

MANDAR AGADA AS AN ANTI-TOXIC FORMULATION: A CONCEPTUAL EXPLORATION

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ABSTRACT

Ayurveda is regarded as a distinctive medical system because it emphasizes addressing the root causes of disorders rather than merely managing symptoms. It teaches that disease arises when an individual loses awareness of their integral connection with the larger universe. In this tradition, the senses are employed both as preventive tools and as supportive elements, complementing herbal formulations and *Panchakarma* therapies. In his treatises *Ashtanga Hridaya* and *Ashtanga Sangraha*, Vagbhata provides detailed accounts of the origin of *Visha* and *Keeta Visha*. Among various forms of toxins, *Keeta Visha* is particularly significant due to its ability to produce intense clinical manifestations, which in some cases may even prove fatal. Managing these conditions is often difficult, as the identification of insect varieties remains unclear and regional differences lead to varied presentations. To counteract such effects, *Acharya Vagbhata* has described *Mandar Agada*, a classical preparation made from *Vishaghna* (anti-poisonous) herbs, specifically indicated for *Keeta Chikitsa*. Modern research suggests that the components of this formulation possess multiple actions, including anti-inflammatory, antimicrobial, antifungal, insecticidal, antioxidant, hepatoprotective, and immunostimulatory effects. The present review focuses on exploring the pharmacological and therapeutic aspects of *Mandar Agada* while emphasizing the antitoxic potential of its individual ingredients.

KEYWORD: *Mandar Agada*, *Vagbhata*, *Visha*, pharmacological therapeutic antitoxic action.

INTRODUCTION

Agadtantra is the Ayurvedic branch that deals with poisons (*Visha*) and their management (*Chikitsa*). *Visha* is defined as a substance causing *Vishada* (sorrow).^[1] while antidotal formulations are termed *Agada* and classified as *Vishaghna* (anti-toxic). Classical texts describe various *Agadas* along with categories of *Sthavara Visha* (plant/mineral toxins) and

Jangama Visha (animal-origin poisons). Among these, insect and animal bites are especially significant due to their fast and severe effects. Ayurveda prescribes several internal and external formulations for the management of *Visha* (poison). Among them, *Mandar Agada*.^[2] mentioned in the *Ashtanga Hridaya Samhita*, is traditionally used in *Luta* and *Keeta Visha* (insect-related poisoning). Assessing its antitoxic efficacy remains clinically significant.

AIM

To evaluate the antitoxic efficacy of *Mandar Agada*, a classical Agad formulation.

OBJECTIVES

1. To review the pharmacological and therapeutic actions of *Mandar Agada*.
2. To assess the pharmacological and therapeutic contributions of its individual ingredients.

MATERIAL AND METHODS

This study is based on a comprehensive literary review of classical Ayurvedic texts (*Samhitas*), along with relevant research articles and peer-reviewed journals.

Method of Preparation of *Mandar Agada*

Equal quantities of the following ingredients are taken in fine powdered form: *Apamarga*, *Manashila*, *Hartal*, *Daruharidra*, *Dhyamak*, *Gairika*, *Tagara*, *Ela*, *Kushtha*, *Maricha*, and *Yashtimadhu*. These powders are thoroughly mixed and administered along with honey and ghee.

Rasapanchaka Analysis

The pharmacological attributes (*Rasa*, *Guna*, *Virya*, *Vipaka*, and *Prabhava*) of each ingredient of *Mandar Agada* have been reviewed.

Table no.1: Herbal Ingredients of *Mandar Agada*.

Sr.No	Ingredient Name	Latin name	Family	RAS	VEERYA	VIPAK	GUNA
1	<i>Apamarga</i> ^[3]	<i>Achyrrathes aspera</i> linn.	Amaranthaceae	<i>Katu, Tikta</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu, Ruksha, Tikshana</i>
2	<i>Daruharidra</i> ^[4]	<i>Berberis Aristata</i>	Berberidace	<i>Tikta, Kashay</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu, Ruksha</i>
3	<i>Dhyamak</i> ^[5]	<i>Cymbopogo Martini</i>	Gramineae	<i>Katu, Tikta</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu, Ruksha, Tikshana</i>
4	<i>Tagar</i> ^[6]	<i>Valeriana wallichii</i>	Valerianaceae	<i>Tikta, Katu, Kashay</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu, Snigdha</i>
5	<i>Ela</i> ^[7]	<i>Elettaria cardamomum</i>	zingiberaceae	<i>Katu, Madhur</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Laghu, Ruksha</i>
6	<i>Kushtha</i> ^[8]	<i>Saussurea lappa</i>	Compositae	<i>Tikta, Katu, Madhur</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu, Ruksha, Tikshana</i>
7	<i>Marich</i> ^[9]	<i>Piper Nigrum</i>	Piperaceae	<i>Katu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu, Tikshana</i>
8	<i>Yashtimadhu</i> ^[10]	<i>Glycyrrhiza Glabra</i>	Leguminosae	<i>Madhur</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Guru, Snigdha</i>

