

A LITERATURE REVIEW OF *HARITAKI RASAYANA* IN *SHARADA RITU* ON *PITTA VRIDDHI LAKSHANA* IN AYURVEDA CLASSICS

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ABSTRACT

Living long solid energetic life expectancy is a loved wish of each and every person. Our normal wellbeing, bliss and inside feeling of solace are shrouded by the gathering of debasements because of inactive way of life, distressing psychological circumstances, overabundance utilization of pesticides, synthetics, additives and expanded utilize immunosuppressive medications. These debasements or poisons lead to disintegration of typical body working and which influences the personal satisfaction as well as life expectancy. In Ayurvedic works of art, it is obviously referenced that when occasional varieties happen, the *dosha* get imbalanced as *Chaya*, *Prakopa*, *Prasara*. The body parts embraced for downpours and cold are unexpectedly presented to intensity of sun with the start of harvest time so the *Pitta* aggregated during the downpours gets commonly vitiated, Body shows *Pittavridhhi Lakshana*, for example, *Peetavabhasta*, *Santapa*, *Alpanidra*, *Murcha*, *Balahani*, *Indriyadaurbalya*, *Peetavina mutra*

netratva, *Amlika*, *Pipasa*, *Paridaha*. Different helpful measures have been endorsed to beat *Pitta*. One ought to attempt to admission of ghee, first of all, ready of severe medications. In the event that this isn't successful, one might attempt purgation, assuming this likewise neglects to mitigate *Pitta* and there is obvious vitiation of *Rakta* and for that one ought to take response to blood draining. Almost certainly, the *Rakta* likewise gets vitiated during this season. *Rasayana* is a significant part of Ayurveda. It is one of the eight parts of Ayurveda (Ashtanga Ayurveda). *Rasayana* is valuable for people of all age gatherings. It is

similarly significant in the treatment of illnesses as well as in keeping up with wellbeing. This part of Ayurveda seems to have been drilled in old lines as a significant speciality focusing on restoration and geriatric consideration.

KEY WORDS: - *Rasayana*, psychological, *Pittavridhhi*, *Prakopa*, Ayurveda.

INTRODUCTION

Ayurveda is prevalent and old wellbeing study of prime significance. Being a wellbeing science, it sticks to an elite methodology that is completely unique in relation to contemporary science. It satisfies the objective of wellbeing by zeroing in on support of wellbeing and treatment of illness as comprehensive. Because of gigantic changes in the method of living as well as occasional varieties, people are inclined to different contaminations and way of life diseases. The irresistible sicknesses once remembered to be taken care of, are reappearing with expanded destructiveness. The flare-up of the occasional pandemics during the last couple of storms has impacted millions, and this has been a significant worry in the general wellbeing area. A definitive point of Ayurveda itself is to keep up with the soundness of a person by regular means. Ayurveda has given considerably more significance to food, diet routine, way of life and occasional routine in the appearance of illnesses. The 21st hundred years with the ceaseless modifying way of life, climate and dietary propensity have made man a survivor of numerous illnesses. The Ayurvedic routine of right living is planned in *Dinacarya* and *Ritucarya* for support of wellbeing and accomplishment of a long solid dynamic life. Ayurveda is a study of life elucidated by *Trisutras* comprising of *Hetu*, *Linga* and *Aushada*. *Hetu* alludes to causative element and *Tridosha* are considered as *Nija Hetu*. *Tridosha* is viewed as generally basic among fundamental ideas of Ayurveda. The whole corpus of Ayurveda hypothesis and practice rotates around the information on *Tridosha*. *Tridosha* in business as usual keeps up with wellbeing, while whenever vitiated (*Vaishamya*) brings about advancement of illness. *Tridosha Vaishamya* (vitiation of *Tridosha*) can happen as *Vridhhi*, *Kshaya* and *Prakopa*. These different provinces of *Tridosha Vaishamya* manifest with various *Lakshanas* (signs and side effects). The *Bala* of the individual is additionally exceptionally low which makes them vulnerable to numerous sicknesses. In this way, a preventive measure is the pressing need to work on the soundness of people. During this time, important safety measures ought to be taken to keep the body safe against sicknesses by supporting the invulnerability. In Ayurvedic works of art itself different modalities are referenced to mitigate the *dosha* vitiation and to work on the *agni* there by working on the

Vyadhiksamatvam. One among this is the occasional utilization of *haritaki* which is referenced in one of the *Laghutrayi*, *Bhavaprakasa*, in the *Haritakyadivarga* as *Rasayana*. This *Ritu haritaki* is a basic and financially savvy *Rasayana* which is not difficult to direct and this will be socially significant whenever demonstrated as a preventive medication in occasional episodes in *Sharda Ritu*. Numerous past examinations have detailed that alongside occasional varieties, there will be changes in the biochemical boundaries in solid people. For sound life we ought to utilize *Haritiki* regularly. It fixes various infections with various *anupan dravyas*. Inferable from its *gunas* by Acharya "Bhav Prakash" *Haritiki* is shown according to *ritu* (season) with various *anupan dravyas* called as "*Ritu Haritaki*".

