



Original Article

SINGLE HERBS FOR MANAGEMENT OF DIABETES MELLITUS – A REVIEW

Dr. Geetika Pahuja*, Mangesh Pahuja**

1. *MD Scholar, Final year, Department of Dravyaguna, All India Institute of Ayurveda
2. **BAMS, Second year, CDL college of Ayurveda

Abstract

Introduction - Diabetes is a lifestyle disorder is getting prevalent. Due to the chronic nature of the disease and associated medical conditions, secondary failures to conventional medicines are getting acknowledged. These secondary failures are one of the major reason due to which people are moving towards *Ayurvedic* herbs with the belief that these medicines are safe. Though few herbs are commonly known and are available as an over the counter (OTC) product. To spread information regarding more of the eligible herbs for the same effect and to safeguard or limit over usage of a particular herb, an effort has been made to compile the herbs mentioned in *Brittrayi* and *Laghutrayi* (the ancient classical treatise). The compilation is done by combining the single herbs mentioned in *Brihatrayi* and *Laghutrayi*. The list shows that 104 herbs have been mentioned in classical literature for their antidiabetic effect. Thus, these herbs may be used for antidiabetic activities and the burden over a few herbs might get reduced.

Keywords: Diabetes Mellitus, Ekal aushadh, *Prameha*, *Madhumeha*, Single herbs.

INTRODUCTION

Diabetes is a metabolic disorder, affecting million people all over the world. In *Samhitas*, 20 types of *Prameha* are described and “*Madhumeha*” is one of its types having almost identical clinical feature of Diabetes Mellitus type II. Due to the chronic nature of disease and its association with many other medical ailments, the research community is continuously exploring possibility to invent new drugs for its management. Drugs are nothing but the more refined forms of herbs and many drugs are synthesized by the herbs only. In Ancient treatise, ample number of herbs is mentioned for this activity.

As various research work are done by various scientist for pharmacological screening of anti-diabetic herbs still there is ample scope to trace out other herbs for a better management of diabetes mellitus type II. Thus an effort has been made to compile the herbs mentioned in *samhitas* i.e.

Address for correspondence:

Dr. Geetika Pahuja
MD Scholar, Final year,
Department of Dravyaguna,
All India Institute of Ayurveda
Email Id: pahujagtk@gmail.com
Ph: 8750737430

Brihattrayi and *Laghutrayi* so that these may also get screened for their antidiabetic potential in conventional terms and may prove beneficial to humankind.

MATERIAL METHODS

Botanicals indicated for *Prameha* (Diabetes Mellitus) were compiled from *Brihattrayi* i.e., *Charak Samhita*, *Sushruta Samhita* and *Astanga Hridaya* and *Laghutrayi* i.e. *Madhava Nidana*, *Sharangdhar Samhita* and *Bhav Prakash Nighantu*.

OBSERVATIONS AND RESULTS

No herb was mentioned in *Madhava Nidana*^{1,2} for the management of *Prameha*.

Table 1: Botanicals indicated for *Prameha* (Diabetes Mellitus) in *Brihattrayi* and *Laghutrayi*

S.N o.	Sanskrit Name	Charak S. ³	Sushrut S. ⁴	Astanga H. ⁵	Sharangdhar S. ⁶	B. P. Nighantu ⁷
1.	Haritaki	✓	✓	✓		
2.	Amalaki	✓	✓	✓	✓	✓
3.	Yava	✓				✓
4.	Danti	✓		✓		
5.	Ingudi	✓	✓			
6.	Atsi	✓	✓			
7.	Sarshapa	✓	✓			
8.	Haridra	✓	✓	✓		
9.	Kapitha	✓				

10.	Vijaysa ar	✓	✓	✓		✓
11.	Kusha	✓				
12.	Aargvadh		✓	✓		
13.	Madanphala		✓	✓		
14.	Gopghanta		✓			
15.	Kantaki		✓	✓		
16.	Kutaj		✓	✓		✓
17.	Patha		✓	✓		
18.	Patla		✓	✓		✓
19.	Murva		✓	✓		
20.	Saptaparna		✓	✓		
21.	Nimba		✓	✓		✓
22.	Kurantaka		✓	✓		
23.	Dasikurantaka		✓			
24.	Guduchi		✓	✓	✓	✓
25.	Chitrak		✓	✓		✓
26.	Sharanga		✓	✓		
27.	Karanja		✓	✓		✓
28.	Putikaranja		✓	✓		

