



# An Enumeration and Review of Medicinal Plants Mentioned in *Bhela Samhita*

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## ABSTRACT

**Introduction:** This study aims to provide a preliminary review on the enumeration of medicinal plants mentioned in the *Bhela Samhita* along with a probable botanical identity. *Bhela Samhita* is one of the important classical treatises of Ayurveda. It is quoted by many scholars in medieval periods. It has sustained its originality as it is less redacted by its successors in the subsequent era. Apart from the critical edition of the manuscript of *Bhela Samhita*, None of the scholars of the ancient period or modern times have put much emphasis on the medicinal plants of *Bhela Samhita*.

**Results:** A total 286 medicinal plants are mentioned in the treatise whereas a total 419 Sanskrit names of the plants are found considering their multiple names. Further, these plants have shown about 1926 citations in the text.

**Conclusion:** Bhela has given a lot of and notable contributions in the field of medicinal plants which will be helpful for the comparative study with other contemporary Ayurveda classics for proper identification and therapeutic usage of the medicinal plants.

**Keywords:** Bhelacharya, *Bhela Samhita*, Medicinal plants of India.

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## INTRODUCTION

Studying of works on Science in ancient India, especially on medicines which is an art as well as science has many lessons to convey. The *Bhela Samhita* is one of the prominent treatises of the *Samhita* period of Ayurveda (Post Vedic period 100 BC to 400 BC). Bhelacharya was one of the outstanding six colleagues–disciples of Punarvasu

Atreya and contemporary of Agnivesha (period 1000 BC). His position was number two, Agnivesha standing at the top. He has individually and independently written a compendium of his own on Ayurveda, named as Bhelatantra, later developed as *Bhela Samhita*. Agnivesha *Samhita* got the first predominance and appreciation, being propagated down through different ages and considered as the backbone of the oldest Ayurveda *Samhitas* which was redacted by Charaka and subsequently by Drudhabala, and now available in the form of *Charaka Samhita*. *Charaka Samhita* occupied the prime position while other treatises dwindled by the scourge of time and also because of their subject matter was also same and the presentation was not much impressive as that of the former. *Bhela Samhita* also got equal approval and recognition of Atreya during that time. However, this treatise lost its popularity even during the time of Vagbhatta also. *Bhela Samhita* was available in its original form till the recent years as it was not exposed to the redactors and commentators. Nevertheless, Bhela is quoted by many authors and commentators of the medieval period. *Bhela Samhita* is not written in the style of question-answer between *guru-shishya* as found in other *Samhitas*. Regarding the native place and the regional movement of Bhela, it is considered that he belonged to Gandhara (present Kandahar). Some researchers also opine that Bhela belonged to someplace on the border area in Punjab and Rajasthan while the workplaces of Bhela were Iran, Afghanistan, Rajasthan, Kashmir, Haryana, Punjab, etc. He had also visited some parts of China. A waterfall in the Narmada River in Madhya Pradesh namely 'Bhedaghat' had the history of exploration of that area by Bhela for medicinal plants. The study of the *Bhela Samhita* is important for any scholar of Ayurveda, Historian and Culturists to know the traditional practices, culture, geographical situation, religious practices prevailed during the period of Bhela as well as of Agnivesha. Hence the contents of *Bhela Samhita* can not be undermined. Only one manuscript of this treatise *Bhela Samhita* was found in the Tanjore Maharaja Serfoji's Saraswati Mahal Library (TMSSM), Thanjavur, which is the only source material today for this *Samhita*. This was published in 1921 from Calcutta University and later in 1959 by Chowkhamba Sanskrit Series Office, Varanasi. In 1977, The Literary Research Unit, Tanjavur

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of CCRIMH, Ministry of Health and Family Welfare, New Delhi had brought its critical edition after needful correction, which is improved in many aspects.<sup>1-3</sup>

Review and Critical study of *Bhela Samhita* have become an important tool for interdisciplinary research to reveal new facts and figures. The similar pattern of sections (*Sthanas*) and a number of chapters (*adhyayas*) are found both in *Charaka Samhita* erstwhile *Agnivesha Samhita* and *Bhela Samhita*, as well.

Healing with medicinal plants is as old as mankind itself. The connection between man and his quest for drugs in nature dates from the far past. According to Ayurveda, The tripartite knowledge (*Trisutra-Hetu, Linga, Oushadha*) descended to earth from Brahma to Daksha Prajapati, from Daksha Prajapati to Ashwini twins, from Ashwini twins to Indra, and from Indra to Bharadwaja. This knowledge ultimately flowed to Atreya and his six disciples. The knowledge of medicinal plants presents inseparably in the *Oushadha sutra* of this tripartite knowledge.<sup>4</sup> The ample evidence of this knowledge is evident from the written documents, preserved manuscripts, and monuments and even original plant medicines. The contemporary science has only acknowledged their active actions. The medicinal plant mentioned by the sages is now included in modern pharmacotherapy.<sup>5,6</sup>

Vivid descriptions of the plant are found in Ayurveda *Samhitas*. Their proper identification, properties, usage is explained by their successor in the medieval periods, in the form of *Nighantus* (lexicon of medicinal plants). Many researchers and scholars have worked and commented on the plants mentioned in *Brihat-Trayi* (*Charaka Samhita, Susruta Samhita, and Astanga Hridayam*).<sup>7</sup> None of the scholars of the ancient period or modern times have put much emphasis on the medicinal plants of *Bhela Samhita*. In this paper, a preliminary review has been done on the medicinal plants described in *Bhela Samhita*.

