



Review Article

MEDICINAL USES OF POISONOUS PLANT - A BRIEF REVIEW

Priyanka^{1*}, R. C. Tiwari², Aditi Yadav³, Akshu Sharma⁴, Indermani⁵

¹Assistant Professor, PG Department of Agadtantra evum Vidhi Vaidyaka, Haridwar Ayurved Medical College & Research Centre, Haridwar, Uttarakhand.

²Professor & H.O.D, PG Department of Agadtantra evum Vidhi Vaidyaka, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar, Uttarakhand.

³Assistant Professor, PG Department of Agadtantra evum Vidhi Vaidyaka, Quadra Institue of Ayurveda, Rorkee, Uttarakhand.

⁴Assistant Professor, PG Department of Agadtantra evum Vidhi Vaidyaka, SKSS Ayurvedic Medical College and Hospital Sarabha, Ludhiana.

⁵Assistant Professor, PG Department of Agadtantra evum Vidhi Vaidyaka, Doon Group of College Sunderpur, Saharanpur, India.

<p>Article info</p> <p>Article History: Received: 12-11-2022 Revised: 02-12-2022 Accepted: 18-12-2022</p> <p>KEYWORDS: Medicinal uses, Poisonous plant, <i>Shodhana</i> process, <i>Visha</i>, <i>Aushadhi</i>.</p>	<p>ABSTRACT</p> <p>A poisonous plant is defined as a plant that when touched or ingested in sufficient quantity can be harmful or fatal. Many plants are harmful to people when consumed or through skin contact with plant chemicals. Poisonous medicinal herbs are used to treat a variety of illnesses, including diabetes, cancer, infection, and fungal growth. According to the review, numerous phytochemical components that have diuretic, purgative, laxative, anti-allergic, and other significant therapeutic effects have been identified from a variety of medicinal plants. If utilized appropriately, poison can be life-giving, calming to the three <i>Doshas</i>, encouraging, and regenerating. The poisonous plants categorized in <i>Visha</i> and <i>Upvisha</i> in Ayurveda texts. <i>Agadtantra</i> is an important branch of <i>Astanga</i> Ayurveda. Importance of this branch has been described in our <i>Vedas</i>, <i>Epics</i>, and <i>Samhita</i>. Proper description, classification, clinical features, and management of any kind of <i>Visha</i> has been described in this branch. Name of some poisonous plants are <i>Dhatu</i>, <i>Vatsanabha</i>, <i>Bhallataka</i>, <i>Bhanga</i>, <i>Kuchala</i>, <i>Vacha</i> and <i>Gunja</i> etc. <i>Shodhana</i> process is the only bridge between <i>Visha</i> and <i>Aushadhi</i>. <i>Shodhana</i> is the process by which physical, chemical and natural impurities are removed. It will intensify the potency, effectiveness of drug, nullify the toxicity. The aim of this review article is to provide a brief overview of the numerous medicinal uses of some poisonous plant.</p>
--	---

INTRODUCTION

According to Acharya Charaka, if poison used in a therapeutic dose will provide results in a beneficial way to the patient.^[1]

Visha means poison and it was named *Visha* by Acharya Charaka.^[2] *Visha Chikitsa* or *Agad Tantra* include the treatment of diseases caused by poisons

and toxins, such as animal, reptile, insect bites, spoiled food and poisonous minerals, metals and unsuitable food combinations.^[3] Thus *Visha* has been defined as a substance which is destructive to life and possesses properties like *Ushna*, *Tikshna*, *Ruksha*, *Sukshma*, *Vyavayi*, *Vikasi*, *Ashukar*, *Anirdeshya rasa* and *Apaki* etc. The drugs which possess these properties is in less virulence than *Vishas* are called *Upavishas*.^[4,5]

Access this article online	
Quick Response Code	
	https://doi.org/10.47070/ijapr.v10i12.2614
Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)	

Description of Some Poisonous Plants

Dhatura (Dhatura Metal Linn.)^[6,7]

A perennial herbaceous plant, belonging to *Solanaceae* family. *Dhatura*, commonly known as thorn apple, jimson weed, locoweed, and devil's weed.



Fig no-1: *Dhatura* plant



Fig no-2: *Dhatura* seeds

Chemical Constituents

Main constituents of the *Dhatura* plant are tropane alkaloids (hyoscyamine, hyoscyne, littorine, acetoxytropine, valtropine, fastusine, fastusinine), a number of withanolides and various triglycol esters of tropine and pseudotropine. Calystegines, the nortropine 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. Notably the leaves are frequently use as remedy for asthma and proctatile cough.