29.	Patola		✓	✓		
30.	Kirattik ta		✓	✓		
31.	Sushvi		✓	✓		✓
32.	Sal		✓	✓		
33.	Ajkarna		✓	✓		✓
34.	Khadir		✓	✓		✓
35.	Kadar		✓	✓		
36.	Kaal skandh a		✓			
37.	Kramu ka		✓	✓		
38.	Bhurja		✓	✓		
39.	Meshas hringi		✓	✓		✓
40.	Tinish		✓	✓		✓
41.	Chanda n		✓	✓		
42.	Ku- chanda n		✓	✓		
43.	Shinshi pa		✓	✓		
44.	Shirish		✓	✓		
45.	Dhava		✓	✓		
46.	Arjuna		✓	✓		✓
47.	Taal		✓	✓		
48.	Shaak		✓	✓		
49.	Ashvak		✓	✓		

	arna					
50.	Agaru		✓	✓		✓
51.	Kaliyak a		✓			
52.	Bibhita ki		✓	✓		
53.	Pippali		✓			✓
54.	Marich a		✓			
55.	Shringv er		✓			
56.	Vidari		✓			
57.	Sariva		✓			
58.	Karmar da		✓			
59.	Gokshu ra		✓			✓
60.	Shatava ri		✓	✓		
61.	Gridhra nakhi		✓			
62.	Kusum bha		✓			
63.	Moolak		✓			
64.	Jimutak a		✓			
65.	Kritved hana		✓			
66.	Arka		✓			
67.	Kampil laka		✓			

68.	Hastika rna		✓			
69.	Prithvik a		✓			
70.	Peelu		✓			
71.	Shigru		✓			
72.	Suvarc hala		✓			
73.	Vidang		✓			
74.	Jyotish mati		✓			
75.	Tuvara ka		✓			
76.	Bhallat aka		✓			
77.	Kinshu ka		✓	✓		
78.	Parijat		✓			✓
79.	Ashvat ha		✓			
80.	Agnima ntha		✓			✓
81.	Mridvi ka			✓		
82.	Lashun a			✓		
83.	Daruha ridra			✓		
84.	Mushka k			✓		
85.	Snug			✓		

86.	Dravant i			✓		
87.	Katuka					✓
88.	Manjist ha					✓
89.	Bakuch i					✓
90.	Devdar u					✓
91.	Aatrush ak					✓
92.	Mahani mba					✓
93.	Bala					✓
94.	Indrava aruni					✓
95.	Mahen dravaar uni					✓
96.	Kakma chi					✓
97.	Arkapu shpi					✓
98.	Gojihw a					✓
99.	Aamra					✓
100.	Kadli					✓
101.	Loni					✓
102.	Shitiva ar					✓
103.	Dronpu shpi					✓

104	Varahik anda					✓
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Table 2: Latin name of herbs with their parts used and explored for their antidiabetic activity

S. N o.	Sanskrit Name	Common name ^{8,9}	Latin Name ¹⁰	Part used
1.	Haritaki	Harad	<i>Terminalia Chebuli</i> Retz.	Fruit
2.	Amalaki	Amla	<i>Phyllanthus emblica</i> Gaertn.	Fruit
3.	Yava	Jo	<i>Hordeum vulgare</i> Linn.	
4.	Danti	Danti	<i>Baliospermum montanum</i> Muell. Arg.	Root, Seed, Leaves
5.	Ingudi	Ingudi	<i>Balanites roxburghii</i> Planch.	Bark, Fruit, Seed, Leaves, Oil

6.	Atsi	Alsi	<i>Linum usitatissimum</i> Linn.	Seed, Oil, Flower
7.	Sarshapa	Kali sarso	<i>Brassica campestris</i> Prain.	Seed, Oil
8.	Haridra	Haldi	<i>Curcuma longa</i> Linn.	Rhizome
9.	Kapitha	Kapitha	<i>Feronia limonia</i> (L.) Swingle	
10	Vijaysara	Vijaysara	<i>Pterocarpus marsupium</i> Roxb.	Heartwood, Exudate
11	Kusha	Kusha	<i>Desmostachya bipinnata</i> Stapf	Root
12	Aargvadh	Amaltas	<i>Cassia fistula</i> Linn.	Rootbark, Leaves, Flower, Phalmajja
13	Madanphala	Mainphala	<i>Randia dumet</i>	Fruit

