



Review Article

Therapeutic Potentials of Guggulu Formulations: A Review Through Medieval Century Ayurveda Texts

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ABSTRACT

Guggulu was a well known Indigenous system of medicine throughout the Vedic period and also it is indicated in *Atharvaveda* to be utilized both externally and internally. Many ailments are reduced just by inhaling the odor of *guggulu*. Many of *guggulu* qualities are described in our classics. The approach is mostly employed on a large basis. In the *Atharva veda*, *guggulu* is referred to as *Yakshmanashana* (A.V.19/38/1). As a reducing agent for various metals and minerals, it is mentioned on *dravaka gana* and *mitra panchaka gana*. The details of *guggulu* and its undiscovered Ayurvedic formulations used in this review were compiled with great care in the Ayurvedic System of Medicine. Aim of this study is to identify the various *guggulu* formulations mentioned in *bhaishajya ratnavali*. To know the therapeutic potentials of *Guggulu* formulations in various diseases. With the help of Material and method comprehensive review has been made through *Bhaishajya Ratnavali*. The journals, Dissertations and Internet search engines for the collections of *Guggulu* formulations and its related research. The data was then compiled in tables and graphs. The observation of this study shows that total 92 formulations have reviewed in this paper.

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All the formulations are having their own therapeutic utility in various diseases like vatarakta, Amavata, vatavyadhi, Kushtha, Gridhrasi, Arsha, Prameha, Sthaulyaetc. this study concludes that Guggulu is commonly used in combination with anupana in ayurvedic medicine in compound dosage forms. The pharmacetics of guggulu Kalpana emphasizes the pliability of guggulu. Preclinical and clinical research activity is less common.

INTRODUCTION

Guggulu was a well known Indigenous system of medicine throughout the Vedic period and also it is indicated in *Atharvaveda* to be utilized both externally and internally. Many ailments are reduced just by inhaling the odor of *guggulu*. Many of *guggulu* qualities are described in our classics¹. It is employed in a variety of composition as a binding agent as well as a major ingredient. It has a prominent role in the *Atharva veda*, according to history. The treatise of *Charaka Samhita* contain a detailed explanation of *guggulu* as a drug (1000 B.C.), *Vagbhat* (17th century A.D.), *Shushurt* (600 B.C.) and several *Nighantu*'s were written in India during the 12th and 14th centuries². There are two methods to prepare *guggulu Kalpana*. One is Heating and other is Pounding both the strategies can be employed in small and large scale. However, the pounding method is mostly used for large scale production and heating is used for small scale preparation. Furthermore, *Adityapaka* for preparations a techniques *&bhavana* were discovered. According to Ayurveda, *guggulu* should only be used after purification. It can be purified in a variety of ways. Its purification is aided by the drug that was utilized. It not only improves its therapeutic value, but it also detoxifies it, making it safer for human use. The process of Shodhana must be applied in order to make it suitable for internal use as well. The procedure of shodhana involves purging the medications of physical and chemical impurities and potentiating them. Guggulu's pharmacological effects and purity can vary according on the

purifying method used. The therapeutic impact may differ based on the change in characteristics. The approach is mostly employed on a large basis. In the *Atharva veda*, *guggulu* is referred to as *Yakshmanashana* (A.V.19/38/1). There is a categorial definition of who has the smell of herb like *guggulu*, diseases can't effect on him. It is quoted on *dravaka gana* and *mitra panchaka gana* as a reducing agent for different metals and minerals. The details of *guggulu* and its undiscovered Ayurvedic formulations used in this review were compiled with great care in the Ayurvedic System of Medicine³

One of the greatest gifts from Indian sages to humankind is Ayurveda. Diseases have evolved to harm life since the beginning of time. Ayurveda, the science of life, has been practiced by *acharyas* since *vedic* time to protect life. Because of its principles, treatment aspects, and various applications, Ayurveda is becoming quite popular among whole traditional science/ holistic health care⁴.

Knowledge of the medicinal properties of plants and mixtures utilized in Ayurvedic medicines is based on astute clinical observations made in classics throughout the centuries. Ancient scriptures such as the *Vedas*, *Samhitas*, *Puranas* contain information regarding their properties and medicinal applications⁵.

Trisutras (*Hetu*, *Linga*, *Aushadh*) are the foundations of Ayurveda. *Aushadh* is most important from all of them. In *Chatushpada*, it is close to a physician. *Aushadh nirmana* is divided into two branches 1. *Rasa Shastra* 2. *Bhaishajya Kalpana*. *Bhaishajya Kalpana* consist primary formulations such as *Panchavidh Kashaya Kalpana* and secondary formulations such as *Churna*, *Vati*, *Guggulu*, *Sneha* and *sandhana Kalpana* among them *Guggulu Kalpana* is widely used now a days⁶.

