and absorption of fats. The combined properties help eliminate Ama and strengthen Agni, enabling effective disease management. The key ingredients of this formulation synergistically support Agni, facilitating Samprapti Vighatan for overall disease.

Arsha and Bhagandar

As we discussed, Ama is root cause of most diseases. In the case of Arsha and Bhagandara, the accumulation of Ama in the gastrointestinal tract plays a crucial role in disease manifestation. Hence, the main line of treatment is Deepana and Pachana. Navayasa Churna promotes Agnidipana and enhances digestive efficiency. This not only improves overall digestion but also prevents the formation of hard stools, which is a major aggravating factor in Arsha. Navayas Churna reduces constipation. Also acts as Tri Doshahara. In Arsha, vitiated Pitta Dosha leads to Rakta-strva and shotha, vitiated Kapha Dosha contributes to Picchila strva and Vitiated Vata causes Shula. The Tridoshahara effect of this formulation helps to balance all three Doshas, thereby alleviating the primary symptoms associated with Arsha and Bhagandara. The contents of Navayasa Churna are Vraṇaropaka and Rasayana, which help to heal fissures. In the condition of Bhagandara, where Puya formation is common, Navayasa Loha helps eliminate Ama, purify the Rakta Dhātu and maintain its healthy state. Many of the constituents also exhibit Shothaghna and Vyadhikshamatva-vardhaka actions, which further assist in reducing inflammation and enhancing the body's natural defense mechanisms to combat the symptoms of Arsha and Bhagandara.

Navayasa Churna, through its Dipana, Pachana, Tridoshahara, Ama-nashaka, Vrnaropaka, Rasayana and Rakta-prasadaka properties, provides comprehensive management in Arsha and Bhagandara, addressing both the root cause and symptomatic relief.

Udar

In *Udara Vyadhi*, vitiated *Kapha* and *Pitta Doshas* lead to fluid accumulation and inflammation. *Navayasa Churna*, with its *Tikta* and *Katu Rasa*, pacifies these Doshas and helps reduce inflammation. In *Jalodara*, *Ama* is a key factor. Amanash occurs due to the *Deepana*, *Pachana* action of *Navayasa Churna*. *Lekhana*, *Ruksha*, and *Laghu* properties help eliminate excess *Kapha Medas*, toxins, and abdominal fluid and prevent recurrence.

Shotha

The formulation also exhibits *Shothaghna*, hepatoprotective, antimicrobial, antioxidant, and antibacterial effects. These support liver function, reduce swelling, and fight infections. By enhancing *Dhatu-agni* and immunity, it promotes tissue repair and prevents chronic inflammation.

Kushtha

In the pathogenesis of *Kushta Vyadhi*, Ayurveda highlights seven key factors that become vitiated: *Rakta*, *Lasika*, *Mamsa*, *Twacha* and the *Tridosha*. Among these, *Rakta Dhatu* and *Tridosha* play a central role in disease manifestation. *Navayasa Churna* effectively manages *Rakta Dushti* and balances all three *Doṣas* due to its well-formulated composition. By purifying *Rakta Dhatu* and correcting imbalances of *Dosha*, it helps relieve core symptoms of *Kushta*, such as *Kandu*, *Vaivarnya*, *Lalima*, *Strava* and *Jadatva*.

The dominance of *Katu* and *Tikta Rasa* in this formulation enhances its *Shodhana* and *Ropana* effects. These Rasas cleanse the *Twacha*, eliminate *Dosha* and *Ama*, and promote healthy skin regeneration. *Navayasa Churna* helps to heal *Kushta Vyadhi* through systemic and local effects, hence recurrence is prevented and long-term relief is gained.

Krumi

Abnormal digestion and impaired metabolism create a conducive environment for the development and proliferation of *Krumi*. In this context, the formulation known as *Navayasa Churna* contains a predominance of *Katu* and *Tikta Rasa*, both of which are traditionally recognized for their *Krumighna* properties. The eradication of *Krumi* from the body through these herbs leads to significant improvement in appetite. As digestion improves, the nutritional absorption in the gut is enhanced, resulting in better nourishment of bodily tissues and overall strengthening of the body. Through a synergistic combination of *Deepana*, *Pachana*, *Krumighna* and blood-purifying actions, *Navayasa Churna* targets eliminating *Krumi* and also restores digestive balance and promotes systemic health.