Local: Being *Jantughna*, *Vedanastapana* and *Kushthaghna*.

Internal

Anna and Purishavaha: *Dhatura* diminishes excessive hyperperistalsis of stomach and duodenum whereby it relieves pain in abdomen and controls secretion of *Pitta*. Hence, it is used in *Amlapitta*, *Parinamashula* and *Pittashmari* to relieve pain and to control secretion of acid and bile. It is also useful to relieve pain present in *Amashayagata vata*, *Vatajagrahani* and *Pravahika*.

Pranavaha: It relieves bronchial spasm and absorbs mucus whereby it eliminates *Shvasa* and *Kasa*.

Rasa-Raktavaha: It improves rate of contraction of the heart and the pulse by stimulating vagus nerve (*Pranada vatavahini*).

Jvara- It is very good *Kapha-Vatashamaka*. Its seed powder is useful to overcome *Bhrama* (dizziness) and *Pralapa* (delirium) associated with *Vishmajvara*.

Majjavaha: It is *Vedanasthapana* and *Madaka*. It acts as a cholinergic blocking agent of the nerves and hence works as *Shoolaghna* (antispasmodic). It should be used as *Vedanashamaka* (analgesic) in *Vatavyadhi*.

Shukra Artavavaha: Useful in *Kashtartava* (dysmenorrhoea) as it removes uterine spasm. It is also useful in premature ejaculation being *Shukra stambhana* due to its *Kashaya* and *Rooksha gunas*.

Mutravaha: It acts as antispasmodic of ureters and bladder and hence should be used in renal colic. Should also be used to overcome bed wetting in children.

Svedavaha: Since it raises body temperature by decreasing rate of perspiration due to its *Ruksha guna*, it is used to prevent or to treat chills and rigors.

Formulations

- *Kanakasava*,
- *Ekangavira Rasa*
- *Tribhuvana Kirti Rasa*
- *Sri Jayamangala Rasa*
- *Laghu Vishagarbha Taila*
- *Vishatinduka Taila*
- *Dhatura Taila*

Vatsnabh (Acontium ferox Wall)^[8]

Family – Ranunculaceae

English: Indian aconite, Hindi Name: Meetha Telia, Bachnag, Meetha visha, Sanskrit names: *Vatsnabh*, *Amrit*, *Vish*



Fig no-3: *Vatsnabh* root

Chemical Composition- *Vatsnabha* is good source of following photochemical- Aconite, Pseudo-aconitine, Indaconitine, Catecholamine, Isoquinolines

Therapeutic Indications

Fever, chronic fever, inflammation induced fever- like rheumatic fever, loss of appetite (rarely used unless fever, but beneficial during fever or illness for improving appetite). Splenomegaly, diabetes,

respiratory infections, indigestion, poor digestion, asthma, cough, common cold.

Formulations

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

Gunja (*Abrus Precatorius*)^[9,10,11,12]

Family- Leguminosae



Fig no-4: Gunja plant



Fig no-5: Gunja seeds

Common Name- Gunja **English Name-** Indian liquorice root. **Sanskrit-** Gunja, Raktika, Kakananti **Hindi-** Ratti

Active Principle- Seeds contain active principles, abrin, a thermolabile toxalbumin; abrine, an amino acid; hemagglutinin, a lipolytic enzyme; and abralin, a glycoside.

Therapeutic Indication

Urustambh, Udararog, Shotha Viryavikar Vatavyadhi, Kushta, Krimi, Arsha, Visrpa, Vicharchika and Kaphaj Galgand.

When used locally, *Gunjadya Taila* is quite successful at treating *Darunak*. The efficacy studies of the purified seeds show the significant result on hair growth. There are various parts of *A. precatorius*, which shows different pharmacological activity. This plant is having antiestrogenic antimicrobial, anti-diabetic, antioxidative, neuroprotective, antiviral, neuromuscular, anticonvulsant, antiepileptic, immunomodulating, abortifacient, antihelminthic, antidepressant, memory enhancing, antiserotonin, diuretic, antiyeast, anti-inflammatory, antiarthritic and analgesic, anticancer, antifertility and antispermatogenic activity.

Formulations

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

Bhanga (*Cannabis sativa*) (Cannabaceae)^[13,14,15]

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

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

Common name- Marijuana, Marihuana, Hashish, Pot, Hash, Grass, Weed.