MATERIAL AND METHODS

➤ DOSHA & PITTA

As indicated by the *sanchaya* (amassing), *prakopa* (exacerbation) and *prashamana* (moderation) of the *dosha*, the *Shishira* and *Hemanta ritus* is by all accounts comparative. Thus these two *ritus* are made sense of in single *ritu* for example *Hemanta ritu*.

DOSHA	SANCHAYA	PRAKOPA	PRASHAMANA
Vata	Grishma	Varsha	Sharada
Pitta	Varsha	Sharada	Hemanta
Kapha	Shishira / Hemanta	Vasanta	Grishma

Haritaki (*Terminalia chebula retz*) is one of the significant as well as commonest spices utilized by society, family and customary medication. Its organic product skin is utilized in medication; it is one of the elements of *triphala* i.e., *Haritakee*, *Vibhitaki* and *Amalaki*. *Haritaki* with various *Anupana* (vehicle) yields rejuvenative impact in various *ritu* (seasons). Acharya Charaka featured its rejuvenative properties in *chikitsasthana*. He explicitly expressed that *Haritaki* is best among the spices to be utilized consistently.

➤ PITTA VRUDDHI LAKSHANAS

1. *Peeta vin mootra netratwam*-Ayurveda-Rasayana has referenced it as '*Vin mootra netra twacham peethatwam*' highlighting expanded Pitta bringing about yellowish discolouration of stool, pee, eyes and skin. Indu remarks on it as, presence of yellowish discolouration of body parts.
2. *Alpanidratha*-Dalhana has remarked it as *Kinchith snighdhtwath pittasya* decreased unctuousness of Pitta is answerable for *Alpanidratha* and Chakrapani details that *Aushnyatha* of Pitta causes *Vikshepa* of *Manas* bringing about diminished rest. Hemadri

- makes reference to *Alpanidratha* as *Nidra-alapatwam* focuses to decreased rest.
3. *Trut*-Hemadri portrayed it as *Trushaviha theevrae jeye, samayo samyalakshanatwath* which alludes to thirst. Amarakosha portrayed *Trut* as equivalent words of *Udanya*, *Pipasa* and *Tarsha*.
 4. *Moorcha*-Dalhana referenced it as *Sarvendriya shakthe thiraskara* highlighting dismissal of sense objects by *Indriyashakthi* because of loss of cognizance.
 5. *Sheethakamita/Sheethaabhilasha*-it implies longing for cold solaces. Ashtanga Sangraha has expressed *Sheetabilasha* rather than *Sheeta Kamita*.
 6. *Indriya-dourbalya*-it is comprised of two words, *Indriya* (receptors) and *Daurbalya* (shortcoming), accordingly it very well may be perceived as shortcoming of receptors.
 7. *Daha*-Ayurveda-Rasayana has referenced it as *Dahaha-santapa*, which signifies consuming.
 8. *Peethavabhasatha*-It contains *Peeta* and *Avabhasatha* highlighting yellowish discolouration.
 9. *Santhapa*-Dalhana referenced it as *Santhapat kshayopapathe*, focuses to enormously warmed, consumed, upset or excited.
 10. *Bhalahani*-Dalhana has referenced it as *Ojohani*, highlighting loss of solidarity.
 11. *Glani*-implies diminished strength and powerlessness to perform routine work.
 12. *Mukhathiktata* - implies unpleasant desire for mouth.
 13. *Krodha*-implies outrage or surliness.
 14. *Ojovisramsas*-it is included *Oja* and *Visramsas*. *Ojas* alludes to substantial strength, Dalhana referenced *Visramsas* as *visramsas ha sthanachyuthir-abhighatat-adhibhi* focuses to dislodging from its not unexpected spot. Sushruta referenced *Ojovishramsas* as a kind of *Ojo kshaya* portrayed by side effects, for example, *Sandhi vislesha*, *gatrnam sadanam*, *doshacyavanam*, *kriyasannirodha*.
 15. *Kshuth*-Ayurveda Rasayana referenced it as *kshuthviha theevre jeye, samayo samyalakshanatwath*, implies hunger felt before time. Subsequently it very well may be perceived as craving.

