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Review Article

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# A COMPREHENSIVE REVIEW ON MEDICINAL HERBS BENEFICIAL FOR EYES (NETRYA DRAVYA) WITH SPECIAL REFERENCE TO AYURVEDIC LEXICON BHAVAPRAKASHA **NIGHANTU**

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#### **ABSTRACT**

The Netrya (beneficial for eyes) dravya and Chakshushya (improves vision health) dravya from Bhavaprakash nighantu which can be used in the treatment of various netra rogas are elaborated in this article. After describing their pharmacological properties in detail, the importance of studying tikta rasa, katu vipaka and laghu guna come to light. In this study, 21 dravya are found ushna veeryatmaka means kaphashamak in nature or have lekhana karma. Chakshu is main site of alochaka pitta and it needs to be protected from kaphadosha as both are opposite in their guna (properties). On the contrary 17 chakshushya dravya in this study are sheeta veeryatmaka and are madhura, sheeta and snigdha which acts by nurturing sapta rasadi dhatu, ojovardhan

and therefore netrendriya poshana. Pittadhikya (vitiated Pitta) with vidagdhata, paaka and daaha can cause netra indriyabalahras and drushtidourbalya, so pittashamak (sheeta) dravya also have their role in pathology of eye disorders. So balancing both pitta and kapha and maintaining equilibrium of tridoshas plays important role in netrachikitsa. Abundantly found tikta rasa pacifies pitta dosha, also increases Vata and pacifies Kapha. Its laghu guna (lightness) is responsible for relieving avarodha in ashruvaha srotas (obstruction in channels) of netrendriya.

**KEYWORDS:** Netrya, Chakshushya, Bhavaprakash Nighantu, Ayurveda.

#### INTRODUCTION

Ayurveda science is divided in eight branches called Ashtang Ayurveda which constitutes study of following disciplines: Kayachikitsa (General or Internal Medicine), Balaroga (Pediatrics), Graharoga (Psychiatry and Parapsychology), Urdhwang chikitsha or Shalakyatantra (Ear, Nose, Throat, Head and Ophthalmology), Shalyatantra (Surgery), Danshtra (Toxicology), Jara (Geriatrics), and Vrishyachikitsa (Rasayan- vajikaran means rejuvenating therapy, Immunomodulation therapy or Aphrodisiac therapy). Ophthalmology or netra vidnyan branch deals with diseases of eye and their treatment with Chakshushya or netrya dravya. Chakshu means Darshanendriya. Chakshushya means *chakshushe hitah syaat chakshus yat*<sup>[1]</sup>, *chakshushe lochanay hitam* i.e. benificial for eyes. Dravyaguna is the branch of Ayurveda related with the science of drugs or dravya or medicines of herbal origin, their properties and actions. [3]

Most of the dravya in netraroga are labelled under the heading of Netrya or Chakshushya dravya. Netrya dravya means various herbs which are beneficial for eyes and chakshushya which improves vision health; under which there are so many dravyas entitled in Brihatrayi, Laghutrayi, nighantus and other texts. The nighantu literature has significant role in the study of Ayurveda; especially in the subject of Dravyaguna vidnyan and it has collection of words, synonyms and names of the medicinal plants. The statement in Raj nighantu clearly states that the knowledge of nighantu is indispensable for a Vaidya. <sup>[4]</sup> In this article, we will deliberate Chakshushya dravya from Bhavaprakash nighantu. Bhavaprakash Nighantu is an important lexicon of Ayurveda, which is enumerated among 'Laghutrayi' in between 15<sup>th</sup> century A.D. and 17<sup>th</sup> century A.D. that is 16<sup>th</sup> century A.D. In this nighantu 426 drugs are mentioned which are classified in 22 vargas. <sup>[5]</sup>

#### MATERIAL AND METHODS

On studying this nighantu, it is found that Bhavamishra described Chakshushya dravya as Chakshushya, Netrya, Netrahitam, netraroganut, akshirogaghnam or akshirogapaham etc. All of these are Netrahitakara i.e. benificial for eyes or Netrarogahara i.e. used for treating eye disorders. They are distributed in different 13 vargas of this nighantu as follows-

- 1. Haritakyadi varga- 14
- 2. Karpuradi varga- 10
- 3. Guduchyadi varga- 16
- 4. Pushpa varga- 3

5. Phala varga- 2

Above all are herbal origin drugs.

