WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.453
Volume 14, Issue 10, 560-568. Review Article ISSN 2277–7105

FROM POISON TO CURE: MEDICINAL APPLICATIONS OF TOXIC FLORA

Dr. Akshay Kumar*[1], Prof. (Dr.) Munna Lal Prajapati[2] and Dr. Rajveer Sason[3]

[1]MD Scholor PG Department of Agadtantra Evum Vidhi Vaidyaka, Rajiv Gandhi Government Post Graduate Ayurvedic College and Hospital Paprola, Distt. Kangra, (Himachal Pradesh).

[2]H.O.D, PG Department of Agadtantra Evum Vidhi Vaidyaka, Rajiv Gandhi Government Post Graduate Ayurvedic College and Hospital Paprola, Distt. Kangra, (Himachal Pradesh).

[3]Assistant Professor, PG Department of Agadtantra Evum Vidhi Vaidyaka, Rajiv Gandhi Government Post Graduate Ayurvedic College and Hospital Paprola, Distt. Kangra, (Himachal Pradesh).

Article Received on
26 March 2025,

Revised on 15 April 2025,
Accepted on 05 May 2025

DOI: 10.20959/wjpr202510-36743

***Corresponding Author**
Dr. Akshay Kumar
MD Scholor PG Department of Agadtantra Evum Vidhi Vaidyaka, Rajiv Gandhi Government Post Graduate Ayurvedic College and Hospital Paprola, Distt. Kangra, (Himachal Pradesh).

ABSTRACT

The concept of using poisons as medicine has been an integral part of Ayurveda, particularly in Agada Tantra (Toxicology). The principle of "*Vishasya Visham Aushadham*" (Poison as Medicine) highlights the controlled and purified use of toxic substances to treat various ailments. The historical, theoretical, and practical facets of Ayurvedic poison-based remedies are examined in this paper. Poisons like *Vatsanabha* (Aconite), *Datura*, and Strychnos nux-vomica have been traditionally utilized after proper detoxification to treat neurological, respiratory, and skin disorders. Ayurveda emphasizes detoxification techniques such as *Shodhana* (purification) and *Samskara* (processing) to reduce toxicity, modern medicine employs precise dose calculations and targeted delivery. This article critically analyzes the efficacy, safety, and potential risks associated with poison-based treatments, aiming to bridge the gap between traditional wisdom and modern scientific validation. The findings emphasize the need for evidence-based research to integrate Ayurvedic poison therapy into mainstream medicine while ensuring safe and ethical use.

KEYWORDS: Agada Tantra, *Vishopachara*, Poison as Medicine, Ayurvedic Toxicology, Controlled Poison Therapy.

INTRODUCTION

Humans have depended on plants for all of their basic requirements, including food and shelter, from the beginning of civilization. Additionally, they employ herbs as medicine. Since the dawn of recorded history, people have utilized toxic plants for the assassination of both humans and animals. Later on, Human knowledge of toxic plants increased, and their therapeutic applications were put into practice. According to estimates from the World Health Organization, 70–80% of people worldwide use herbal treatments.. Poisons have long been regarded as substances causing harm, but history shows that their controlled use can yield medicinal benefits. Numerous common plants are in danger of dying due to the ongoing depletion of finite natural resources.

Because they are used, poisonous plants are increasingly prevalent. less often. The cost of effective medicine can be somewhat reduced if medical expenses can be met.[1]

Acharya Charaka gave it the name Visha, which means poison.[2]

The patient will benefit if the poison is administered in a therapeutic dosage, according to Acharya Charaka.[3]

Aacharya Sushruta asserts that all substances in the universe possess the ability to heal in some way. Drugs used to treat illnesses or materials utilized in specific Combinations' positive and potent effects demonstrate the presence of therapeutic compounds.[4]

The treatment of diseases caused by toxins and poisons, such as insect, reptile, and animal bites, ruined food, toxic minerals, metals, and improper food combinations, is covered by Visha Chikitsa, also called Agad Tantra.[5] Visha, then, is a material that is harmful to life and has qualities such as Ushna, Tikshna, Ruksha, Sukshma, Vyavayi, Vikasi, Ashukar, Anirdeshya rasa, and Apaki, among others. Upavishas are medications that have these characteristics but are less virulent than Vishas.[5,6]

Upavishas and Visha are used to treat poisoning, inflammation, fever, and pain, among other conditions. It is used either alone or in conjunction with medication to treat a number of

illnesses, including: In light of this, this article's goal is to examine the therapeutic uses of toxic plants as they are mentioned in Indian medicine.