Table no. 2: Mineral Ingredients of *Mandar Agada*.

Sr.No	Ingredient	English Name	Chemical formula	Ras	Veerya
1	<i>Gairik</i> ^[11]	Ochre	Fe ₂ O ₃	<i>Madhur, Kashay</i>	<i>Sheeta</i>
2	<i>Mana Shila</i> ^[12]	Realgar	As ₂ S ₂	<i>Katu, Tikta</i>	<i>Ushna</i>
3	<i>Hartal</i> ^[13]	Orpiment	As ₂ S ₃	<i>Katu</i>	<i>Ushna</i>

Apamarga^[14]

Pharmacological properties /action- Anti-inflammatory, anti-arthritis, Hypolipidemic analgesic, Anti-oxidant, Anti-depressant, Antibacterial, Antifertility, Wound healing, Antiparasitic, Abortifacient, Anti-allergic, Hypolipidemic, Immunomodulatory, Nephroprotective, Anti-allergic, Immunomodulatory, Cancer chemo preventive,

Ayurvedic review^[3] – Vishaghaa, Vraashodhaka, Krumighanna, Twachadoshahar, Raktashodhak, Raktavardhak, Lekha, Vedanasthapan

Antitoxic action – Tanduliyakadi Agada^[15] Amrutnamak Vishaghana Agad^[16]

Daruharidra

Pharmacological properties/action- Hepatoprotective, Anti-Inflammatory, Antidiarrheal, Anti- glyceemic, Anti-cancerous, Anti- platelet, cardiotonic, Antioxidant, Anni-microbial, Anti-fungal, Anti-bacterial^[17]

Ayurvedic review^[4] – Vedanasthapak, Vraashodhak, Vranaropak, Raktastambhak, Raktashodhak, Jwaraghana, Varnya

Antitoxic action – Chandrodaya Agad^[18] Vajra Namak Agad^[19] Bilwadi Agad^[20] Padamak Agad^[21] Champak Agad^[22] Ajeya Ghruta^[23] Trivrutadi Agad^[24] Sarvakrmika Agad^[25] Vishaghana Kalyanak Ghruta^[26] Mahasugandh Agad^[27] Ashtam Vishanashak Sursadi Yog^[28] Mrutasanjivan Agad^[29] Gandhahasti Agad^[30] Ksharagad^[31] Sarvavishanashak Chandanadi Yog^[32] Sarpavishaghana Shirishpushpadi Yog^[33] Param Agad Vachadi Yog^[34]

Dhyamak

Pharmacological properties /action^[35]- antibacterial, anti-inflammatory, antioxidant, anticancer, antidiabetic, and wound-healing activities **Ayurvedic review^[5]** – Vedanathapak, Krumighana, Deepan, Pachan, Twakdosahar

Anti- toxic action – Dushivishari Agad^[36] Lutavishahar Agad^[37] Tarkshya Namak Agad^[38] Mahasugandhi Agad^[27] Mahagandhahasti Agad^[39]

Tagar

Pharmacological properties/action^[40]- Analgesic, Cerebral protector. Antispasmodic, Radioprotective activity, Antidepressant, Antimicrobial activity, Anti-inflammatory, Anti-oxidant, Sleep Enhancing activity.