## MATERIALS AND METHODS

The *Bhela Samhita* (Published by CCRIMH) available in the library of CARIHD, Bhubaneswar (Accession No.592) and *Bhela Samhita* by Dr K. H. Krishnamurty, edited by Dr P. V. Sharma (Published by Chaukhamba Viswabharati, Varanasi) were consulted for this purpose. The names of the medicinal plants mentioned were gathered and tabulated alphabetically. The number of citations for each plant was also noted to see the frequency of use of the plant in the text. The possible botanical correlation was done with the help of codified texts of Ayurveda, modern books on medicinal plants.<sup>8,9</sup>

## RESULTS AND DISCUSSION

The present study revealed that the medicinal plants

are mainly described in the *Chikitsasthana, Sutrasthana, Vimanasthana, Sidhhisthana, and Kalpasthana* of *Bhela Samhita*. Information pertaining to medicinal plants are observed in 4th, 5th, 9th, 14th, 22nd, 27th and 28th chapters of *Sutrasthana*. Similarly, 1st, 2nd, 3rd and 6th chapters of *Vimanasthana* deal with the medicinal plants. Total 286 medicinal plant species with 419 Sanskrit names and 1927 citations were mentioned regarding the use of plants in various disease conditions (Table 1). Total eight groups (*Gana*) of medicinal plants with 57 citations were described (Table 2). Most of the Sanskrit names of the medicinal plants are found synonymous. Among the single drugs like *Pippali, Bala, Yastimadhu, Chitraka, Bilwa, Rasna, Draksha, Vacha* are the most cited medicinal plants which are frequently used for therapeutic purpose. *Triphala* and *Trikatu* were frequently cited among the *ganas* in text for their superior therapeutic values. The enumerated medicinal plant flora of *Bhela Samhita* and *Charak Samhita* are similar in reference to the naming pattern of plant members like, *Asana* (*Pterocarpus marsupium* Roxb.), *Swarna Yuthika* (*Jasminum humile* SENSU CL.), *Ratha* (*Randia dumetorum* Lam.), *Piluparni* (*Maerua arenaria* Hook.), etc. *Paribhadra* (*Erythrina variegata* L.) mentioned by *Bhela* in *Madonmada* chapter (8th chapter of *Chikitsa Sthana*) is not cited in *Charaka Samhita*. There is distinctly mentioned of many such medicinal plants commonly found and known in the areas demarcated by modern region of Rajasthan, Gujarat, Malava and Central India forest areas which are not mentioned in *Charak Samhita*, e.g., *Sukanasa* (*Corallocarpus epigaeus* Benth ex. Hook F, Family-Cucurbitaceae) is the main component of the *Sukanasadi Ghritam* (*Apatantraka Chikitsa*). This shows that *Bhela* was well familiar with that area in comparison to *Agnivesha* and *Charaka*.

His better acquaintance with the plant *Rohitaka* (*Tecomella undulata* G. DON., Family: Bignoniaceae) revealed about his nativity to the Western part of India. *Bhela* differs in the sequence of consuming *Triphala* (*Haritaki, Bibhitaki, and Amalaki*) along with the meal, which is mentioned in *Matrashitiya adhyaya* and had given a pharmacological basis for it. *Amalaki* is advised to be taken before a meal, *Haritaki* after meal and *Bibhitaki* after digestion, whereas *Charaka* prescribes two *Bibhitaki* before meals, four *Amalaki* after meals and one *Haritaki* after digestion. *Bhela* has considered *Bibhitaki* as *Pitta Slesma Kara* and *Vatahara*, whereas *Bibhitaki* is usually considered as *Slesamahara*. Use of *Khadira* in *Kushtha* by *Bhela* seems to be referred from *Susruta Samhita*. Three varieties of *Pippali* (*Long pepper*) are mentioned in *Bhela Samhita*. viz; *Pippali, Aranya Pippali, and Gajapippali/Hasti Pippali*. Out of

Ashtavarga, six members are separately mentioned in the text. The botanical identity of certain plants like *Chandrarka shakam* could not be ascertained. Name of group of medicinal plants three or more combining together

has been advised in about 60 situations which may be interpreted that the knowledge of the synergistic effect of a number of plants if given together, was known to Bhela.

