

# A comprehensive review of Kakaradi gana and its significance in Rasashastra

## Review Article

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## Abstract

Among various branches of Ayurveda, *Rasashastra* is an important branch known for its various formulations called as *Rasaushadhi* (Mineral or Herbo-mineral medicines). According to various classics of Ayurveda, some *Pathyapathya* (Wholesome and unwholesome diet / regime) are explained which should be followed during the *Rasasevanakala* (period of consuming Mercurial Preparation). The group of fruits and vegetables which are advocated as *Apathya* (unwholesome diet) during the *Rasasevanakala* is known as *Kakaradi Gana*. In some texts, eight number of such *dravyas* are mentioned and this group is known as *Kakarashtaka Gana*. The total number of drugs mentioned under the *Kakaradi Gana* in various classics are different. These *Kakaradi gana* drugs also has other utility in the *Rasashastra* other than unwholesome regime. Here an attempt has been made to compile the *Kakaradi gana*, *Kakarashtaka gana* with Probable rationale behind elucidation of these *gana* and significance of these *ganans* are also discussed here.

**Key Words:** *Ayurveda; Rasashastra; Kakaradi Gana; Kakarashtaka Gana; Rasaushadhi; Pathyapathya; Rasa sevana kala.*

## Introduction

*Ayurveda* is an ancient science of life which is globally accepted due to its holistic approach. *Rasashastra* (Indian Iatrochemistry) is one of the main branch of *Ayurveda* which developed prominently in the medieval period i.e. from 8<sup>th</sup> century to 15<sup>th</sup> century. *Rasashastra* contains the drugs of Metal, Mineral, Herbal, Aquatic, Herbo-mineral and Animal origin. Many of the Minerals and Metals were known to Indians since pre-*vedic* period. References of minerals and metals like Gold, Copper, Iron, Tin and Lead etc. are found in *Vedic* era. In medieval period, these drugs were used for both *Lohavada* (Conversion of lower metal into higher) as well as *Dehavada* (for therapeutic purpose).

*Rasashastra* is mainly based on the *Parada* (Mercury) hence the processes related to the *Parada* are found elaborated in detail. In *Ayurveda* there is importance of *pathyapathya* (wholesome and unwholesome diet) along with the medicine which has impact on eventual outcome of medicinal use therapeutically. They should be followed for the desired effect of the medicine. The drugs / diet which are mentioned as wholesome or unwholesome; are

described on the basis of the *Rasa, Guna, Veerya, Vipaka* etc. In many *Rasagranthas* (Classics of *Rasashastra*), the *Pathyapathya* is described for the *Rasaushadhisevana* (during administration of Mineral and Herbo-mineral formulations). For *Apathya Dravyas*, some fruits and vegetables are mentioned in general while some are specified under the group called as *Kakaradi Gana*(1). While mentioning these group of drugs, in some classics they are limited to eight numbers in total. This group of drugs is known as *Kakarashtaka Gana*(2).

The *dravyas* mentioned under the *Kakaradi gana* or *Kakarashtaka Gana* are also indicated as antidote for the ill effects of *Paradasevana* (Mercurial compounds). Many of the *Kakaradi Gana* ingredients are used in various processes in *Rasashastra* like used as *Bhavana dravya*, as an ingredient of formulation, in *Paradasamskara* (Mercurial processes) etc. Hence here compilation of various *Kakaradi Gana* and *Kakarashtaka gana* has been done. Also to explain the probable rationale behind forming such group, probable reason behind why not to consume these drugs during the intake of various mercurial compounds, significance of these *Ganas* and the use of *Kakaradi Gana dravyas* at other places; a discussion has been done here.

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## Kakaradi Gana

The group of fruits and vegetables (*Shaka*) having their Sanskrit name starting with 'KA', are called as *Kakaradi Gana*. They are also known by the name of *Kakarashtaka Gana* where the total number of ingredients in such group are limited to eight only. They are mentioned in many classics of Ayurveda in the

context of unwholesome diet/ regime during the mercurial therapy. These food stuffs should be forbidden during the *Rasasevanakala* (Administration of Mercurial formulations) (3). The number of drugs under these *Ganas* are different in various classics ranging from six to twenty. The drugs mentioned under *Kakarashataka Gana* are eight in number and are similar in most of the texts except *RasaChandamshu* and *Rasendrasaramgraha* has one variation in the drug. Some drugs are found commonly mentioned in most of the classical texts where as some are different.