CONCLUSION

The formulation of *Navayas Churna* includes *dravyas* endowed with various properties which can break down the manifestation process of the *Rogas* mentioned in the *Phalashruti*, such as *Pandu*, *Hridroga*, *Bhagandara*, *Shotha*, *Kustha*, *Udara*, *Arsha*, *Mandagni*, *Aruchi* and *Krimi Roga*. The wise selection of *dravyas*, based on *Acharya Yukti*, proves to be highly relevant in the current era. The drugs used in the combination help to manage the multiple diseases. The herbo-mineral components in such formulations are biocompatible and possess particles small enough to enter the bloodstream efficiently. This enhances their therapeutic potential.

The formulation, after entering the bloodstream, exhibits various actions on the target cells and achieves the results as explained above.

The combined study of traditional medicines with modern technology signifies a transformative era in healthcare, where traditional Ayurvedic wisdom converges with modern scientific understanding, offering effective and natural solutions to contemporary health challenges.

REFERENCES -

- 1. O Akerele. Importance of medicinal plants: WHO's programme, In: Natural Resources and Human Health: plants of medicinal and nutritional value, Elsevier, Amsterdam, Netherlands, 1992, pp. 63-77.
- 2. <u>Http://www.biologydiscussion.com/herbal-medicines/regulatory-requirements-for-herbal-medicines-in-india/25359</u>.
- 3. Http://www.ncbi.nlm.nih.gov/books/NBK92773/.
- 4. Charaka. Charaka Samhita (Chakrapani Commentary), editor. 1st ed. Sutra Sthana chapter no. 1, verse no-68. Varanasi: Chaukhamba Sanskrit Sansthan; 2009. P. 36
- 5. Sharangdhar, Sharngadhara Samhita, Madhyam Kahanda, Churn Kalpana, Chapter 6, verse 161-163, pg. no. 129
- Acharya Privat Sharma, Dravyaguna Vidyan, Part Two, Chaukhamba Prakashan, edition 2012;
 pg. No 359
- 7. Acharya Privat Sharma, Dravyaguna Vidyan, part two, Chaukhamba Prakashan, edition 2012; pg. No -753
- 8. Acharya Privat Sharma, Dravyaguna Vidyan, part two, Chaukhamba Prakashan, edition 2012; pg. No 759
- 9. Acharya Privat Sharma, Dravyaguna Vidyan, part two, Chaukhamba Prakashan, edition 2012; pg. No -239
- 10. Acharya Privat Sharma, Dravyaguna Vidyan, part two, Chaukhamba Prakashan, edition 2012; pg. No $\,$ -370
- 11. Acharya Privat Sharma, Dravyaguna Vidyan, part two, Chaukhamba Prakashan, edition 2012; pg. No 503
- 12. Acharya Privat Sharma, Dravyaguna Vidyan, part two, Chaukhamba Prakashan, edition 2012; pg. No -332
- 13. Acharya Privat Sharma, Dravyaguna Vidyan, part two, Chaukhamba Prakashan, edition 2012; pg. No -362
- 14. Acharya Privat Sharma, Dravyaguna Vidnyan, part two, Chaukhamba Prakashan, edition

- 2012; pg. No- -275
- 15. Siddhinandan Mishra, Ayurveda Rasashastra Chaukhamba Prakashan 15th edition, 2006- pg. no- 459
- 16. Neelam, Sharma A. The therapeutic and toxicological effect of chitrak (Plumbago zeylanica L.)- a review. Ayushdhara [internet]. 2015dec.8 [cited 2025jun.6];2(4). available from: https://ayushdhara.in/index.php/ayushdhara/article/view/78
- 17. Dr. Shalu Sharma, Dr. Bhavna Singh, Dr. Hemant Kumar. A Critical Review of Pharmacological Actions of Haritaki (Terminalia chebula Retz) in Classical Texts. J Ayurveda Integra Med Sci [Internet]. 2019Aug.31 [cited 2025Jun.6];4(04):258-69. Available from: https://jaims.in/jaims/article/view/673
- 18. Shraf, Abdul Hakeem Sayed; Sarkar, Kingsuk; Sobhana, Shreelakshmi Radhakrishnan; Chalil, Ijima; Sen, Animesh; Mitra, Achintya. Pharmacological insights and therapeutic potential of Amalaki Rasayana: A comprehensive review. Journal of Drug Research in Ayurvedic Sciences 9(Suppl 2): p S160-S166, December 2024. | DOI: 10.4103/jdras.jdras_290_24
- 19. Sharma, Panshul, et al. "A Review on Ethnobotany, Phytochemistry and Pharmacology on Terminalia Belerica (Bibhitaki)." *Journal of Drug Delivery and Therapeutics*, vol.. 11, no. 1-s, 15 Feb. 2021, pp. 173–181, https://doi.org/10.22270/jddt.v11i1-s.4739. Accessed 9 Mar. 2021.
- 20. Tyagi, Tripti, et al., Overview evaluation of Therapeutic uses of Cyperus rotundus Musta, JETIR. Org volume- 10, 02/2023
- 21. Premalata et. al A review on vidanga (Embelia ribes burm. f.) in brihtrayi and nighantus: an overview wjpmr 2024, 10(12), 60-71
- 22. Ekka Deepak, Dubey Swati, Khichariya S.D., Dhruw D.S., Parhate S.M. Antioxidant and Anti-Inflammatory Effect of Sunthi in Pranvaha Srotas. AYUSHDHARA, 2016;4(1):1056-1059.
- 23. Ashokkumar, K., Murugan, M., Dhanya, M.K. *et al.* Phytochemistry and therapeutic potential of black pepper [*Piper nigrum* (L.)] Essential oil and piperine: a review. *Clin Phytosci* **7**, 52 (2021). Https://doi.org/10.1186/s40816-021-00292-2

