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Vishaghna (anti-toxic) property of *Shirisha* (*Albizia lebbeck*) : A Review

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ABSTRACT

Ayurveda is a traditional healthcare system of Indian medicine since ancient times. Majority of medicine mentioned in Ayurveda are plant based. Herbal medicine is based on the premise that plants and plants extracts contain natural phytochemicals with biological activity that can promote health or alleviate illness. *Shirisha (Albizia lebbeck*) is one of the important herbs having broad spectrum therapeutic effects. In classical textbook it is mentioned as the best among the *Vishaghna* (anti poisonous) drug. In Ayurveda it is used in allergic skin conditions, allergic cough and seasonal cold to get relief. It's action is *Shothara* (anti-inflammatory), *Vedanasthapan* (analgesic), *Varnya* (complexion promoter), *Vrishya* (Spermatogogue), *Vishaghna* (antipoisonous), *Shirovirechana* (*Nasya*), *Chakshushya* (beneficial to eyes), *Stambhana* (anti Diarrheal), *Kaphagna* (antitussive), *Raktashodhaka* (Blood purifier) and *Kustaghna* (anti leprotic), *Kandughna* (Antipruritic). Research conducted during past have also reported its anti-inflammatory, anti-histaminic, antianaphylactic, anti-asthmatic, anti-microbial properties.

Key words: *Ayurveda, Shirisha, Vishaghna, Anti-toxic, Agad, Therapeutic effect.*

INTRODUCTION

Ayurveda is a traditional healthcare system of Indian medicine since ancient times. Majority of medicine mentioned in Ayurveda are plant based. The overuse of synthetic drugs, results in higher incidence of adverse reaction, has motivated humans to return to nature for safer remedies. The present review is about *Shirisha (Albizia lebbeck*) plant which is important herbal drug in various aspects like chemical constituent, pharmacological activity and being used traditionally for longer period of time. *Shirisha* (*Albizia lebbeck*) is one of the important herbs having a broad spectrum of therapeutic effect. Many drugs and formulations have been described as *Vishaghna* (anti-poisonous) among which one of the most important and commonly used drugs is *Shirisha* and it is said to be best among all the *Vishaghna* (anti-poisonous) drugs.[1] Many formulations of *Shirisha* having different modes of administration, both internal administration and also for external applications have been mentioned in the management of various poisons in *Brihattrayee* (Major treatises of Ayurveda). It also shows antimicrobial, analgesic, anti-inflammatory, antidiarrheal, immune modulatory, anti- asthmatic, anticonvulsant properties stated by various researchers.

OBJECTIVE

Present review is aimed to compile up the data to highlight the *Vishaghna* property of *Shirisha* and effort is made to collect scientific evidences and researches to evaluate the antitoxic effect of *Shirisha*

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(*Albizia lebbeck* Benth) for the treatment of poisonous conditions.

Vishaghna property (antitoxic) of *Shirisha* mentioned in *Brihattrayee* (Major treatises of Ayurveda)

