

**Review Article****A REVIEW ON BAUHINIA VARIEGATA AND ITS PHYTOCONSTITUENTS****Thakur Tanika<sup>1</sup>, Vaishnavi<sup>1</sup>, Kumar Ravinder<sup>2\*</sup>, Sharma Shruti<sup>3</sup>, Thamman Rakesh<sup>4</sup>**<sup>1</sup>Research Scholar, <sup>2</sup>Lecturer, Department of Pharmacology, <sup>3</sup>Lecturer, Department of Pharmaceutics, <sup>4</sup>Principal, College of Ayurvedic Pharmaceutical Sciences, Jogindernagar, Maandi, H.P, India.**Article info****Article History:**

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**KEYWORDS:***Kachnar, Gandmala nashaka, Bauhinia variegata, Kovidar, Pharmacognosy, Phytochemicals.***ABSTRACT**

*Kachnar (Bauhinia variegata)* is a common drug of the Ayurvedic system of medicine used in different Ayurvedic formulation for the treatment of various ailments. *Kachnar* is a member of the Leguminosae family and is widely produced in the tropical regions of world and countries such as Asia, China, India, Bhutan, and Thailand. All parts of *Kachnar* are enriched with medicinal and nutritional efficiency including the roots, leaves, bark, stem and flowers. A class of phytochemicals like protein, amino acid, fixed oils, fats, phenolic compounds, tannins and saponins are found in *Kachnar*. *Kachnar* is used to treat goiter, pain, diabetes, hyperthyroidism, ulceration and it shows various proven Pharmacological activities such as anti-inflammatory, anti-oxidant, immune-modulatory, antibacterial, anti-diabetic, analgesic and thyroid hormone regulator activity. This review article chiefly highlights the phytoconstituents present in the *Kachnar* and pharmacological properties of *Kachnar*.

**INTRODUCTION**

*Bauhinia variegata* also known as *Kachnar* belongs to family Leguminosae mostly found in the regions of South India [1,2] and is an indigenous plant of Asia and China, present in the tropical regions of the world [3]. *B.variegata* is used traditionally as a medicine for the treatment various diseases like infections, diabetes, pain and inflammation edema, leprosy, wounds etc. due to presence of many phytochemicals [4]. As per Ayurveda *B.variegata* contains saponins and glycosides and it is cold in potency, astringent in taste, light, dry [5]. *Bauhinia* balances all the three *Doshas (Kapha, Pitta and Vata)* and is beneficial in diseases like chronic lymphadeniti, goiter, worm infection, and wound healing [6].

**Morphology**

*Bauhinia variegata* is a species of flowering plant, deciduous medium size tree.

- Bark- Externally greyish brown in colour and pale- pink internally and the outer surface is rough due to the presence of large number of longitudinal fissures and cracks.
- Leaves- Leaves are 10-15cm in length and in width, broad, sub coriaceous and deeply cordate.
- Flowers- Flowers are white or purplish with five irregular overlapping fragrant petals.
- The pods are 15-30 in numbers, hard, flat and dehiscent. [7]

**Macroscopic Characters:** The bark is light brownish, smooth with little fissure, and scaly. Leaves consist of minute stipules 1-2mm, 3-4cm, lamina is ovate to form clusters twigs are unbranched at the end. Pods are dehiscent, strap-shaped, 20-30 in numbers and 2-25cm long, hard, flat with 10-15 seeds.[8]

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**Pharmacognostical Characters****Table 1: Pharmacognostical characters of *Bauhinia variegata* [9]**

S.No.	Parts	Characters
1.	Flower covering Trichomes	Uni to multicellular broad at base, pointed at apex and balloon shaped
2.	Leaf petioles	Single layered covered with thin cuticle
3.	Vascular bundles	Well-developed xylem and phloem
4.	Lamina of leaves	Thin cuticle with rectangular cells.
5.	Midrib of leaves	well-developed thin cuticle