Ayurvedic review^[6] - Vranaropan, apasmarahara, netrarogahara, vatanadiuttejaka, vedanasthapan Vishaghna, Shulghna

Anti- toxic action- Chandrodaya Agada^[18] Katukadi Agad^[41], Natadi Agad^[42], Vajranamak Agad^[19], Bilwadi Agad^[20], Champak Agad^[22], Gandhamadan Agad^[43] Dushivishari Agad^[36] Lutavishahar Agad^[37] Ajeya Ghruta^[23] Ajitnamak Mahagad^[44] Tarkshya Namak Agad^[45] Sarvakarmik Agad^[25] Sarvasarpa Vishaghana ksharagad^[46] Vishaghana Kalyanak Ghruta^[26] Mahasugandhinmak Agad^[27] Dushivishari Agad^[47] Mrutasanjevan Agad^[29] Mahagandhahasti Agad^[39] Dhumagad yog^[48] Mansyadi Yog^[49] Sarvavishanashak Chandanadi yog^[32] Sarpavishaghana Shirishpushpadi Yog^[33] Paramagad Vachadi Yog^[34]

Ela

Pharmacological properties/action^[50]- Anti-oxidant, antimutagenic, cardioprotective, hepatoprotective, antibacterial, anti-inflammatory, antidiabetic and chemoprotective properties

Pharmacological action according to Ayurveda^[7] *Hrudya, Dahaprashaman, Rochan, Deepan, Pachan, Anuloman, Chardinigraha, Trshnanigrah*

Anti-toxic action - *Balasurya Agada*^[51] *Sugandhyakhya Agada*^[52] *Gandhamadan Agad*^[43] *Ajeya Ghruta*^[23] *Tarkshyanamak Agad*^[45] *Rushabha Namak Mahagad*^[53] *Sanjeevan Namak Agad*^[54] *Mahasugandhinamak Agad*^[27] *Dushivishari Agad*^[47] *Mrutasanjeevan Agad*^[29] *Mahagandhahasti Agad*^[39]

Kushtha

Pharmacological properties /action^[55] - anti-inflammatory, anti-ulcer, hepatoprotective properties, antifungal, antiviral, antimicrobial, anti-inflammatory, anti-cancer, antioxidant, *Antiparasitic*, antidiabetic, anthelmintic, antitumor, immunomodulatory, antimalarial, antihyperglycemic

Ayurvedic review^[8]- *Vednsthapan, Akshepsamak, Raktashodhak, Shulprashaman, Shwashar, Rasayan, Vranaropak*

Antitoxic action

Katukadi Agad^[41] *Natadi Agad*^[42] *Sankrantikari Agad*^[56] *Lutavishahar Agad*^[37] *Sarvasarpavishaghana Ksharagad*^[46] *Eksarsandnyaka Agad*^[57] *Sarvakarmik Agad*^[25] *Rushabhanamak Agad*^[53] *Tarkshyanamak Agad*^[45] *Vishaghana Kalyanak Ghruta*^[26] *Mahasugandhinamak Agad*^[27] *Mahagandhahasti Agad*^[39] *Dhumagad yog*^[48] *Ksharagad*^[31] *Sarvavishanashak Chandanadi Yog*^[32] *Sarpavishaghana Shirishpushpadi Yog*^[33] *Param Agad Vachadi Yog*^[34] *Lutavishaghana Madhukadi Yog*^[58]

Marich

Pharmacological properties /action^[59]- anti-per oxidative, anti-oxidant, anti-inflammatory, anti-metastatic, anti-depressant, anti-diarrheal actions

Ayurvedic review^[9]- *Krumighana, Uttejaka, Kushthaghana, Swedjanan, Lekhan, Deepan Pachan*

Antitoxic action- *Chandrodaya Agada*^[18] *Katukadi Agad*^[41] *Bilwadi Agad*^[20] *Shirishadi Agad*^[60] *Karviradi Agad*^[61] *Dashang Agad*^[62] *Pancha Shirishnamak Agad*^[63] *Trivrutadi Agad*^[24] *Ajitnamak Mahagad*^[44] *Sarvakarmika Agad*^[25] *Mahasugandh Agad*^[27] *Sarvasarpa Vishaghana ksharagad*^[46] *Mahagandhahasti Agad*^[39] *Gandhahasti Agad*^[30] *Ksharagad*^[31]

Yashtimadhu

Pharmacological properties /action^[64] Antithrombotic action, Antiulcrogenic toxicological studies, Choleric effects, Memory enhancing activity, Anti-ulcer and antioxidant activity, Hair growth promoting activity, Anticonvulsant effects, Anti-asthmatic activity, Cerebroprotective effect, Aphrodisiac activity, Antidyslipidaemic activity, Antioxidant activity, Anxiolytic activity.