**Table 1:** Medicinal Plants of *Bhela Samhita* along with their botanical equivalent and citations

Sl. No.	Sanskrit Name found in <i>Bhela Samhita</i>	Equivalent Botanical Name	Family	Number of Citations
1	<i>Amlasaakam, Chukram</i>	<i>Garcinia indica</i> (DUP) Choisy	Guttiferae	1
2	<i>Karaja</i>	<i>Eclipta alba</i> (L.) Hassk	Compositae	1
3	<i>Kalanusarya</i>	<i>Dalbergia sisso</i> DC.	Leguminosae	1
4	<i>Kutinjaka</i>	<i>Digera muricata</i> (L.) Mart.	Amaranthaceae	3
5	<i>Krushnavrihi</i>	<i>Lens culinaris</i> Medik.	Leguminosae	1
6	<i>Kshavaka</i>	<i>Centipeda minima</i> (L.) A. Braun and Asch.	Compositae	1
7	<i>Kshirasukla</i>	<i>Ipomoea digitata</i> L.	Convolvulaceae	1
8	<i>Gandhanakuli</i>	<i>Aristolochia indica</i> L.	Aristolochiaceae	1
9	<i>Gavadani</i>	<i>Citrullus colocynthis</i> (L.) Schrad	Cucurbitaceae	1
10	<i>Chandrarka shakam</i>	-	-	1
11	<i>Taleesa</i>	<i>Abies spectabilis</i> (D. Don) Mirb.	Pinaceae	4
12	<i>Atibala</i>	<i>Abutilon indicum</i> L.	Malvaceae	1
13	<i>Khadira</i>	<i>Acacia catechu</i> (L.f.) Willd.	Mimosaceae	11
14	<i>Saptala</i>	<i>Acacia sinuata</i> (Lour) Merrill.	Mimosaceae	2
15	<i>Avakpuspi, Apamarga, Kharapuspa</i>	<i>Achyranthes aspera</i> L.	Amaranthaceae	7
16	<i>Ativisha</i>	<i>Aconitum herterophyllum</i> Wall. Ex Royle	Ranunculaceae	8
17	<i>Prativisha</i>	<i>Aconitum palmatum</i> D. Don	Ranunculaceae	2
18	<i>Vacha</i>	<i>Acorus calamus</i> L.	Araceae	23
19	<i>Atarushakah, Vasa, Vrishakam</i>	<i>Justicia adhatoda</i> L.	Acanthaceae	9
20	<i>Tamrachudah</i>	<i>Adiantum lunulatum</i> Burm. f.	Polypodiaceae	1
21	<i>Bilwa</i>	<i>Aegle marmelos</i> (L.) Correa	Rutaceae	25
22	<i>Malati</i>	<i>Aganosma heynei</i> (Spreng.)	Apocynaceae	3
23	<i>Chhatram</i>	<i>Agaricus campestris</i> L.	Agaricaceae	2
24	<i>Ankola</i>	<i>Alangium salviifolium</i> (L.f.) Wang.	Alangiaceae	1
25	<i>Shirisha</i>	<i>Albizia lebbek</i> (L.) Benth.	Mimosaceae	7
26	<i>Duralabha, Yavasa</i>	<i>Alhagi pseudoalhagi</i> (M. Bieb.) Desv. ex B. Keller and Shap.	Papilionaceae	5
27	<i>Palandu</i>	<i>Allium cepa</i> L.	Liliaceae	1
28	<i>Lasunam</i>	<i>Allium sativum</i> L.	Liliaceae	4
29	<i>Kumari</i>	<i>Aloe barbadensis</i> Mill.	Liliaceae	1
30	<i>Saptaparna</i>	<i>Alstonia scholaris</i> R.Br.	Apocynaceae	4
31	<i>Satapuspaa</i>	<i>Anethum graveolens</i> L.	Umbelliferae	9
32	<i>Choraka</i>	<i>Angelica glauca</i> Edgew.	Umbelliferae	3
33	<i>Dhava</i>	<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall. ex Bedd.	Combretaceae	3
34	<i>Neepea, Kadamba</i>	<i>Anthocephalus chinensis</i> Walp.	Rubiaceae	3
35	<i>Ajamoda</i>	<i>Apium graveolens</i> L.	Apiaceae	5
36	<i>Aguru, Agaru</i>	<i>Aquilaria agallocha</i> Roxb.	Thymelaeaceae	8
37	<i>Swarnakshiri, Hemadugdha, Suvarnaksiri</i>	<i>Argemone mexicana</i> L.	Papaveraceae	15
38	<i>Panasa</i>	<i>Artocarpus integrifolius</i> L.f.	Moraceae	3
39	<i>Likucha</i>	<i>Artocarpus lacucha</i> Buch. Ham. Syn. <i>Artocarpus lakoocha</i> Roxb.	Moraceae	3
40	<i>Satamuli</i>	<i>Asparagus racemosus</i> Willd.	Liliaceae	20
41	<i>Iksuraka, Iksurabijam, Iksvarika</i>	<i>Asteracantha longifolia</i> Nees, syn. <i>Hygrophila auriculata</i> (Schumach.) Heine.	Acanthaceae	5
42	<i>Pichumardah, Nimba, Arista</i>	<i>Azadirachta indica</i> A. Juss.	Meliaceae	12
43	<i>Danti</i>	<i>Baliospermum montanum</i> (Willd.) Muell. Arg.	Euphorbiaceae	21