**Table 2: Vernacular Names [10]**

Languages	Vernacular Names
Sanskrit	Kovidara
Hindi	Kachnar, Kaniar
English	Mountain ebony
Marathi	Raktakanchan
Gujarati	Kovindara
Punjabi	Kanchan
Kannada	Kempumandara
Telugu	Devakanchanum
Tamil	Sigappu mandaraii
Urdu	Kachnal
Oria	Kosonaro
Kashmiri	Kanchana
Bengali	Raktakanchana
Assam	Shonapushpaka

**Table 3: Chemical constituents and uses of different parts of *Bauhinia variegata* [11]**

S.No.	Part	Chemical Constituents	Uses
1.	Root bark	Flavone, dihydrodibenzoxepin, flavanol, glycoside-5, 7, 3', 4'-tetrahydroxy-3-methoxy-7-O-alpha-L-rhamnopyranosyl (1-3)-O-beta-galactopyranoside (Mopura et al., 2003). (2S)-5, 7-dimethoxy-3'-4'-methylenedioxyflavanone, dihydrodibenzoxepin. 5.6-dihydro-1, 7-dihydroxy-3, 4-dimethoxy-2methyl-dibenzoflavanone [12]	Wound healing, anti-inflammatory, anti-hyperlipidemic, antioxidant.[13]
2.	Stem bark	5, 7-Dihydroxy flavanone-4'-O-alpha-L-rhamnopyranosyl b-D-glucopyranoside (Gupta et al., 1979), hentriacontane, octacosanol, sitosterol, stigmasterol (Prakash and Khosa, 1978), nerigenin -5-7-dimethylether-4'-rhamnoglucoside, lupeol (Gupta et al., 1980), 5, 7, 3', 4'-tetrahydroxy-3-methoxy-7-O-alpha-L-rhamnopyranosyl (1->3)-O-beta-galactopyranoside (Yadav et al., 2003), 2, 7-dimethoxy-3-methyl-9, 10-dihydrophenanthrene-1, 4-dione named as bahuinione[14]	Hepatoprotective, antioxidant, nephroprotective, anti-hyperlipidemic, anti-goitrogenic, immunomodulatory, anti-tumor, anti-ulcer, anti-diabetic, anti-inflammatory, anti-microbial, molluscidal.[15]
3.	Flower	Quercitroside, Isoquercitroside, rutoside, taxifoline rhamnoside, kaempferol-3-glucoside, myricetol glycoside (Duret and Paris, 1977), apigenin, ascorbic, aspartic,	Anti-diarrhoeal, flower buds are laxative and antihelmintic, used for the

		glutamic, octadecanoic acid, keto acids, amino acids, tannins. <sup>[16]</sup>	treatment of <i>Pitthaghna</i> , <i>Rakta pradaraghna</i> , <i>Kaasghna</i> , and <i>Kshyaghna</i> <sup>[17]</sup>
4.	Leaves	Heptariacontane-12, 13- diol 7 dotetracont – 15- en -9- ol, catechol, tannins, ellagic acid and sterol (Sahu G et al, IRJP 2012, 3 (1)) Also rich in vit.C (146mg%) and rich in reducing sugar <sup>[18]</sup> . (Kirtikar KR, Basu BD, Indian Medicinal Plants, 3 <sup>rd</sup> edition 1991;898-900)	Anti-diabetic, extract juice of leaves used in jaundice and loss of appetite <sup>[19]</sup> .
5.	Stem	Beta sitosterol, naringenin5, 7dimethylether 4-rhmnoglucosides, lupeol <sup>[20]</sup> .	Antiulcer <sup>[21]</sup>
6.	Root	Flavonol glycosides 5, 7, 3, 4 tetrahydroxy-3-methoxy-7-o-alpha-L rhamno-pyranosyl (1-3)-o-beta-D-galactopyranoside <sup>[22]</sup>	Anti-inflammatory, Wound healing and nephroprotective effect, antioxidant activity <sup>[23]</sup>
7.	Seeds	Oleic acid, palmitic acid, linoleic acid, stearic acid, proteins <sup>[24]</sup>	Haemagglutinating <sup>[25]</sup>