The Guggulu plant has many active ingredients such as essential oils (0.37%), mainly myrcene,



dimyrecene and polymyrecene, guggulusterones like Z-guggulusterone, E-guggulusterone, guggulusteron-I, guggulusteron-II, guggulusteron-III, guggulusteron-IV. These isolates are primarily responsible for its action like rheumatism, arthritis, hyperlipidemia, obesity, inflammation,

atherosclerosis, wrinkle, acne and other disases. It also constitutes of alphatic esters, triterpenoids, ferulates, longchain aliphatic tetrols, diterpenoids, lignans, and a variety of inorganic ions and carbohydrates, besides small amounts of sesamin⁷.

Table no 1: Properties of Guggulu⁸.

Guna of purana guggulu	Rasa	Vipaka	Veerya	Prabhava	Karma
Laghu, Ruksh, Tikshna, Vishad, Suksham, Sara, Sugandhi, Snigdha, Piccshila	Katu, Tikta, Kasaya	Katu	Ushna	Tridoshahara	Balya, Rasayana, Varnya, Vatabalasajit, Bhagnasandhanakrit, Medohara

Guggulu is an oleogum resin (oleoresin) that exudes spontaneously as a result of injury from the bark of Commiphora mukul Hook. ex. Stocks belongs to the family Burseraceae. Katu, tikta, Kashaya, are the three flavours that make up Rasa (taste), astringent guru (quality), snigdha (unctuous), Laghu (easily digested), Ruksha (dry) and Teekshna are tough to digest (sharp), ushna veerya (potency), Vipaka (post metabolic impact) as mentioned in table no.1

Aims and Objectives:

- To identify the various guggulu formulations mentioned in Bhaishajya ratnavali.
- To explore the therapeutic potentials of Guggulu formulations in various diseases.

Materials and Method:

The comprehensive review has been made through *Bhaishajya Ratnavali*⁹. The opinions of their

critics and contemporaries were also considered. Compatibility of *Guggulu* formulations is kept in mind. The journals, contemporary novels and Internet were all screened as well during the review attempt on *guggulu* and their formulations as shown in table no 2.

With regard to the percentage of Guggulu in each formulation, their dose, Anupana, and therapeutic indications, available references of formulations containing guggulu were searched through Bhaishajya Ratnavali and compiled. Based on the total number of ingredients and their proportions, the percentage of Guggulu is determined in the formulation. The collection and analysis of data were done using Microsoft Excel.

Table no. 2: Guggulu formulations described in Bhaishajya Ratnavali

Sr. No.	Name of the formulation	Ingredients	% of guggulu	Therapeutic uses	Reference
1.	<i>Amruta guggulu</i>	16	2.21%	18 types of kushtha (psoriasis), vatarakta(Gout), kamla (jaundice), amavata (Rhumatoid arthritis), bhagandar(Fistula).	B.R.Kustharogadgik ar(54/217-222, p 881)
2.	<i>Amruta guggulu I.</i>	13	12.01%	Vatarakta(gout), kushtha (psoriasis), arsha(piles), dushtavrana(Chronic wounds), prameha (diabetes), amavata (rhumatoid arthritis), bhagandar(fistula).	B.R. vataraktarogadhikar a(27/89-95,p 581)