- 6. Dhatu varga- a. Suvarna- netryam
- b. Ranga- Chakshushya
- c. Yashad- Chakshushya
- d. Louha- Chakshushya
- e. Suvarnamakshik- Chakshushya
- f. Taramakshik- Chakshushya
- g. Tuttha- Chakshushya
- h. Kaansya- Netrahitam
- 7. Dugdha varga- a. Hastini dugdha- Chakshushya
- b. Nari dugdha- Chakshushya
- 8. Navneet varga- Navneeta- Chakshushya
- 9. Ghruta varga- a. Gavyaghruta- Chakshushya
- b. Ajaghruta- Chakshushya
- c. Aavighruta- Chakshushya
- d. Streeghruta- Chakshushya
- e. Vadawaghruta- Netrarogaghna
- f. Haiyanaveena- Chakshushya
- 10. Mutra varga- Gomutra- Akshiroganut
- 11. Taila varga- Taila- Chakshushya
- 12. Madhu varga-
- a. Madhu- Chakshushya
- b. Pingavarnamakshika- Netramayahara
- c. Aarghyamadhu- Chakshushya
- 13. Khanda varga- Khanda- Chakshushya

These are jangam dravya from animal source, minerals, metals etc. and drugs of herbal origin only will be elaborated in this article.

#### **OBSERVATION AND RESULTS**

The data of herbal origin drugs from above mentioned first five varga is presented as per their action on eyes (karma). As per pharmacognostic view, drug's Latin name and family studied. Further, useful parts of the drug with their chemical constituents are mentioned as following.

## 1. Haritakyadi varga

Table 1: Chakshushya, netrya or akshirogahar dravya from Haritakyadi varga of Bhavaprakash nighantu.

Drug name	karma	Latin name	Family	Part used	Chemical content		
Abhaya <sup>[6]</sup>	Akshiroge (used in eye disorders)	Terminalia chebula Retz.	Combretaceae	Mature fruit <sup>[7]</sup>	Tannins, anthraquinones, polyphenolic compounds		
Bibhitaka <sup>[8]</sup>	Netrahitam (good for eyes)	Terminalia bellirica Roxb.	Combretaceae	Ripe fruit <sup>[9]</sup>	Gallic acid, tannic acid, glycosides		
Ajmoda <sup>[10]</sup>	netramaya haret (treats eye diseases)	Apium graveolens Linn.	Umbelliferae	Fruits <sup>[11]</sup>	Essential oil, fixed oil		
Jeeraka <sup>[12]</sup>	Chakshushya (beneficial for eyes)	Cuminum cyminum Linn.	Umbelliferae	Fruits	Volatile oil containing cumic aldehyde, thymol, fixed oil, pentosan		
Shatapushpa <sup>[13]</sup>	Akshirogahrut (treats eye diseases)	Anethum sowa Kurtz.	Umbelliferae	Fruits	Volatile oil Dill- apiol, hydrocarbon anethene, carvone		
Tumburu Phala <sup>[14]</sup>	akshiruk naashayet (in painfull eyes)	Zanthoxylum alatum Roxb.	Rutaceae	Fruit	Essential oil		
Samudrafen <sup>[15]</sup>	Chakshushya (beneficial for eyes)	Sepia officinalis	Cephalopoda	Cuttle fish bone	Calcium carbonate, phosphate, sulphate, silics		
Yashtimadhu <sup>[16]</sup>	Chakshushya (beneficial for eyes)	Glycyrrhiza glabra Linn.	Leguminosae	Stolon, roots <sup>[17]</sup>	Glycyrrhizin, glycyrrhizic acid, glycyrrhetinic acid, asparagine, sugars, resin starch		
Manjishtha <sup>[18]</sup>	Akshiruknut (in painfull eyes)	Rubia cordifolia Linn.	Rubiaceae	Stem <sup>[19]</sup>	Glycosides		
Daruharidra <sup>[20]</sup>	Netraroganut (treats eye diseases)	Berberis species	Berberidaceae	Dried stem <sup>[21]</sup>	Alkaloids		
Rasanjan <sup>[22]</sup>	Netravikarnut (tre	ats eye diseases)		•			
Lodhra <sup>[23]</sup>	Chakshushya (beneficial for eyes)	Symplocos racemosa Roxb.	Symplocaceae	Stem bark <sup>[24]</sup>	Alkaloids loturine, colloturine, red coloring matter		
Rasona <sup>[25]</sup>	Netrya (beneficial for eyes)	Allium sativum Linn.	Liliaceae	Bulb <sup>[26]</sup>	Volatile oil containing allyl disulphide, diallyl disulphide, allin, allicin, mucilage albumin		
Saindhava <sup>[27]</sup> Netryam (beneficial for eyes)							

## 2. Karpuradi varga

Table 2: Chakshushya, netrya or akshirogahar dravya from Karpuradi varga of Bhavaprakash nighantu.