Pharmacological action according to Ayurveda^[10] *Vedanasthapak, Shothahar, Dahashamak, Chardiigrah, Trushananigrah, Rasayan, Balya, Raktavikar,*

Antitoxic action – Himvan Agad^[65] Kashmaryadi Agad^[66] Lutavishahar Agad^[37] Chandrodaya Agada^[18] Dushivishari Agad^[36] ksharagad^[46] Trivrutadi Agad^[24] Rushabha Namak Mahagad^[53] Mahagandhahasti Agad^[39] Sarpavishaghana Shirishpushpadi Yog^[33] Lutavishaghana Madhukadi Yog^[58]

Gairik

Pharmacological action^[67] – Antacid properties, hemostatic effects, particularly in menorrhagia and cardioprotective actions to safeguard against poisons like snake venom and certain chemotherapy drugs

Pharmacological action according to Ayurveda^[11] – It is useful in eye disorders, *Raktapitta*, *Hikka*, *Kandu*, *Udarda Vyadhi*.

Antitoxic action – Dushivishari Agad^[36] Mahasugandh Agad^[27] Mandalivishahar Drakshadi Agad^[68] Mahagandhahasti Agad^[39], Ksharagad^[31]

Manashila^[12]

Pharmacological action^[69] – Antiviral, Immunoregulatory, antibacterial, Antitumor, anti-inflammatory, antioxidant, and epidemic-preventing effects

Pharmacological action according to Ayurveda^[12] – *Rasayan*, *Lekhan*, useful in *Aganimandya*, *Kshay*, *Anah*, *Kandu*, *Jwar*

Antitoxic action – Chandrodaya Agada^[18] Vajranamak Agad^[19] Sankrantikari Agad^[56] Mahagandhahasti Agad^[39] Param Agad Vachadi Yog^[34] Sarvavishanashak Chandanadi Yog^[32] Mrutasanjeevan Agad^[29] Mansyadi Yog^[49]

Hartal^[13]

Pharmacological action^[70] – anti fungal, antibacterial and antimicrobial, anticonvulsant action, Anti asthmatic, vasorelaxation, and antioxidant effects

Pharmacological action according to Ayurveda^[13] – *rumighana*, *Deepan*, *Pachan*, *Rasayan*, *Keshya*, *Jwaraghana*, *Rasayan*

Antitoxic action – Chandrodaya Agada^[18] Mahagandhahasti Agad^[39] Sarvasarpa Vishaghana ksharagad^[46] Nagaradi Agad^[71]

DISCUSSION

Mandar Agada is a classical formulation comprising 11 ingredients, of which 8 are herbal and 3 are mineral drugs. The preparation is administered orally, mixed with honey and ghee. Traditionally, it is indicated in the management of *Keeta–Loota Visha* (insect poisoning).

Most of the manifestations of *Keeta–Loota Visha* are observed on the skin, presenting as *Raga* (redness), *Shotha* (inflammation), *Ruja* (pain), and *Daha* (burning sensation). In Ayurveda, *Keeta Visha* is described as *Bahu Vata-Kapha*, *Manda*, and *Nati Ushna* in nature; hence, management with *Ushna Karya* (hot potency measures) is considered appropriate.

Among the 11 constituents of *Mandar Agada*, 8 possess *Ushna Veerya* and *Katu Vipaka*. The formulation is predominantly rich in *Tikta*, *Madhura*, and *Katu Rasa*. Most ingredients are credited with *Vishaghna*, *Krumighna*, *Vedanasthapaka*, *Vranashodhaka*, *Twakdoshahara*, *Shothahara*, and *Raktashodhaka* actions.

From a pharmacological perspective, these drugs exhibit antibacterial, antioxidant, antimicrobial, anti-inflammatory, analgesic, and antifungal properties. This explains the potential of *Mandar Agada* in insect bites and suggests its possible application in certain skin disorders as well. However, further experimental validation and clinical trials are required to substantiate these traditional claims.

CONCLUSION

Mandar Agada, described in the *Ashtanga Hridaya Samhita*, is indicated for *Keeta–Loota Visha*. Its herbal and mineral ingredients, rich in *Ushna Veerya* and *Katu Vipaka*, exhibit *Vishaghna*, *Krumighna*, *Shothahara*, and *Raktashodhaka* properties. Modern evidence supports their antibacterial, antifungal, antioxidant, and anti-inflammatory activities. Thus, *Mandar Agada* shows promise in managing insect bites and related skin conditions, though further scientific validation through research and clinical trials is needed.