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Sl. No.	Sanskrit Name found in Bhela Samhita	Equivalent Botanical Name	Family	Number of Citations
44	Vansha	<i>Bambusa arundinacea</i> Willd.	Poaceae	7
45	Sahachara, ? Sitapaki	<i>Barleria prionitis</i> L.	Acanthaceae	4
46	Nichula	<i>Barringtonia acutangula</i> Gaertn.	Barringtoniaceae	4
47	Upodika, Upadoka	<i>Basella alba</i> L.	Chenopodiaceae	2
48	Kovidarah	<i>Bauhinia purpurea</i> L.	Leguminosae	7
49	Kushmandam	<i>Benincasa hispida</i> (Thunb.) Cogn	Cucurbitaceae	1
50	Daru Haridra, Rasanjanam	<i>Berberis aristata</i> DC.	Berberidaceae	7
51	Pashanabhedak	<i>Bergenia ciliata</i> Stamb. Syn. <i>Bergenia ligulata</i> (Wall.) Engl.	Saxifragaceae	1
52	Samanga	<i>Mimosa pudica</i> L.	Leguminosae	6
53	Uchhata	<i>Blepharis edulis</i> Pers.	Acanthaceae	6
54	Punarnava, Kathillaka, Kathilla	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	15
55	Shalmali	<i>Bombax ceiba</i> L. Syn. <i>Salmalia malabarica</i> Schott and Endl.	Bombacaceae	5
56	Talaphalam	<i>Borassus flabellifer</i> L.	Arecaceae	1
57	Sallaki, Kunduraska	<i>Boswellia serrata</i> Roxb.	Burseraceae	3
58	Sarsapah	<i>Brassica campestris</i> L. Var. sarson Prain	Cruciferae	11
59	Rajasarsapah, Suksma Sarsapa	<i>Brassica juncea</i> L.	Cruciferae	2
60	Priyalah	<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	2
61	Kinsuka, Palasha	<i>Butea monosperma</i> (Lam.) Kuntze	Leguminosae	7
62	Adhaki	<i>Cajanus cajan</i> (L.) Mill.	Leguminosae	4
63	Priyangu	<i>Callicarpa macrophylla</i> Vah	Verbenaceae	8
64	Arka	<i>Calotropis procera</i> (Ait.) R.Br.	Asclepiadaceae	6
65	Sidhhi	<i>Cannabis indica</i> L.	Cannabinaceae	6
66	Kareera	<i>Capparis aphylla</i> Roth	Capparidaceae	2
67	Karamarda	<i>Carissa carandas</i> L.	Apocynaceae	2
68	Karavi	<i>Carum carvi</i> L.	Apiaceae	2
69	Adari	<i>Acacia pinnata</i> Link	Leguminosae	1
70	Aragwadha, Chaturangula, Karnikara	<i>Cassia fistula</i> L.	Leguminosae	9
71	Ratha, Madana	<i>Catunaregum spinosa</i> (Thunb.) Tirv syn. <i>Randia dumetorum</i> (Retz.) Poir.	Rubiaceae	15
72	Gandira	<i>Cayratia carnosia</i> (Wall.) Gagnep	Vitaceae	1
73	Suradaru Devadaru	<i>Cedrus deodara</i> (Roxb.) Loud.	Pinaceae	18
74	Jyotismati	<i>Celastrus paniculatus</i> Willd.	Celastraceae	2
75	Vastuka	<i>Chenopodium album</i> L.	Chenopodiaceae	1
76	Chanaka	<i>Cicer arietinum</i> L.	Leguminosae	2
77	Karpura	<i>Cinnamomum camphora</i> L.	Lauraceae	1
78	Patram	<i>Cinnamomum tamala</i> Nees and Eberm.	Lauraceae	15
79	Tvak	<i>Cinnamomum zeylanicum</i> Breyn.	Lauraceae	19
80	Pathaa, Ekasthila	<i>Cissampelos pareira</i> L. Var. <i>hirsuta</i> (Buch.-Ham. ex DC.) Forman Syn. <i>Cissampelos pareira</i> L..	Menispermaceae	13
81	Matulunga, Bijapura	<i>Citrus medica</i> L.	Rutaceae	5
82	Charati	<i>Clerodendrum indicum</i> L.	Verbenaceae	1
83	Jaya, Aarani	<i>Clerodendrum phlomoides</i> L. f.	Verbenaceae	2
84	Bhargi	<i>Clerodendrum serratum</i> L.	Verbenaceae	11
85	Sweta	<i>Clitoria ternatea</i> L.	Leguminosae	3
86	Bimbi, Tundikeri Phalam	<i>Coccinia grandis</i> (L.) Voigt syn. <i>Coccinia indica</i> W. and A.	Cucurbitaceae	2
87	Gavedhuka	<i>Coix lacryma-jobi</i> L.	Poaceae	1
88	Hrivera	<i>Coleus vettiveroides</i> K. C. Jacob	Labiatae	4
89	Pindalu	<i>Colocasia esculenta</i> L.	Araceae	1
90	Guggulu, Palankasha	<i>Commiphora mukul</i> (Hook. ex Stocks) Engl. <i>C. wightii</i> (Arn.) Bhandari.	Burseraceae	5