Drug name	karma	Latin name	Family	Part used	<b>Chemical content</b>			
Karpura <sup>[28]</sup>	Chakshushya (beneficial for eyes)	Dryobalanops camphora	Diptero- carpaceae	Camphor	C <sub>10</sub> H <sub>18</sub> O			
Latakasturi <sup>[29]</sup>	Chakshushya (beneficial for eyes)	Hibiscus abelmoscheus Linn.	Malvaceae	Leaves, roots, seeds	Albumin, volatile oil			
Gandhamarjar <sup>[30]</sup>	Netryam (bene	ficial for eyes)						
Raktachandan <sup>[31]</sup>	Netryahitam (beneficial for eyes)	Pterocarpus santalinus Linn. F.	Leguminoseae	Heart wood <sup>[32]</sup>	Glycosides, colouring matter			
Aguru <sup>[33]</sup>	Akshi rogaghnam (Treats of eye diseases)	Aquilaria agallocha Roxb.	Thymeliaceae	Heart wood <sup>[34]</sup>	Essential oil			
Tagara <sup>[35]</sup>	Akshi rogapaham (Treats of eye diseases)	Valeriana wallichii D. C.	Valerianaceae	Dried rhizomes, stolons, roots <sup>[36]</sup>	Essential oil			
Sarala Niryasa <sup>[37]</sup>	Akshirogapa ha (Treats eye diseases)	Pinus longifolia	Pinaceae	Exudate from wood <sup>[38]</sup>	1-α-pinene, 1-β- pinene, longifolene, mono & sesquiterpene			
Lavang <sup>[39]</sup>	Netryahitam (beneficial for eyes)	Syzygium aromaticum Linn.	Myrtaceae	Flower bud <sup>[40]</sup>	Essential oil eugenalactone, caryophyllene			
Nalika <sup>[41]</sup>	Chakshushya (beneficial for eyes)							
Prapoundarika <sup>[42]</sup>	Chakshushya m (beneficial for eyes)	, v						

## 3. Guduchyadi varga

Table 3: Chakshushya, netrya or akshirogahar dravya from Guduchyadi varga of Bhavaprakash nighantu.

Drug name	karma	Latin name	Family	Part used	Chemical content
Jivanti <sup>[43]</sup>	Chakshushyaa (beneficial for eyes)	Leptadenia reticulata W. & A.	Asclepiadaceae	Leaves, roots	Terpenoids, phenolics, flavonoids, steroids, esters
Mudgaparni <sup>[44]</sup>	Chakshushyaa (beneficial for eyes)	Phaseolus trilobus Ait.	Fabaceae	Seeds <sup>[45]</sup>	Saponin, Starch, albuminoidal, oil
Karavir <sup>[46]</sup>	Netrakopapaham	Nerium	Apocynaceae	Dried	Cardiac