- 24. Kumar, Suresh, et al. "Overview for Various Aspects of the Health Benefits of Piper Longum Linn. Fruit." *Journal of Acupuncture and Meridian Studies*, vol. 4, no. 2, June 2011, pp. 134–140, www.sciencedirect.com/science/article/pii/S2005290111600204?Via%3Dihub, https://doi.org/10.1016/s2005-2901(11)60020-4.
- 25. Vikram. S, Smrithi Valsan, Deepika. S, Swathi. R. Pharmaceutico-Analytical Study of Loha Bhasma as Described in Rasa Ratna Samuchchaya. AYUSHDHARA, 2018;5(2): 1590-1596.
- 26. Dr. Ganesh Krushna Garde, Vagbhatkrut Ashtanga Hrudaya, Sutrasthana, Chapter 1/18-19, Hemadri Tika, Chaukhamba Surabharati Publication, page 3.
- 27. Brahmanand Tripathi, Charak Samhita (Hindi translation) Vol. I, Sutrasathan 26 /42, Varanasi, Chaukhamba Surabharati Prakashana, Reprint edition 2006:pg no 368, 370, 371
- 28. Lee HS, Jung SH, Yun BS, Lee KW. Isolation of chebulic acid from Terminalia chebula Retz. And its antioxidant effect in isolated rat hepatocytes. Arch Toxicon 2007 Mar;81(3): 211-218.
- 29. Tyagi, Tripti, et al., Overview evaluation of Therapeutic uses of Cyperus rotundus Musta, JETIR. Org volume- 10, 02/2023
- 30. Sarkar PK, Prajapati PK, Chaudhary AK, Shukla VJ, Ravishankar B. Hematinic evaluation of Lauha Bhasma and Mandura Bhasma on HbCl2-induced anemia in rats. Indian J Pharm Sci 2007 Nov-Dec;69(6):791-795.
- 31. Khan SK, Vyas SN, Chandola HM. Efficacy of Trikatrayadi Lauha in Panduroga with reference to iron deficiency anemia. Ayu 2012 Jan-Mar;33(1):62-67.

PHARMACODYNAMICS OF NAVAYAS CHURNA: A DETAILED EXPLORATION OF ITS THERAPEUTIC MECHANISMS AND APPLICATIONS

ORIGINA	ALITY REPORT				
6 SIMILA	% ARITY INDEX	5% INTERNET SOURCES	3% PUBLICATIONS	0% STUDENT F	PAPERS
PRIMAR	Y SOURCES				
1	WWW.NC Internet Sour	bi.nlm.nih.gov			1 %
2	WWW.SC Internet Sour	holarsresearchl	library.com		1%
3	Plants a	Alamgir. "Thera _l nd Their Extrac and Business N	ts: Volume 1",	Springer	1%
4	www.ay	ushdhara.in			<1%
5	clinphyt Internet Sour	oscience.spring	geropen.com		<1%
6	jaims.in Internet Sour	ce			<1%
7	www.dig	gitaljournal.com	1		<1%
8	www.jay Internet Sour	/peejournals.co	m		<1%
9	Evaluate and Era Amavata	ngh. "A Compare the Efficacy of nd Paka in the I a w.s.r. to Rheutional Research	Panchasama Management o matoid Arthrit	Churna of is",	<1%