Panchangas of *Shirisha* are used as *Paana* (internal medication), *Nasya* (Nasal inhalation), *Anjana* (collyrium), *Lepa* (ointment) showing *Vishaghna* property. *Shirisha Beeja* is used in *Dantha kashta* (tooth brush twigs), In *Visha Chikitsa* as *Prathisarana*.[2] It's *Twak* (bark), *Phala* (fruits) and *Sara* (heart wood) is used for *Lepa* (ointments), *Paana* (internal medication) and *Anjana* in different types of *Mushika Damsha* (rat bites) like *Putraka, Krishna* and *Kashaya Danta.*[3] Similarly, *Phala* is used for *Vamana* (emesis) and *Sara* (heart wood) is used for *Shirovirechana (Nasya).*[4] In *Keeta Visha Chikitsa* (Insect poisoning), *Shirisha Twak* (bark) is used for *Paana* (internal medication) and *Lepa Chikitsa* (ointments), *Alepa* (external application) and *Seka.*[5] In *Pitta Pradhana Luta Damsha* (spider bites), *Shirisha Twak* (bark) is used for both *Paana* (internal medication) and *Lepa* (ointment).[6] As *Prathisarana* (rubbing), *Shirisha Twak* is used in *Vishadagdha Vrana* (wound caused by poisoned arrows or Weapons).[7] White pepper triturated with the juice of flowers of *Shirisha* is considered to be best among all types of treatment for *Sarpa Dansha* (snake bites).[8] In case of *Vrishchika* (scorpion bites) *Chikitsa Shirisha Phala* (seed), *Pushpa* (flowers) and *Beeja* (seeds) are used in different forms like *Paana* (internal medication), *Anjana* (collyrium) and *Lepa* (ointment).[9] Especially in *Ratri* (night), *Vrishchika* (scorpion bites) *Chikitsa-Pushpa* (flowers) and *Beeja* (seeds) are considered to be best. In *Luta* (spider bite) *Chikitsa*, *Shirisha Twak* and *Phala* is used for *Lepa* and *Paana*. *Shirisha Sara* and *Phala* (fruits) are used for *Shirovirechana* (*Nasya*) in *Bhujanga* (snake bites), *Luta* (spider bite) and *Undhura* (mice).[10] In *Mushika* (rat bites) *Damsha Shirisha Beeja* (seed) is considered to be the best.[11] Some examples of different *Agads* of *Shirisha* for Internal/ External Use are as follows:

Mritasanjivini Agad

Pushpa (flower) of *Shirisha* used as *Ghreya* (Inhalation through nose), *Vilepana* (ointments), *Dharana* (as an amulet), *Dhoopana* (fumigation), *Grihastasya* (kept at home), in *Sarva Visha Nashaka* (all types of poisons) and *Jwara* (fever).[12]

Gandhahasti Agad

Pushpa (flowers) is used as *Paana* (Internal medication), *Anjana* (collyrium), *Lepa* (ointment) for *Sarva Visha Nashaka*.[13]

Mahagandhahasti Agad

Panchanga (five parts of the plants) is used for *Mushika* (rat bite), *Luta* (spider bite), *Sarpa* (all types of snake bites) *Mula* and *Kanda Visha* (roots and rhizomes poisoning) in the form of *Paana* (Internal medication), *Anjana* (collyrium), *Lepa* (ointment).[14]

Dhoomagad

Pushpa (flowers) is highly significant in the cases of *Keeta* (insect bites), *Mashakadamsha* as *Dhoom* to fumigate the home.[15]

Sarvakarmika Agad

In *Luta Visha* (spider bites), *Beeja* (seed) is used as *Paana* (Internal medication), *Nasya* (Nasal inhalation), *Anjana* (collyrium), *Lepa* (ointment).[16]

Parama Agad

Twak (bark) is used in *Sthavara* (vegetative poison), *Jangama* (animal poison) as *Paana* (Internal medication), *Nasya* (Nasal inhalation), *Anjana* (collyrium).[17]

Pancha Shirisha Agad

In *Jangama* (animal poison), *Sthavara* (vegetative poison) *Visha*, *Paana* (Internal medication) of *Panchanga* (five parts of the plants- flowers, fruits, leaves, bark, root) of *Shirisha* is used.[18]

Vamshatwagadi Agad

Pushpa (flowers) is used as *Lepa* (ointment), *Anjana* (collyrium), *Nasya* (nasal inhalation), *Varti* (suppository) in *Luta* (spider bite), *Undura, Pannaga* (variety of snake).[19]

Mahasugandi Agad

Lepa (ointment) and *Dharana* (wearing) of *Pushpa* (flowers) is used *Sarva Visha Nashaka* (all types poison) and also used for induction of abortion.[20]

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Ksharagad

Paana (internal medication), *Nasya* (nasal inhalation), *Abhyanga* (massage), *Lepa* (ointment) of *Twak* (bark) of shirish is used in *Jangama* (animal poison), *Sthavara* (vegetative poison), Sarva *Visha* nashaka (all types poison).[21]