➤ **HARITAKI DRUG**

Contraindication to take *Haritaki*

Who is experiencing heartburn, taking dry and hot nourishment for quite a while, genuinely powerless individuals who have low strength and resistance because of over the top and ordinary sexual exercises, liquor utilization and admission of toxin, in the state of

exorbitant yearning, thirst and intensity stroke *Haritaki* shouldn't utilize.

Unique properties of various type of *Haritaki*

In the event that bit it animates hunger, expanded stomach related fire, assuming it takes in powdered structure it makes diuretic difference, bubbled *Haritaki* makes against diarrhoeal difference, broiled *Haritaki* conciliates *Tridosha*, *Haritaki* with feasts is advantageous for scholarly power and for the better discernment from the receptor and after dinners it fixes sickness because of wrong dietary propensities and irregularity in three natural humors (*Tridosha*), takes with rock salt accommodating in lightening *Kapha*, with sugar supportive in mitigating *Pitta*, with ghee supportive in reducing *Vata*.

Ritu haritaki

The excellent standard of Ayurveda science is *Swasthyashya SwasthyaRakshanam* (keep up with the strength of sound), To satisfy this reason Ayurved Works of arthave been referenced *Dincharya* (Everyday routine) and *Ritu Charya* (Occasional routine), *RituHaritaki* is a piece of *Ritu Charya*, when season wise *Haritaki* powder is taking with various adjuvant is called *Ritu Haritaki*. There are seven sorts of *Haritaki* portrayed in Ayurveda, names are *Vijaya*, *Rohini*, *Putana*, *Amrata*, *Abhaya*, *Jivanti* and *chetaki*. They all have different remedial impacts like *Amrata* is utilized in purgation, *Abhaya* in ophthalmic problems, *Rohini* for recuperating ulcers, *Putana* for effective application, *Vijaya* and *Jivanti* can be utilized in all sort of unhealthy condition and *Chetaki* is a kind of *Haritaki* which are profoundly powerful for purgation, in the event that any individual just passes by the shade of the tree they purgate right away. In the text of Charaka Samhita Acharya plainly referenced about food which is consistently utilized by individual in his day-to-day schedule life there are *Haritaki* is the one of these food articles which ought to be taken routinely. So, in this article there is a little depiction about *Haritaki* and its advantages as per occasional routine. *Haritaki* goes about as a rejuvenator (by cleaning different malas). However, for delivering its *rasayana* outcome, it needs different strong *dravyas* in various seasons as *anupana* (vehicle).

- *Varsha*: - *saindhava* (rock salt-Sodium chloride)
- *Sharada*: - *sharkara* (sugar treats)
- *Hemanta*: - *shunthi* (dry ginger)
- *Shishira*: - *pippali* (flute player longum)
- *Vasanta*: - *madhu* (honey)

- *Grishma*: - *guda* (jaggery)

Phytochemical properties of *Haritaki*

Haritaki is perceived to have an extensive variety of phyto-compound constituents. *T. chebulahave* various phytoconstituents like tannins, flavonoids, sterols, amino acids, fructose, pitch, fixed oils and so forth and it is genuinely stacked with various tannins (around 32% tannin content). The chebulic corrosive, chebulinic corrosive, chebulagic corrosive, gallic corrosive, corilagin and ellagic corrosive are the main parts of tannin. The investigations showed that Phytochemicals, for example, anthraquinones, ethaedioic corrosive, sennoside, 4,2,4 chebulyl-d glucopyranose, terpinenes and terpinenols have likewise been available. Late examinations exhibit that *T. chebula* contains a greater number of phenolics than some other plant.

Pharmacological actions of *Haritaki*

1. Anti-oxidant and Free radical-scavenging activity

- *T. chebula* is a fantastic enemy of oxidant. It displayed enemy of lipid peroxidation, hostile to superoxide revolutionary arrangement and free extremist searching exercises. In a review, 6 concentrates and 4 unadulterated mixtures of *T. chebula* showed hostile to lipid peroxidation, against superoxide revolutionary development and free extremist rummaging exercises at various extents of intensity. The ethanolic concentrate of the products of *T. chebula* diminished the degree of lipid peroxidase in pale skinned person rodents. Both treatment and pre-treatment of the refined rodent essential hepatocytes with *T. chebula* watery natural product separate (500 or 1000 mg/kg body weight for 5 days) altogether switched the t-BHP-actuated cell cyto- poisonousness and lactate dehydrogenase spillage.
- Also, *T. chebula* extricate showed in vitro ferric-decreasing enemy of oxidant movement and 2,2 diphenyl-1-picrylhydrazyl free extremist searching exercises. Histopathologic assessment of the rodent livers showed that *T. chebula* remove diminished the rate of liver injuries including hepatocyte expanding and neutrophilic invasion, and fixed rot prompted by t-BHP.
- *T. chebula* (fluid concentrate) major areas of strength for has oxidant movement because of hindrance of radiation prompted lipid peroxidation, which is seen in rodent liver microsomes at various portions. *T. chebula* (methanolic remove) found to hinder lipid

peroxide arrangement and to rummage hydroxyl and superoxide extremists in vitro.