			<i>orum</i> Lam.	
14	Gopgha nta	Gopgha nta	<i>Ziziph us xylop yrus</i> (Retz.) Willd.	
15	Kantaki	Kantaki	<i>Caesa lpinia crista</i> L.	
16	Kutaj	Patha	<i>Holar rhena antidy senti ca</i> Wall.	Bark, Seeds
17	Patha	Patla	<i>Cissa mpelo s pare ira</i> Linn.	Root, underground stem
18	Patla	Murva	<i>Stereo sperm um suave olens</i> DC.	Flower, Seed, Leaves, Rootbark, Kshar
19	Murva	Indraya va	<i>Marsd enia tenaci ssima</i> (Roxb) Moon	Root
20	Saptapa rna	Saptapa rna	<i>Alston ia schola</i>	Bark

			<i>ris</i> (L.) R. Br.	
21	Nimba	Neem	<i>Azadi rachta indica</i> A.Juss .	Flower, Leaves, Bark, Seeds, Oil
22	Kuranta ka	Sehchar	<i>Barler ia prioni tis</i> L.	Leaves, Whole plant
23	Dasi kuranta ka	Neela Sehchar	<i>Barler ia strigo sa</i> Willd.	Leaves, Whole plant
24	Guduch i	Giloy	<i>Tinos pora cordif olia</i> (Willd) Miers	Stem
25	Chitrak	Chitrak	<i>Plumb ago zeylan ica</i> L.	Rootbark
26	Sharan gesta	Sharan gesta	<i>Drege a volubi lis</i> (L.f.) Benth. ex Hook. f.	
27	Karanja	Dithori	<i>Ponga mia</i>	Bark, Leaves,

			<i>pinnata</i> (L.) Pierre	Seeds
28	Puti karanja	Chirbil va	<i>Holoptelea integrifolia</i> Planch.	Bark
29	Patola	Parval	<i>Trichosanthes dioica</i> Roxb.	Leaves
30	Kirattik ta	Chirayta	<i>Swertia chirata</i> Bunch Ham.	Whole Plant
31	Sushvi	Karela	<i>Momordica charantia</i> L.	Whole Plant, Fruitbark
32	Sal	Sal	<i>Shorea robusta</i> Gaertn.	Bark, Exudate
33	Ajkarna	Ajkarna (Sal bheda)	<i>Vateria indica</i> Linn.	Bark, Exudate
34	Khadir	Khair	<i>Acacia catechu</i>	Bark, Exudate

			(L.f.) Willd.	
35	Kadar	Safed khair	<i>Acacia sumatra</i> Buch. Ham	Bark, Exudate
36	Kaal skandha	Kaalskandha	<i>Acacia farnesiana</i> Willd.	Bark, Exudate
37	Kramuka	Supari	<i>Areca catechu</i> L.	Fruit
38	Bhurja	Bhoj patra	<i>Betula utilis</i> D. Don	Bark
39	Meshashringi	Gudmar	<i>Gymnema sylvestre</i> (Retz.) R.Br. ex Sm.	Leaves, Root
40	Tinish	Tinish	<i>Ougeinia dalbergioides</i> Benth.	Heartwood, Bark
41	Chandan	Chandan	<i>Santalum album</i> L.	Heartwood, oil

42	Ku-chandan	Laal chandan	<i>Pterocarpus santalinus</i> L.f.	Heartwood
43	Shinshi pa	Sheesham	<i>Dalbergia sissoo</i> Roxb.	Leaves, Saar, Bark, Root
44	Shirish	Shirisha	<i>Albizia lebbek</i> (L.) Benth.	Bark, Leaves, Seeds, Flower
45	Dhava	Dhava	<i>Anogeissus latifolia</i> Wall.	Bark, Leaves, Resin
46	Arjuna	Arjuna	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Bark
47	Taal	Taad	<i>Borassus flabellifer</i> L.	Fruit, Seeds
48	Shaak	Sagon	<i>Tectona grandis</i> L.f.	Saar