REFRECES

1. Sharma Anantram – ‘Sushrutsamhita’ Kalpasthana – Jangamvishvidnyaniya Kalpadhyaya – 3/21 – Edition, Chaukhambha Subharati Publication, Varanasi, 2015; 533.
2. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Keetalutadivishapratishedhaadhyaya, 37/73, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1174.
3. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 542
4. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 537
5. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 623
6. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 64
7. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 719
8. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 572
9. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 362
10. Acharya Privat Sharma, Drvyaguna vidnyan, part two Chaukhamba prakashan, edition, 2012; pg.No- 253
11. Dr.Siddhinandan Mishra Ayurvediya Rasashastra Uparasvarga Gairik prakarann, Edition reprint, published by – Chaukhamba Orietalia, Varaasi, 2011; 359.
12. Dr.Siddhinandan Mishra Ayurvediya Rasashastra Uparasvarga Manashila prakarann, Edition reprint, published by –Chaukhamba Orietalia, Varaasi, 2011; 379.
13. Dr.Siddhinandan Mishra Ayurvediya Rasashastra Uparasvarga Hartal prakarann, Edition reprint, published by – Chaukhamba Orietalia, Varaasi, 2011; 372.
14. Sharma AK. Medicinal properties of Apamarg (*Achyranthes aspera* Linn.). Int J Ayur Pharma Res., 2013; 1(3): 4-12. Available from: <http://ijapr.in>
15. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/60, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1160.
16. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Dundubhiswaniya Adhyaya 6/12-13 - Edition reprint ChaukhambhaSurbharati Prakashan, Varanasi, 2015; 563.

17. Shailja Choudhary, et al. "Daruharidra (Berberis Aristata): Review Based upon Its Ayurvedic Properties." *International Journal for Research in Applied Sciences and Biotechnology*, 24 Mar. 2021; 8(2): 98–106, <https://doi.org/10.31033/ijrasb.8.2.12>. Accessed 26 May 2022.
18. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Vishapratishedhaadhyaya, 35/24-32, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1147
19. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/82-83, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1160.
20. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/84-85, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1160.
21. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 37/70, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1174.
22. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 37/71, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1174.
23. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sthavarvishavidnyaniya Adhyaya 2/47-49 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 525
24. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 61-62 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 558
25. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 78-80 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 560
26. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Dundubhiswaniya Adhyaya 6/8-11 - Edition reprint ChaukhambhaSurbharati Prakashan, Varanasi, 2015; 563.
27. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Dundubhiswaniya Adhyaya 6/14-27 - Edition reprint ChaukhambhaSurbharati Prakashan, Varanasi, 2015; 564.
28. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/52- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 549.
29. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/52- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 549.
30. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/74-76- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 552.
31. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/101-104- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 555.
32. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/191-192- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 567.
33. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/193-198- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 568.
34. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/193-198- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 570.
35. Pharmacological Properties and Therapeutic Applications of Acalypha indica: Review Article., *Journal of Pharma Insights and Research*, 2025; 3(3): 392-401. <https://doi.org/10.69613/31xf2p43>
36. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Vishapratishedhaadhyaya, 35/39, Edition reprint,

