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Therapeutic insights of *Sushrutokta Parushakadi Gana*

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Abstract

Parushakadi gana is classical grouping of herbs mentioned in *sushruta samhita sutra sthana* 38th chapter *Dravyasangrahaniya adhyaya*, is traditionally recognized for its *Hridya,Mootrala,* and *Trishna nigrahana* properties[34].

This review seeks to bridge classical Ayurvedic knowledge with modern pharmacological insights, highlighting the therapeutic relevance of these herbs in cardiovascular, renal and gastrointestinal health[8,9,14].

Ayurveda organizes medicinal plants in the *ganas & vargas*. Based on their therapeutic actions[31]. *Parushakadi gana* is consist of Parushaka (*Grewia asiatica*), Draksha (*Vitis vinifera*), Katphala *(Myrica esculenta),* Dadima (*Punica granatum*), Rajadana *(Albizia lebbeck), katak* Phala (*Strychnos potatorum*), Sakaphala (*Tectona grandis)*, and Triphala(*Emblica offincinalis, Treminallia bellerica, Terminalia chebula*)[34].

A narrative review was carried out, analysing classical Ayurvedic texts and correlating them with contemporary pharmacognostic and biomedical studies. Each herb was profiled for its traditional attributes and modern pharmacological evidence.

Cardiovascular health- *Parushaka, Draksha, Dadima*, and *Rajadana* demonstrate antioxidant[24] and vaso-protective effect, supporting *Hridya* indications. Urinary disorder- *Katphala* and *kataka* acts as a diuretics and antimicrobials, alingning with *Mutra-doshahara* properties. Thirst and dehydration- *Parushaka* and *Draksha* provide cooling and hydrating actions, consistent with *Trishna nigrahana & pipasa hara properties* .Diagestive support: *Triphala* and *Sakaphala*

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enhances digestion and immunity, showing *Tridoshahara* and *Rasayan* effects[26].

Parushakadi gana represents a holistic group of herbs with multi-functional therapeutic potential. Their classical indications map convincingly into modern pharmacological mechanisms, particularly in cardiovascular and renal health. Future clinical trials and pharmacokinetic studies are essential to validate their integrative role in contemporary medicine.

Key words : *Parushakadi gana*, *Hridya* herbs, Diuretic activity, *Rasayana*, Integrative medicine.

Ayurveda the ancient Indian system of Medicine, classifies medicinal plants into distinct groups known as *ganas and vargas* , based on their therapeutic properties and clinical applications also on substance. Aacharya charak has mentioned group of drugs in charak samhita sutrastan 4th chapter named as shadvirechan shatashritiya adhyay[7]. Which tells about 500 medicinal plants divided in 50 groups of drugs. Each group consist of 10 drugs they are known as mahakashays, which are particularly based on their therapeutic action.

But Aacharya sushrut and vagbhat both had told about 37 ganas that is group of drugs not particularly based on Therapeutic action but based on substance which are similar qualities .Acahrya sushrut mentioned those ganas in sushrut samhita sutra sthan chapter no. 38 that is Dravyasangrahaniya adhyay[34]. Among these, *Parushakadi gana* holds a special place for its hridya, mootrala and trishna nigrahana actions. It Consist of fruits and herbs like Parushaka *(Grewia asiatica),* Draksha *(Vitis vinifera),* Katphala *(Myrica esculenta),* Dadima *(Punica granatum),* Rajadana *(Albizia lebbeck),* Kataka phala *(Strychnos potatorum),* Sakaphala *(Tecona grandis), and* Triphala *(*a combination of *Euphorbia offincinalis, Terminalia chebula & Terminalia bellerica).*

Traditionally, these drugs are indicated in *Hridroga* (cardiac disorder), *Mutra dosha* (urinary disturbances), and *pipasa/Trishna* (execessive thirst), reflecting their multifunctional role in maintaining systemic balance. Modern pharmacological studies supports these classical insights, highlighting antioxidant[16], anti-inflammatory, vasculo-protective diuretic and Immunomodulatory[32] activities of the group. Thus, *Parushakadi gana* represents the integrative potential of Ayurveda, where ancient science aligns with contemporary biomedical perspective to address cardiovascular, renal, and metabolic health.