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Sl. No.	Sanskrit Name found in Bhela Samhita	Equivalent Botanical Name	Family	Number of Citations
91	Shankhapuspi	<i>Convolvulus microphyllus</i> Sieb. ex Spreng syn. <i>Convolvulus pluricaulis</i> Choisy	Convolvulaceae	11
92	Shukanana, Shukanasa	<i>Corallocarpus epigaeus</i> Benth. Ex Hook.f.	Cucurbitaceae	4
93	Dhanyaka	<i>Coriandrum sativum</i> L.	Apiaceae	2
94	Kalika	<i>Coscinum fenestratum</i> Gaertn.	Menispermaceae	5
95	Varuna	<i>Crataeva magna</i> (Lour.) DC. syn. <i>Crataeva nurvala</i> Buch.-Ham.	Capparidaceae	4
96	Kesarah, Kumkuma	<i>Crocus sativus</i> L.	Iridaceae	11
97	Sanabijam	<i>Crotalaria juncea</i> L.	Leguminosae	1
98	Dravanti	<i>Croton tiglium</i> L.	Euphorbiaceae	2
99	Kalanusariva	<i>Cryptolepis buchananii</i> Roem. and Schult.	Asclepiadaceae	1
100	Urvaru, Karakati, Urvarukam	<i>Cucumis melo</i> L. var. <i>utilissimus</i> Duth. and Fuller	Cucurbitaceae	4
101	Vishala	<i>Cucumis trigonus</i> Roxb.	Cucurbitaceae	1
102	Jirakam	<i>Cuminum cyminum</i> L.	Apiaceae	4
103	Tavakshera, Tugakshiri	<i>Curcuma angustifolia</i> Roxb.	Zingiberaceae	7
104	Nisha, Haridra	<i>Curcuma longa</i> L.	Zingiberaceae	12
105	Amrinalam, Katrinam	<i>Cymbopogon jwarancusa</i> (Jones) Schult.	Poaceae	1
106	Rohisha	<i>Cymbopogon martini</i> (Roxb.) Wats	Poaceae	4
107	Golomi	<i>Cynodon dactylon</i> Pers.	Poaceae	2
108	Bhadramusta, Musta, ? Kapila mustakam	<i>Cyperus rotundus</i> L.	Cyperaceae	21
109	Simsapa	<i>Dalbergia sissoo</i> Roxb.	Leguminosae	4
110	Ansumati, Sthira, Shaliparni	<i>Desmodium gangeticum</i> DC.	Leguminosae	9
111	Kusha	<i>Desmostachys bipinnata</i> Stapf	Poaceae	7
112	Kusa, Kusa mulam, Kusa sambhali	<i>Desmostachys bipinnata</i> Stapf.	Poaceae	7
113	Bhavya	<i>Dillenia indica</i> L.	Dilleniaceae	4
114	Tinduka	<i>Diospyros ebenum</i> Koenig	Ebenaceae	4
115	Aswakamah	<i>Dipterocarpus alatus</i> Roxb.	Dipterocarpaceae	2
116	Kulattha, Kaulattha	<i>Dolichos biflorus</i> L.	Leguminosae	10
117	Nispava	<i>Dolichos lablab</i> L.	Leguminosae	2
118	Bhringaraja	<i>Eclipta prostata</i> L.. Syn. <i>Eclipta alba</i> Hassk	Compositae	1
119	Kaseruka	<i>Eleocharis dulcis</i> Trin.	Cyperaceae	1
120	Ela, Sukshmaila	<i>Elettaria cardamomum</i> Maton.	Zingiberaceae	10
121	Vellam, Amogha, Vidanga	<i>Embelia ribes</i> Burm. f.	Myrsinaceae	13
122	Amalaki, Amalakam	<i>Emblica officinalis</i> Gaertn.	Euphorbiaceae	37
123	Lamajjaka	<i>Cymbopogon jwarancusa</i> (Jones) Schult.	Poaceae	7
124	Soma	<i>Ephedra gerardiana</i> Wall	Ephedraceae	2
125	Paribhadra	<i>Erythrina variegata</i> L. Var. <i>variegata</i> syn. <i>Erythrina indica</i> Lam.	Leguminosae	2
126	Sudha, Snuhi	<i>Euphorbia neriifolia</i> L..	Euphorbiaceae	11
127	Kapittha	<i>Feronia limonia</i> (L.) Swingle.	Rutaceae	10
128	Nyagrodha, Vata	<i>Ficus benghalensis</i> L.	Moraceae	10
129	Kakodumbarika	<i>Ficus hispida</i> L.	Moraceae	1
130	Plaksha	<i>Ficus lacor</i> Buch-Ham	Moraceae	6
131	Udumbara, Audumbara	<i>Ficus racemosa</i> L.	Moraceae	6
132	Aswathhah	<i>Ficus religiosa</i> L.	Moraceae	7
133	Viraa	<i>Fritillaria roylei</i> Hook.	Liliaceae	2
134	Amlavetsa	<i>Garcinia pedunculata</i> Roxb.	Guttiferae	12
135	Pinda	<i>Gardenia gummifera</i> L.	Rubiaceae	2
136	Trayamana	<i>Gentiana kurroo</i> Royle	Gentianaceae	3
137	Valukam	<i>Gisekia pharnaceoides</i> L.	Ficoidaceae	1
138	Langali	<i>Gloriosa superba</i> L.	Liliaceae	4

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Sl. No.	Sanskrit Name found in Bhela Samhita	Equivalent Botanical Name	Family	Number of Citations
139	Madhuka Yastimadhu	<i>Glycyrrhiza glabra</i> L.	Leguminosae	40
140	Kashmari, Kashmaryam	<i>Gmelina arborea</i> L.	Verbenaceae	11
141	Karpasha beejam	<i>Gossypium herbaceum</i> L.	Malvaceae	1
142	Parushaka	<i>Grewia asiatica</i> L.	Tiliaceae	6
143	Shati	<i>Hedychium spicatum</i> Buch.-Ham.	Zingiberaceae	4
144	Sariva	<i>Hemidesmus indicus</i> R.Br	Asclepiadaceae	8
145	Atichhatra	<i>Heracleum canescens</i> Lindl.	Apiaceae	1
146	Ambasthaki, Ambastha, Ambastakam	<i>Hibiscus sabdariffa</i> L.	Malvaceae	4
147	Kutaja, Vatsaka	<i>Holarrhena antidysenterica</i> Wall	Apocynaceae	13
148	Putika, Chirabilwa	<i>Holoptelea integrifolia</i> Planch	Ulmaceae	5
149	Atiyava	<i>Hordeum spontaneum</i> Koch.	Poaceae	1
150	Yavaka	<i>Hordeum vulgare</i> L.	Poaceae	17
151	Puskaramulam	<i>Inula racemosa</i> Hook.f.	Compositae	5
152	Payasya	<i>Ipomoea digitata</i> L.	Convolvulaceae	1
153	Swarnayuthika	<i>Jasminum humile</i> L.	Oleaceae	2
154	Hapusha	<i>Juniperus communis</i> L. var. <i>Saxatillis</i> palias.	Coniferae	4
155	Krushnagandha	<i>Kaempferia galanga</i> L.	Zingiberaceae	1
156	Laksha	<i>Kerria japonica</i> (L.) DC.	Kerriidae	7
157	Krutavedhanam, Ikhwaku Alabuh, Lavukah	<i>Lagenaria siceraria</i> (Molina) Standl.	Cucurbitaceae	14
158	Kalayaka	<i>Lathyrus sativus</i> L.	Leguminosae	1
159	Madayantika	<i>Lawsonia inermis</i> L..	Lythraceae	4
160	Jivanti	<i>Leptadenia reticulata</i> W. and A	Asclepiadaceae	3
161	Kshauma	<i>Linum usitatissimum</i> L.	Tiliaceae	3
162	Rajakoshatakam Koshataki	<i>Luffa acutangula</i> (L.) Roxb.	Cucurbitaceae	3
163	Dhamargava	<i>Luffa cylindrica</i> (L.) M.J. Roem.	Cucurbitaceae	7
164	Jimutaka	<i>Luffa echinata</i> Roxb.	Cucurbitaceae	3
165	Hastiparna	<i>Luffa aegyptiaca</i> Mill. EX. Hook.F.	Cucurbitaceae	2
166	Madhuka	<i>Madhuca indica</i> J.F. Gmel.	Sapotaceae	5
167	Piluparni	<i>Maerua arenaria</i> Hook.f.andThoms.	Capparidaceae	1
168	Rishabhak	<i>Malaxis acuminata</i> D.Don.	Orchidaceae	8
169	Jivakah	<i>Malaxis muscifera</i> (Lindley) Kuntze syn. <i>Microstylis muscifera</i> Ridley	Orchidaceae	8
170	Kampillaka	<i>Mallotus philippinensis</i> Muell. Arg.	Euphorbiaceae	2
171	Suvarchala	<i>Malva rotundifolia</i> L.	Malvaceae	1
172	Chyuta, Amra	<i>Mangifera indica</i> L.	Anacardiaceae	5
173	Murva	<i>Marsdenia tenacissima</i> W.andA.	Asclepiadaceae	9
174	Mahanimba	<i>Melia azedarach</i> L.	Meliaceae	1
175	Nagapuspa	<i>Mesua ferrea</i> L.	Guttiferae	3
176	Bakula	<i>Mimusops elengi</i> L.	Sapotaceae	1
177	Shigr, Sobhanjanak, Krishnagandha	<i>Moringa oleifera</i> L.	Moringaceae	12
178	Atmagupta, Kapikachhu Phalam	<i>Mucuna pruriens</i> (L.) DC..	Leguminosae	4
179	Kiadarya	<i>Murraya koenigii</i> (L.) Spreng./ <i>Alianthus excelsa</i> Roxb.	Rutaceae	1
180	Surabhi	<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	3
181	Kadali	<i>Musa paradisiaca</i> L.	Musaceae	1
182	Katphala	<i>Myrica nagi</i> Thunb.	Myricaceae	4
183	Jativriksham	<i>Myristica fragrans</i> Houtt.	Myristicaceae	3
184	Mansi	<i>Nardostachys grandiflora</i> DC. Syn. <i>Nardostachys jatamansi</i> DC.	Valerianaceae	3
185	Bisam, Padma, Prapoundirakam, Pundarika, Asita utpalam, Kamalam, Kalhara kusumam	<i>Nelumbo nucifera</i> Gaertn.	Nelumbonaceae	15
186	Alambusha	<i>Neptunia oleracea</i> Lour.	Leguminosae	1