- Further, a hepato-defensive compound, disconnected from the ethanolic concentrate of the products of *T.*, was distinguished as a combination of chebulic corrosive and its minor isomer, neochebulic corrosive that likewise diminished the tert-butyl hydroperoxide (t-BHP)- prompted cell cyto-poisonousness in separated rodent hepatocyte explore. In vitro assessment of *T. chebula* shows that tri-ethyl chebulate is areas of strength for an oxidant and free extremist scrounger, which could add to the counter oxidative capacity. An aglycone confined from the products of *T. chebula*, triethylchebulate, essentially repressed FeSO₄/Cys-prompted microsomes lipid peroxidation and safeguarded both H₂O₂-actuated RBCs hemolysis and RBCs auto-hemolysis in a portion subordinate way. Moreover, triethylchebulate showed powerful DPPH free-revolutionary ability to rummage and decently smothered azide-instigated mitochondria ROS arrangement. The outcomes showed that triethylchebulate was areas of strength for an oxidant and free revolutionary scrounger, which could add to the counter oxidative capacity of *T. chebula*.
- The watery concentrate of *T. chebula* is by all accounts ready to shield cell organelles from radiotherapy actuated harms. The fluid concentrate of *T. chebula* safeguarded the counter oxidant chemicals from responsive oxygen species (ROS) delivered by gamma radiation in the rodent liver microsomes and mitochondria⁴⁹. *T. chebula* (Fluid concentrate) displayed xanthine/xanthine oxidase restraint, 2,2 diphenyl-1-picrylhydrazyl (DPPH) extremists rummaging activity. The leaves, bark and product of *T. chebula* exhibited high enemy of oxidant movement because of presence of phenolics. *T. chebula* (fluid concentrate) restrains free extremist prompted hemolysis, nitric oxide discharge from lipopolysaccharide invigorated murine macrophages.
- *T. chebula* (Gallic corrosive and chebulagic corrosive, detached from natural product extricate) obstructed cyto-poisonous T lymphocyte (CTL)- intervened cyto-harmfulness. Granule exocytosis in light of against CD3 feeling was additionally obstructed by the above phytochemicals at the same focuses. *T. Chebula* (CH₃)₂CO separate) has more grounded enemy of oxidant action than alpha. *T. chebula* (ethanol extricate) repressed oxidative pressure and the age-subordinate shortening of the telomeric DNA length. *T. chebula* nerve were tried for against oxidative and tyrosinase hindrance exercises as well with respect to proliferative and MMP-2 restraint exercises on early maturing human skin

fibroblasts to assess in vitro enemy of maturing action. The cool water concentrate of *T. chebula* nerve showed the most elevated feeling list (SI) on typical human fibroblast multiplication. The concentrate likewise showed MMP-2 hindrance on fibroblasts 1.37 times more strong than ascorbic corrosive. The review affirmed the conventional utilization of *T. chebula* nerve in numerous Thai restorative plant recipes for life span.

2. Cyto-protective activity

- In the peroxidation model utilizing t-butanol, *T. chebula* extricate showed an outstanding cyto-defensive impact on HEK-N/F cells. Also, the *T. chebula* extricate showed cyto-defensive impact against UVB initiated oxidative harm. The life expectancy of the HEK-N/F cells was lengthened by 40% because of the persistent organization of 3 µg/ml of *T. chebula* extricate contrasted with controls. The oxidative pressure and inhibitory impact on cell maturing of its natural products have likewise been recorded. Gallic corrosive and chebulagic corrosive, segregated from organic product concentrate of *T. chebula*, impeded cyto-harmful T lymphocyte (CTL)- intervened cyto-poisonousness.
- It showed the improvement of duodenal ulcers and seemed to apply a cyto-defensive impact on the gastric mucosa in vivo. *T. chebula* extricate on the age subordinate shortening of the telomere length as shown by the Southern Smears of the terminal limitation sections of DNA separated from sub-culture entries.