In a present review, An In depth literature survery through a range of authorative sources, including *Sushruta samhita*, *Bhavprakash nighantu* and *Raj nighantu*[17], API[1] and various journals were referred. The primary goal was to highlight the importance of Underrated *Parushakadi gana Dravyas* and its pharmacological actions which will be

beneficial in day to day practise.

This Literature review revealed various aspects of drugs in *Parushakadi gana*. The identity of drugs, their Properties as described in Ayurveda (*Rasapanchaka)* and their phytochemical constituents are compiled and presented in tables here. Parushakadi gana basically composed of 10 drugs. Most of them useful part is fruit in therapeutics.

List of drugs in *Parushakadi gana* :

Table showing the complete list of drugs in *Parushakadi gana* along with their botanical sources, family and Part used is shown in table-1.

Table-1. Taxonomy of *Parushakadi gana* Dravyas[1]

Sr.no.	Sanskrit name	Common name	Family	Botinical name	Part used
1.	*Parushaka*	Falasa	*Tiliaceae*	*Grewia asiatica* L.	Fruit
2.	*Draksha*	Grapes	*Vitaceae*	*Vitis vinifera* L.	Fruit
3.	*Katphala*	Bayberry	*Myriaceae*	*Myrica esculenta* Buch.-Ham.ex D. Don	Bark
4.	*Dadim*	Pomogranate	*Punicaceae*	*Punica granatum*	Fruit & Fruit bark
5.	*Rajadan*	Rayan tree	*Sapotaceae*	*Manilkara hexandra* (Roxb.) Dubard.	Bark, seed & latex
6.	*Katakphala*	Clearing nut	*Longaniaceae*	*Strychnos potatorum* L.f.	Seed
7.	*Sakaphala*	Teakwood	*Lamiaceae*	*Tectona grandis* L.f.	Leaves and bark
8.	*Haritaki*	Chebulic Myrobalan	*Combrataceae*	*Terminalia chebula* Retz.	Fruit
9.	*Bibhitaki*	Belleric Myrobalan	*Combrataceae*	*Terminalia bellerica* (Gaertn.) Roxb.	Fruit
10.	*Aamalaki*	Indian Gooseberry	*Combrataceae*	*Emblica offincinalis* Gaertn.	Fruit

Vernacular names will helps to identify same species in local language in diversified areas over India and world. Were synonym are the peculiar names based on characteristic, Morphology of drugs which helps to identify them in seasonal variation.shown in table-2.

Table-2. Vernacular names and synonym[6,17,31]

Sr.no.	Sanskrit names	Vernacular names	synonym
1.	*Parushaka*	Falsa, palasaha	*Parusha, Alpasthi, Parapar*
2.	*Draksha*	Angur, Manuuka	*Swaduphala, Madhurasa, gostani*
3.	*Katphala*	Kayafala, Dingsolir	*Somawalka, kumbhika, Bhadra*
4.	*Dadima*	Aanar, Dadima	*Karak, Dantabeej , Lohitpushpak*
5.	*Rajadan*	Khirni, Kshiri, palu	*Kshirini, Nimbabeeja, Phaladhyaksha*
6.	*Katakphala*	Nirmali, katakado, Chillikayi	*Payaprasadi, Katak*
7.	*Sakaphala*	Sagwan, Sagon, Segun	*Bhumisaha, Varadaru, Kharacchada*
8.	*Haritaki*	Harad, Himaj, Aniley	*Abhaya, Pathya, Putana, amruta*
9.	*Bibhitaki*	Veheda, Behada, Finas	*Aksha, Karshaphala, Kalidruma, Bhootavasa*
10.	*Aamalaki*	Aamla, Amaro, Aavalkathi	*Vrushya, Dhtriphala, Shreephala*

Rasapanchaka is of any dravya maily indicate the guna and karma of the particular drug. Which is basically helps in therapeutics in Ayurveda. Wasd hich has been mentioned in table-3.

