A CRITICAL REVIEW ON GUGGULU [COMMIPHORA WIGHTII (ARN.) BHAND.] & ITS MIRACULOUS MEDICINAL USES

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ABSTRACT

Guggulu has been a key component in ancient Indian Ayurvedic system of medicine. It has been used extensively by Ayurvedic physicians for centuries to treat a wide variety of disorders, besides its use in pharmaceutical and perfumery industries. Guggulu is a gum or resin extracted from the plant Commiphora wightii (Arn.) Bhand. (Syn. Commiphora mukul Hook. ex. Stocks) or Guggulu tree. Guggulu is a shrub or small tree belonging to Burseraceae family. Guggulu contains volatile oil, gum resin, gugulipids, guggulerterones, guggulsterols, mukolol and other steroids. Guggulu is very much used in Ayurvedic system of medicine as an astringent, anti-septic, expectorant, aphrodisiac, carminative, anti-spasmodic, emmenagogue. In Ayurveda, Guggulu is the best among herbs that are used for Medoroga and Vata disorders. It is widely used for obesity and it is also known as fat burning agent all over the world. It helps to lower cholesterol and triglycerides level. Guggulu is very effective in rheumatoid arthritis, gout and sciatica. It is also one of the most important Rasayana of Ayurveda. In addition it treats sluggish liver, stimulates libido, nervous diseases, bronchial congestion, cardiac and circulatory problems, weak digestion, wounds, abscess, footed ear, fractures, gynaecological problems and various skin diseases. Guggulu is a very important and trustworthy herb in Ayurvedic medicine. Basically it is used almost in every kind of illness due to its amazing treating power. This review is an attempt to describe the pharmacological activities of Guggulu and variable uses of Guggulu in several diseases.

KEYWORDS: Guggulu, Guggul, Commiphora wightii, Commiphora mukul, Burseraceae, Gum, Resin, Medicinal use, Anti-inflammatory, Obesity.

INTRODUCTION

Commiphora wightii (Arn.) Bhand. (Syn. Commiphora mukul Hook. ex. Stocks), with common names Indian bdellium tree, Gugal, Guggul, Guggulu, is a flowering plant belonging to family Burseraceae. The Guggul plant may be found from northern Africa to central Asia, but is most common in Northern India. It prefers arid and semi-arid climates and is tolerant of poor soil. It is a shrub or small tree, reaching a maximum height of 3m, with thin papery bark. Guggul produces a resinous sap known as gum Guggul. The extract of this gum, called gugulipid or guglipid, has been used in Ayurvedic medicine abundantly. Guggulu contains essential oil, resin, gum, and bitter compounds. The major chemical constituents of guggulu are Z- gugulsterone, E-gugulsterone, guggulignans I & II, gugglul tetrols; mukulol; allylcembrol; c-27 guggulsterol I, II, III; Z-guggulsterol; E-guggulsterol etc. These constituents are responsible for several pharmacological activities like anti-inflammatory, analgesic, cleaning of wound and healing due to its antibacterial action. Guggulu is a natural health product used primarily to reduce elevated blood cholesterol levels. It has been used for many years as a hypocholesterolaemic agent in India. Guggulu is one of the best rewarding herbs for Vata diseases. Various preparations of Guggulu used in sciatica, hemiplegia, gout, rheumatic diseases, facial paralysis etc. Guggulu is beneficial in cleansing and healing of wounds and to reduce oedema due to its anti-inflammatory and anti- septic properties. In digestive ailments also like anorexia, flatulence, worm infestations, piles etc, it works well.

Vernacular Names

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<th>Table 1: Showing vernacular names of Guggulu</th>
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<tr>
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Available online at: http://ijapr.in
Cutch  Gugal
Deccan  Gugal, Guggal, Mukul, Ranghaturb
Gujarat  Gugal, Gugali, Gugar, Guggul, Mukul, Ranghaturb
Hindi  Gogil, Gugal, Guggul, Mukul, Ranghatorium
Marathi  Guggala, Gulag, Mukul
Persian  Boejahudan
Porebunder  Gugal, Gugali, Gugar
Sanskrit  Bhavabhishttha, Bhutahara, Devadhupa, Deveshta, Dhurta, Divya, Durga, Guggulu, Jatala, Jatayu, Kalaniriyasa, Kaushika, Kumbha, Kumbhi, Kumbholu, Kumbholukhalaka, Kunti, Mahishaksha, Mahishakshaka, Marudishtha, Nishadhaka, Palankasha, Pavandvishta, Pura, Puta, Rakshohoa, Sarvasaha, Shambhava, Shiva, Uddipta, Ulukhalaka, Usha, Varughna
Sind  Gugal, Guggul, Mukul, Ranghanturb
Sinhalese  Gugula, Jatayu, Javayu, Ratadummula
Tamil  Gukkal, Gukkulu, Maisakshi
Telugu  Gugal, Mahisaksh, Maisakshi.1