49	Ashvakarna	Garjan	<i>Dipterocarpus alatus</i> Roxb. ex G.Don	oil
50	Agaru	Agaru	<i>Aquilaria agallocha</i> Roxb.	Heartwood, Oil
51	Kaliyak	Kaliyak	<i>Jateorhiza palmata</i> (Lam.) Miers	Heartwood
52	Bibhita ki	Baheda	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Fruit
53	Pippali	Pippali	<i>Piper longum</i> L.	Fruit
54	Maricha	Kali Mirich	<i>Piper nigrum</i> L.	Fruit
55	Shringver	Sonth	<i>Zingiber officinale</i> Roscoe	Rhizome

56	Vidari	Vidarik and	<i>Pueraria tuberosa</i> (Willd.) DC.	Tuber
57	Sariva	Sariva	<i>Hemidesmus indicus</i> (L.) R. Br. ex Schult.	Root
58	Karmarda	Karmarda	<i>Carissacarandas</i> L.	
59	Gokshura	Gokshura	<i>Tribulus terrestris</i> L.	Fruit, Root
60	Shatavari	Shatavari	<i>Asparagus racemosus</i> Willd.	Rhizome
61	Gridhranaki	Himsra	<i>Capparis sepiaria</i> L.	
62	Kusumbha	Kusumbha	<i>Carthamus tinctorius</i> L.	

63	Moolak	Moolaka	<i>Raphanus sativus</i> Linn.	Leaves, Seeds, Rhizome
64	Jimutaka	Jimutaka	<i>Luffa echinata</i> Roxb.	Fruit
65	Kritvedhana	Kritvedhana	<i>Luffa acutangula</i> (L.) Roxb.	Fruit, Leaves, Root
66	Arka	Aaka	<i>Calotropis gigantea</i> (L.) Dryand.	Rootbark, Latex, Flower, Leaves
67	Kampilaka	Kampilaka	<i>Mallostus philippensis</i> Muell.	Fruithairs
68	Hastikarna	Hastikarna	<i>Leea macrophylla</i> Roxb. ex Hornem.	Rhizome
69	Prithvika	Kala jeera	<i>Nigella sativa</i> Linn.	Fruit

70	Peelu	Peelu (Gudphala)	<i>Salva dora persica</i> L.	Fruit, Seeds, Leaves, Rootbark
71	Shigru	Sehjan	<i>Morin ga oleifera</i> Lam.	Seeds, Rootbark
72	Suvarc hala	Suvarc hala	<i>Gyna ndrop sis penta phylla</i> L.	Seeds, Root
73	Vidang	Vidang	<i>Embel ia ribes</i> Burm. f.	Fruit
74	Jyotish mati	Jyotish mati	<i>Celast rus panic ulatus</i> Willd.	Seeds, oil
75	Tuvara ka	Tuvara ka	<i>Hydn ocarp us laurif olia</i> (Denn st.) Sleum er	Seeds, Seed oil
76	Bhallat aka	Bhallat aka	<i>Semec arpus anaca rdium</i> L.f.	Fruit

77	Kinshu ka	Palash	<i>Butea monos perma</i> (Lam.) Taub.	Bark, Flower, Exudate, Seeds
78	Parijat	Haarshr ingar	<i>Nycta nthes arbor- tristis</i> L.	Leaves, Bark
79	Ashvat ha	Peepal	<i>Ficus religi osa</i> L.	Bark, Fruit, Tender leaves, Latex
80	Agnima ntha	Arni	<i>Clero dendr um phlom idis</i> L.f.	Leaves, Rootbark
81	Mridvi ka	Munak ka	<i>Vitis vinifer a</i> L.	Fruit
82	Lashun a	Lehsun	<i>Alliu m sativu m</i> L.	Rhizome, oil
83	Daruha ridra	Daruhal di	<i>Berber is aristat a</i> DC.	Root, Stem, Fruit
84	Mushka k	Mushka k	<i>Cassi ne gla uca</i> (Rottb.) Kuntz e	