Koshatakyadi Agad

Twak (bark) in the form of *Paana* (internal medication) is given in *Vishavegantara* (between stages of poisoning).[22]

Ashtanga Agad

In *Gonasaja Sarpa* (a variety of snake), *Paana* (internal medication) of *Beeja* (seed) of *Shirisha* is administered.[23]

Recent research Works

In *Visha Damsha* conditions, *Sthanika Chikitsa* (local external treatment) plays an important role to reduce the pain, itching and inflammation at the site.[24] *Shirisha* is best *Vedanasthapaka* (analgesic), *Shothaghna* (antiinflammatory), *Vrana Ropaka*, *Vishaghna* (anti-toxic) and *Tridosha Shamaka.*[25] Phytochemical screening of successive extracts of *Albizzia lebbeck* leaves shows presence of carbohydrates, alkaloids, tannin, flavonoids, terpenoids, coumarins, glycosides, phenolics, and saponins.[26] The presence of these phyto-constituents makes them an efficacious herbal drug. After several experimental model & clinical trial multidimensional activity of *Shirisha* like analgesic, antiinflammatory, anti-allergic, anti-bacterial, antifungal, antiprotozoal, anticonvulsant, anti-anaphylactic, antioxidative is proved.

- **Anti allergic activity:** One of the study carried on rats investigated that the extract of bark of A.*lebbeck* supress histamine signalling genes H1R and histadine decarboxylase(HDC).This genes are allergic disease sensitive genes and there expression level effect severity of the allergic symptoms.[27]
- **Antimicrobial screening:** Active compound isolated from stem bark showed that the total glycosides, cardenolide glycoside and anthraquinone glycosides were active against the test cultures. [28]
- **Anticonvulsive activity:** Leaves of Albizzia *lebbeck* showed anticonvulsive activity against seizures induced by maximal electroshock, lithium-pilocarpine in laboratory animals. The saponins of A. *lebbeck* possess nootropic activity.[29]
- **Anti-inflammatory activity:** An experimental study on petroleum ether, ethyl acetate, the methanol extract of *Albizia* bark was carried on carrageenan-induced paw edema in mice. The extract at the dose of 400mg/kg/BW was given and 36-68% inhibition of edema volume at the end of 4hr was observed.[30]
- **Anti-fungal activity:** The anti-fungal activity of lebbeckalysin was screened with an agar diffusion assay. Two hundred micrograms of lebbeckalysin were added to test its inhibitory effect on different fungi. The IC 50 value for the anti-fungal activity of lebbeckalysin against Rhizoctonia solani (pathogenic fungus) was determined.[31]
- **Immuno-modulating activity:** The study affirms that ethanolic extract of the Shirishadi Compound is an effective immunomodulatory agent. The effectiveness of extract-treated animals in overcoming the side-effects of CP induced immunosuppression provides evidence for balancing and adaptogenic effectiveness of extract. The extract potentiated the non-specific immune response. Increase in percentage of neutrophil is attributed to marginalization of phagocytic cells i.e. improved defensive response under normal circumstances.[32]
- **Antioxidant properties:** The bark extracts of *Albizia lebbeck* posses free radical scavenging activity against 1, 1-di diphenyl-2-picrylhydrazyl radical (DPPH) and reducing power assays. Their results on DPPH free radical scavenging at 1000 µg/ml indicated maximum antioxidant activity of 91.82% and 90.08% respectively.[33]
- **Antipyretic Activity:** The effects of the different extracts administered at doses of 1 g/kg except

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the n-butanol extract which was administered at a dose 0.25 g/kg.All of the treatments decreased the body temperature significantly. The maximum decrease of 8˚C was shown by the dichloromethane extract.[34]