	(subsides vitiated humours in eyes)	odorum Soland.		roots <sup>[47]</sup>	glycosides, resinous matter	
Nimba patra <sup>[48]</sup>	Netryam (beneficial for eyes)	Azadiracta indica A. Juss.	Meliaceae	Leaves, stem bark <sup>[49]</sup>	Triterpenoids, sterols, nimbin, nimbiol	
Shigrubeej <sup>[50]</sup>	Chakshushya (beneficial for eyes)	Moringa pterygosperma gaertn.	Moringaceae	Seeds <sup>[51]</sup>	Carbohydrate, protein, carotene, ascorbic acid	
Nirgundi <sup>[52]</sup>	Netrahito (beneficial for eyes)	Vitex nigundo Linn.	Verbenaceae	Leaves <sup>[53]</sup>	Alkaloids, essential oil	
Gunja <sup>[54]</sup>	Netramayaharam (Treats eye diseases)	Abrus precartorius Linn.	Fabaceae	Roots <sup>[55]</sup>	Glucoside glycyrrhizin	
Eraka <sup>[56]</sup>	Chakshushyaa (beneficial for eyes)	Typha elephantine Roxb.	Typhaceae	Leaves <sup>[57]</sup>	Pentacosane, 1- triacontanol, sitosterol	
Shatavari <sup>[58]</sup>	Netryaa (beneficial for eyes)	Asparagus racemosus Willd.	Liliaceae	Tuberous roots <sup>[59]</sup>	Sugar, glycosides, saponins, sitesterols	
Asthi Samharaka <sup>[60]</sup>	Akshirogajit (Treats eye diseases)	(Treats   Vitis quadrangularis Wall.   Vitaceae		Stem <sup>[61]</sup>	Calcium oxalate, carotene, ascorbic acid	
Kumari <sup>[62]</sup>	Netryaa (beneficial for eyes)	Aloe vera Tourn. Ex. Liliaceae Linn.		Leaves	Aloin glucoside, Barbaloin, isobarbaloin, β- barbaloin, aloe- emodin	
Bhringaraj <sup>[63]</sup>	netra artinut (in painfull eyes)	Eclipta alba Hassk.	Compositae	Whole plant <sup>[64]</sup>	Alkaloids, ecliptine, nicotine	
Kakmachi <sup>[65]</sup>	Netrahitaa (beneficial for eyes)	Solanum nigrum Linn.	Solanaceae	Whole plant <sup>[66]</sup>	Alkaloids, saponins	
Mesha shrungi <sup>[67]</sup>	Akshishulanut (in Dolichandron		Bignoniaceae	Leaves, roots <sup>[68]</sup>	Triterpenoid saponins of gymnemic acid A, B, C, D with sugar residues, hydrocarbon	
Aakashavalli <sup>[69]</sup>	Akshyaamayapaha (Treats eye diseases)	Cuscuta reflexa Roxb. Cassytha filiformis Linn.	Convolvulaceae Lauraceae	Stem, seeds	Cuscutin, cuscutalin, reducing sugar	
Jalapippali <sup>[70]</sup>	Chakshushyaa (beneficial for eyes)	Phyla nodiflora (Linn.) Greene	Verbenaceae	Whole plant <sup>[71]</sup>	Flavonoids mainly nodiflorin A & B, nodifloretin, lippiflorins A & B	

## 4. Pushpa varga

Table 4: Chakshushya, netrya or akshirogahar dravya from Pushpa varga of Bhavaprakash nighantu.

Drug name	karma	Latin name	Family	Part used	Chemical content	
Swarnajatika <sup>[72]</sup>	akshi artijit (in painfull eyes)	Jasminum grandiflorum Linn.	Oleaceae	Flowers, leaves	Volatile oil, alkaloids, salicylic acid	
Yuthika <sup>[73]</sup>	Akshirogapaham (Treats eye diseases)	Jasminum auriculatum Vahl.	Oleaceae	Flowers, leaves	Aromatic oil	
Swarnaketaki <sup>[74]</sup>	Chakshushyaa (beneficial for eyes)	Pandanus odoratissimus Roxb.	Pandanaceae	Flowers, leaves	Aromatic oil	

## 5. Phala varga

Table 5: Chakshushya, netrya or akshirogahar dravya from Phala varga of Bhavaprakash nighantu.

Drug name	karma	Latin name	Family	Part used	<b>Chemical content</b>
Kataka <sup>[75]</sup>	Netryam (beneficial for eyes)	Strychnous potatorum Linn.	Loganiaceae	Seeds <sup>[76]</sup>	Alkaloids
Draksha <sup>[77]</sup>	Chakshushyaa (beneficial for eyes)	Vitis vinifera Linn.	Vitaceae	Fruits	Sugar, Mallic, tartaric, racemic, oxalic acid

Table 6: Data of Rasa, Guna, Veerya and Veepaka of Chakshushya, netrya or akshirogahar dravya from Bhavaprakash nighantu.

Sr.	Dans			R	asa			Vip	aka	Vec	rya		(	Guna	l	
No	Drug name	M	A	L	С	T	K	M	C	S	U	Lg	Rk	Tk	Gr	Sn
1.	Abhaya	+	+		+	+	+	+			+	+	+			
2.	Bibhitaka						+	+			+		+		+	
3.	Ajmoda				+	+			+		+	+	+	+		
4.	Jeeraka				+				+		+	+	+			
5.	Shatapushpa				+	+			+		+	+	+	+		
6.	Tumburuphala				+	+			+		+	+	+	+		
7.	Yashtimadhu	+						+		+					+	+
8.	Manjishtha	+				+	+		+		+		+		+	
9.	Daruharidra					+	+		+		+	+	+			
10.	Lodhra						+		+	+		+	+			
11.	Rasona	+		+	+	+	+		+		+			+	+	+
12.	Karpura	+			+	+			+	+		+		+		
13.	Latakasturi	+			+	+			+	+		+	+	+		
14.	Raktachandana	+				+			+	+			+		+	
15.	Aguru				+	+	_		+		+	+	+	+		