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Sl. No.	Sanskrit Name found in Bhela Samhita	Equivalent Botanical Name	Family	Number of Citations
187	Karavira	<i>Nerium indicum</i> Mill.	Apocynaceae	4
188	Prithvika, Ajaji, Upakunchika, Kunchika	<i>Nigella sativa</i> L.	Ranunculaceae	9
189	Kumuda Mrunala	<i>Nymphaea alba</i> L.	Nelumbonaceae	8
190	Neelotpala	<i>Nymphaea stellata</i> Willd.	Nelumbonaceae	16
191	Utpala	<i>Nymphaea alba</i> L.	Nelumbonaceae	10
192	Kutheraka	<i>Ocimum</i> sp.	Labiatae	1
193	Karbudara	<i>Bauhinia variegata</i> L.	Leguminosae	1
194	Trivrit	<i>Operculina turpethum</i> (L.) Silva Manso.	Convolvulaceae	10
195	Shyama	<i>Operculina turpethum</i> L.	Convolvulaceae	13
196	Munja	<i>Orchis latifolia</i> L.	Orchidaceae	2
197	Katambhara, Shyonaka, Kutannatam	<i>Oroxylum indicum</i> Vent.	Bignoniaceae	6
198	Arjakah	<i>Orthosiphon pallidus</i> Royle	Labiatae	1
199	Dhanyam, Shali, Kalama	<i>Oryza sativa</i> L.	Poaceae	22
200	Changeri	<i>Oxalis corniculata</i> L.	Oxalidaceae	2
201	Chandravalli	<i>Paederia foetida</i> L./ <i>Hiptage benghalensis</i> (L.) KURZ	Rubiaceae	1
202	Saileyam	<i>Parmelia perlata</i> Sch.	Parmeliaceae	1
203	Uddalaka, Kodravam, Koradusa	<i>Paspalum scrobiculatum</i> L.	Gramineae	2
204	Vrichhikali	<i>Pergularia extensa</i> N. E. Br	Asclepiadaceae	2
205	Kharjura	<i>Phoenix sylvestris</i> Roxb.	Palmae	9
206	Tikta Rohini, Katukah, Katukah, Katukam Katukarohini, Katukarohini	<i>Picrohiza kurroa</i> Royle ex. Benth.	Scrophulariaceae	44
207	Sarala, Srivestaka	<i>Pinus roxburghii</i> Sargent	Pinaceae	3
208	Chavyam	<i>Piper chaba</i> L.	Piperaceae	5
209	Pippali, Kana, Krishna	<i>Piper longum</i> L..	Piperaceae	53
210	Aaranya Pippali	<i>Piper peepuloides</i> Roxb.	Piperaceae	1
211	Gaja Pippali, Hastippali	<i>Piper retrofractum</i> Vahl	Piperaceae	8
212	Karakata Sringi	<i>Pistacia chinensis</i> Bunge subsp. <i>integerrima</i> (Stewart) Rech.f.	Anacardiaceae	1
213	Rasna	<i>Pluchea lanceolata</i> Oliver and Hiern.	Compositae	25
214	Vyala, Chitraka	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	34
215	Mahameda	<i>Polygonatum cirrhifolium</i> Royle	Liliaceae	1
216	Meda	<i>Polygonatum verticillatum</i> (L.) All	Liliaceae	8
217	Naktamala, Karanja	<i>Pongamia pinnata</i> Pierre	Leguminosae	15
218	Tarkari, Agnimantha	<i>Premna integrifolia</i> L.	Verbenaceae	4
219	Shami	<i>Prosopis cineraria</i> (L.) Druce	Leguminosae	1
220	Padmaka	<i>Prunus cerasoides</i> D. Don	Rosaceae	12
221	Avalguja	<i>Psoralea corylifolia</i> L.	Leguminosae	3
222	Asana	<i>Pterocarpus marsupium</i> Roxb.	Leguminosae	11
223	Vidari	<i>Pueraria tuberosa</i> DC.	Leguminosae	11
224	Dadima	<i>Punica granatum</i> L.	Punicaceae	18
225	Pinditakah	<i>Randia uliginosa</i> DC.	Rubiaceae	1
226	Mulakam	<i>Raphanus sativus</i> L.	Cruciferae	13
227	Sarpagandha	<i>Rauvolfia serpentina</i> Benth. Ex. Kurz	Apocynaceae	1
228	Eranda, Gandharva Hasta	<i>Ricinus communis</i> L.	Euphorbiaceae	10
229	Kakolyo (Kakoli and Kshira kakoli)	<i>Roscoea procera</i> Wall. and <i>Fritillaria roylei</i> Hook.	Zingiberaceae	2
230	Manjistha	<i>Rubia cordifolia</i> L.	Rubiaceae	13
231	Sara	<i>Saccharum munja</i> Roxb.	Poaceae	2
232	Iksu, Iksurasam	<i>Saccharum officinarum</i> L.	Poaceae	7
233	Kasa	<i>Saccharum spontaneum</i> L.	Poaceae	2
234	Pilu	<i>Salavadora persica</i> L.	Salvadoraceae	9
235	Vetasa	<i>Salix tetrasperma</i> Roxb.	Salicaceae	7