**The Ayurvedic Description of Properties <sup>[26]</sup>**

Flowers and barks of *Kanchnara* are used in Ayurvedic system of medicine. In terms of *Rasa panchaka* theory of Ayurveda, the properties of *Kanchnara* are as follows:

**Rasa (taste):** *Kashaya* (astringent)

**Guna (quality):** *Ruksa* (creates dryness) and *Laghu* (light for metabolism)

**Veerya (Potency):** *Sheeta* (conserves energy during digestion and metanolism)

**Vipaka (digestive effect):** *Katu* (pungent)

**Prabhava (special effect):** *Gandmala nashana*

**Karma (action):** *Grahi* (constipative)

**Doshaghanata (effect on Dosha):** *Pittahara* (mitigates *Pitta*)

**Vyadhiharavata (indications):** *Arshas* (haemorrhoids), *Kasa* (cough), *Rakta pradara* (menorrhagia), *Ruksa* (creates dryness, *Grahi*/*Kostabaddhata* (constipation).

**Varieties of B. variegata <sup>[27]</sup>**

It can be classified on the basis of flower

**Sweta- Sweta (*Bauhinia Variegata*)** is native to temperate and tropical China, the Indian Sub-continent (i.e., Bhutan, India, Nepal and Pakistan) and South - eastern Asia (i.e., Laos, Myanmar, Vietnam and Thailand).

**Rakta: Rakta (*Bauhinia purpurea*)** is a species of flowering plant in the family Fabaceae, native to Indian sub constituents and Myanmar, and widely introduced elsewhere in tropical and subtropical area of the world.

**Peeta: Peeta (*Bauhinia tomentosa*),** also known as yellow Bauhinia or yellow bell orchid tree. It is found in South Africa, Mozambique, Zimbabwe, Tropical Africa, India and Srilanka.

**Ayurvedic Formultions <sup>[28]</sup>**

1. *Kachnar guggulu*
2. *Kachnar gutika*
3. *Kachnaradikwatha*
4. *Gulkand kachnar*

**Dose/ Matra: <sup>[27]</sup>**

S.No.	Formulations	Dose
1.	<i>Twak Churna</i>	3-6gm
2.	<i>Twak Kwatha</i>	40-80ml
3.	<i>Puspa swarasa</i>	10-20ml

**Therapeutic Uses**

Traditional use of *Bahunia variegata* Linn.

- Acharya Charaka has shown powder of its blossom to be licked with nectar to check draining disarranges.
- Charaka has shown utilization of *Kovidara* alongside different medications as *Khad yusha* for curing draining heap.
- Acharya Charaka has additionally specified about the utilization of *Karbudara* and different medications like *Yava*, *Tila*, *Upodika* as *Niruha Vasti* to cure *Parisrava*.
- Acharya Charaka has additionally specified about the utilization of *Karbudara* and different medications like *Aadhki*, *Kadam* and *Vidula* as *Vasti* to cure *Parikartika*.
- *Kanchnara* bark included with three myrobalans or *Triphala* and *Pippali churna* is suggested in *Gandamala* and also *Galganda*. *Kanchnara* bark beat in rice water can likewise be given for curing *Gandmala*. *Kanchnara guggulu* is additionally a noticeable definitions in Indian solution which is habitually regulated for treatment of *Galaganda*,

*Gandamala*, *Granthi* and other associated diseases. In Siddha solutions one of its critical pharmaceutical arrangement is *Mantharai Kudineer* and it is utilized for *Vata* issue and Skin maladies.

- Acharya Sushruta has likewise proposed the utilization of powder of *Madhuka*, *Shobhanjan*, *Kovidara* and *Priyangu* for curing draining scatters (*Raktapitta*).
- Decoction of the bark of *Kanchnara* with powder of *Shunthi* included with part of nectar can cure scrofula (*Gandamala*) which is enduring from quite a while.
- Soup of blooms of *Kovidara* and *Karbudara* along sides blossoms of *Sana*, *Shalmali*, *Dhataki*, and *Padma* is cooked with *Dadima* without oil and is given in *Asrigdara*, *Raktapitta*, *Daha* and maladies of eye and midriff.
- A wash produced using the bark with the expansion of conc. of acacia pods and pomegranate blooms is a cure in salvation and sore throat and decoction of buds in hack, draining heaps, haematuria and menorrhagia. Dried buds are additionally valuable in looseness of the bowels, worms, heaps and diarrhoea. [29]