OBJECTIVE

This review of the literature examines how poisonous plants are treated in Indian medicine using published scientific publications and material from both traditional and contemporary Ayurvedic principles.

To critically evaluate the therapeutic applications, detoxification techniques, and safety profiles of poisonous plants used in Ayurvedic medicine, with a special focus on Agada Tantra (Ayurvedic Toxicology). This article aims to bridge traditional Ayurvedic knowledge and modern scientific perspectives by analyzing the efficacy, risks, and potential integration of poison-based therapies into contemporary healthcare systems.

MATERIALS AND METHODS

This review is based on a comprehensive analysis of classical Ayurvedic texts such as Charaka Samhita, Sushruta Samhita, and relevant Nighantus (Ayurvedic pharmacopoeias), focusing on descriptions of Visha (poisons) and Upavisha (semi-poisons). In addition, scientific journals, research papers, and pharmacological studies were examined to understand the modern toxicological and therapeutic aspects of selected poisonous plants, including *Vatsanabha* (Aconitum ferox), *Datura* spp., and *Strychnos nux-vomica*. The methodology involves a qualitative review of literature from traditional and contemporary sources, evaluating both historical relevance and recent pharmacological validation of Ayurvedic detoxification procedures like *Shodhana* and *Samskara*

Effects of Sodhana of Toxic herbs

Ayurvedic texts state that poisons must be carefully cleaned before being used. Toxic substances are utilized in a few special cases. This is the method by which Jangam Visha (Animal Poison) is counteracted by Sthavar Visha Dravya (Inanimate). To support the findings of the Shodhna (purification) process, numerous scientists have carried out a variety of investigations.

According to research, detoxifying harmful chemicals boosts power and eliminates chemical and bodily impurities. It also modifies the structure and characteristics of medications and

lessens toxicity. Purified nux vomica seeds exhibit anticonvulsant properties, however unpurified nux vomica seeds have the potential to induce convulsions.[7]

Visha in the context of medicine

***Vatsanabha* (Aconitum ferox)**[8]

Family – Ranunculaceae

English: Indian aconite,

Hindi Name: Meetha Telia, Bachnag, Meetha visha

Sanskrit names: Vatsnabh, Amrit, Vish

The following photochemicals are found in good amounts in Vatsnabha: Aconite, pseudo-aconitine, indaconitine, catecholamine, and isoquinolines.

Medical Indications Fever, persistent fever, fever brought on by inflammation, such as rheumatic fever, and appetite loss (rarely used unless fever, but helpful for boosting appetite during fever or illness).

Formulations

- Amrit Rasayan
- Anand bhairav ras
- Hinguleshwar ras
- Jaya vati
- Jwarmurari ras
- kaphketu ras
- Mahalaxmi vilas ras
- Mrityunjaya Ras.

Dhatura (Dhatura Metal Linn.)[9,10]

Dhatura Plant.

Dhatura Seeds.

A perennial herbaceous plant, belonging to Solanaceae family .Dhatura is also referred to as devil's weed, locoweed, thorn apple, and jimson weed.

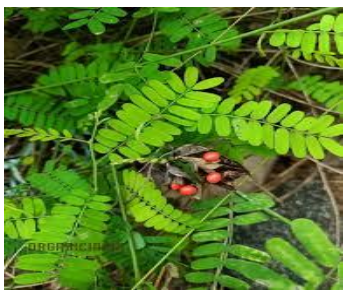
Chemical Constituents

Calystegines, the nortropane alkaloids with glycosidase inhibitory activity, have also been found in various Dhatura species. Therapeutic Uses- Plant contains many useful phytochemicals which renders it of benefit for using treatment of many kinds of diseases. Numerous Dhatura species have also been reported to contain calystegines, nortropane alkaloids having glycosidase inhibitory action.

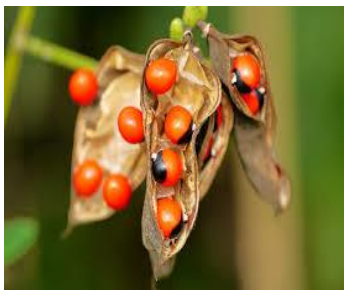
Therapeutic Uses: The plant's numerous beneficial phytochemicals make it beneficial for treating a wide range of illnesses.