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Sl. No.	Sanskrit Name found in Bhela Samhita	Equivalent Botanical Name	Family	Number of Citations
236	Chandana	<i>Santalum album</i> L.	Santalaceae	16
237	Aristaka	<i>Sapindus emarginatus</i> Vahl	Sapindaceae	3
238	Ashoka	<i>Saraca asoca</i> (Roxb.) DC Wild	Leguminosae	3
239	Ingudi	<i>Balanites aegyptiaca</i> L.	Balanitaceae	1
240	Kustham, Kustakam	<i>Saussurea lappa</i> C.B. Clarke	Compositae	1
241	Bhallataka	<i>Semecarpus anacardium</i> L. f.	Anacardiaceae	9
242	Tila	<i>Sesamum orientale</i> L. Syn. <i>Sesamum indicum</i> L.	Pedaliaceae	20
243	Kangu, Prasadhika, Syamaka	<i>Setaria italica</i> Beauv.	Poaceae	1
244	Sarja	<i>Shorea robusta</i> Gaert.n.f.	Dipterocarpaceae	6
245	Bala, ?Odanapaki	<i>Sida cordifolia</i> L.	Malvaceae	41
246	Sidharthaka, Goura sarshapa	<i>Sinapis alba</i> L.	Brassicaceae	1
247	Kakamachi	<i>Solanum nigrum</i> L.	Solanaceae	2
248	Brihati	<i>Solanum indicum</i> L.	Solanaceae	6
249	Vartaka	<i>Solanum melongena</i> L.	Solanaceae	5
250	Nidigdhika, Kantakarika	<i>Solanum xanthocarpum</i> Schrad. and Wendl.	Solanaceae	11
251	Kadambapuspi	<i>Sphaeranthus indicus</i> L.	Compositae	1
252	Amrataka	<i>Spondias pinnata</i> Kurz	Anacardeaceae	2
253	Patala	<i>Stereospermum chelonoides</i> (L. f.) DC. Syn. <i>Stereospermum suaveolens</i> DC	Bignoniaceae	2
254	Kiratatika	<i>Swertia chirayita</i> (Roxb.ex Flem.) Karst. syn. <i>Swertia chirata</i> C.D. Clarke	Gentianaceae	3
255	Lodhra	<i>Symplocos racemosa</i> Roxb.	Symplocaceae	14
256	Jambu	<i>Syzygium cuminii</i> (L.) Skeels	Myrtaceae	5
257	Nandi	<i>Tabernaemontana coronaria</i> R.BR.	Apocynaceae	1
258	Ajamoda	<i>Trachyspermum roxburghianum</i> (DC.) H. Wolff	Apiaceae	6
259	Amlika	<i>Tamarindus indica</i> L.	Leguminosae	1
260	Rohitaka	<i>Tecomella undulata</i> Seem. syn. <i>Tecoma undulate</i> D.Don	Bignoniaceae	1
261	Mashaparni	<i>Teramnus labialis</i> Spreng.	Leguminosae	2
262	Arjuna	<i>Terminalia arjuna</i> (Roxb.) W.andA.	Combretaceae	4
263	Vibhitakam, Aksha	<i>Terminalia bellirica</i> Roxb.	Combretaceae	20
264	Abhaya, Pathya, Vayastha Haritaki	<i>Terminalia chebula</i> Retz	Combretaceae	35
265	Kakubha	<i>Terminalia myriocarpa</i> Heurck and Muell.-Arg.	Combretaceae	4
266	Ajagandha	<i>Thymus serpyllum</i> L.	Labiatae	1
267	Chhinnaruha, Sreyasi, Madhuparni, Guduchi	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook. f. and Thoms.	Menispermaceae	13
268	Yavani	<i>Trachyspermum ammi</i> (L.) Sprague	Apiaceae	4
269	Swadamstra, Swadukantaka, Goksu kara	<i>Tribulus terrestris</i> L.	Zygophyllaceae	14
270	Patolam,	<i>Trichosanthes dioica</i> Roxb.	Cucurbitaceae	8
271	Godhuma	<i>Triticum aestivum</i> L.	Poaceae	6
272	Pritahkparni	<i>Uria picta</i> Desv.	Leguminosae	3
273	Tagaram, Balakam	<i>Valeriana wallichii</i> DC	Valerianaceae	7
274	Sahadeva	<i>Vernonia cinerea</i> Less.	Compositae	1
275	Usheeram, Virana	<i>Vetiveria zizanioides</i> (L.) Nash.	Poaceae	10
276	Tilvaka	<i>Viburnum nervosum</i> Hook. f. and Thoms.	Adoxaceae	4
277	Masha	<i>Vigna mungo</i> (L.) Hepper syn. <i>Phaseolus mungo</i> L.	Leguminosae	12
278	Mudga, Krushnamudga	<i>Vigna radiata</i> (L.) Wilczek syn. <i>Phaseolus radiata</i> L.	Leguminosae	11
279	Mudgaparni	<i>Vigna trilobata</i> (L.) Verdcourt syn. <i>Phaseolus trilobatus</i> (L.) Schreb.	Leguminosae	1
280	Harenu	<i>Vitex negundo</i> L.	Verbenaceae	5