Table-3. Rasapanchaka of Parushakadi gana

Sr no.	Sanskrit name of Dravya	Rasa	Guna	veerya	Vipaka	Karma
1.	*Parushaka* (Un -Ripened fruit) *Parushaka*[6] Ripened fruit	*Kashay Amla Madhur*	*Laghu Laghu snigdha*	*Ushna Sheeta*	*Amla Madhur*	*Pittakar, Vishtambhi Brumhana, Pittashamak*
2.	*Draksha*[6]	*Madhur Kashay*	*Snigdha Guru*	*Sheeta*	*Madhur*	*Saraka, Swarya, Chakshushya, Srushtamootravita*
3.	*Katphala*[6]	*Kashay Tikta Katu*	*Laghu, Teekshna*	*Ushna*	*Katu*	*Kaphavatasham-aka,*
4.	*Dadima*[6]	*Madhur KashayAmla*	*Laghu, S nigdha*	*Sheeta*	*Madhur*	*Tridoshghna Shukrajanak, Grahi*
5.	*Rajadan*[6]	*Madhur Kashay*	*Guru, Snigdha*	*Sheeta*	*Madhur*	*Grahi, Balya, Vrushya, rakta prasadak, Hridhya*
6.	*Kataka phala*[6]	*Madhur Kashay Tikta*	*Guru, Vishada*	*Sheeta*	*Madhur*	*Vatakaphashamak, Chakshushya*

7.	*Sakaphala*[6]	*Kashay, Tikta*	*Laghu Ruksha*	*Sheeta*	*Katu*	*Pittashamak, Raktaprasadak, Krumighna*
8.	*Haritaki*[6]	*Lavanvarjit kashaypr-adhan Pancharasa*	*Laghu, Ruksha*	*Ushna*	*Madhur*	*Anuloman, Rasayan, Aayuvardhak*
9.	*Bibhitaki*[6]	*Kashaya*	*Ruksha*	*Ushna*	*Madhur*	*Bhedan, Kasanashak, Kaphapittashamak*
10.	*Aamalaki*[6]	*Lavanvarjit Amlapradhan pancharasa*	*Guru, Ruksha*	*Sheeta*	*Madhur*	*Rasayan, Raktapittahar, Pramehahara*

Chemical constituents or phytochemicals are the core active ingredients of the present in drugs which are having There specific properties. In below table chemical composition menationed of particular drug.

Table-4. Chemical constituents of Parushakadi Gana Dravyas[15]

Sr.no.	Drug name	Chemical composition
1.	*Grewia asiatica* L.[27]	Flavonoids & Polyphenols: quercetin, naringenin, catechins Fatty acids: Palmitic acid, stearic acid. Terpenpids: Leupeol, Friedelin, Taraxerol Other compounds: Grewinol, Betulin, Docosanol, Nonacosanol.
2.	*Vitis vinifera* L.[23]	Phenolic acids: Gallic, caffeic, ellagic Flavonoids: Quercetin, kempeferol, rutin Stilbenoids: Trans-resveratrol, piceatannol Anthocyanins: Malvidin, Cyanidin, Petunidin Procynidins: Oligomers and polymers like procyanidin B1, B2, C1. Others: Sugars, organic acids, Proteins and amino acids. Minarals: Potassium, calcium, magnesium, zinc, phosphorus.
3.	*Myrica esculenta*[11] Buch.-flam. ex D.Don	Phenolics and Flavonoids: Coumaric acid, myrecitin, kaempeferol Diarylheptanoids: Myricanol, Myricanone Volatile compounds: n-Hexadacanol, eudesmol acetate, palmitric acid Others: Alkaloids, Glycosides, saponins, tannins, fatty acids.