Gunja (Abrus Precatorius)[11,12,13,14]

Family- Leguminosae



Gunja Plant.



Gunja Seeds.

Common Name: Gunja

Indian liquorice root is its English name.

Sanskrit: Raktika, Kakananti, and Gunja

Hindi-Ratti Active Principle: The active principles found in seeds include the thermolabile toxalbumin abrin, the amino acid abrine, the lipolytic enzyme hemagglutinin, and the glycoside abralin. Urustambh, Udararog, Shotha Viryavikar Vatavyadhi, Kushta, Krimi, Arsha, Visrpa, Vicharchika, and Kaphaj Galgand are among the medicinal indications. Gunjadya Taila works quite well for Darunak when applied locally. The purified seeds' efficacy studies have a noteworthy impact on hair development. A. precatorius has diverse pharmacological activities in different sections. Antiestrogenic, antimicrobial, anti-diabetic, antioxidative, neuroprotective, antiviral, neuromuscular, anticonvulsant, antiepileptic, immune modulating, abortifacient, antihelmintic, antidepressant, memory enhancing, antiserotonin, diuretic, antiyeast, anti-inflammatory, antiarthritic and analgesic, anticancer, and antispermatogenic properties are all possessed by this plant.

Formulations

- Gunjabhadra rasa
- Gunja Jeevan rasa
- Pratham gunjaydhya taila
- Ditiya gunjaydhya taila.

Bhanga (Cannabis sativa) (Cannabaceae)[15,16,17]

Cannabis is also called marijuana, Hashish, Ganja etc. It is also categorized as a narcotic, sedative, or mild psychedelic.

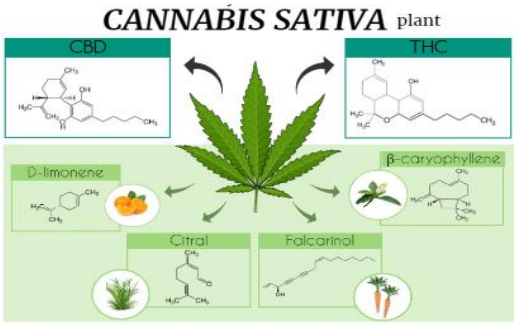
Sanskrit name- Bhanga, Ganja, Maatulani, Maadini, Vijaya, Jaya.

Common names include marijuana, marihuana, weed, grass, hash, pot, and hashish.

Chemical Constituents

Bhanga has many chemical constituents. Some important chemical constituents are Cannabinol, tetrahydro-cannabiol, Cannabidiol, tetrahydrocannabinol, eugenol, 1-dehydro sesquiterpenes, cannabinoids etc.

Active Principle: 9-tetrahydrocannabinol (THC) is the active form of canabinol, a fat-soluble oleoresin rather than an alkaloid. Benzopyrene, a recognized carcinogen likewise present in tobacco, is also present in it.



Therapeutic Uses[18,19,20]

1. For diarrhea, pure Bhang 1 part, Jayphal 1 part, and Indrayav 2 part with honey are highly helpful.
2. In Nindra naash, Attisaar, and Grahani, roasted bhang seed powder combined with honey at night is beneficial.
3. Bhang leaves can be used in piles when soaked in hot water.

Detoxification and Processing Methods in Ayurveda

Ayurveda emphasizes *Shodhana* (purification) and *Samskara* (processing) to neutralize toxicity before medicinal use. Some key detoxification methods include

- **Swedana(Steaming):** Swedana is commonly used to detoxify metals and minerals in Rasa Shastra. This process involves the application of heat and moisture, typically using steam from herbal decoctions.[21]
- ***Nirvapa* (Repeated heating and quenching in herbal decoctions)** – Used for mercury and sulfur.[22]
- ***Dhalana* (Melting and pouring into liquids)** – Used for metallic preparations.[23]
- ***Bhavana* (Grinding with herbal juices)** – Used for reducing toxicity of plant-based poisons.[24]

CONCLUSION

The controlled use of poisons in medicine represents a fine balance between toxicity and therapeutic potential. Ayurveda's approach to poison-based treatments, when validated through modern scientific research, offers promising avenues for drug discovery and integrative medicine. Future research should focus on clinical trials, toxicity studies, and pharmacological validation to establish safety standards for traditional poison therapies. By bridging the gap between Ayurveda and modern medicine, we can harness the potential of controlled poisons for effective and safe disease treatment.