- **Analgesic Activity:** The effect of the different extracts of A. *lebbeck* on pain sensation was tested using hot plate method. Maximum increases in the pain threshold were observed 90 minutes after administration of each extract.[35]
- **Antibacterial properties:** The bark of *Albizia lebbeck* has acrid taste and its extract showed antimicrobial activity. Novel macrocyclic alkaloids (budmunchiamines A, B and C were isolated from A. amara. They were also found to have antiplatelets aggregation and bactericidal activity.[36]

DISCUSSION

It may be concluded that *Albizia* is a important plant with various therapeutic properties mainly as *Vishaghna* drug. *Panchangas* of *Shirisha* are used as *Paana* (internal medication), *Nasya* (Nasal inhalation), *Anjana* (collyrium), *Varti, Seka*, *Lepa* (ointment) in many formulations showing *Vishaghna* property. *Shirisha* is used as *Paana* (internal medication) in many formulations with different *Anupanas* (adjuvants) like *Ghrita* (ghee) and *Madhu* which plays a major role in counteracting the *Visha* and stops the *Visha* from spreading all over the body. *Lepa* (Ointment) *Yogas* are not only the *Bahirparimarjana Chikitsa* but also acts on local poisoning in the cases of bites to reduce the pain, itching and inflammation at the site. *Shirisha* helps in pacifying the *Bhrajaka Pitta* situated in the *Twacha* thus directly removes the *Visha* and stops spreading of *Visha* into the *Rakta*. *Nasya* (nasal inhalation) is one of the eliminating therapy which helps to remove the vitiated *Doshas*, toxins and poison from the nasal route when the effect of poison is seen in the head due to which obstruction occurs at nose, eye, ear, tongue and throat and if person is unconscious *Anjana* is used when symptoms related to eyes appear like swelling in the eye ball, drowsiness. Pharmacodynamics of *Shirisha* shows that it possesses *Kashaya, Tikta Rasa*. *Tikta Rasa* itself is antitoxic in nature & *Kashaya Rasa* help in the healing procedure in bite cases. Apart from *Raspanchaka*, Toxic and antitoxic drugs act on the basis of their *Prabhav*, which is the known special potency and power the drug. In the cases of poisoning specially in insect bite, snake bite, rat bite symptoms are pain, inflammation & oedema. Phytochemical screening of successive extracts of *Albizzia lebbeck* leaves shows presence of carbohydrates, alkaloids, tannin, flavonoids and saponins. After several experimental model & clinical trial multi dimensional activity of *Shirisha* like analgesic, antiinflammatory, anti-allergic, anti-bacterial, antifungal, antiprotozoal, anticonvulsant, anti-anaphylactic, antioxidative is proved. This piece of report would promote these species for extensive research, to fetch the optimistic utility of its phytoconstituents for therapeutic applications. Herbal medicine are now in great demand in developing world for primary health care because of better cultural acceptability, better compatibility with human body and minimal side effects. Most herbal products on the market today have not been subjected to drug approval process to demonstrate their safety and effectiveness. So, to make it accepted as viable alternative to modern medicine, the vigorous method of scientific, experimental and clinical validation must be applied to prove the safety and effectiveness of therapeutic plants. In the present review attempt is being made to describe the traditional as well as contemporary, scientific and experimental researches which are done to reveal the antitoxic effect of *Shirisha* plant.

CONCLUSION

Acharya Charaka quoted *Shirisha* as a best anti poisonous drug and also mentioned in *Vishaghana Gana Dravyas* (antipoisonous drugs). Many studies conducted by different branches by using different parts of the plant have proved antimicrobial, analgesic, anti-inflammatory, anti-diarrhoeal, immuno- modulatory, antiarthritic, anti-asthmatic, anticonvulsant, anti- allergic, hepatic protective and antioxidant activity of the drug. Thus, it seems to be a promising drug for various activities. In all *Samhitas*

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various *Yogas* have been mentioned for internal and external use containing *Shirisha* as an ingredient. All the *Yogas* are not in practice and hence there remains scope for further research on these *Yogas*. The present review highlights on the major goal of Ayurveda and their significant role in healthcare system. Therefore exploration of different Ayurvedic herbs can be carried out through experimental studies with their proper documentation. It will be helpful in enhancing the use of herbal drugs like *Shirisha* (*Albizia lebbeck*) in general practice and making it globally accepted by humans.