4.	*Punica granatum* L.[12]	Phenolic compounds: Ellangitanins, Punicalangins and punicalin Flavonoids: Quercetin, Galic acid, Caffeic acid, Catechin, anthocynins Fatty acids: Punicic acid, oleic acid Vitamins & minerals: Vit.C, Iron and various minerals Other compounds: Proteins, Sugars, Fibers, Triterpenoids and alkaloids.
5.	*Manilkara hexandra*[29] (Roxb.) Dubard	Triterpenoids: Uroselic acid, Taraxerol, Alpha-amyrin, beta-amyrin Flavonoids: Quercetin, Isoquercitrin, rutin, kaempferol Phenolic compounds: Gallic acid, caffic acid, Cinnamic acid Sterols: Beta-sitosterol, Beta-D-glucoside, alpha-spinasterol Other compound: Tannins, waxes, Starch, sugar, Pectin and cautchouc.
6.	*Strychnos potatorum*[28] L.f.	Alkaloids: Diaboline, strychnine, brucine Polysaccharides: Mannohalacton, Galactan. Tritrpenes & sterols: Olenaolic acid, sitostero, stigmasterol.Others: Lohganin, mannose, sucrose, Stigmasterol, saponins & tanins
7.	*Tectona grandis*[13] L.f.	Quinones & Naphoquinones: Anthraquninones Terpenoids: Sesquiterpenoids like α cadinol, cedrol Phenolics: Tannins, flavonoids, lignans Saponins, carbohydrtes Other compounds: Fatty acids, resins, proteins and minerals.
8.	*Terminalia chebula*[33] Retz.	Tannins: Chebulagic acid, chebulinic acid, Punicalagins, Corilagins Phenolic acid: Gallic acid, chebulic acid, ferulic acid, photocatechueic acid Flavonoids: Luteloin, quercetin, rutin Triterpenoids: Arjunglucoside, arjugenin, chebulosides Fatty acids: palmitic acid, Lonolic acid, Oleic acid, dodecanoic acid. Others:Amino acids, Vitamins, essential minerals.
9.	*Terminalia bellirica*[10] (Gaertn.) Roxb.	Tannins & Phenolics: Gallic acid, Ellagic acid, chebulic acid. Lignanas: Termiligans, Thanniligan and AnolignanB Flavonoids: Quercetin derivatives, FlavoneTepenoids: Triterpenes like arjungeninand its glycosidesSugars: mannitol, glucose, galactose, rhmanose.
10.	*Emblica offincinalis*[03] L.	Vitamins: Ascorbic acid, Carotene, Niacin, Riboflavin, Thiamine Tannins: Emblicanin, Gallic acod , Ellagic acid, Corilagfin, Punigluconin Flavonoids: Quercetin, campepferol, various glycosides Alkaloids: Phyllnathine, Phyllantidine Amino acids: Glutamic acid, Proline, Aspertic acid, Alanine, Lysine Fatty acids: Oleic acid, Linolenic acid Stearic acid, Myristuc acid Carbohydrate: Pectin, Glucose, FructoseOrganic Acids: Citric acid, Mucic Acid.

Table-5. Pharmacological action of Parushakadi gana Dravyas[34]