### Kakaradi Gana in different Classics

The references of the *Kakaradi Gana* are found in many of the *Rasashastra* classics of *Ayurveda*. The main references are *RasaRatnaSamucchaya*, *RasaTarangini*, *Rasarnava*, *Rasendrasarasamgraha*, *Ayurved Prakasha*, *Rasa Manjiri*, *Rasa Chandamshu*

etc. Most of the *Dravyas* mentioned in these classics under the *Kakaradi Gana* or *Kakarashataka Gana* are similar; but some texts are having more or less *Dravyas* in this list. The *Shatkadin* drugs mentioned in *Ayurved Prakash* and *YogRatnakara* are similar with no change. In *RasaRatnaSamucchaya*, they are mentioned under two groups; one is *Devishastrokta* and other is *Shrikrushnadevokta*. In *Devishastrokta Kakaradi Gana*, *Acharya Rasavagbhata* (Author of the book *RasaRatnaSamucchaya*) included some drugs the name of which does not starts with 'Ka' like *Nimbuka*, *Rajika* etc.

The number of the drugs under *Kakaradi Gana* varies text to text from minimum of six to maximum of twenty in numbers.

The drugs of the *Kakaradi Gana* described in various texts are compiled and are as shown in table no.1.

**Table 1: Kakaradi Gana in various Classics**

Sr No	Ayurveda Prakash(5) & Yoga Ratnakar(12)	Rasaratna Samucchaya Devi Shastrokta(6)	Rasaratna Samucchaya Shrikrushna Devokta(7)	Rasatarangini(4)
1	Kushmanda	Kantari	Kangu	Kushmanda
2	Karkati	Kanji	Kanduka(Pugaphala)	Kamatha(Kachhapa)
3	Kola	Kamatha(Kachhapa)	Kola	Kalinga
4	Kalinga	Taila	Kukkuta(Cock)	Kola
5	Karamardaka	Rajika	Kala(Peacock)	Kulattha
6	Karira	Nimbuka	Kroda(Pig)	Karkoti
7		Kataka	Kulattha	Kataka(Nirmali)
8		Kalinga	Kantari	Kapittha
9		Kushmanda	Katutaila	Kanchanar flower
10		Karkati	Krushna galak	Kangu
11		keki(Peacock)	Kurma(Kachhapa)	Kanji
12		Kukkuta(Cock)	Kalay(Pea)	Karavellaka
13		Karavellaka	Kana(Pippali)	Karkotaka
14		Karkoti	Karkaru(Kumhada)	Karkati
15		Vrintaka	Karavellaka	Kusumbha
16		Kapittha	Kataka(Nirmali)	Kapota
17			Karkota	
18			Karkati	
19			Kali (Black Jeera)	
20			Kanji	

As per **Rasatarangini(4)**, *Rasa sevaneApathyani* (Unwholesome regime) has been mentioned in *Saptam Taranga* (7<sup>th</sup> Chapter). The 'KA'karadigana has been mentioned here and the drugs included are as follows:

*Kushmanda, Kamatha, Kalingaphala, Kola, Kulattha, Karkoti, Kataka, Kapitthaphala, Kanchanarpushpa, Kanguni, Kanji, Karavellaka, Karkotaka, Karkati, Kusumbha, Kapotamamsa*

**Kakarashatakagana:** According to some scholars; *Kalinga, Karvellaka, Kadali, Kakamachi, Kusumbha, Karkoti, Kushmanda* and *Karkati* are called as *KA karashtaka gana*. The use of these regimes should be avoided during the *Paradasevana kala* by the persons seeking for the *Rasayanaphala(4)* (Benefits of intake of Mercurial compounds).

According to *Ayurved Prakash(5)*, six drugs have been included in *Kakaradigana*.

*Kushmanda, Karkati, Kola, Kalinga, Karamardak* and *Karira*. These drugs are suggested not to consume during the period of administration of Mercurial formulations. The Acharya here named this group as *Kadina* or *Kakara*.

According to the **RasaRatnasamucchya**, two types of *Kakaradi gana* has been mentioned named as *Devishastrokta kakaradi gana* and *shrikrushnadevokta kakaradi gana*.