Guggulu is known as Marudeshya because it is a plant which grows in arid zone. It exudes a gum resin coming out of cavities (Kaushika, Ulukhala, Kumbholukhala) in form of particles (Kananiyasa) reddish black in colour (Mahishaksa, Kalaniriyasa). It removes a number of ailments (Guggulu) particularly obesity (Palankasa) and is antiseptic (Rakshoha) as fumigation. It is also used as incense in god’s worship (Devadhupa)2.

Guggulu is known as Ulukhala because it exudes a gum-resin which comes out from cavities. The resin is the best medicine, so it is known as Pura. It is also known as Durg because it is a plant which grows in arid zone3.

Classical Review

In Atharvaveda it is mentioned that Yakshma and other diseases will not spread to the areas fumigated by Guggulu. Sayana also introduced it as a well known “Dhupana dravaya”. It was used for the treatment of diseases of cattle. It is observed that the internal usage of Guggulu increased during Samhita period only4. Charaka has mentioned it in “Sangyasthapana mahakashaya” (Su.4/48) and in “Kashaya Skandha” (Vi.8/144)5. Sushruta has described Guggulu in “Eladi gana” (Su.38/24)6. Vagbhata included Guggulu in “Eladi gana”. (Su.16/37)7. Sharangdhara quoted it among the drugs to be used for Rasayan karma8. Dhanwantari Nighantu included it under “Chandanadi Varga”9. Madanpala Nighantu included it under “Karpooradi Varga”10. Kaiydev Nighantu has mentioned it under “Aushadi Varga”11. Bhavprakash Nighantu has described it in “Karpooradi Varga”12. Raj Nighantu included it under “Chandanadi Varga”13. Mahashadi Nighantu included it under “Chandanadi Varga”14. Shaligram Nighantu has mentioned it under “Karpooradi Varga”15.

Varities of Guggulu

Bhaymishra described five varieties of Guggulu - 1. Mahishaksha - Mahishaksha has the colour of honey-bee or Anjana (antimony sulphide). 2. Mahanila - Mahanila is similar to its name and looks like a Sapphire, a precious stone. 3). Kumuda-Kumuda resembles Kumuda flower (white) in colour. 4). Padma - Padma resembles Manikya (ruby red). 5). Hiranya - Hiranya is like gold in colour. Mahikshaksh and Mahanila varieties are beneficial to elephants, Kumuda and Padma bestow health to horses, Hiranya variety is best suited for humans. Mahishaksha is also good for humans16.

Other two varieties of Guggulu has mentioned in the text books of Ayurveda: 1). Nava Guggulu 2). Purana Guggulu. The freshly collected Guggulu is tissue builder and aphrodisiac and if stored for more than one year, it is a depletory of tissues. The characters of fresh one are, it is oily, yellowish looks like a ripen Jambu fruit, fragrant and gummy in nature. Purana or old decayed Guggulu is dry, emitting bad smell, devoid of natural colour and potency.

Nav Guggulu is useful in debility, whereas the old variety - Purana Guggulu is salutary in obesity and diabetes17-18.

According to Kaiydeva Nighantu, Guggulu are of five types: Mahishaksha, Mahanila, Kumuda, Padma, Hiranya. Kaiydeva mentioned that Guggulu trees habituated in the Maru bhumi pradesh (Vata pradhan desp) will yield five types of gum-resin during Grishmritu as well as Shaityritu. According to Kaiydeva Nighantu - Krishna varna Guggulu - best for Rakta-pitta dosh Pingal varna Guggulu - best for Kapha-pitta dosh Sweta varna Guggulu - best for Vata-pitta dosh19. Other five types of Guggulu, according to Unani system of medicine:

Mukle Saklabi - Brown in colour Mukle arabi - It is reddish brown or purpulish in colour and found in Yaman pradesh. Mukle ajarak - reddish in colour Mukle Yahud - yellowish in colour Mukle hindi - It is found in India20.
Botanical Description

_Guggulu_ [commiphora wightii] (Arn) Bhand.] is a woody shrub or a small tree which grows to the height of 2-3 metres, much branched with characteristics silvery and paper like bark-peeplings. Branches are knotty and crooked, divaricate, usually ending in a sharp spine.