3.	<i>Amruta guggulu</i> 2.	11	63.30%	<i>Vatarakta</i> (gout), <i>kushtha</i> (psoriasis), <i>arsha</i> (piles), <i>dushtavrana</i> (Chronic wounds), <i>prameha</i> (diabetes), <i>amavata</i> (rhumatoid arthritis), <i>bhagandar</i> (fistula).	B.R. <i>vataraktarogadhikar</i> (27/96-102,p 581)
4.	<i>Amrutadya guggulu</i>	8	22.22%	<i>Pramehapidika</i> (gonorrhoea), <i>sthaulya</i> (obesity), <i>bhagandar</i> (fistula).	B.R. <i>medorogadhikar</i> (39/43, p 527)
5.	<i>Abha guggulu</i>	8	50%	<i>Bhagna</i> (Fracture), <i>asthichyuti</i> (bone dislocation).	B.R. <i>bhagnarogadhikar</i> (49/14, p 833)
6.	<i>Ekavinshati guggulu</i>	20	50%	18types of <i>kushtha</i> (psoriasis), <i>krumi</i> (Warm infestation), <i>dushtavrana</i> (chronic wound), <i>grahani</i> (Irritable bowl syndrome), <i>asthibhagna</i> (fracture).	B.R. <i>kushtharogadhikara</i> (54/223-227,p 881)
7.	<i>Kanchanar guggulu Vati</i>	13	49.94%	<i>Galaganda</i> (mumps), <i>gandamala</i> (goiter), <i>apachi</i> (lymphadenitis), <i>arbuda</i> (tumor), <i>granthi</i> (cystic swelling).	B.R. <i>galagandagandamal aapachi Granthiarbudarogadhikar</i> (44/63-68,p806)
8.	<i>Kaishora guggulu</i>	9	76.45%	<i>Vatarakta</i> (gout), <i>vrana</i> (wound), <i>kasa</i> (cough), <i>vibandha</i> (constipation), <i>granthi</i> (cyst).	B.R. <i>vataraktadhikar</i> (27/104-113,p582)
9.	<i>Triphala guggulu</i>	3	50%	<i>puyastrava</i> (purulent discharge)	B.R. <i>vranashothadhikar</i> (47/49,p824)
10.	<i>Vidangadi guggulu</i>	8	50%	<i>Dushtavrana</i> (chronic wound), <i>apachi</i> (lymphadenitis), <i>nadivrana</i> (sinus)	B.R. <i>vranashothadhikar</i> (47/50,p 824)
11.	<i>Navaka guggulu</i>	10	10%	<i>Medaroga</i> (obesity), & <i>amavata</i> (rhumatoid arthritis).	B.R. <i>medorogadhikara</i> (39/42,p726)
13.	<i>Navakarshik guggulu</i>	5	55%	<i>Shotha</i> (inflammation), <i>gulma</i> (lump), <i>arsha</i> (piles), <i>bhagandar</i> (fistula)	B.R. <i>bhagandarogadhikar</i> (51/27,p844)
14.	<i>Punarnava guggulu</i>	17	35%	<i>Vatarakta</i> (gout), 7 types of <i>vridhhi roga</i> (hernia, etc.), <i>gridrasi</i> (sciatica), <i>amavata</i> (rhumatoid arthritis)	B.R. <i>vataraktadhikar</i> (27/114-118,p 583)
15.	<i>Panchatikta ghruta guggulu</i>	19	71.48%	<i>Kushtha</i> (psoriasis), <i>nadivrana</i> (sinus), <i>arbuda</i> (tumor), <i>gandamala</i> (goiter), <i>gulma</i> (lump), <i>rajayakshma</i> (tuberculosis).	B.R. <i>kushtharogadhikar</i> (54/228-231,p882)
16.	<i>Bruhat yograj guggulu</i>	11	50%	<i>Katibhagna</i> (slipdisc), <i>sandhivata</i> (osteoarthritis), <i>koshthukshirshaka</i> (Chronic Synovitis)	B.R. <i>amavatrogadhikar</i> (29/158-167,p608)

17.	<i>Vatari guggulu</i>	7	16.66%	<i>Amavata</i> (rheumatoid arthritis), <i>katishula</i> (lumbar pain), <i>khanja</i> (lameness), <i>pangu</i> (paraplegia)	B.R. <i>Amavatarogadhikar</i> (29/149-151,p607)
18.	<i>Yogaraj guggulu</i>	10	50%	<i>Adhyavata</i> (rheumatic palsy), <i>krumi</i> (worm infestation), <i>gulma</i> (lump), <i>udararoga</i> (diseases of abdomen)	B.R. <i>Amavatarogadhikar</i> (29/152-157,p608)
19.	<i>Vyadhisardul guggulu</i>	14	19.09%	<i>Ashmari</i> (renal calculi), <i>mutrakrchha</i> (dysuria), <i>amlapitta</i> (hy peracidity), <i>kasa</i> (cough), <i>katigraha</i> (low back pain)	B.R. <i>amavatarogadhikar</i> (29/168-175,p609)
20.	<i>Simhanad guggulu 1.</i>	18	20.96%	<i>Sandhivata</i> (osteoarthritis), <i>ashmari</i> (renal calculi), <i>asthibhagna</i> (fracture), <i>timir</i> (darkness of vision)	B.R. <i>amavatarogadhikar</i> (29/176-184,p 610)
21.	<i>Simhanad guggulu 2.</i>	3	50%	<i>Sannipataj roga</i> (typhus disease), <i>khanja</i> (lameness), <i>pangu</i> (paraplegia), <i>shwas</i> (asthama).	B.R. <i>amavatarogadhikar</i> (29/185-190, p610)
22.	<i>Shiva guggulu</i>	10	52.84%	<i>Katishula</i> (lumbar pain), <i>koshtushirshaka</i> (chronic synovitis)	B.R. <i>amavatarogadhikar</i> (29/191-194, p611)
23.	<i>Yogaraj guggulu vati</i>	9	48.58%	<i>Vatavyadhi</i> (neurological disorder), <i>grahani</i> (irritable bowl syndrome), <i>bhagandar</i> (fistula), <i>kshaya</i> (consumption), <i>apasmara</i> (epilepsy)	B.R. <i>vatavyadhirogadhikar</i> (26/102-113,p527)
24.	<i>Trayodashang guggulu</i>	12	33.33%	<i>Katigraha</i> (lower back pain) <i>ghrudrasi</i> (sciatica), <i>hanugraha</i> (locked jaw), <i>sandhishula</i> (joint pain)	B.R. <i>vatavyadhirogadhikar</i> (26/98-101,p 526)
25.	<i>Rasa guggulu</i>	4	80%	<i>Kushtha</i> (psoriasis), <i>upadansha</i> (syphilis).	B.R. <i>upadansharogadhikar</i> (52/55-63, p851)
26.	<i>Varadi guggulu</i>	8	50%	<i>Upasansha</i> (syphilis), <i>dushtavrana</i> (chronic wound)	B.R. <i>upadansharogadhikar</i> (52/64-65, p852)
27.	<i>Rasabhra guggulu</i>	15	61.37%	<i>Vatarakta</i> (gout), <i>krumi</i> (worm infestation), <i>Gudabhramsha</i> (prolapse of rectum), <i>kamala</i> (jaundice), <i>apachi</i> (lymphadenitis)	B.R. <i>vataraktarogadhikar</i> (27/82-88, p580)
28.	<i>Rasna guggulu vati</i>	3	56.60%	<i>Ghrudrasi</i> (sciatica)	B.R. <i>vatavyadhiroga dhikar</i> (26/44, p522)
29.	<i>Laksha guggulu</i>	5	50%	<i>Asthibhagna</i> (fracture), <i>asthichyuta</i> (dislocation)	B.R. <i>bhagnarogadhikar</i> (49/12-13, p833)
30.	<i>Loahadi guggulu</i>	7	50%	<i>All types of shuklagata roga</i> (pterygium)	B.R. <i>netrarogadhikar</i> (64/211, p 1005)