1. **Devishastrokta Kakaradi Gana(6):** *Kantakari phala, kanji, Kamatha (Kacchhapa), Taila, Rajika, Nimbu, Kataka, Kalinga phala, Kushmanda, Karkati, Keki, Kukkuta, Karvaellaka, Karkoti, Vrintaka* and *Kapittha*. This is mentioned in *Devishastra*.

2. **Shrikrushnadevokta Kakaradi Gana(7):** *Kanguni, Kanduk(Pugaphala), Kola phala, Kukkuta, meat(mamsa) of Peacock and pig, Kulattha, Kateri,*

*Katutaila (sarshap), Krushna galak*(type of bird like cock), *Kurma(kacchhapa), Pea, Kana(Pippali), Karkaru, Karavellaka, Krishna Jeeraka, seed of Nirmali, Kanji, Karkati and Karkotak*. This *Gana* is proposed by the Acharya *ShrikrushnaDeva*.

As per **Rasarnava**(8), the *Kakarashhtakagana* has been mentioned here. The drugs are *Kushmanda, Karkati, Kalinga, Karavellaka, Kusumbha, Karkota, Kadali and Kakamachi*. These drugs should be gave up by the persons consuming mercurial formulations.

As mentioned in **RasaManjari**(9), *Kakarashhtaka Gana* is mentioned as follow: They are *Kushmanda, Karkati, Kalinga, Karavellaka, Kusumbha, Karkoti, Kadali and Kakamachi*.

As mentioned in the **RasaChandamshu**(10), the *Kakarashhtakagana* ingredients are as below given: *Kushmanda, Karkati, Kalinga, Karavellaka, Kusumbha, Karkoti, Kalambi and Kakamachi*.

As mentioned in **Ayurved Prakash**(11), *Kakarashhtaka Gana* is explained in *Rasasevanakarturaharadiniyam* (Directions regarding the Food regime for the persons taking Mercurial formulations). Here *Kakarashhtaka Gana* is explained as unwholesome regime along with other contraindications. This *gana* includes drugs

*Kushmanda, Karkati, Karavellaka, Kalinga, Kusumbha, Karkoti, Kadali and Kakamachi*.

As mentioned in **YogaRatnakara**(12), here also Acharya has explained six number of drugs in *Rasasindura prakaran* under *Rasendrasedevane apathyam* and are called as ‘*Shatkaadin*’ (Six ‘Ka’ drugs). They are *Kushmanda, Karkati, Kola, Kalinga, Karamardaka and Karira*; these drugs are suggested to avoid by the person during *Rasasevanakala*.

As mentioned in *Rasendrasarasamgraha*(13) *prathamoadhyaya* (1<sup>st</sup> chapter) under *Rasendra bhasma sevana apathyam*, Acharya has described eight drugs which should be avoided during the period of *Rasendra bhasma sevana* (consumption of Mercurial incinerated ash). Those drugs are *Kushmanda, Karkati, Kalinga, Karavellaka, Kusumbhika, Karkoti, Kalambi and Kakamachi*.

If the drugs of the *Kakarashhtaka Gana* from various classics are viewed, it can be seen that all the drugs are similar except *Kalambi* explained by *Rasachandamshu* and *Rasendrasarasamgraha* is different. In other classics, they have included *Kadali* instead of *Kalambi*. Rest all the drugs are same in all other classics. The *Kakarashhtaka Gana* mentioned in various texts are compiled and discussed as per Table no. 2 here.

**Table 2: Kakarashhtaka Gana of various classics**

Sr No	<i>Rasa Tarangini</i> (2)	<i>Rasarnava</i> (8)	<i>RasaManjari</i> (9)	<i>RasaChandamshu</i> (10) and <i>Rasendra sara samgraha</i> (13)	<i>Ayurveda Prakash</i> (11)
1	<i>Kushmanda</i>	<i>Kushmanda</i>	<i>Kushmanda</i>	<i>Kushmanda</i>	<i>Kushmanda</i>
2	<i>Karkati</i>	<i>Karkati</i>	<i>Karkati</i>	<i>Karkati</i>	<i>Karkati</i>
3	<i>Kalinga</i>	<i>Kalinga</i>	<i>Kalinga</i>	<i>Kalinga</i>	<i>Kalinga</i>
4	<i>Karvellaka</i>	<i>Karvellaka</i>	<i>Karvellaka</i>	<i>Karvellaka</i>	<i>Karvellaka</i>
5	<i>Kusumbha</i>	<i>Kusumbha</i>	<i>Kusumbha</i>	<i>Kusumbha</i>	<i>Kusumbha</i>
6	<i>Karkoti</i>	<i>Karkoti</i>	<i>Karkoti</i>	<i>Karkoti</i>	<i>Karkoti</i>
7	<i>Kadali</i>	<i>Kadali</i>	<i>Kadali</i>	<i>Kalambi</i>	<i>Kadali</i>
8	<i>Kakamachi</i>	<i>Kakamachi</i>	<i>Kakamachi</i>	<i>Kakamachi</i>	<i>Kakamachi</i>