REFERENCES

1. Jadavji T. editor. Charaka Samhitha, Sutrasthana, Ajjapurishiya adhyaya, 25/16, Reprint edition, Chaukhambha Orientalia, Varanasi, 2007, 34.
2. Susrutha Samhitha of Susrutha Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya.kalpasthana; sthavaravishavigyaniya adhyaya: 2/44-46.Varanasi. Chaukamba Sanskrit Sansthan, 2015, 566.
3. Kunti Anna Moreshwara editor. Sarvanga sundara of Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; vishapratishedam adhyaya, 35/21. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 804
4. Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; sarpavishapratisheda adhyaya, 36/66. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 812
5. Kunti Anna Moreshwara editor. Sarvanga sundara of Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; vishapratisheda adhyaya, 35/46. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 805.
6. Kunti Anna Moreshwara editor. Sarvanga sundara of Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; sarpavishachikitsa adhyaya, 36/72. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 812.
7. Kunti Anna Moreshwara editor. Sarvanga sundara of Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; kitalootadivishapratisheda adhyaya, 37/76. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 818.
8. Kunti Anna Moreshwara editor. Sarvanga sundara of Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; mushikaalrkavishapratisheda adhyaya, 38/17. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 821.
9. Jadavji T. Ayurveda Deepika commentary of chakrapanidatta on Charaka Samhitha of charaka, chikitsasthana, vishachikitsa adhyaya, 23/36.Varanasi; Chaukhambha prakshan, 2007, 573.
10. Jadavji T. Ayurveda Deepika commentary of chakrapanidatta on Charaka Samhitha of charaka, chikitsasthana, vishachikitsa adhyaya, 23/218. Varanasi; Chaukhambha prakshan, 2007, 580.
11. Pralhad Kasture Jyoti et al. A Literary Review of Lepa Chikitsa w.s.r. to Chaturvinshati Upakrama. International Journal of Applied Ayurveda Research ISSN: 2347- 6362. 2016; II(7):980-984. URL-www.ijaar.in.
12. Jadavji T. editor. Ayurveda Deepika commentary of Chakrapani Datta on Charaka Samhitha of charaka, chikitsasthana, vishachikitsa adhyaya, 23/77-94. Varanasi; Chaukhambha prakshan, 2007, 575.
13. Jadavji T. editor. Ayurveda Deepika commentary of Chakrapani Datta on Charaka Samhitha of charaka, chikitsasthana, vishachikitsa adhyaya, 23/200-201. Varanasi; Chaukhambha prakshan, 2007, 580
14. Jadavji T. editor. Ayurveda Deepika commentary of Chakrapani Datta on Charaka Samhitha of charaka, chikitsasthana, vishachikitsa adhyaya, 23/202. Varanasi; Chaukhambha prakshan, 2007, 580.
15. Jadavji T. editor. Ayurveda Deepika commentary of Chakrapani Datta on Charaka Samhitha of charaka, chikitsasthana, vishachikitsa adhyaya, 23/204. Varanasi; Chaukhambha prakshan, 2007, 580.
16. Jadavji T. editor. Ayurveda Deepika commentary of Chakrapani Datta on Charaka Samhitha of charaka, chikitsasthana, vishachikitsa adhyaya, 23/212-214. Varanasi; Chaukhambha prakshan.
17. Acharya JT. Susrutha Samhitha of Susrutha Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. kalpasthana; sthavaravishavigyaniya adhyaya: 2/44- 46.Varanasi. Chaukamba Sanskri]\t Sansthan, 2015, 566.
18. Acharya JT. Susrutha Samhitha of Susrutha Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. kalpasthana; dundubiswaniya adhyaya: 6/14-27. Varanasi. Chaukamba Sanskrit Sansthan, 2015, 581.
19. Acharya JT. Susrutha Samhitha of Susrutha Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. kalpasthana; Dundubiswaniya adhyaya: 6/12-13. Varanasi. Chaukamba Sanskrit Sansthan, 2015, 580.
20. Acharya JT. Susrutha Samhitha of Susrutha Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. kalpasthana;

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mushikakalpa adhyaya: 7/12, 13, 19, 33. Varanasi. Chaukamba Sanskrit Sansthan, 2015, 586-588.

21. Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. kalpasthana; mushikakalpa adhyaya:7/34-35. Varanasi. Chaukamba Sanskrit Sansthan, 2015, 588.
22. Kunti Anna Moreshwara editor. Sarvanga sundara of Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; kitalootadivishapratisheda adhyaya, 37/31, 36, 43. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 816-817.
23. Kunti Anna Moreshwara editor. Sarvanga sundara of Arunadatta. Ashtanga Hrudaya of Vagbhata. Uttarasthana; kitalootadivishapratisheda adhyaya, 37/44. Varanasi: Chaukhambha Sanskrit Sansthan, 2016, 817.
24. Sunitha G et al. Chathurvimshathi upakrama and its importance: A review. Journal of Biological & Scientific Opinion (ISSN: 2321-6328). 2017; 5(1):6-10. www.jbsoweb.com.
25. Govinddas. Bhaishajyaratnavali, edited by shastri AmbikaDatta, Chukhambha prakashan, Varanasi, edition 19th, 1100.
26. Ambika K, Jegadeesan M. Comparative Pharmacognostical Studies On Albizia lebbeck (L.)Wild and Albizia Procera (Roxb.) Benth. Leaves, IJIRSET, Vol. 6, Issue 9, September 2017.
27. Islam MN, Hiroyuki M, Masum S. Albizia lebbeck suppresses histamine signaling by the inhibition of histamine H1 receptor and histidine decarboxylase gene transcriptions. Int Immunopharmacol. 2011; 1- 7.
28. Ganguli NB, Bhatt RM. Mode of action of active principles from stem bark of Albizia lebbeck. Indian J Experiment Biol. 1993;31:125-129.
29. Kasture VS, Chopde CT, Deshmukh VK.(2000) J. Ethnopharmacol. 71: 65-75.
30. Saha A, Ahmed M. The analgesic and antiinflammatory activities of the extract of Albizia lebbeck in animal model. Pak J Pharm Sci. 2009;22(1):74-7.
31. Lam SK, Ng, TB. A protein with antiproliferative, antifungal and HIV-1 reverse transcriptase inhibitory activities from caper (Capparis spinosa) seeds. Phytomed. 2009;16:444–450.
32. Divya Kajaria, Immunomodulatory effect of ethanolic extract of Shirishadi compound AYU | Apr-Jun 2012 | Vol 33 | Issue 2.
33. Khatoon, Islam E, Islam R, Rahman AA, Alam AH, Khondkar P, Rashid M, Parvin S. Estimation of total phenol and in vitro antioxidant activity of Albizia procera leaves. BMC Res Notes 2013; 6: 121.
34. Z. Yongna, R. Wantana, B. Pisit, L. Zhongkun and Z. Rongping, "Analgesic and Antipyretic Activities of the Aqueous Extract of Urtica macrorrhiza in Experimental Animals," Fitoterapia, Vol. 76, No. 1, 2005, pp. 91-95.
35. A. Saha and M. Ahmed, "The Analgesic and Anti-Inflammatory Activities of the Extract of Albizia lebbeck in Animal Model," Pakistanian Journal of Pharmaceutical Science, Vol. 22, No. 1, 2009, pp.74-77.
36. Yadava RN, Tripathi P. Chemical examination and antiinflammatory action of the extract from the stem of Albizia procera. Res J Chem Environ 2000; 4: 57-60.

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