85	Snug	Snuhi	<i>Euphorbia neriifolia</i> L.	Root, Stem, Leaves, Latex
86	Dravanti	Jaypaal	<i>Croton tiglium</i> L.	Seeds, Seed oil
87	Katuka	Kutki	<i>Picrorhiza kurroa</i> Royle	Underground stem
88	Manjista	Manjista	<i>Rubia cordifolia</i> L.	Root
89	Bakuchi	Bakuchi	<i>Psoralea corylifolia</i> L.	Seeds, Seed oil
90	Devdaru	Devdar	<i>Cedrus deodara</i> (Roxb. ex D.Don) G.Don	Heartwood, Oil
91	Aatrushak	Vasa	<i>Adhatoda vasica</i> Nees	Root, Leaves, Flower
92	Mahani	Bakaya	<i>Melia azeda</i>	Root, Bark, seed(Phalasth

	mba	n	<i>rach</i> L.	i)
93	Bala	Bala	<i>Sida cordifolia</i> L.	Root, Seeds
94	Indravara	Indrayan	<i>Citrus colocynthis</i> (L.) Schrad.	
95	Mahendra	Badi Indrayan	<i>Cucumis melo</i> L. <i>Cucumis trigonus</i> Roxb.	
96	Kakma	Makoye	<i>Solanum nigrum</i> L.	Whole plant, Fruit
97	Arkashpi	Arkashpi	<i>Asclepias annularis</i> Roxb.	Root
98	Gojihwa	Gojaban	<i>Onoma bracteatum</i> Wall	Leaves, Flower

99	Aamra	Aam	<i>Mangifera indica</i> L.	Bark, Leaves, Flower, Fruit, Beejmajja
10	Kadli	Kela	<i>Musa sapientum</i> L.	Fruit, Flower, Stem
10	Loni	Badi Loni shaak	<i>Portulaca quadrifida</i> L.	Leaves, Seeds
10	Shitivar	Shitivar	<i>Marsilea minut</i> a L.	Whole plant
10	Dronpshpi	Dronpshpi	<i>Leucas cephalotes</i> (Roth) Spreng.	Whole plant, Leaves
10	Varahikanda	Varahikanda	<i>Dioscorea bulbifera</i> L.	Rhizome

DISCUSSION AND CONCLUSION

Diabetes is a chronic disease making one's life challenge full. To combat those challenges and live healthy life patients are using herbs which have always been an exemplary source of medicine. Since ancient times, all over the world traditional system of medicine have advocated the use of herbs to treat diabetes. But till date, only a few herbs

are known for their antidiabetic potential and are being used. Which is imparting stress on commonly available herbs as they are widely in use as OTC products. Also, to spread awareness regarding more herbs having the same potential, herbs from Brihatrayi and Laghutrayi are compiled.

On reviewing *Brihatrayi* and *Laghutrayi*, 104 plants are enumerated for their antidiabetic potential.

REFERENCES

1. Shri Vijayrakshita and Shri kanthadatta, commentator, Madhava Nidanam, Part I, Chaukhamba Prakashana, Varanasi, Vi. S. 2073
2. Shri Vijayrakshita and Shri kanthadatta, commentator, Madhava Nidanam, Part II, Chaukhamba Prakashana, Varanasi, Vi. S. 2073
3. Chakrapanidutta, Commentator, Charak Samhita, Chaukhamba Subhartiprakashana Varanasi, 2016.
4. Ambikadutta Shastri, Commentator, Sushruta Samhita, Chaukhamba Sanskrit Samsthana Varanasi, Reprint Edition, 2006.
5. Kaviraj Atridev Gupta, Commentator, Astang Hridaya, Chaukhamba Prakashana, Varanasi, Reprint Edition 2012.
6. Pandit Sharandhara acharya, Sharangdhar samhita, Chaukhamba Orientalia, Varanasi, third edition 1983.
7. K.C Chuneekar, commentator, Bhava prakash Nighantu, Chaukhamba Bharti Academy, Varanasi, reprint edition 2015.
8. Pt. Kashinath Shastri and Dr. Gorakhnath Chaturvedi, Commentator Charak Samhita, Part I and II, Chaukhamba Bharti Academy, Varanasi, reprint edition 2016.

9. Dr. Anant Ram Sharma, Sushruta Samhita, volume I, Chaukhamba Subhartiprakashana Varanasi, 2017.
10. <http://theplantlist.org/> assessed on 10.06.2018 at 4.40 pm

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