REFERENCES

1. Dr. Ashish Bharti Goswami. A Survey of Visha Dravya (Poisonous Plants) And Vishaghna Dravya Antidotal Plants) in and around Belgaum Region [PG thesis]., KLE university, 2010.
2. Tripathi Bramhanand, Dr. Prabhakar Deshpande, editors, Charak Samhita, Varanasi; Chaukhambha Orientalia; Chikitasthana. 23/5 reprint, 2002; pp746.
3. Charaka Samhita. Jadavji Trikamji Acharya, editor. Varanasi: Chowkhamba Krishnadas Academy, 2006. Chikitsasthana.
4. Trikamji Yadavji, Sushruta Samhita. Varanasi: Chaukhamba Sanskrit Sansthan. Sutrasthana, 41/9: 2003.
5. Chunekar Krushnachandra, commentator, Gangasahaya Pandeya, editor, Bhavprakash Nighantu-Purvakhanda, Dhatwadivarga/191, 1st edition, Varanasi; Chaukhambha Vidya Bhavan, 1960; pp.678.
6. Chunekar Krushnachandra, commentator, Gangasahaya Pandeya, editor, Bhavprakash Nighantu-Purvakhanda, Dhatwadivarga/206, 1st edition, Varanasi; Chaukhambha Vidya Bhavan, 1960.
7. Katiyar C, Kumar A, Bhattacharya SK, Singh RS Fitoterapia. Ayurvedic processed seeds of nux-vomica: neuropharmacological and chemical evaluation, 2010; 81(3): 190-5.
8. https://www.easyayurveda.com/2012/08/24/vat sanabha-benefits-toxic-effects-purification-dosage.
9. Afsharypuor S, Mostajeran A. and Mokhtary R (1995). Variation of scopolamine and atropine in different parts of Datura metel during development. Planta Med., 61: 383–384.
10. Ghani A (2003). Medicinal Plants of Bangladesh with chemical constituents and uses. 2nd edition, Asiatic Society of Bangladesh, 5 old Secretariate road, Nimtali, Dhaka, Bangladesh.
11. Banger SK, Lahamge SM. A comparative clinical study to evaluate role of Gunjadi Tail and Narikel Tail in Darunaka w.s.r. to dandruff. Int J Res Ayurveda Med Sci., 2018; 1: 5-9.
12. Barve K, Ojha N. Effective detoxification of Abrus precatorius Linn. seeds by Shodhana. J Ayurveda Integr Med., 2013; 4: 82-5.
13. Desai VB, Sirsi M. Antimicrobial activity of Abrus precatorius. Indian J Pharmacy, 1966; 28: 164.
14. Dhawan BN, Patnaik GK, Rastogi RP, Singh KK, Tandon JS. Screening of Indian plants for biological activity: Part VI. Indian J Exp Biol., 1977; 15: 208-19.

15. Sivakumar R, Alagesaboopathi C. Studies on cytotoxicity and antitumor screening of red and white forms of Abrus precatorius L. Afri J Biotech, 2008; 7: 3984-8.
16. Ganga Sahay Pandey, Krishan Chandra Chunekar, Bhav Prakash Nighantu, Chaukhambha Bharti Academy, Reprint, 2005; page No-141-145.
17. Gautam Vishvas, Review of Forensic Medicine and Toxicology, First edition, 2010; page no- 404.
18. Priyavat Sharma, dravayagun vigyan 2nd part, Chaukhamba Bharti Academy. Sixteenth edition, 1994; page no. 25 & 27.
19. Shri harihar Prasad pandeyen, bhawprakash (vidhyotini tika). publication- Chaukhamba Sanskrit Sasthan Varanasi ninth edition, 2005; pg no-27.
20. PV sharma, chakardatta, Sanskrit text with English transhlation. publication chaukhamba publishers Varnasi (India) 3rd edition, 2002.
21. Sharma, P.V. (2006). *Rasa Shastra*. Chaukhambha Sanskrit Series.
22. Dash, Vaidya B. & Kashyap, L. (2011). *Materia Medica of Ayurveda Based on Ayurveda Saukhyam of Todarananda*.
23. Tripathi, I. (2015). *Rasa Tarangini*, 11th Edition. Motilal Banarsidass Publishers.
24. P.V. (1994). *Dravyaguna Vijnana (Vol. 2)*. Chaukhambha Bharati Academy, Varanasi.