Sr. No.	Drug name	Pharmacological action	Indication
1.	Parushaka[25]	Antipyretic & antioxidant	*Daha* (Burning sensation), *Raktavikara* (Blood disorders), *Jwara* (Fever), *Kshaya* (Tuberculosis)
2.	Draksha[23]	Cardiotonic & Hepatoprotective	*Trushna* (Thirst) *Jwara* (Fever) *Shwas* (Bronchitis) *Vatarakta* (Gout) *Kamala* (Jaundice) *Mootrakrichra* (Dysuria)
3.	Katphala[11]	Antidiabetic and inflammatory	*Shwas* (Bronchitis) *Prameha* (Diabetes mellitus) *Arsha* (Haemorrides) *Kasa* (Cough) *Aruchi* (Loss of appetite)
4.	Dadim[12]	Antioxidant, cardioprotective	*Atisaar* (Diarrohea) *Pravahika* (Dysentry) *Krimi* (Worms) *Hridya* (Cardioprotective)
5.	Rajadan[29]	Nutritive & tonic	*Atisara* (Diarrhoea) *Dantaharsha* (Toothache) *Sandhivata* (Arthritis) *Kasa* (Cough)
6.	Katakphala[14]	Anti-diarrheal, renal support	*Netrabhishyanda* (Conjectivitis) *Madhumeha* (Type 2DM)
7.	Sakaphala[13]	Antibacterial, antiulcer	*Raktapitta* (Intrensic haemorrhage)
8.	Haritaki[6]	Antidiabetic, Antimicrobial	*Aadhman* (Constipation) *Chakshu vyadhi* (Eye disorder) *Pandu* (Anemia) *Ajirna* (Indigetion)
9.	Bibhitaki[6]	Hypolipidemic, Hepatoprotective	*Kasa* (cough) *Arsha* (haemorrhides) *Atisara* (Diarrhoea) *Kushtha* (Skin disease)
10.	Aamalaki[6]	Antioxidant, immunomodulatory	*Raktapitta* (Intrensic haemorrhage) *Prameha* (Diabetes mellitus) *Shwasa* (Bronchitis)

Table-6. Parushakadi Gana Dravyas Formulations Available In Classics and Market[17&31]

Sr.no.	*Dravyas*	Classical formulation	Market Formulation
1.	*Parushaka*	Parushaka lehya, Parushaka ghrita	Falsa sharbat, Falsa fruit tonic
2.	*Draksha*	Draksha arishta, Drakshadi Lehya and Drakshadi ghrita	Drakshadi kashayam tablet, Drakshadi tonic
3.	*Katphala*	Katphla choorna, Kwath, rasayan	-
4.	*Rajadan*	Rajadan churna, kwath, rasayan	-

5.	*Dadim*	Dadimashtak choorn, Dadim avlehya	Dadimashtak choornam
6.	*Katakphala*	Katak phala Choorn, Kwath	-
7.	*Sakaphala*	Sagwan patra lepa, Sagwan twak kwath, Sagwan beeja choorn	-
8.	*Haritaki*	Triphala choorn, Haritaki choorn, Haritakyadi yoga, Abhaya Arishta	Chitrak haritaki avleha, Haritaki rasayan
9.	*Bibhitaki*	Bibhitaki ghrita, Taila, yoga, Choorn, kwath	-
10.	*Aamalaki*	Amalakiavlehya, chyawanprash avlehya, Amalaki taila, Ghrita, Rasayan, Choorn.	Amlaprasha, Chawanprash, Amla Juice

Mode of action :

- *Parushak, Draksha, Rajadan, Dadim, Katakphala* are the *madhura rasa dravyas* which plays an important role to protect cardiovascular system by providing,
  1. Glucose and anabolic nourishment it will support myocardial ATP generation
  2. Improves cardiac resilience and immunity against stress.
  3. It Calms down excitatory impulses, reducing tachycardia and palpitations.
  4. They contain flavonoids and glycosides that reduce oxidative stress[16].
  5. Maintains plasma volume and helps to prevent hypovolemia-induced cardiac strain

- Kataphala, sakaphala, haritaki, bibhitaki, Aamalaki these are kashaya rasa Pradhan dravyas which are rich in tannins and polyphenols caues mild vasoconstriction and stabilizes vascular tone.
  1. Polyphenols helps in reducing capillary fragility which prevents LDL oxidation[16].
  2. *Kashay rasa pradhan dravyas* reduce cytokine activity to protect myocardium.
  3. *Kashay rasa Pradhan dravyas* have unique property of *stambhan karma* which helps to prevent excessive fluid loss and to stabilize circulation.
  4. Also it protects vascular endothelium by preventing oxidative stress