#### Ayurvedic Uses

The leaves are used for the preparation of *biddies*. The stem bark of *B.variegata* is used in treatment of *Gandmala* (scrofula), *Krimiroga* (worm infection), *Apaci* (cervical lymphadenitis) and *Vrna* (wound)[30]. The paste of the bark is used in *Gandamala*. Due to its *Ruksa*, *Laghu* and *Kashya* properties it helps in *Kapha* and *Pitta shaman*. *B.variegata* is *Raktasatambhna* because of *Kashaya* [31]. The Ayurvedic Pharmacopeia of India indicated the use of the stem bark in lymphadenitis and goitre [32].

#### Therapeutic Properties

- *B.variegata* shows anti-diarrhoeal, anti-diabetic, antioxidant and anti-hyperlipidemic activity due to the presence of chemical constituents present in flowers such as malvidin-3-diglucoside, peonidin-3-diglucoside, myricetrol, ascorbic acid, glutamic acid, tannins etc.[33] The flowers and flowers buds are used as a vegetables and laxatives. The juice of flower is used to treat diarrhoea, dysentery and other stomach disorders. The dried buds are used for the treatment of diarrhoea, dysentery, worms, piles and tumours [34].
- The leaves of the *B.variegata* contains crude proteins, phosphorus, calcium, lupeol, carbohydrates, vitamin c, quercitrin, Beta-sitosterol, rutin, alkoids etc.[35] shows antifungal, antimicrobial, antidiabetic, hypoglycemic,

anticancerous activity.[36] The leaves are rich in reducing sugar and have good nutritive value for the healthy department of tasar silk worms.

- The presence of phyto-constituents such as oleic acid, Beta-sitosterol is reported to reduced the hyperlipidemic states[37] and such components have been previously reported in *B.variegata* [38]. Anti-obesity effect of *B.variegata* bark extract on female rat fed on hypercaloric diet has been reported [39].
- *B.variegata* shows antitumour, antiulcer, immunomodulatory, haematinic, antimicrobial, hepatoprotective, antioxidant properties [40] due to the presence of chemical constituents such as lupeol, kaempferol-3-glucosides, 5, 7 dimethoxy flavanone-4-o-L etc. in stem bark.
- The roots contains chemical constituents such as flavonol glycosides 5, 7 and shows anti-inflammatory, wound healing and nephroprotective effect, anti-mutagenic and antioxidant activity.[41] The root is carminative and used in dyspepsia and flatulence and as a antidote of snake poison. [42]
- Ethanol extract of the stem bark of *B.variegata* shows the immunomodulatory activity on primary and secondary antibody responses by humoral antibody response for specific immune response. Phagocytic activity and neutrophil adhesion test for a non-specific immune system respectively [43].
- Crude seed protein of *B.variegata* shows haemagglutinating activity due to the presence of oleic acid, palmitic acid, linoleic acid, stearic acid, proteins, chemical constituent [44].

#### REFERENCES

1. Sahu G, Gupta P K. A review on Bauhinia variegata Linn. Int Res J Pharma, 2012; 3(1): 48-51.
2. Gamble J S. Flora of the Presidency of Madras. Vol.2. London, West, Newman and Adlard; "Published under the authority of the secretary of State for India in Council"; 1915. p. 7-8.
3. Sahu G, Gupta PK. A review on B.variegata Linn. Int. Res J Pharma. 2012; (1): 48-51.
4. Negi A, Sharma N, Pant R, Singh F M. Determination of total phenolic content of stem bark of Bauhinia variegata Linn. an approach to standardization. The Pharma Research. 2012; 7(2): 16-22.
5. Pahwa S, Mazumdar R, Bhattacharya S, Kumari S, Mazumdar A, Singh PD. Pharmacognostical and Phytochemical Evaluation of the leaves of *B.purpurea* Linn. Ancient Science of Life. (2010); 30(2): 28-32.
6. Irchhaiya R, Kumar A, Gujrat H, Gupta N, Kumar S and Kumar M: Plant Profile, Phytochemistry and Pharmacology of Bauhinia variegata Linn.