31.	<i>Vranari guggulu vati</i>	4	50%	<i>Sarvrnanashaka</i> (all types of vrana)	B.R. <i>visphotarogadhikar</i> (58/17,p922)
32.	<i>Shadanga kwatha guggulu</i>	6	4%	<i>Netrashotha</i> (eye disease), <i>netrapaka</i> , <i>netrashula</i> (glaucoma)	B.R. <i>Netrarogadhikar</i> (64/45, p986)
33.	<i>Saptavinshatik guggulu</i>	15	66.66%	<i>Kukshishula</i> (abdominal pain), <i>jeernajwara</i> (fever), <i>rajayakshma</i> (tuberculosis), <i>unmad</i> (hysteria), <i>nadivrana</i> (sinus)	B.R. <i>bhagandarogadhikar</i> (51/28-33, p844)
34.	<i>Saptanga guggulu</i>	9	14.28%	<i>Nadivrana</i> (sinus), <i>dushtavrana</i> (chronic wound).	B.R. <i>nadivraadhikar</i> (50/20, p838)

In Bhaishajya ratnavali total 34 guggulu formulations are found in which guggulu is ranging from 2.21% to 76.4%. All these formulations are indicated in various diseases like

vatavyadhi, Ghridrasi, Nadivrana, kushtha roga, bhagandara, arsha, amavata, katigraha, vatarakta, etc.

Table No. 3: List of formulations in which Guggulis used as an ingredient:

Sr. No.	Formulations	Total ingredients	% of Guggulu	Indications	Reference
1.	<i>Sarivadi kwatha</i>	6	16.6%	<i>Kapahajwara</i> (fever)	B.R. <i>Jwararogadhikar</i> (5/139, p 95)
2.	<i>Vachadi kwatha</i>	16	6.25%	<i>Sandhik sannipatjwara</i> (rheumatic fever)	B.R. <i>Jwararogadhikar</i> (5/294 ,p 112)
3.	<i>Ashtang dhupa</i>	8	12.5%	<i>Jwara</i> (fever)	B.R. <i>Jwararogadhikar</i> (5/411 , p 125)
4.	<i>Aparajit dhupa</i>	8	12.5%	<i>Jwara</i> (fever)	B.R. <i>Jwararogadhikar</i> (5/412 , p 126)
5.	<i>Chaturthik jwarahara dhupa</i>	2	50%	<i>Chaturthik jwara</i> (fever)	B.R. <i>Jwararogadhikar</i> (5/419 , p 126)
6.	<i>Lakshadi vati dhupa</i>	9	11.1%	<i>Krimi</i> (worm infestation)	B.R. <i>Krimirogadgikar</i> (11/83-84, p 373)
7.	<i>Panchanana vati</i>	7	14.2%	<i>Pandu</i> (anaemia), <i>kamala</i> (jaundice)	B.R. <i>Pandurogadhikar</i> (12/88-89)
8.	<i>Pandusudan rasa</i>	6	16.6%	<i>Pandu</i> (anaemia), <i>kamala</i> (jaundice)	B.R. <i>Pandurogadhikar</i> (12/90-91)
9.	<i>Chandanadya taila</i>	47	2.12%	<i>Raktapitta</i> (bleeding disorder), <i>kshaya</i> (consumption), <i>jwara</i> (fever), <i>kandu</i> (itching).	B.R. <i>Hikkashwasa rogadhikar</i> (16/105-114, p468)