3. Immuno-modulatory activity

- Fluid concentrate of *T. chebula* delivered an expansion in humoral immune response titer and deferred type extreme touchiness in mice. *T. chebula* viewed as powerful against the movement of cutting-edge glycation final results initiated endothelia cell brokenness. Unrefined concentrate of *T. chebula* animated cell intervened resistant reaction in test amoebic liver boil in brilliant hamsters. The plan showed most elevated fix pace of 73% at 800 mg/kg body weight in hepatic amoebiasis. In safe regulation examinations, humoral resistance was improved where Lymphocyte includes stayed unaffected in the creatures, however cell-intervened safe reaction was animated.

4. Anti-mutagenic and Anti-carcinogenic activities

- Rough concentrate of *T. chebula* organic product have chebulinic corrosive, tannic corrosive and ellagic corrosive, which are viewed as the most development inhibitory phenolics of *T. Chebula*. The impact of 70% methanolic organic product concentrate of *T.*

chebula was explored for development of some harmful cell lines including a human (MCF-7) and mouse (S115) bosom disease cell line, a human osteosarcoma cell line (HOS 1), a human prostate malignant growth cell line (PC-3) and a non-tumorigenic, deified human prostate cell line (PNT1A) involving examines for expansion (3H-thymidine fuse and coulter counting), cell practicality (ATP assurance) and cell passing (stream cytometry and Hoechst DNA staining). In all cell lines uncovered that the concentrate diminished cell practicality, restrained cell expansion, and prompted cell passing in a portion subordinate way. CH₃CO concentrate of T. chebula has been accounted for to contain phytochemicals with promising enemy of mutagenic and hostile to cancer-causing properties. The chebulagic corrosive, one of the fractionated compounds from ethanolic organic product concentrate of T. chebula, showed strong double hindrance against COX and 5-LOX. It additionally showed hostile to proliferative movement against HCT-15, COLO-205, MDA-MB-231, DU-145 and K562 cell lines. A new report has shown the capacity of Triphala to hinder cytochrome P450.

T. chebula (watery concentrate and hydrolyzable tannins) showed Against mutagenic movement in Salmonella typhimurium.

5. Radio-protective, Chemo-preventive and Chemo-modulatory activity

- In an examination, watery concentrate of the product of T. chebula (50µg) had the option to kill 1,1 diphenyl-2-picrylhydrazyl, a stable free revolutionary by 92.9% and shielded the plasmid DNA pBR322 from going through the radiation-prompted strand breaks. T. chebula diminishes light impacts in mice, human lymphocytes while going through the gamma radiation-in vitro. T. chebula remove in portion of 80 mg/kg body weight preceding entire bodylight of mice brought about decrease of peroxidation of film lipids in the liver and decline in radiation-prompted harm to DNA.
- Therapy of mice with fluid concentrate of Triphala in various portions successively for five days before light postponed the beginning of mortality and diminished the side effects of radiation ailment contrasted with controls. T. chebula showed chemo-preventive impact on nickel chloride - prompted renal oxidative pressure, harmfulness and cell multiplication reaction in male Wistar rodents T. chebula concentrate could be utilized as restorative specialist for disease avoidance as it obstructed or smothered the occasions related with substance carcinogenesis.

6. Cardio-protective activity

- Cardio-defensive impact of ethanolic concentrate of *T. chebula* organic products (500 mg/kg body weight) was exhibited in isoproterenol-prompted myocardial harm in rodents. It was accounted for that pre-treatment with *T. chebula* extricate had cardio-defensive impact due to the lysosomal film adjustment forestalling myocardial putrefaction and restraint of modifications in the heart mitochondrial ultrastructure and capability in the exploratory rodents. Pericarp of *T. chebula* has likewise been shown cardio-defensive action in confined frog heart model.

7. Hepato-protective activity

- Defensive impacts of a fluid concentrate of *T. chebula* organic product on the tert-butyl hydroperoxide-actuated oxidative injury was seen in refined rodent essential hepatocytes and rodent liver. *T. chebula* organic products showed solid hepato-defensive movement through enemy of oxidant impact in separated rodent hepatocytes. The comparative property of its 95% ethanolic extricate was seen against hostile to tuberculosis drugs for example Rifampicin, Isoniazid and Pyrazinamide (blend)- actuated harmfulness in sub-constant model (12 weeks) because of its unmistakable enemy of oxidative and layer settling exercises.