**Leaves:** The leaves are rhomboid-ovate, 1-3 foliate, serrate-toothed in the upper part, smooth and shining, the lateral leaflets when present less than half the size of the terminal ones.

**Flowers:** Flowers in the fascicles of 2-3; pedicles very short. Calyx campanulate, glandular, hairy; lobes are 4-5 in number, triangular, as long as the tube. Petals are brownish red, broadly linear, nearly thrice the length of the calyx, reflexed at the apex. Stamens are 8-10 in number, alternatively long and short, half the length of the petals. Disk, 8-10 lobed, the alternate sinuses deeper and in these are inserted the shorter stamens. Ovary oblong-ovoid, attenuated into the style.

**Fruits:** The fruits are small, red in colour when ripe, ovoid drupes. Each plant produces about 0.5 to 1kg of oleo-gum resin which is collected from January to March.

**Gum Resin:** Pale yellow to brown aromatic gum resin obtained from the bark of the plant. Agglomerated tears of resin are somewhat transparent, with waxy surface and brittle in nature. Gum-resin is thick, scented, burnt on fire, liquefies in sun heat. When dissolved in water, it turns milky white.

**Chemical Constituents**

In its chemical composition volatile oil, resins, gum and a bitter compound is found. Five types of guggul sterols, Z-guggul sterone, E-guggulsterone, guggul sterol - I, II, III, sesamine, cholesterol, mucolol and other steroids are also found. Monocyclic diterpenes- alpha - camphorene and cembrene isolated from resin; allyl-cembrol isolated from plant and characterized (Chem Abstr. 1972,77, 111554 t). Three new steroids - guggulsterones I,II,III are isolated from gum resin (Tetrahedron 1972, 28, 2341). Cembrene A isolated from resin and characterized (Tetrahedron 1973, 29, 341). Isolation and structure elucidation of two aliphatic tetrols - octadecan - 1, 2, 3, 4 and eicosan - 1, 2, 3, 4 - tetrol from gum resin (Tetrahedron 1973, 29, 1595).

Guggulsterol VI and Z - guggulsterol isolated from gum resin (Tetrahedron 1982, 38, 2949).

**Macroscopic and Microscopic Features**

**a) Macroscopic** Drug occurs in vermicular pieces of pale yellow or brown coloured mass, makes milky emulsion in hot water and readily burns, when fresh viscid and golden coloured, odour; aromatic, taste is bitter and astringent.

**b) Microscopic**

Foreign matter Not more than 4 %; Total Ash Not more than 5 %; Acid-insoluble ash Not more than 1%; Alcohol-soluble extractive Not less than 27 %; Water-soluble extractive Not less than 53%; Volatile oil Not less than 1%, v/w.25

**Distribution**

The _Guggul_ plant may be found from northern Africa to central Asia, but is most common in Northern India. It is also found in the tracts of Western India and found extensively in Rajasthan, Gujrat, and Maharashtra. It is propagated by seeds and root cuttings.

**Cultivation**

_Guggulu_ is sought for its gummy resin, which is harvested from the plant's bark through the process of tapping. In India, _Guggulu_ is cultivated commercially. It can successively be propagated by vegetative means. The rooting initiates 21 days after sprouting and 300mm, long 15 and 15mm diameter cutting gives the maximum rooting. As it is a plant of arid zone, there is no necessity of irrigation upto the middle of November except during drought. However, if there is the winter shower, there is a necessity of irrigation to plants of one to five years of age group. The plants of 6-7 years of age group require irrigation only in summer season. Irrigation can be done either by head load method or water tank method.

**Endangerment and Rescue**

Because of its medicinal properties, _guggul_ has been overharvested in much of its habitat, and has been listed on the IUCN Red List of threatened species. Several efforts are in place to address this situation. India's National Medicinal Plants Board launched a project in Kutch District to cultivate 500 to 800 hectares (1,200 to 2,000 acres) of _Guggal_, while a grass-roots conservation movement, led by IUCN associate Vineet Soni, has been started to educate _Guggul_ growers and harvesters in safe, sustainable harvesting methods.