- *Parushak, Draksha, rajadan & katakphala* and *dadim* all these drugs posses *sheeta veerya* and *snigdha guna* which promotes diuretic mechanism by reducing irritation and inflammation in urinary system also allows free flow of urine.
  1. All above mentioned drugs are also *madhur rasa Pradhan* which often contains sugars, polysaccharides and mild electrolytes, which helps for osmosis activity in renal tubules, drawing water into urine[23].
  2. As *madhur rasa* bears *snigdha guna* it prevents excessive dryness and irritation which promotes gentle diuresis.

- *Parushakadi gana dravyas* are the combination of not only *kashay rasa ruksha guna ushna veerya* and *katu vipaka* but also *madhura rasa snigdha guna sheeta veerya* and *madhur vipaka* which work together to stimulate metabolism and dissolving obstruction, reducing edema, clears urinary tract infections and blockages.
- In the pathophysiology of *trishna rasa dhatu* from the body gets replenished, *Madhur rasa dravyas* from *parushakadi gana* directly nourishes the *rasa dhatu* which can fulfil the body's fluid demand to pacify thirst[7].
- *Snigdha guna* will provides unctuousness in oral cavity, throat and systemic tissue to cut down dryness. This lubrication helps to reduce sensation which triggers thirst.
- Most probably thirst increases when you do more physical and straineous activity, also high level of mental exhaustion which can activate body's heat producing receptors to maintain fluid balance, to manage the body's fluid balnce it demands for cold water. So here we can use *parushakadi gana* soaked and infused water to get out of the symptoms of thirst and regulating body's temperature[23].

Aacharya sushruta has told grouping of herbs that is *gana* based on dravyas not specifically on their pharmacological actions, Morphology and *Rasa panchak. Parushakadi gana* is one among them has been mentioned in sushrut samhita sutrasthan chapter no. 38 Dravyasangrahaniuya adhyay. Here the drugs mentioned by aacharya was half of *Madhura rasa Pradhan* and half of *Kashaya rasa* Pradhan all of them with combinations acts as a hridya (Cardioprotective), *mootrala* (Diauretic), Trinsha nigrahana (Thirst quenching).

Cardio-protective mechanism :

Prushaka and *Draksha* are rich in antioxidants so they protects blood vessels and helps to reduce oxidative stress also improves endothelial functioning of cell. *Dadima* contains polyphenols especially punicalangins which helps to lower LDL cholesterol levels and enhances vascular tone. Rajadan is rich in triterprnoids that helps to strengthen heart muscle

Renal and urinary system suport: *Katphala* and *katakphala* are considered as natural diuretic and antibacterial agents because they contains polysaccharides and alkaloids which boosts mootrala properties. They helps to reduce inflammation of urinary tract as well as free flow of urine.

Digestive system and metabolic health :

Haritaki, Bibhitaki and *Aamalaki* are most popular and widely used by indian population over the counter to get relief from diagestive problems like mainly flatulence and constipation. Triphala is rich in polyphenols, flavonoids, Vit.C and steroids. It helps in boosting immunity, oxidative stress and supports in lipid metabolism. *Sakaphala* is having antibacterial and anti- ulcer properties works on gastro-intestinal tract. *Parushaka* and *Draksha* possess cooling and hydration properties. Which helps to manage trishna because they conatin suagars and electrolyte which directly acts on rasadhatu to replenish the body fluids and prevents dehydration related strain on heart.