8. Nephro-protective activity

- The chloroform concentrates of *T. chebula* seeds (100, 200 and 300 mg/kg body weight) created portion subordinate decrease in blood glucose of streptozotocin-prompted diabetic rodents in both present moment and long-haul study (300 mg/kg body weight for a considerable length of time). Further, momentous reno defensive action was likewise seen in *T. chebula* treated rodents. Oral organization of ethanolic concentrate of products of *T. chebula* (200 mg/kg bodyweight for 30 days) diminished the degrees of blood glucose and glycosylated hemoglobin in streptozotocin (STZ) actuated trial diabetic rodents. In a comparative report, watery concentrate of *T. chebula* (200 mg/kg body weight for a very long time) diminished the raised blood glucose and expansion in glycosylated hemoglobin. A similar portion likewise showed an undeniable improvement in controlling the raised blood lipids as well as diminished serum insulin levels. The in vitro examinations with pancreatic islets showed that the insulin discharge was almost twice more than that in untreated diabetic creatures. The treatment affected liver and kidney capability tests. The organic product concentrate of *T. chebula* is useful to mitigate the

cadmium-prompted nephro-harmfulness in rodents.

9. Adaptogenic activities

- *T. chebula* alongside a few other restorative plants assists with opposing against various stressors in various ways.

10. Anti-bacterial activity

- *T. chebula* showed hostile to bacterial action against different Gram positive, Gram negative microscopic organisms, for example, *Salmonella typhi*, *Staphylococcus epidermidis*, *Staphylococcus aureus*, *Bacillus subtilis* and *Pseudomonas aeruginosa* recommending its expansive range hostile to microbial action. Consequently different concentrates of *T. chebula* display hostile to bacterial action against various bacterial species. Another review uncovered that gram positive creatures repressed on bigger degree as contrast with gram negative living beings. Two antibacterial mixtures, gallic corrosive and ethyl ester against methicillin-safe *Staphylococcus*, have been disconnected from ethyl liquor concentrate of products of *T. chebula*.
- *T. chebula* is well viable against *Helicobacter pylori*, a bacterium liable for gastritis, ulcer and stomach malignant growths. The ether, heavy drinker and fluid concentrates of *T. chebula* were tried against *Helicobacter pylori*, yet watery concentrate of the plant, at a grouping of 1-2.5 mg/ml, restrained urease action of *H. Pylori*. In a concentrate a few organically dynamic parts were disengaged from butanol part of natural product concentrate of *T. chebula* and tried against six gastrointestinal microorganisms. The solid and moderate inhibitory movement was seen against *Clostridium perfringens* and *Escherichia coli* by Ethanedioic corrosive separately, with no unfriendly consequences for the development of the four tried lactic corrosive creating microbes. The review exhibited Ellagic corrosive's powerful inhibitory impact against *C. perfringens* and *E. coli*, however next to zero restraint was seen for behenic corrosive, β - caryophyllene, eugenol, isoquercitrin, oleic corrosive, α -phellandrene, β -sitosterol, stearic corrosive, α -terpinene, terpinen-4-ol, terpinolene, or triacontanoic corrosive.

11. Anti-amoebic and Anti-protozoal activity

- The medication definition of *T. chebula* was explored for against amoebic impact in test caecal amoebiasis in rodents and result showed healing pace of 89% at 500 mg/kg body weight due differing levels of hindrance of catalyst exercises like DNase, RNase,

aldolase, soluble phosphatase, corrosive phosphatase, α -amylase and protease in axenically refined amoebae. The CH_3CO concentrate of *T. chebula* seeds showed hostile to plasmodial movement against *Plasmodium falciparum*. In another review, *T. chebula* was assessed in trial amoebic liver ulcer in brilliant hamsters and in safe balance studies. The detailing had a greatest fix pace of 73% at 800 mg/kg body weight in hepatic amoebiasis.

12. Anti-fungal activity

- The counter parasitic movement a fluid concentrate of *T. chebula* was seen against various dermatophytes and yeasts. It is viable against the pathogenic yeast *Candida albicans* and dermatophytes *Epidermophyton*, *Floccosum*, *Microsporum gypseum* and *Trichophyton rubrum*.