**Substitutes and Adulterants**

Oleo-gum resin obtained from _Boswellia serrata_ Roxb. (Salai guggulu) is the major adulterant. It is distinguished by its yellowish green, golden or milky tears, seldom amalgamated into lumps and a characteristic terpentine like odour. Gum-oleo-resin of _Commiphora myrrha_ (Nees) Engl., imported from Africa and constituting the drug Hirabole or bole of commerce is sometimes mixed with _Guggulu_. Similarly, gum-oleo-resin obtained from _Commiphora roxburghii_ (Arn) Engl., Occurring in...
central and eastern India is sold by the name of Guggulu. The former is distinguished by large tears of yellowish brown colour, exposing, on fracture, a brown surface having white markings, while the latter has a bluish tinge and a feeble balasmic odour. According to Ayurveda Literature, Raspanchak of Guggulu are

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<td>Guna</td>
<td>Laghu, Ruksa, Tikshna, Vishad, Sukshma, Sara, Sugandhi (Pureana Guggulu), Snigdh, Picchala (Naveen Guggulu)</td>
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<td>Virya</td>
<td>Ushna</td>
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<td>Vipak</td>
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According to Bhavaprakash Nigahntu, Ayurvedic properties of Guggulu are: Guggulu is Vishad (non-unctuous), Tikta (bitter), Ushna Virya (hot in potency), increases Pitta, Sara (laxative), Kashaya (astringent), Katu (pungent) in taste, Katu in Vipak (pungent after digestion), Ruksa (causes dryness) and Laghu (light). Guggulu is Bhagnasandhankrid (Unifies fracture), Vrishya (aphrodisiac), Sukshma (enters into minute pores), Swarya (improves voice), Rasayana (rejuvenative), Dipan (appetizer), Balya, mitigates Kapha and Vata, cures Apachi, Medo rog, Meha, Ashmari, diseases of Vata, Pidika, Granthi, Shof, Arsh, Gandmala, Krmi rog. It mitigates Vata by its Madhuraya (sweet taste), Pitta by its Kashayatava (astringent taste) and Kapha by its Tiknatvata (bitter taste), so Guggulu mitigates all the Doshas.

According to Raj Nighantu, Guggulu is Katu (pungent), Tikta (bitter) in Rasa (taste) and Ushna (hot) in Virya (potency). Guggulu is extremely beneficial in the diseases of Vata and Kapha doshas and Kasa rog (cough). It also cures the Krimi rog, Vata rog, Udara rog, Priha rog, Shoth and Arsh. It has a special potency as a rejuvenative (Rasayan).

Purification of Guggulu

Traditionally Guggulu is purified in Triphala kvatha for 3 hours (in Dola Yantra) and then fried with ghee before administered internally. According to Nighantu Ratanakar decoctions of Guduchi, Triphala, and Cow’s milk are to be used for purification.

Research Studies

Anti-inflammatory and Anti-arthritis activity

Oleoresin was found to be highly potent anti-inflammatory agent, as compared to hydrocortisone and butazoladin against Brownlee’s for maldehyde-induced arthritis in albino rats (Gujral et al; 1960).

Oleoresin fraction possessed significant anti-arthritic and anti-inflammatory activities, the minimum effective dose being 12.5mg/100g body weight. Only the acidic fraction showed significant activity while the monoacid and solid fractions were inactive. (Santhakumari et al; 1964).


Antifertility activity

Oleoresin of gum Guggulu is found to cause also a reduction in the weight of the uterus, ovaries and cervix with a concomitant increase in their glycogen and sialic acid levels, thereby showing that it might be useful as an antifertility agent (Amma M.K.P. et al; 1978).

Anti-atherosclerotic activity

Effect of gum Guggulu was observed on serum cholesterol, fibrinolytic activity and platelet adhesive index in healthy individuals (group I) and in patients of CAD (group II) for a period of 30 days. Serum fibrinolytic activity improved by 22% and 19% at the end of 24hrs, as after 30 days it was 40% and 30% in group I &II respectively. Platelet adhesive index showed 22% and 19% after 30 days in group I and group II respectively. Serum cholesterol did not decrease significantly (Bordia & Chutanni, 1979).

Anti-obesity activity

Crude Guggulu was found to reduce the body weight of hydrogenated ground-nut oil treated rabbits (Satyavati et al; 1969 b).