If an overlook of the drugs mentioned under various *Kakaradi Gana* and various *Kakarashhtaka Gana* is done, some drugs are found to be common explained by most of the Acharyas in their respective texts. These common drugs are compiled and discussed here in the Table No 3.

**Table 3: Kakaradi and Kakarashhtaka Dravyas common in various classics**

A. <i>Kakaradi Dravyas</i>			B. <i>Kakarashhtaka Dravyas</i>		
Sr No	Name of Dravya		Sr No	Name of Dravya	
1	<i>Kushmanda</i>		1	<i>Kushmanda</i>	
2	<i>Kalinga</i>		2	<i>Karkati</i>	
3	<i>Karkati</i>		3	<i>Kalinga</i>	
4	<i>Kola</i>		4	<i>Karvellaka</i>	
			5	<i>Kusumbha</i>	
			6	<i>Karkoti</i>	
			7	<i>Kakamachi</i>	

If all the drugs of *Kakaradi gana* and *Kakarashhtaka gana* compiled together from various classical texts, they are around thirty seven numbers in total. All the drugs mentioned in various Ayurveda texts under *Kakarashhtaka Gana* or *Kakaradi Gana* compiled with their respective English or Latin name are discussed here in Table No. 4.

**Table 4: Combined drugs of Kakaradi Gana and Kakarashhtaka Gana of various texts**

Sr No	Drug Name	Part Used	English / Latin Name
1	<i>Kushmanda</i>	Fruit	Ash gourd/ pumpkin
2	<i>Karkati</i>	Fruit	Cucumber
3	<i>Kalinga</i>	Fruit	Watermelon
4	<i>Karvellaka</i>	Fruit	Bitter Gourd

*Mahesh S Pawar et.al., A comprehensive review of Kakaradi gana and its significance in Rasashastra*

5	<i>Kusumbha</i>	Flower	Safflower
6	<i>Karkoti</i>	Fruit	Spine Gourd
7	<i>Kakamachi</i>	Whole plant / Fruit	Black nightshade
8	<i>Kola</i>	Fruit	Indian Jajube
9	<i>Karamardaka</i>	Whole plant / Fruit	Bengal Currant
10	<i>Karira</i>	Root bark/Fruits/Flowers	<i>Capparis decidua</i>
11	<i>Kantari</i>	Fruit	Wild eggplant
12	<i>Kanji</i>	Rice Gruel	Rice Gruel
13	<i>Kamatha / Kurma</i>	<i>Mamsa</i> (Meat)	Tortoise
14	<i>Taila</i>	Oil	<i>Sesamum indicum</i>
15	<i>Rajika</i>	Seed/Oil/ Leaves	Brown Mustard
16	<i>Nimbuka</i>	Fruit	Lemon
17	<i>Keki / Kala</i>	<i>Mamsa</i> (Meat)	Peacock
18	<i>Kukkuta</i>	<i>Mamsa</i> (Meat)	Cock
19	<i>Vraintaka</i>	Fruit	Brinjal
20	<i>Kapittha</i>	Fruit	Elephant Apple
21	<i>Kangu</i>	Seed/Leaves	Staff tree
22	<i>Kanduka</i> (Pugaphala)	Fruit	Areca catechu
23	<i>Kroda</i>	<i>Mamsa</i> (Meat)	Pig
24	<i>Kulattha</i>	Seed	Horse gram
25	<i>Katutaila</i>	Oil	White mustard
26	<i>Krushna galak</i>	<i>Mamsa</i> (Meat)	A type of wild Bird having black neck from cock family
27	<i>Kalay</i>	Seed	Pea
28	<i>Kana</i> (Pippali)	Fruit	Long Pepper
29	<i>Karkaru</i>	<i>Mamsa</i> (Meat)	<i>Kumhada</i> bird
30	<i>Kataka</i> (Nirmali)	Seed	Clearing nut tree
31	<i>Karkota</i>	Fruit	Momordicadioica
32	<i>Kali</i> ( <i>Kala Jeera</i> )	Fruit	Black cumin
33	<i>Kanchanar flower</i>	Flower	Orchid flower
34	<i>Karkotaka</i>	Fruit	Balsam pear
35	<i>Kapota</i>	<i>Mamsa</i> (Meat)	Pigeon
36	<i>Kalambi</i>	Whole plant	Water spinach
37	<i>Kadali</i>	Fruit	<i>Musa paradisiaca</i>