13. Anti-viral activity

- Herpes simplex infection 1 (HSV-1) is the reason for long lasting inactive disease of tactile neurons. Heated water concentrate of *T. chebula* showed hostile to herpes simplex infection (HSV) action in vivo and against cytomegalovirus (CMV) movement both in vitro and in vivo in a review. Ledretan-96 and every one of its 23 individual parts were tried on an epithelial tissue culture cell line for their defensive movement against cyto-harmful impacts brought about by flu A infection. Of the 23 parts tried, just a single part showed a huge defensive impact when applied to the epithelial cells exclusively. *T. chebula* can likewise be utilized in physically sent illnesses and AIDS¹⁰⁹. The concentrate of products of *T. chebula* showed inhibitory consequences for human immunodeficiency infection 1 converse transcriptase. A review demonstrated that *T. chebula* natural products contain four human HIV-type 1 integrase inhibitors, for example, gallic corrosive and three galloyl glucoses, and proposed that galloyl moiety played a significant part for restraint of the 3'- handling of HIV-1 integrase by these mixtures. The watery concentrate of *T. chebula* executed the most noticeable Enemy of HBV action by diminishing the degree of extracellular HBV virion DNA at focus going from 64 to 128 μg .
- Two hydrolyzable tannins, chebulagic corrosive and punicalagin, secluded from the dried products of *T. chebula* restrained HSV-1 section at non-cytotoxic portions in A549 human lung cells by forestalling restricting, entrance, and cell-to-cell spread, as well as optional contamination. As of late, CH_3CO concentrate of *T. chebula* has arisen as another

choice to treat pandemic pig flu A disease because of its minimal expense, simple readiness and expected impact.

14. Anti-inflammatory activity

- Watery concentrate of dried product of *T. chebula* showed calming action by restraining inducible nitric oxide blend. Chebulagic corrosive removed from delicate product of *T. chebula* fundamentally stifled the beginning and movement of collagen-prompted joint pain in mice. *T. chebula* in a polyherbal definition (Aller-7) displayed mitigating impact against joint pain in rodents.

15. Anti-allergic activity

- *T. chebula*, element of a polyherbal detailing (Aller-7), showed strong in vitro enemy of unfavorably susceptible movement. Hydro-ethanol concentrate of *T. chebula* display allergy med and hostile to fitful in guinea pig ileum. Oral organization of a fluid concentrate of organic product fundamentally smothered receptor discharge from rodent peritoneal pole cells¹²⁰ and furthermore altogether expanded creation of growth putrefaction factor (TNF) by hostile to dinitrophenyl IgE¹²¹.

DISCUSSION

It has been referenced in *bhavprakash nighntu* under *haritakiyadi varga*, that *haritaki* whenever consumed in 6 different *ritus* (season) by various *anupana* have *rasayana* properties. By *Rasayana* drugs one can accomplish unrivaled quality *Dhatus* (body tissues). Aacharya Shushruta characterizes *Rasayana Tantra* as the action which defers the maturing system, builds mind and strength, draws out life and fixes the problems. Aacharya Sharangdhara makes reference to that *Rasayana* is the means by which advanced age and sicknesses are deflected. Ayurvedic Samhita and Nighantu states *Rasayana* activity of *Haritaki*. In these six seasons alongside *haritaki* - *kashta aushadha*, *vyanjana*, *shara*, and so on utilized as *anupana* like in *Hemanta* - *shunti* (*kashta aushadha*), *Shishir* - *pippali* (*kashta aushadha*), *Vasanta* - *Madhu* (*vyanjana*), *Grishma* - *gud* (*vyanjana*), *Varsha* - *saindhava* (*shara*) and *Sharad* - *sharkara* (*vyanjana*). In the start of *Visarga Kala* and finishing of *Adana kala*, or at least, during *Varsha* and *Grishma*, shortcoming happens. In the solstices, or at least, during *Sharada* and *Vasanta*, strength stays in moderate grade and toward the finish of *Visarga Kala* and in the start of *Adana Kala*, that is to say, during *Hemanta* and *Shishira*, greatest strength is seen. Regimens of various seasons are depicted as follow. A long these