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Sl. No.	Sanskrit Name found in Bhela Samhita	Equivalent Botanical Name	Family	Number of Citations
281	Mrudvika, Draksha	<i>Vitis vinifera</i> L.	Verbenaceae	29
282	Aswagandha	<i>Withania somnifera</i> (L.) Dunal	Solanaceae	6
283	Dhataki	<i>Woodfordia fruticosa</i> Kurz	Lythraceae	7
284	Sisumarah	<i>Xylocarpus granatum</i> KOEN	Meliaceae	1
285	Tejovati, Tumburu	<i>Zanthoxylum armatum</i> DC.	Rutaceae	7
286	Sunthi, Mahousadha, Nagaram, Sringaveram, Ardrakam, Viswa Bhesajam	<i>Zingiber officinalis</i> Roxb.	Zingiberaceae	27
287	Karakandhu	<i>Ziziphus nummularia</i> (Burm. f) Wight and Arn	Rhamnaceae	5
288	Badara, Badaram Kolam, Kolakam, Kolahwa, Kaulakam	<i>Zizyphus mauritiana</i> Lam.	Rhamnaceae	18
289	Badari	<i>Zizyphus xylopyrus</i> (Retz.) Willd.	Rhamnaceae	2
Total				1926

Table 2: Group of medicinal plants described in Bhela Samhita

Sl.No.	Gana (Group)	Number of Citations
1.	Dasamulam	4
2.	Trikatukam/Vyoshakam	18
3.	Triphala/Vara	28
4.	Piplou	2
5.	Phalini	1
6.	Mulini	1
7.	Karanjou	2
8.	Chaturjata	1
Total		57

## CONCLUSION

*Bhela Samhita* is one among the unique ancient classic of Ayurveda, which is modestly explored. Bhela has given a lot of and notable contributions in various concepts of Ayurveda. In the context of medicinal plants, 286 medicinal plant species with 419 Sanskrit names are mentioned in different treatment advised in the text and 1926 citations are found. Different names have been given to one plant in different contexts which may be considered as synonyms. Highlighting of formulations in 60 situations with various drug combinations is unique and represents the synergistic effects of drugs. The botanical identities of a few plants of this treatise are still to ascertain due to their controversial nomenclature. Its comparison with other contemporary Ayurveda classics is essential for proper identification and therapeutic uses of the medicinal plants for the benefit of the fraternity of Ayurveda and Indological science.

## ACKNOWLEDGMENT

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## हिन्दी सारांश

### भेल संहिता में दिए गए औषधीय पादपों की एक परिगणना और समीक्षा

**पृष्ठभूमि:** इस अध्ययन का लक्ष्य भेल संहिता में वर्णित औषधीय पादपों की गणना पर एक संभावित वनस्पति संबंधी पहचान के साथ प्रारंभिक समीक्षा प्रदान करना है। भेल संहिता आयुर्वेद के महत्वपूर्ण शास्त्रीय ग्रंथों में से एक है। यह मध्यकालीन कई विद्वानों द्वारा उद्धृत भी किया गया है। इसके उत्तराधिकारियों द्वारा संशोधित न किए जाने पर भी इसने अपनी मौलिकता को निरंतर बनाए रखा है। भेल संहिता की पांडुलिपि के महत्वपूर्ण संस्करण के अतिरिक्त, प्राचीन काल या आधुनिक समय के किसी भी विद्वान ने भेल संहिता की औषधीय पौधों को ज्यादा महत्व नहीं दिया है।

**परिणाम:** इस ग्रंथ में कुल 286 औषधीय पादपों का उल्लेख किया गया है, जहां पादपों के कई नामों के कारण कुल 419 संस्कृत नाम पाये गये हैं। इसके अतिरिक्त, इन पादपों का लगभग 1926 बार ग्रंथ में उद्धरण मिलता है।

**निष्कर्ष:** भेल ने औषधीय पादपों के संदर्भ में उल्लेखनीय योगदान दिए हैं, जो औषधीय पादपों के पहचान एवं चिकित्सीय उपयोग हेतु अन्य समकालीन आयुर्वेद ग्रंथों के साथ तुलनात्मक अध्ययन में सहायक होंगे।

**सूचक शब्द:** भेलाचार्य, भेल संहिता, भारत के औषधीय पादप