**Probable Rationale behind the Kakaradi Gana**

Digestive fire (*Agni*) plays an important role in the metabolic functions of the Human body. A good digestive fire performs role in Metabolism, Absorption and Excretion of the Drug. The patients who is diagnosed for any disease and asked for the *Rasaushadhi* as treatment; may have low digestive fire. The most of the *dravyas* (Drugs) mentioned under the *Kakaradi gana* are heavy (*Guru*) and may be difficult to digest (14). Hence these fruits and vegetables may have said to be contraindicated while the *Rasasevana* is in process.

As mentioned in *Rasa Tarangini* (15), as quoted elsewhere; due to the intake of the *Kakaradi gana dravyas*, the *Parada/Rasaushadhi* will be excreted in more quantity in the form of *mala mutradi* (waste products like stool and urine etc). This may result in inadequate effect of the *Rasaushadhi* on the indicated disease.

Hence the substances which maintains the balance of digestion, absorption and excretion should be consumed as they are *Pathya* and the substances which may give rise to the indigestion, flatulence, burning sensation etc should be avoided during the administration of Mercurial preparations as the administered *Rasakalpas* (mercurial formulations) may not get digested and absorbed properly due to these substances (17). They are *Apathyadravya* and some of them comes under the heading of *Kakaradigana*.

Most of the drugs of the *Kakaradigana* like *Kushmanda* (Ash gourd), consist of *Sara guna*

(purgative property). This may result in less time for the absorption in the intestine. So when any *Rasakalpa* is consumed with this substance, the medicine will excrete out of the body with less absorption and thus may not show the expected result on the body. That means medicine entered in the body should get enough time for the absorption to show the desired effects. Another drug from the *Kakaradigana*; *Kulattha* (Horse gram) is to be avoided during the *Shilajatushevana* (17). The property of the *Kulattha* is *Ashmarighna* (Stone removing) hence it may remove out the *Shilajatu* before its proper absorption (17). This might be the probable reason behind why not to take the *Kakaradi* vegetables and fruits while administration of the various *Rasakalpas*.

**Significance of the Kakaradi Gana**

These *Dravyas* are believed to having the similar qualities (*Guna Sadharmya*) and also similar as per *Shabda* i.e. *Kakaradi*. The *pathyadravyas* (wholesome diet/ regime) should be preferred for eating during the period of *Rasasevana* (Administration of Mercurial formulations). The fruits and vegetables mentioned under the *Kakaradi gana* should be avoided during the ingestion of mercurial formulations. Also the *dravyas* other than these *Pathyapathya dravyas* can be taken cautiously with the consultation of the expert physician during the said period (16).

The substances of the *Kakaradi gana* can be consumed once the *Rasasevana kala* completed and this may help for chelating (17) the unwanted drug deposited



in the body during the period of mercurial formulations intake.

As mentioned by *Nighantu Ratnakara*(18), when there is occurrence of the *Paradavikaras* (Unwanted effect of Mercury); one should eat the ingredients of the *Kakarashataka gana* to get rid of the untoward effect of the mercurial formulation.

As mentioned in *Rasarnava*(19), if anybody shows the untoward effect of the *Paradasevana*; that person is advocated to drink some medicinal drinks which includes some *Kakaradi gana dravyas* like *Kanji*, *Kadalikanda rasa*, *Karavellaka rasa* etc. This may help in detoxication of the ill effects of the *Parada*. As mentioned in *Rasendrachintamani*, *swarasa* (juice) of *Kakamachi* is also advised to drink in case of *Rasajirna*(20).