- (kanchanar):- An overview. Int J Pharmacognosy. 2014; 1(5): 279-287.
7. The Ayurvedic Pharmacopeia of India: Government of Indian Ministry of Health and Family Welfare, Department of Ayush, 1(1): p 73-74.
  8. G Deswal, Arora K. Ethnobotany and phytopharmacology of *Bauhinia variegata*. Int J Pharma Drug Anal.2015; 3(9): 261-3.
  9. Gupta R, Padmaa MP, Usha G. Pharmacognostical and Phytochemical screening of *Bauhinia variegata* Linn. Leaves. Journal of Pharmacy Research. 2009; 2(7): 1196-1198.
  10. Singh N, Singh A, Pabla D. A Review on Medicinal uses of *Bauhinia variegata* Linn. Pharma Tutor. 2019; 7(6) 12-17
  11. Moyo M, Ndhlala A R, Finnie J F, Staden J V. Phenolic composition, antioxidant and acetylcholinesterase inhibitory activities of *Scalerocarya* and *Harpephyllum caffrum* (Anticardiaceae). Food Chem .2010; 123: 69-76
  12. Yadava RN, Reddy VMS. Anti-inflammatory activity of a novel flavonol glycoside from the *Bauhinia variegata* Linn. Nat Prod Res 2003; 17 (3): 165-169.
  13. Maldonado PD, Barrea D, Rivero I, Mata R, Medina-Campos ON, Hernandez-Pando R, Pedraza-Chaverri J Antioxidant S- allylcysteine prevents genatamicin-induced oxidative stress and renal damage. Free radical Bio Med (2003) 35(3): 317-324
  14. Rajani GP, Ashok P. *Vitro* antioxidant and anti-hyperlipidemic activities of *Bauhinia variegata* Linn. Indian J Pharmacol. (2009); 41(5): 227-232
  15. Parekh J, Karathia N, Chanda S. Evaluation of antibacterial activity and phytochemical analysis of *Bauhinia variegata* L bark. Afr. J Biomed Res. (2006); 9:53-56
  16. Dugasani S, Balijepalli MK, Tandra S, Pichika MR. Antimicrobial activity of *Bauhinia tomentosa* and *Bauhinia vahlii* roots. Pharmacogn Mag. (2016); 6(23): 204
  17. Ahmed AS, Elgorashi EE, Moodley N, McGaw LJ, Naidoo V, Eloff JN. The antimicrobial, antioxidative, anti-inflammatory activity and cytotoxicity of different fractions of four South African *Bauhinia* species used traditionally to treat diarrhoea. J Ethnopharmacol (2012); 143(3): 826-839
  18. Singh RS, Pandey HS. Two new long chain compounds from *Bauhinia variegata* Linn. Indian J Chem. (2006); 45B(9): 2151-2153
  19. Sharma RN, Saxena VK. In vitro antimicrobial efficacy of leaves extracts of *Bauhinia variegata*. Asian J Chem. (1996); 8(4): 811-812
  20. Zhao YY, Cui CB, Cai B, Han B, Sun QS. A new phenanthraquinone from the stems of *Bauhinia variegata* L.J Asian Nat Prod Res(2005); 7(6): 835-838
  21. Rajkapoor B, Jayakar B, Murugesh N. Antitumour activity of *Bauhinia variegata* on Dalton's ascitic lymphoma. J Ethnopharmacol (2003) 89: 107-109
  22. Gunalan G, Saraswathy A, Krishnamurthy V. Antimicrobial activity of medicinal plant *Bauhinia variegata* Linn. Int J Pharma Biol Sci. 2011; 1(4): 400-408
  23. Sharma RK, Rajani GP, Sharma V, Komala N (2011) Effect of ethanolic and aqueous extracts of *Bauhinia variegata* Linnon gentamicin- induced nephrotoxicity in rats. Indian J Pharm Educ 45(2): 192-198
  24. Shahana S, Nikalje APG. A brief review on *Bauhinia variegata*: phytochemistry, antidiabetic and antioxidant potential. Am J Pharmtech Res 2017; 7(1): 186-197
  25. Wassel G, Ammar SA. Seed proteins of selected *Bauhinia* species and their haemagglutinating effect. Herba Hungarica. 1989; 23(1-2): 123-125
  26. Bhavamisra, Bhavaprakash of Bhavmishra, Translated by Srihantha Murthy Vol.1 Choukhamba Krishanadas Academy, Varanasi; 2004; p243.
  27. Acharya SP. Dravyaguna-vighyan. vol.2. Choukhambha Bharti Academy Varanasi; page 234-236.
  28. Acharya SP. Dravyaguna- vighyan. vol.2. Choukhambha Bharti Academy Varansi; page 236.
  29. Sahu G, Gupta. "A review on *Bauhinia variegata* Linn". International Research Journal of Pharmacy. 2012 3(1).
  30. The Ayurvedic Pharmacopeia of India: Government of Health and Family Welfare, Department of Ayush, 1(1): 73-74.
  31. Acharya SP. Dravyaguna- vighyan. vol.2. Choukhambha Bharti Academy Varanasi; page 235.
  32. Parmar RK. Pharmacognosy. First edition. Chandigarh; P Prakashan; Jan 2015.p 35.
  33. Tripathi AK, Gupta PS, Singh SK Antidiabetic, anti-hyperlipidemic and antioxidant activities of *Bauhinia variegata* flower extract. Biocatal Agric Biotechnol. 2019; 19: 101-142
  34. Ghaisas MM, Shaikh SA, Deshpande AD. Evaluation of the immunomodulatory activity of ethanolic extract of the stem bark of *Bauhinia variegata* Linn. Int J Green Pharm. 2009; 3(1) 70-74.
  35. Singh RS, Pandey HS. Two new long chain compounds from *Bauhinia variegata* Linn. Indian J Chem. 2006; 45B(9): 2151-2153