10.	<i>Mahapaishachya ghruta</i>	23	4.62%	<i>Chaturthik jwara</i> (fever), <i>unmad</i> (hysteria), <i>apasmar</i> (epilepsy), <i>grahabadha</i> (seizure)	<i>B.R.Unmadrogadhikar</i> (24/77-80, p 508)
11.	<i>Palankashadya taila</i>	19	6.25%	<i>Apasmar</i> (epilepsy)	<i>B.R.Apasmarogadhikar</i> (25/46-47, p 517)
12.	<i>Rasnaguggulu vati</i>	3	56.60%	<i>Ghridrasi</i> (sciatica)	<i>B.R.Vatarogadhikar</i> (26/44, p 522)
13.	<i>Vatarirasa</i>	6	33.33%	<i>Amavata</i> (rheumatoid arthritis), <i>andavruddhi</i> (hydrocele).	<i>B.R.Vatavyadhi</i> (26/163-167, p 532)
14.	<i>Chandraprabha vati</i>	33	7.20%	<i>Arsha</i> (piles), <i>bhagandar</i> (fistula),	<i>B.R.Arsharogadhikar</i> (9/222-233, p 329)
16.	<i>Vataraktantaka rasa</i>	21	4.76%	<i>Vatarakta</i> (gout)	<i>B.R.Vataraktadhikara</i> (27/42-46, p576)
17.	<i>Langalyadi lauha</i>	10	5.26%	<i>Vatarakta</i> (gout)	<i>B.R.Vataraktadhikara</i> (27/68-70, p578)
18.	<i>Urustambhahara yoga</i>	4	20%	<i>Urustambha</i> (immobility of thighs)	<i>B.R.Urustambharogadhikar</i> (28/6, p592)
19.	<i>Amavatari vatika</i>	10	33.33%	<i>Amavata</i> (rheumatoid arthritis), <i>shlipada</i> (elephantiasis)	<i>B.R.Amavatarogadhikar</i> (29/63-68, p601)
20.	<i>Amavatari rasa</i>	5	40%	<i>Amavata</i> (rheumatoid arthritis)	<i>B.R.Amavatarogadhikar</i> (29/69-70, p601)
21.	<i>Triphaladi lauha</i>	11	22.8%	<i>Pandu</i> (anaemia), <i>kamala</i> (jaundice)	<i>B.R.Amavatarogadhikar</i> (29/97-99, p604)
22.	<i>Panchanana lauha rasa</i>	17	58.8%	<i>Amavata</i> (rheumatoid arthritis), <i>sandhivata</i> (osteoarthritis)	<i>B.R.Amavatarogadhikar</i> (29/108-119, p604-605)
23.	<i>Gulmashardula rasa</i>	12	9.5%	<i>Gulma</i> (lump)	<i>B.R.Gulmarogadhikara</i> (32/104-107, p657-658)
24.	<i>Ushakadigana</i>	8	12.5%	<i>Ashmari</i> (renal calculi), <i>mutrakruccha</i> (dysuria)	<i>B.R.Ashmarogadhikara</i> (36/16-17, p689)
25.	<i>Shukramatraka vati</i>	16	2.68%	<i>Prameha</i> (diabetes), <i>mutrakruccha</i> (dysuria),	<i>B.R.Prameharogadhikar</i> (37/69-74, p704)
26.	<i>Chandraprabha vati I</i>	33	36.77%	<i>Prameha</i> (diabetes), <i>mutrakruccha</i> (dysuria), <i>mutravikara</i> (urinary tract infection)	<i>B.R.Prameharogadhikar</i> (37/92-94, p705)
27.	<i>Chandraprabha vati II</i>	36	26.49%	<i>Prameha</i> (diabetes), <i>mutrakruccha</i> (dysuria),	<i>B.R.Prameharogadhikar</i> (37/96-105, p706)