16.	Tagara				+	+	+		+		+	+				+
17.	Sarala niryasa	+			+	+			+		+	+		+		+
18.	Lavang				+	+			+	+		+				+
19.	Jivanti	+						+		+		+				+
20.	Mudgaparni	+						+		+		+	+			
21.	Karavir				+	+			+		+	+	+	+		
22.	Nimba patra					+	+		+	+		+				
23.	Shigrubeej				+	+			+		+	+	+	+		
24.	Nirgundi				+	+			+		+	+	+			
25.	Gunja					+	+		+		+	+	+	+		
26.	Eraka	+				+	+	+		+		+				+
27.	Shatavari	+				+		+		+					+	+
28.	Asthisamharaka	+						+			+	+	+			
29.	Kumari	+				+		+		+		+	+	+		
30.	Bhringaraj				+	+			+		+	+	+			
31.	Kakmachi					+			+	anus	shna	+				+
32.	Meshashrungi					+	+		+		+	+	+			
33.	Aakashavalli					+	+		+	+						
34.	Jalapippali				+		+		+	+		+	+			
35.	Swarnajatika					+	+		+		+	+				+
36.	Yuthika	+				+	+		+	+		+				
37.	Swarnaketaki	+				+	+		+		+	+				+
38.	Kataka	+				+	+	+		+					+	
39.	Draksha	+						+		+					+	+
		18	01	0	17	30	17	11	28	17	21	30	22	12	08	12

#### **OBSERVATIONS**

In Bhavaprakash nighantu, netrya or chakshushya dravya (beneficial for eyes) and akshirogahar dravya (treating eye diseases) are distributed in total 13 varga as mentioned before. Out of them, Haritakyadi varga, Karpuradi varga, Guduchyadi varga, Phala varga and Pushpa varga contains herbal origin drugs. Excluding some controversial drugs whose rasapanchaka cannot be stated on the basis of grantha, total 39 herbs are taken into consideration for study.

## **Interpretation of Rasa**

Table 7: Six rasa with their number of netrya or akshirogahar dravya from Bhavaprakash nighantu.

Sr. no.	Rasa	No. of drugs	Percentage
1	Madhura (sweet)	18	46%
2	Amla (sour)	01	2.56%
3	Lavana (salty)	01	2.56%
4	Katu (pungent)	17	44%
5	Tikta (bitter)	30	77%
6	Kashaya (astringent)	17	44%

### Interpretation of Vipaka

Table 8: Three vipaka with their number of netrya or akshirogahar dravya from Bhavaprakash nighantu.

Sr. no.	Vipaka	No. of drugs	Percentage
1	Madhura	11	28%
2	Amla	0	0
3	Katu	28	72%

## **Interpretation of Veerya**

Table 9: Two veerya with their number of netrya or akshirogahar dravya from Bhavaprakash nighantu.

Sr. no.	Veerya	No. of drugs	Percentage
1	Sheeta	17	44%
2	Ushna	21	54%

### **Interpretation of Guna**

Table 10: Guna with their number of netrya or akshirogahar dravya from Bhavaprakash nighantu.

Sr. no.	Guna	No. of drugs	Percentage
1	Laghu	30	77%
2	Ruksha	22	56%
3	Tikshna	12	31%
4	Guru	08	20.51%
5	Snigdha	12	31%
6	Pichchhila	02	5.1%
7	Sara	01	2.56%
8	Ushna	01	2.56%
9	Mrudu	02	5.1%
10	Vishada	01	2.56%

From above observations of rasa, vipaka, veerya and guna of all herbs, it is determined that the most of the netrya, chakshushya or akshirogahar dravya predominantly contains tikta rasa, katu vipaka and laghu guna.

#### DISCUSSION

Dravya are classified as per their effect on dosha and dhatu.

- 1. Firstly they are Dosha-prashamana (pacifier) which we use as therapeutic agents.
- 2. Secondly Dhatu-pradushana (vitiator) dravya are etiological factors responsible for production of diseases.