- published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1148.
37. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 37/82-84, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1176.
38. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 65-67 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 559.
39. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/77-94- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 553.
40. Tripti Tyagi, Sakshi Sharma, Rajesh Sharma. Pharmacological Actions of Valeriana Wallichii (Tagara): A Fundamental Analysis Supporting Traditional Benefits. International Journal of Ayurveda and Pharma Research, 2022; 10(Suppl 1): 1-7. <https://doi.org/10.47070/ijapr.v10iSuppl1.2468>.
41. manand Tripathi -Ashtanga Sangraha Uttarsthana, Vishapratishedhaadhyaya, 35/84-85, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1161.
42. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/73, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1162.
43. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Keetlutavishadi pratishedhadhyaya, 37/74, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1174.
44. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 63-64 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 558.
45. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 63-67 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 559.
46. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Dundubhiswaniya Adhyaya 6/1-3 - Edition reprint ChaukhambhaSurbharati Prakashan, Varanasi, 2015; 563.
47. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sthavarvishavidnyaniya Adhyaya 2/50-52 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 526.
48. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/98-100- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 555.
49. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/190- Edition Chaukhamba Sanskrut Pratishthana Delhi, 2022; 567.
50. Yahyazadeh R, Ghasemzadeh Rahbardar M, Razavi BM, Karimi G, Hosseinzadeh H. The effect of *Elettaria cardamomum* (cardamom) on the metabolic syndrome: Narrative review. Iran J Basic Med Sci., 2021 Nov; 24(11): 1462-1469. doi: 10.22038/IJBMS.2021.54417.12228. PMID: 35317114; PMCID: PMC8917848
51. Kaviraj Dr.Atridev Gupta –commentator, Ashtanga Sangraha, II. Krushnadas Academy, Varanasi, Uttarsthana-Vishapratishedha.1st edition, 2001; 40/77; 347.
52. Kaviraj Dr. Atridev Gupta-Ashtanga Sangraha Uttarsthana, Vishopadravapratishedhaadhyaya, 47/39, Edition reprint, published by –Chaukhamba Krushnadas Academy Varanasi, 2005; 383.
53. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 68-72 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 559.
54. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 73-74 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 559.
55. Elnour AAM, Abdurahman NH. Current and potential future biological uses of *Saussurea costus* (Falc.) Lipsch: A

- comprehensive review. *Heliyon*, 2024 Sep 11; 10(18): e37790. doi: 10.1016/j.heliyon.2024.e37790. PMID: 39323795; PMCID: PMC11422592.
56. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 37/44, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1170.
57. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 84-86 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 561.
58. Tripathi Ravidatta and Shukla Vidyadhar – ‘Charaksamhita’ Vol. 2 Chikitsasthana- ‘Vishchikitsitam Adhyaya 23/202- Edition Chaukhamba Sanskrit Pratishthana Delhi, 2022; 568.
59. Duggal V, Sharma O, Garg N. Significance of pharmacokinetics and pharmacodynamics of *Piper nigrum* L. (Marich). *World J Pharm Med Res.*, 2021; 7(12): 60-5.
60. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/72, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1162.
61. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/70, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1161.
62. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Keetlutavishadi pratishedhadhyaya, 37/27-28 Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1168.
63. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 81 Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 560.
64. Prajapati SM, Patel BR. Phyto-pharmacological perspective of Yashtimadhu (*Glycyrrhiza glabra* Linn.) – a review. *Int J Pharm Biol Arch*, 2013; 4(5): 833-41.
65. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/63-64, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1160.
66. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 36/65, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1161.
67. Santoshi Mane, Nilima Wadnerwar, Sudhir Ninave, R. D. Wajgi and R. R. Dighade, “Evaluation of Cardioprotective action of Suvarna gairik (Redochre) in Indian Cobra Envenomation, Aluminium Phosphide Poisoning and Doxorubicin Cardiotoxicity in Albino Rats- A Protocol”, *Journal of Pharmaceutical Research International*, 2021; 33(60A): 405–411. doi: 10.9734/jpri/2021/v33i60A34500
68. Acharya Priyavat Sharma –‘Sushrutsamhita’ Kalpasthana Sardashtavisha Chikitsa Adhyaya 5/ 68-72 - Edition reprint Chaukhambha Surbharati Prakashan, Varanasi, 2015; 559.
69. Guan, Huifang, et al. “Pharmacology, Toxicology, and Rational Application of Cinnabar, Realgar, and Their Formulations.” *Evidence-Based Complementary and Alternative Medicine*, 27 Sept. 2022; vol. 2022: p. e6369150, www.hindawi.com/journals/ecam/2022/6369150/#;~:text=According%20to%20traditional%20Chinese%20medicine,https://doi.org/10.1155/2022/6369150. Accessed 23 Aug. 2023.
70. Alappat, Binu & Das, Kamdev & Das, Arun & C, Roshy., Ayurvedic Review of Haratala (Arsenic Trisulphide – As₂S₃) and Its Therapeutic Importance, 2015; 2: 1-10.
71. Dr. Brahmanand Tripathi -Ashtanga Sangraha Uttarsthana, Sarpavishapratishedhaadhyaya, 37/40, Edition reprint, published by –Chaukhamba Sanskrit Pratishthan Delhi, 2022; 1170.