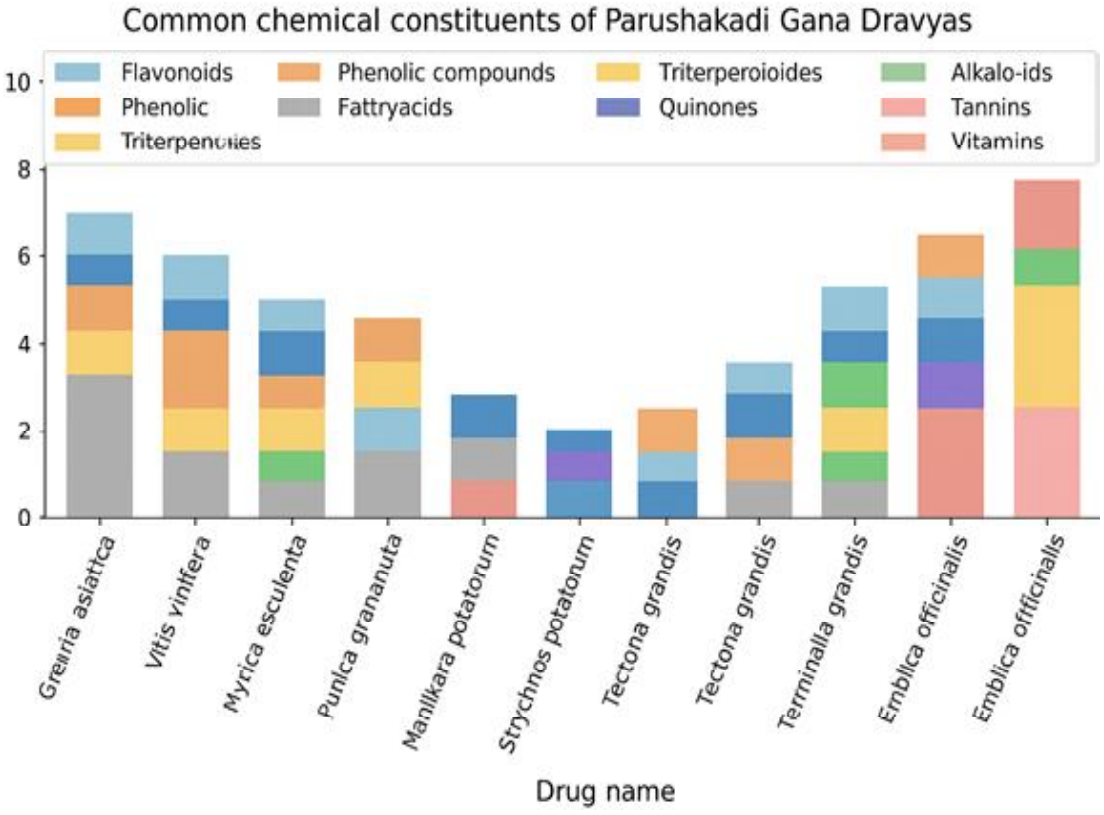
Parushakadi Gana stands as a remarkable example of how Ayurveda harmonizes tradition

with science. The herbs and fruits grouped under this gana are not only ancient dravyas but also bridges gap between classical knowledge and modern biomedical understanding. Their dual nature of *Madhura rasa dravyas* nourish the heart and *rasadhatu* and *Kashaya rasa dravyas* stabilize vascular tone which reflects a holistic design aimed at protecting cardio-vascular health, supporting renal function, and quenching systemic thirst.

What makes *Parushakadi Gana* truly special is its versatility: From easing digestive problems to strengthening immunity, from calming the heart to replenishing rasa dhatu, these dravyas makes the integrative spirit of Ayurveda. Modern research now validates what our acharyas intuitively knew centuries ago—that these plants are rich in antioxidants, polyphenols, flavonoids, and bioactive compounds that safeguard against oxidative stress, inflammation, and metabolic imbalance.

In today's context, where lifestyle disorders are on the peak, Re-capturing the therapeutic potential of Parushakadi Gana can offer safe, natural and effective solution. By embracing these dravyas in both classical formulations and contemporary practice.

Graphical Representation :



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