36. Abdel-Halim AH, Fyiad AAA, Aboulthana WM, El-Sammad NM, Youssef AM, Ali MM (2020) Assessment of the anti-diabetic effect of *Bauhinia variegata* gold nano-extract against streptozotocin induced diabetes mellitus in rats. *J Allied Pharm Sci* 10(05): 077-091
37. Bopanna K N, Kannan J, Sushma G, Balaraman R and Rathod, S. Antidiabetic and anti-hyperlipidemic effect. *Indian Journal of Pharmacology*.1997; 29(3): 162-167.
38. Khare C.P. *Indian Medicinal Plants- An illustrated Dictionary*. First Indian Reprint, Springer (India) Pvt. Ltd. New Delhi.2007; 717-718
39. G. Balamurugan and P Muralidharan. Antiobesity effect of *Bauhinia variegata* bark extract on female rats fed on hypercaloric diet. *Bangladesh J Pharmacology*. 2010; 5: 8-12.
40. Singh RS, Pandey HS. Two new long chain compounds from *Bauhinia variegata* Linn. *Indian J Chem*. 2006; 45B(9): 2151-2153
41. Golwala DK, Vaidya SK, Dholwani KK, Patel DS, Sahoo S (2020) Antioxidant and antimutagenic (anticlastogenic) activity of alcoholic extract of *Bauhinia variegata* (Linn.) root. *Eur J Med Plants* 2020: 32-39.
42. *The Wealth of Indian Raw Material: A Dictionary of Indian Raw material and Industrial Products*, Council of Scientific Indian.
43. Kirti KR, Basu BD. *Indian Medicinal Plants*.3<sup>rd</sup> edition. Allahabad; Lalit Mohan Publication. 1991; 898-900.
44. Wassel, Wahab GEL, Ammar SA, Seed Protein of selected *Bauhinia* species and their haemagglutinating effect. *Herba Hungarica* 1989; 23 (1-2): 123-125.

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