28.	<i>Lauha rasayana</i>	24	6.02%	<i>Sthaulya</i> (obesity), <i>rasayana</i> (rejuvenation), <i>vajikarana</i> (aphrodisiac)	<i>B.R.Medorogadhikara</i> (39/31-41, p726)
29.	<i>Shilajatvadi prayoga</i>	5	25%	<i>Udararoga</i> (diseases of abdomen)	<i>B.R.Udararogadhikara</i> (40/60, p736)
30.	<i>Shothodaradi lauha</i>	27	1.1%	<i>Shotha</i> (inflammation), <i>pandu</i> (anaemia)	<i>B.R.Udararogadhikara</i> (40/113-122, p740)
31.	<i>Plihanataka rasa</i>	24	4.16%	<i>Plihodara</i> (diseases of spleen)	<i>B.R.Plihayakrutarogadhikara</i> (41/66-69, p752)
32.	<i>Punarnavadi kalka kwatha</i>	9	22.22%	<i>Kaphajshotha</i> (inflammation)	<i>B.R.Shothorogadhikara</i> (42/15, p768)
33.	<i>Guggulu prayoga</i>	6	1.58%	<i>Shotha</i> (inflammation)	<i>B.R.Shothorogadhikara</i> (42/23, p769)
34.	<i>Shothaghna prayoga</i>	2	2%	<i>Shotha</i> (inflammation)	<i>B.R.Shothorogadhikara</i> (42/24, p769)
35.	<i>Darvadi kalka</i>	3	33.33%	<i>Shotha</i> (inflammation)	<i>B.R.Shothorogadhikara</i> (42/26, p 769)
36.	<i>Guggulu prayoga</i>	6	16.66%	<i>Shotha</i> (inflammation)	<i>B.R.Shothorogadhikara</i> (42/135, p 780)
37.	<i>Vatari rasa</i>	6	33.33%	<i>Antravruddhi</i> (hernia)	<i>B.R.Vrudhhirogadhikara</i> (43/65-69, p 795)
38.	<i>Shatapushpadya ghruta</i>	31	3.22%	<i>All types of vrudhhi roga</i> (hernia)	<i>B.R.Vrudhhirogadhikara</i> (43/87-92, p 797)
39.	<i>Kanchanar gutika</i>	5	57.14%	<i>Galaganda</i> (mumps), <i>gandamala</i> (goitre), <i>nadivrana</i> (sinus)	<i>B.R.Galaganda-gandamarogadhikara</i> (44/60-62, p 806)
40.	<i>Saureshwara ghruta</i>	25	4%	<i>Shlipada</i> (elephantiasis), <i>gandamala</i> (goitre), <i>antravruddhi</i> (hernia)	<i>B.R.Shlipadarogadhikara</i> (45/40-45, p 813)
42.	<i>Guggulu prayoga</i>	15	0.79%	<i>Kaphaja vidradhi</i> (hernia)	<i>B.R.Vidradhirogadhikara</i> (46/11, p 817)
43.	<i>Shriviasadi dhupa</i>	4	25%	<i>Vrana</i> (wound)	<i>B.R.Vranashothadhikara</i> (47/47, p 823)
44.	<i>Gunavativarti</i>	12	11.11%	<i>Galaganda</i> (mumps), <i>nadivrana</i> (sinus)	<i>B.R.Nadivaranarogadhikara</i> (50/7-9, p 836)
45.	<i>Narayanarasa</i>	20	5%	<i>Bhagandara</i> (fistula), <i>nadivrana</i> (sinus)	<i>B.R.Nadivaranarogadhikara</i> (51/15-18, p 842-843)
46.	<i>Nishadya taila</i>	8	14.28%	<i>Bhagandara</i> (fistula)	<i>B.R.Bhagandararogadhikara</i> (51/37, p 845)
47.	<i>Sarjarasadi lepa</i>	8	12.5%	<i>Vipadika</i> (palmoplantar psoriasis)	<i>B.R.Kushtharogadhikara</i> (54/40, p 863)
48.	<i>Arogyavardhini vati</i>	10	1.11%	<i>Kushtha</i> (psoriasis), <i>jwarafever</i>)	<i>B.R.Kushtharogadhikara</i> (54/111-117, p 871)
49.	<i>Kushthakuthara rasa</i>	13	5.37%	<i>Galita kushtha</i> (leprosy)	<i>B.R.Kushtharogadhikara</i> (54/147-149, p 874)
50.	<i>Galatkushtharirasa</i>	11	5.88%	<i>Galita kushtha</i> (leprosy)	<i>B.R.Kushtharogadhikara</i> (54/157-159, p 875)
51.	<i>Amrutankura lauha</i>	12	11.13%	<i>Kushtha</i> (psoriasis), <i>vatarakta</i> (gout)	<i>B.R.Kushtharogadhikara</i> (54/184-192, p 878)
52.	<i>Somaraji ghruta</i>	9	23.48%	<i>Shweta kushtha</i> (vitiligo)	<i>B.R.Kushtharogadhikara</i> (54/244-250, p 884)