Preliminary clinical trials on 22 patients of hypercholesterolaemia associated with obesity, IHD, HTN, DM etc. Guggulu crude was administered orally (6.12mg in three divided doses for 15 days to one month. A fall in total serum cholesterol and serum lipid-phosphorus was found in all the cases treated with Guggulu. The body weight of 10 patients of obesity also found to be reduced significantly (Satyavati, 1966).

Hypolipidemic/Hypocholesterolaemic activity

Crude Guggulu was reported to possess highly encouraging hypolipaeic activity in rabbits (Satyavati, 1966).

Anion exchange property detected by means of chloride retention and bile acid
sequestrating activity in the oleoresin fraction hypocholesterolaemic activity (Satyavati et al; 1969)\(^{45}\).

- Crude drug as well as its two fractions (alcohol soluble and alcohol insoluble) were found to cause a significant fall in serum cholesterol and serum turbidity with a concomitant increase in the coagulation time and prothrombin time. The alcohol insoluble fraction was slightly more potent in this respect than alcohol soluble fraction as well as crude Guggulu (Sastri, 1967; Tripathi et al; 1968)\(^{46}\).

- PE fraction A (petrol-soluble), B (alkali washed neutral portion) and C (petrol-insoluble) were given to 8 week old male white leg horn chicks for 2-3 weeks in hypercholesterolaemia induced by atherogenic diet. All fractions lower the serum cholesterol, but fraction A is most potent and B is the least potent (Mehta et al; 1968; Mehta & Malhotra, 1970)\(^{47}\).

- Alcohol extract and two pure fractions (a terpenoid and a steroid) isolated from the PE extract showed that the steroid fraction was highly potent as hypolipemic agent lowering the serum cholesterol by 69.3% as well as the c/p ratio. The alcohol extract could lower the cholesterol by 59.2% whereas the Terpenoid lowered it by 54.3% (Malhotra et al; 1970)\(^{19}\).

- The alcohol extract of Guggulu when orally administrated to Indian domestic pigs kept on standard atherogenic diet over a period of six weeks effectively reduced the total serum cholesterol and also serum beta-lipoprotein fraction and significantly altered the lipoprotein ratio (Khanna et al; 1969)\(^{19}\).

- The steroidal compound isolated from fraction A of PE extract reduced the lipid content (Viz., total lipids, cholesterol, TG and phospholipids) of both hepatic and aortic tissues. The response was doses-dependent and the maximum effect was noted at 10mg/kg (Malhotra & Ahuja, 1972)\(^{50}\).

- Fraction A of PE extract of C. mukul, effectively lowered serum lipids, cholesterol, phospholipids and triglycerides in monkeys fed with cholesterol diet (Das et al., 1973)\(^{51}\).

- Alcoholic extract (25-50 mg/kg orally), reduced serum cholesterol level in normal and hyperlipaemic rats and rabbits. Further, a resin fraction, a pure steroid and fraction F isolated from crude extract showed hypocholesterolaemic effect on normal and triton-induced hyperlipaemic rats (Kapoor and Nityanand, 1971, Nityanand and Kapoor, 1971)\(^{52,53}\).

**Medicinal Uses**

The “Nirysta” means gum-oleo resin, of the Guggulu plant is used for medicinal purpose, both internally as well as externally\(^{54}\).

**Sthausraya (Obesity)**

- In obesity, use of Rasanjana, Brahath Panchmula, Guggulu, Shilajatu and Agnimanta is beneficial\(^{55}\).

- In case obesity has set in, one should use regularly Shilajatu, Guggulu, Gomutra, Triphala, Lauha-Bhasma, Rasanjana, honey, barley, Mudda, Kodrava, Shyamaka, Vanakodrava etc. which are rough and reduce fat\(^{56}\).

**Udararoga**

- One should use Guggulu as Shilajatu is used i.e., use of Guggulu with milk is beneficial in Udar rog\(^{57}\).

- Use of Shilajatu, Gomutra, Guggulu, Triphala, and Snuhi latex alleviates Udararoga\(^{58}\).

**Shotha (Oedema)**

- One should use Guggulu with Gomutra or decoction of punanava\(^{59}\).

- Guggulu or Haritaki should be used with gomutra\(^{60}\).

- Guggulu destroys oedema taken with decoction of Punarnava, Devdaru shunthi or Gomutra or Dashmula decoction\(^{61}\).

- Those suffering from oedema should use Guggulu with Go-mutra or Pippali with milk or Haritaki or Shunthi mixed with jaggery\(^{61}\).