lines. *Haritaki* been utilized with various *anupana* have different pharmacological activities like *shunti* and *pippali* are *ushna veerya* (hot in strength) let the *kapha* being melt from the *srotos* (channels of the body) so go about as a *rasayana* in *hemanta* and *shishir ritu* separately. In *hemanta ritu*, transcendent *Rasa* during this season is *Madhura* and the dominating *Mahabhutas* are *Prithivi* and *Apa*. The strength of an individual remaining parts on most elevated grade and vitiated *Pitta Dosha* gets placated. Action of *Agni* is expanded. In *Shishir ritu*, the climate stays cold, alongside chilly breeze. The overwhelming *Rasa* and *Mahabhuta* during this season are *Tikta* (unpleasant) and *Akasha* + *vayu* separately. The strength of the individual turns out to be less, testimony of the *Kapha Dosha* happens and *Agni* (catabolism) stays in a higher state. In *sharad ritu*, (time span of *pitta prakopa*) *sharakara* is utilized as *anupana* which has the property of *shita*, *Madhura* and *pittashamana*. the overwhelming *Rasa* is *Lavana* (pungent) and dominating *Mahabhutas* are *Apa* and *Agni*. The strength of the individual remaining parts medium, placation of vitiated *Vata Dosha* and vitiation of *Pitta Dosha* happen, and action of *Agni* increments during this season. In *vasant ritu*, *Madhu* being as *anupaan* utilized have *kapha Virodhi* property. Dominating *Rasa* and *Mahabhuta* during this season are *Kashaya* (astringent), and *Prithvi* and *Vayu*, separately. Strength of the individual remaining parts in medium degree, vitiation of *Kapha Dosha* happens and *Agni* stays in *Manda* state. In *grishma ritu*, *Gud* is utilized as *anupana* have *Madhura guna* has expanded strength (*balakara*) which forestalls the aggregation of *vata dosha*, transcendent *Rasa* is *Katu* (sharp) and *Mahabhuta* are *Agni* and *Vayu*. The strength of the individual become less, testimony of *Vata Dosha* happens, however the vitiated *Kapha Dosha* is mollified during this season. *Agni* of the individual will stay in gentle state. In *varsha ritu*, (time span of *vata prakopa*) there is normal gathering of the *amla rasa* and *saindhava* is utilized as *anupana* alongside *haritaki*. This *amla rasa* and *lavana rasa* join to frame a *Madhura rasa* which has *vatashamana* property. the overwhelming *Rasa* and *Mahabhuta* during this season are *Amla* (acid), and *Prithvi* and *Agni*, individually. The strength of the individual again turns out to be less, vitiation of *Vata Dosha* and statement of *Pitta Dosha*, *Agni* likewise gets vitiated. This is the manner in which the antiquated sages set up the routine for different seasons on scientific thinking to acquire *Swastha* (wellbeing) and forestall the sicknesses. In these six *ritus*, *haritaki* is utilized as *kashta aushadhi* (home grown drug) having different *anupana*. Natural medication has no constraints in view of the contribution of the *doshas*, *dushya*, *prakriti* of an individual or even an ecological variables. As per Ayurveda the activity of home grown drugs is deciphered based on properties (*Gunas*) and *Rasapanchaka* is a mark of medication activity. The *Rasapanchaka* of *Haritaki* are

exceptionally helpful for *Agnideepan* (animating *Agni*), *Amapachan* (processing harmful material of digestion) and *Srotas-shodhana* (getting the channels free from miniature dissemination), thus through these activities, it standardizes the elements of *Jatharagni* and subsequently it regularizes absorption and tissue digestion. Accordingly rebuilding of *Agni* at the *Dhatu* level (*Dhatwagni deepan*), expulsion of unreasonable *Kleda* happens which brings about legitimate sustenance of *Dhatus* and creation of greatness of *Dhatus*. It change an upgrades the strength and characteristics of the essential fixing, for example *haritaki*. *Ritu haritaki* goes about as preventive, healing, and rejuvenative medication.

CONCLUSION

Sharada is the second *Ritu* of *Visarga Kala* including Hindi months *Aswina Kartik* around mid-September to mid-November is consider as *Sharad Ritu*. The body which is constant for downpour and cold climate then abrupt openness of sun beams causes the irritation of *Pitta Dosha* in *Sharad Ritu*. In this season outrageous temperature and moistness is available in the climate, water of lakes, streams and lakes is unadulterated and inebriated by because of ascent of *Agastya* star. Strength of body is medium *JatharAgni* is likewise in medium state. *Haritaki* ought to be liked with *Sharkara* (sugar) or *Mishri* in *Sharada Ritu*. *Haritaki* conciliates *Pitta* by its *Madhura* (sweet), *Tikta* (harsh) and *Kashaya* (astringent) taste, *Sharkara* because of its *Sheeta* (cold) strength and *Madhura* (sweet) taste, is additionally useful in mollifying *Pitta Dosha*. Sensitivities, skin problems, consuming sensation, sore throat, intense ear disease, normal cold, influenza and so on are the normal sicknesses which appears in *Sharad Ritu* because of vitiated *Pitta* and *Kapha*. *Haritaki* is shown in *Kasa* (hack), *Tamak Swasha* (bronchial asthma) mostly in *Kaphaj* problem and *Mishri* is demonstrated in *Pitta* predominant problems like *Daha* (consuming sensation), *Raktagata Vikar* (draining problems). This way *haritaki* benefits as *rasayana* and accordingly can be profited. *Ritu haritaki anupana* for six unique seasons help to adjust *tridosha* and *guna's* in a request and succession. Utilization of *haritaki* for entire year regularizes the stomach development alongside *agni* and *bala*.

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