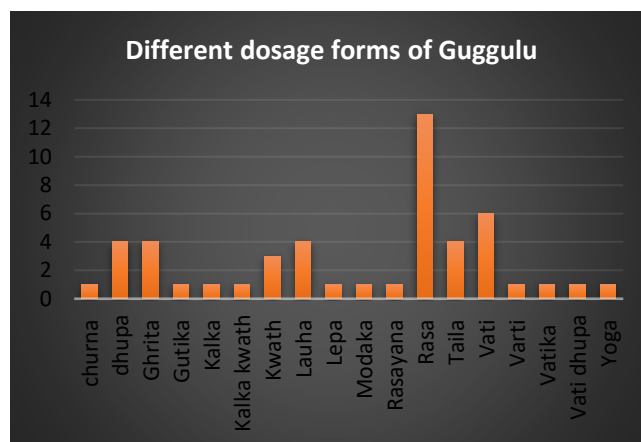
53.	<i>Mahatrunaka taila</i>	68	1.51%	<i>Kushtha</i> (psoriasis), <i>twak roga</i> (skin disease)	<i>B.R.Kushtharogadhikara</i> (54/327-333, p893)
55.	<i>Sarvatobhadra rasa</i>	7	50%	<i>Masurika</i> (measles), <i>visphota</i> (blistering skin disease)	<i>B.R.Masurikarogadhikara</i> (59/56-57,p 929)
56.	<i>Shriveshtakadi churna</i>	5	20%	<i>Oshtharoga</i> (disease of the lips)	<i>B.R.Mukharogadhikara</i> (61/2,p 951)
57.	<i>Saptamruta rasa</i>	7	14.28%	<i>Mukharoga</i> (diseases of mouth)	<i>B.R.Mukharogadhikara</i> (61/119,p 963)
58.	<i>Shirovajra rasa</i>	14	35.71%	<i>Shiroroga</i> (diseases of head)	<i>B.R.Shirorogadhikara</i> (65/52-56, p 1018)
59.	<i>Palankashadi dhupa</i>	8	16.66%	<i>Jwara</i> (fever)	<i>B.R.Balarogadhikara</i> (71/29, p 1080)
60.	<i>Shatavari modaka</i>	52	0.56%	<i>Vajikarana</i> (aphrodisiac)	<i>B.R.Vajikarana</i> (74/237-253,p 1146-1147)
61.	<i>Chandanadi taila</i>	45	2.22%	<i>Vajikarana</i> (aphrodisiac)	<i>B.R.Vajikarana</i> (74/329-338, p 1153-1154)

In bhaishajya ratnavali total 61 formulations are found in which Guggulu is used as an ingredient which is ranging from 0.56% to 58.8% which are used in various

diseases like vatavyadhi, Ghridrasi, Nadivrana, kushtha roga, bhagandara, arsha, amavata, katigraha, vatarakta, etc.

Table no 4: Different dosage forms of Guggulu

S. N	Dosage forms	Total number
1	Churna	1
2	Dhupa	4
3	Ghrita	4
4	Gutika	1
5	Kalka	1
6	Kalka kwath	1
7	Kwath	3
8	Lauha	4
9	Lepa	1
10	Modaka	1
11	Rasayana	1
12	Rasa	13
13	Taila	4
14	Vati	6
15	Varti	1
16	Vatika	1
17	Vati dhupa	1
18	Guggulu Yoga	1



Different dosage forms of guguulu are mentioned in bhaishajya ratnavali like churna, gutika, lepa, kwatha, kalka, vati, etc. ranging from 1 to 13.

DISCUSSION

In the *Devaasura sangrama* (war of gods vs. demons) in ancient times, *Guggulu* was created as

an *Amruta* (nectar) to replenish the *devata*'s lost *bala* (strength). It was also used as an effective fumigating agent. According to the screening done by *Brihatrayee*, *guggulu* is best consumed internally in the form of liquid, semisolids, or liquids. After the 11th AD (*Chakradatta*), *guggulu*

in its *vati* form entered the field of medicine due to the increased advantages of solid dose forms. *Guggulu* was afterwards frequently employed in *vati* form, in addition to the various internal forms. It could be as a result of good fortune. Gums binding capacity as well as *Yogavahi's* nature a medication that improves the efficacy of formulations. *Guggulu Kalpana* is usually prepared using one of two methods like *saagni (paka)* & *Niragni (kuttana)* are the two methods. Furthermore, *Adityapaka* for preparations a techniques & *bhavana* were discovered. *Bhavana* is a process in which the material is levigated with liquid media till the complete absorption with a intention to enhance its potency¹⁰.

According to Ayurveda, *guggulu* should only be used after purification or *shodhana*. The *guggulu* can be purified in a variety of ways. Its purification is aided by the *dravyas* that was utilized. It not only improves its therapeutic value, but it also detoxifies it, making it safer for human use¹¹. The *guggulu Kalpana* is a very important formulation in which the drug does not change the formulations but instead augments them with the other pharmaceuticals it contains. It is still effective and helps in the treatment of disease and illness. *Guggulu* can be used to cure a wide range of illnesses when it is transformed into different formulations like *Churna*, *Ghruta*, *Avaleha*, and others. *Guggulu Kalpana* with variations in *Anupana*, will be effective in treating a variety of ailments, as the manner of actions varies depending on the *Anupana* is utilized. *Guggulu* is used as a *prakshepa dravya* in most of the formulations like *Vatsadani kwathain* that 1gm *guggulu* is added with *guduchi kwathas* it is mentioned in *Bhaishajya ratnavali Vataraktarogadhikara*, In *Vidradhirogadhikara guugulu prayoga* is mentioned in that *su guggulu* is mixed with *punarnavamula kwatha*. *Guggulu Kalpana* is mentioned in almost all of the *strotovikaras* & it has also been the subject of a no.