**Vatavayadhi**

- Use of all Rasayanas particularly of Shilajatu and Guggulu with milk is beneficial\(^{62}\).

- Guggulu is the best remedy for Vata covered by Medas\(^{63}\).

- Gridhasi (Sciatica): Rasna 40 gm and Guggulu 200 gm are pounded with ghee and made into pills. It alleviates sciatica\(^{64}\).

- Kroshshirsha (arthritis of knee joint): In Kroshshirsha, Guggulu or Guduchi with Triphala decoction; or castor oil or Vriddhadaruka with milk should be taken\(^{65}\).

**Urustambha**

- Guggulu with Gomutra is a good remedy for Urustambha\(^{66}\).

- In Urustambha, one should take Shilajatu or Guggulu or Pippali or Shunthi with Gomutra or decoction of Dashmula\(^{62}\).

**Amavata (Rheumatoid arthritis)**

- One should use regularly Haritaki, Guggulu, and Shilajatu with go-mutra\(^{60}\).
Intake of Guggulu with equal quantity of Trikatu, Chitraka, Musta, Triphala, and Vidanga destroys all disorders caused by Medas, Kapha and Amavata60.

Vatarakta (Gout)
- The diseases can be controlled by regular use of Shilajatu, Guggulu and honey69.
- Use of all Rasayanas particularly of Shilajatu and Guggulu with milk is beneficial70.

Vidradhi (Abscess)
- The patient should use Shilajatu, Guggulu, Shunthi, and Devdaru with decoction of the group of drugs according to (predominance of) Dosha71.
- In all types and conditions of abscess, Guggulu should be used with suitable decoctions (according to Dosha). Similarly should be used Shilajatu72.
- In abscess caused by Vata, Guggulu or castor oil should be taken73.
- In case of Kaphaja Vidradhi, one should take Guggulu with decoction of Triphala, Shigru, Varuna, Dashmula or with Gomutra74.

Wound
- Guggulu and Triphala is one of the great combinations in treating, orally, the non-healing chronic wounds75.
- Anti-inflammatory and antiseptic properties of Guggulu are beneficial in cleansing and healing of wounds and to reduce oedema. For such, the paste of its gum is applied in the cases of gout, rheumatic joints, glandular swelling and even piles76.

Vridhdi rog (Scrotal enlargement)
- One should take Guggulu or castor oil with Gomutra. By this chronic scrotal enlargement caused by Vata is destroyed77.

Foetid ear
- Fumigation with Guggulu is a good remedy78.

Bronchial asthma
- Shallaki, Guggulu,Aguru and Padmaka mixed with ample ghee is used for fumigation79.

Amlapitta
- Use of Guggulu with decoction of Vasa, Nimba, Patola, Triphala and Guduchi controls Amlapitta having predominance of Kapha80.

Apathya
- According to Bhavmishra those who consume Guggulu should avoid Amla dravaya, Tikshna dravaya, Ajirina bhajan, Vyavaya, Shrama, Atapa sevan, Madya, Rosha, to be benefited properly81.

Side Effects of Guggulu

According to Priya nighantu, excess dose of Guggulu leads to Klaivaya (impotency), Mukshosh (dryness of mouth), Timira (cataract), Krishta (loss of weight), Murcha (vertigo) and Atisara (dysentery) etc. Guggulu should not be used in patients with above complaints82.

Vriddha Vagbhata described that about 1 Tula (100 Pulas) of Guggulu may be consumed for Rasayan purpose. If administered in extensive quantities side effects like: Timira (cataract), Klaivaiya (impotency), Krishta (weight loss), Murcha (syncope), Shathilya ( laxity of tissue), Roukshya (dryness) may develop83.

Ayurvedic Preparations of Guggulu
- Triphala guggulu, Yogaraj and Mahayogaraj guggulu, Chandraprabha vati, Simhanada guggulu, Gokshuradi guggulu, Kanchanara guggulu, Amritadi guggulu, Lakshadi guggulu, Kaishora guggulu, Navaka guggulu, Satdhara yoga83,84.

CONCLUSION
From this paper it is concluded that, Guggulu is one of the oldest and most famous herb in Ayurvedic medicine. Guggulu is a multi-purpose drug and because of its magical properties, it is very beneficial in so many diseases. Guggulu has several uses which are supported by various researches done by researchers throughout the world. These findings could open a new window on the use of this plant in Ayurveda.

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