3. Swasthahita (maintainer) dravya maintains equilibrium of our body and averts ailments.[78]

These chakshushya dravya shows their action on dosha-dhatu mainly because of their paanchabhoutik sanghatan (constitution of five basic elements mahabhutas). According to the verse 'sarvam dravyam paanchabhoutikam asminnarthe|' every drug consists of five mahabhutas with one Pradhan (main) and other subordinate mahabhutas. In our circle of study in netra utpatti process it is mentioned that maans part of netra is formed by pruthyi, rakta by agni, krushnabhag by vayu, shwetabhag by aap and ashrumarg by aakash mahabhuta. Taijasastu rupam rupendriyam<sup>[79]</sup> In case of chakshu indriya the main mahabhuta is Teja, which resides there as Alochaka pitta. [80]

In this study, 21 dravya are found ushna veeryatmaka means kaphashamak in nature or have lekhana karma. Acharya Charak told 'Chakshustejomayamtasyavishesat sleshmatobhayam' means chakshu is main site of alochaka pitta and it needs to be protected from kaphadosha as both are opposite in their guna (properties).<sup>[81]</sup> So the treatment of shoth, potaki, shukra, timira like kaphaja netravikaras is done by the use of these ushna veeryatmaka dravyas. On the contrary 17 chakshushya dravya in this study are sheeta veeryatmaka. 'Chakshushe hitam yat tat chakshushyam| Yatha maansarasa|' means chakshushya dravya are madhura, sheeta and snigdh in their properties which acts by nurturing sapta rasadi dhatu, ojovardhan and therefore netrendriya poshana. [82] Pittadhikya (vitiated Pitta) with vidagdhata, paaka and daaha can cause netra indriyabalahras and drushtidourbalya<sup>[83]</sup>, so pittashamak (sheet) dravya also have their role in pathology of eye disorders. So balancing both pitta and kapha dosha and maintaining equilibrium of tridoshas plays important role in netrachikitsa.

After studying rasa of all netrya dravya in Bhavaprakash nighantu, it is found that 77% of total dravya possess Tikta as pradhan rasa. The composition of rasas has been described by inference on the basis of their effect on our body. [84] Here tikta rasa pacifies pitta dosha. It increases Vata and pacifies Kapha which clearly shows predominance of vayu in its composition. These tikta rasatmaka dravya have laghu guna (lightness) and responsible for relieving avarodha in ashruvaha srotas (obstruction in channels) which contain akasha. This indicates existence of akasha mahabhuta in Tikta rasa in addition to Vayu. After tikta, second most found rasa is madhura. Tikta and madhura both rasa are soumya in nature which decreases pitta. But, though belonging to soumya group, tikta rasa stimulates agni by promoting vayu and absorbing excess kapha at netrendriya.

If we see the vipaka of chakshushya dravya in Bhavaprakash nighantu, they are either madhura vipaki or katu vipaki that to maximum 72% found drugs are katu vipaki. The effect of rasa is extended only up to the level of digestion but vipaka has got systemic effect after metabolism. [85] 77% of chakshushya dravya from bhavaprakash nighantu are found with laghu guna. These dravya with katu vipaka and laghu guna acts as kaphashamaka. Tikshna, Ushna gunatmaka dravya are also helpful in internal administration of the preparations in aamavastha (metabolic toxins) where doshasanga (obstruction by the humours) is present in various eye disorders.

#### **CONCLUSION**

In Bhavaprakash nighantu, netrya or chakshushya dravya (beneficial for eyes) and akshirogahar dravya (treating eye diseases) are two divisions of drugs acting for eye disorders. After describing their pharmacological properties in detail, the importance of studying tikta rasa, katu vipaka and laghu guna come to light. Dravyas with ushna veerya are kaphashamak in nature or have lekhana karma. Chakshushya dravya with sheeta veerya are madhura, sheeta and snigdha in their properties which acts by nurturing sapta rasadi dhatu, ojovardhan and therefore netrendriya poshana. Pittadhikya (vitiated Pitta) with vidagdhata, paaka and daaha can cause netra indriyabalahras and drushtidourbalya, so pittashamak (sheet) dravya also have their role in pathology of eye disorders. Abundantly found tikta rasa pacifies pitta dosha, also increases Vata and pacifies Kapha. These tikta rasatmaka dravya have laghu guna (lightness) and responsible for relieving avarodha in ashruvaha srotas (obstruction in channels) of netrendriya.

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