of research studies⁶. *Amrita Guggulu* has a considerable impact on the level of serum uric acid, which is an important indicator of *Vatarakta* diagnosis and prognosis with particular reference to the disease Gout¹². Treatment approach In comparison to *Amritadya Guggulu* with lukewarm water, *Amritadya Guggulu* with *Triphala Kwatha* is more effective at relieving both subjective and objective aspects. The *karshana* and *lekhana* properties of this drug are likely to blame for the *karshana* of *medadhatu*, which causes *srotoshodhana* and lowers the *meda*¹³. *Abha Guggulu* is extremely effective at reducing pain, swelling, and facilitating the healing of fractures as well as treating the allied illnesses associated to fractures¹⁴. Based on the results of this study, it can be said that the medicine *Laksha Guggulu* accelerated the healing of fractures and may be used as an adjuvant therapy to speed up healing¹⁵. The prostate size was reduced with the aid of *Kanchanara Guggulu*. *Triphala* and *Trikatu*, two ingredients in *Kanchanar Guggulu*, include ascorbic acid, which aids in relieving pressure and improving urine flow by relaxing the smooth muscle in the prostate and bladder neck¹⁶.

Triphala is well renowned for its capacity to heal wounds. Additionally, it reduces mucous layer inflammation and aids in preventing future infection. One of Ayurveda's most popular anti-inflammatory medicines is *guggulu*. Additionally, it aids in the reduction of inflammation in fistula-in-ano. People with haemorrhoids frequently experience constipation, which *triphala* reduces and aids with smooth bowel movements. One of the greatest oral treatments for haemorrhoids is *triphala guggulu*¹⁷. *Navak Guggulu* is very effective in reducing pain and stiffness. It is also effective in reducing swelling¹⁸. The primary uses of *Kaishore guggulu* are for its antibacterial, antiallergic, and blood-purifying qualities. *Kaishore guggulu* is effective in treating back

pain, gout, fibromyalgia, and healthy joints, muscles, and connective tissue.¹⁹

Vidangadi Guggulu is taken as a drug of choice as it has *Ropana*, *Krimighna*, *Raktastambaka* *Lekhana* properties and is also *Kapha Vata Shamaka* so is helpful in *Dantaveshta* as this is due to *Dushit Kapha* with leads to *Dushti of Rakta* ahead²⁰. One of the *Samanaushadhi* is picked as *Punarnava Guggulu*. The medications described in this yoga are *Vibhitaki*, *Danti*, and *Trivrit*, which have *Pitta-Kaphahara* qualities, *Vidanga*, and *Sunti*, which have *Vata-Kapha* hara properties, and the remaining *Haritaki*, *Pippali*, *Marica*, *Amrita*, and *Amalaki*, which are all *Tridosha shamaka*²¹. The evidence suggests that *Panchatikta Ghrita*, in addition to regional *Abhyanga* and *Nadi Swedana*, has improved relief for the condition *Sandhigata Vata* (Osteoarthritis)²². *Vatari Guggulu* not only reduced the inflammation and arthritis in rats but also improved a number of symptoms associated with the disease. This study clearly highlights the potential of *Vatari guggulu* as a reliable treatment for arthritis substantiating the claims of the *Ayurvedic* system of medicine²³. *Yogaraj guggulu* is advised for the management of all *Vata Rogas* since it possesses both *Rasayana* (rejuvenative) and *Tridosha Shamaka* (pacifier of three *Doshas*, namely *Vata*, *Pitta*, and *Kapha*) effects. *Guggulu* has analgesic and anti-inflammatory properties. It aids in preventing the degenerative changes that arthritis may cause in bones and joints. *Guggulu* improves joint mobility while reducing arthritis-related pain, joint stiffness, and inflammation. As a result, it benefits *Sandhigata Vata*²⁴. In the *Ayurvedic medicinal system*, *trayodashang guggulu* is used to treat a variety of inflammatory disorders like arthritis and its accompanying pain. Consequently, the current study examined the *trayodashang guggulu's in-vitro anti-inflammatory and antioxidant effects*²⁵. When treating *Arma* (Pterygium),

Nayanasukha Varti and *Lohadi Guggulu* are particularly beneficial at reducing irritability, burning, and redness²⁶. *Saptanga Guggulu* is a useful *Ayurveda* herbal remedy which undoubtedly cures difficult and chronic conditions like Sinus, Fistula, Fistula-in-ano, complicated ulcers and Haemorrhoids²⁷.

CONCLUSION

Guggulu is commonly used in combination with *anupana* in *ayurvedic* medicine in compound dosage forms. A proper analysis of the evidence based activity of these formulations mentioned in *Bhaishajya ratnavali* shows that these formulations can be effectively used in all diseased conditions. The current review will be valuable in recognition of the therapeutic applications of newer *guggulu* formulations. Many formulations are not studied yet so there is better scope to study them for the betterment of the patients.

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CONFLICT OF INTEREST

None

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