Chemical Constituents

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

Active Principle- It is not an alkaloid, but a fat-soluble oleoresin, cannabinol, the active form being 9-tetrahydrocannabinol (THC). It also contains benzopyrene, a known carcinogen which is also found in tobacco.

Therapeutic Uses^[16,17,18]

1. Pure Bhang 1 part, *Jayphal* 1 part and *Indrayav* 2 part with honey is very useful in dysentery.
2. Roasted Bhang seeds powder with honey in the night is useful in *Nindra naash, Attisaar, Grahani*.
3. *Bhang* leaves with hot water is useful in piles.

Formulations

- *Jatiphaladi churna*
- *Trilokaya samhohan rasa*
- *Trilokaya Vijaya vati*
- *Madanodaya modak*

CONCLUSION

Ayurveda is an ancient and renowned medicinal pathy of ancient India. Even the poisonous plants have been used for medicinal purpose in Ayurveda. Acharyas use many toxic natural drugs

either in their crude form or after *Shodhana* processes for treating human diseases. As we know that even a strong poison can be converted to an excellent medicine if processed and administered properly but if handled incorrectly, it may become hazardous. Poisonous plants have numerous medicinal values. Certain precautions about those plants are enough to use these poisonous plants for medication purposes.

REFERENCES

1. Charaka Samhita. Jadavji Trikamji Acharya, editor. Varanasi: Chowkhamba Krishnadas Academy; 2006. Chikitsasthana.
2. Tripathi Bramhanand, Dr. Prabhakar Deshpande, editors, Charak Samhita, Varanasi; Chaukhambha Orientalia; Chikitsasthana. 23/5, reprint 2002. pp746.
3. Vaidya Yadavji Trikamji Acharya, editors, Agnivesha Charaka Smahita, Varanasi; Chaukhmba Publication; Sutrasthana. 30/28, reprint 2011. pp 189.
4. Chunekar Krushnachandra, commentator, Gangasahaya Pandeya, editor, Bhavprakash Nighantu-Purvakhanda, Dhatwadivarga/191, 1st edition, Varanasi; Chaukhambha Vidya Bhavan, 1960. pp.678.
5. Chunekar Krushnachandra, commentator, Gangasahaya Pandeya, editor, Bhavprakash Nighantu-Purvakhanda, Dhatwadivarga/206, 1st edition, Varanasi; Chaukhambha Vidya Bhavan, 1960. pp.682.
6. 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.
7. 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.
8. <https://www.easyayurveda.com/2012/08/24/vat-sanabha-benefits-toxic-effects-purification-dosage>
9. Banger SK, Lahange 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.
10. Barve K, Ojha N. Effective detoxification of Abrus precatorius Linn. seeds by Shodhana. J Ayurveda Integr Med 2013; 4: 82-5.
11. Desai VB, Sirsi M. Antimicrobial activity of Abrus precatorius. Indian J Pharmacy 1966; 28: 164.
12. 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.
13. 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.
14. Ganga Sahay Pandey, Krishan Chandra Chunekar, Bhav Prakash Nighantu, Chaukhambha Bharti Academy, Reprint, 2005, page No-141-145.
15. Gautam Vishvas, Review of Forensic Medicine and Toxicology, First edition-2010 page no-404
16. Priyavat Sharma, dravayagun vigyan 2nd part, Chaukhamba Bharti Academy. Sixteenth edition 1994, page no.-25 & 27.
17. Shri harihar Prasad pandeyen, bhawprakash (vidhyotini tika). publication- Chaukhamba Sanskrit Sasthan Varanasi ninth edition 2005 pg no-27.
18. PV sharma, chakardatta, Sanskrit text with English transhlation. publication chaukhamba publishers Varnasi (India) 3rd edition 2002.
19. Dr.Gorkhnath Chaturvedi, Charak Samhita, vidhyotani tika, Chaukhamba Bharti academy, Varanasi, Reprint 2012 page no.439

Cite this article as:

Priyanka, R. C. Tiwari, Aditi Yadav, Akshu Sharma, Indermani. Medicinal Uses of Poisonous Plant- A Brief Review. International Journal of Ayurveda and Pharma Research. 2022;10(12):48-51.

<https://doi.org/10.47070/ijapr.v10i12.2614>

Source of support: Nil, Conflict of interest: None Declared

*Address for correspondence

Dr. Priyanka

Assistant Professor,
PG Department of Agadtantra
evum Vidhi Vaidyaka, Haridwar
Ayurved Medical College &
Research Centre, Haridwar,
Uttarakhand, India

Email:

dr.priyanka545@gmail.com

Phone No: 9634276065

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.