Though the drugs of these *gana* has been contraindicated during the *Rasasevanakala*; many of the drugs from it has wide therapeutic utility in the *Rasashastra* and *Bhaishajya Kalpana*. Many of these drugs are used as *bhavanadravya*, as an ingredient in many formulations and in *Rasabandhana*. Some drugs are used in *Paradasamskaras* like in *Dipanasamskara*, some are mentioned as *rasamooli*; few of them are from *Kakarashataka gana*. E.g. *Kakamachi*, *Kusumbha*, *Kantkari*, *Kadali* etc(21).

Few drugs has been mentioned here as an example having various utility.

- 1. Kakmachi:** *Kakamachi* is also extensively used in all *Rasashastra Granthas*. In almost all the *Rasagrantha*, its description is mostly found in the form of *Bhavana Dravya* or as one of the ingredient in the formulation. It is the drug used for *Parada Bandhanas* (binding of mercury) and having the position in different *Ganas* like *Kakarashatak*, etc. In *Rasaratnasamucchaya* *Kakamachi* is found in various places including its contraindication at the time of *Rasasevana*. *Acharya* has described the drug under the *Vishghna Gana* (group of drugs which counter acts poison) (*RasaRatnaSamucchaya chapter 29, Shloka no 143*). *Acharya* has also described it as one of the *Rasa BhavanadiMoolini Dravyas*(22). *Acharyas* has described it in the preparation like: *Lokanath Gutika*, *Hrudayarnava Rasa*(23) etc. In *Rasatarangini* the use of *Kakamachi* explained under *RasasyaNiyamak Gana*, *ParadaMarak Gana*(24), *Kakarashatak*, *Abhrak* (Mica) *Maran Dravya*, *Abhraka Marana Gana*(25). The *Grantha* has described the drug in *Vamana Hara Yoga*, as a *Kushthahara* also described under *Kushmandadi gana*(26) suggested for the removal of remained *Paradaavasheshamsh* in the body after *Paradasevana kala*.
- 2. Karvellaka:** In most of the classics it is widely used as *bhavanadravya* and *shodhanadravya*. As per *RasaratnaSamucchaya*, it is used for the *shodhana* of *Somala* (Arsenic trioxide)(27).
- 3. Kushmanda:** It is also widely used as ingredient like in *Kushmandavaleha*, *kushmandaghrita* etc. Also it is

used as *shodhana dravya* e.g. as mentioned in *Rasaratnasamucchaya*; it is used in *Haratala shodhana*(28)(Arsenic trisulfide). As per *RasaTarangini*, it is described under *Kushmandadi gana*(29) suggested for the removal of remained *Paradaavasheshamsh* in the body after *Paradasevana kala*.

- 4. Kanjika:** *Kanji* is widely used as *shodhana dravya*. It is also used in *Paradasamskara* like *swedana*(30), *mardana*, *murchhana*, *utthapana*(31) etc.
- 5. Kulattha:** It is widely used as ingredient and as *shodhana* and *sattvapatandravya*. E.g. as per *RasaRatnaSamucchaya*, it is used in *Sattvapatana* of *Haratala*(32).

### Exception to the *Kakaradi Gana*

As mentioned in the *RasaRatnaSamucchaya*(33), though the *Kakaradigana* is advocated as unwholesome food during the period of the use of mercurial medicines; this rule should be applied for that particular *Rasa* (Mercurial) formulation only where *Kakaradi gana* is advised as contraindicated. The *Kakaradi gana dravyas* are not contraindicated in all the *Rasa* formulations. But still it will be better to avoid the *Kakaradi Gana* during *Paradasevana kala*.

### Discussion

Mercury (*Parada*) and other minerals used in therapeutics are in *shodhita* (Pure) form. If the due *shodhana* process (purifying methods) not followed properly, it may show some ill effects. The improperly prepared mercurial formulations may show ill effects. When there is toxicity of the *Parada*, some ingredients of the *Kakaradi gana* like *Karavellaka*, *Kadalikanda swarasa* (Juice) etc are advised to be consumed to get rid of the ill effects of the *Paradasevana*. Also after the completion of the *Rasasevanakala*, sometimes there may be some *Parada avasheshamsha* remained in the body; in such condition some *dravyas* from the *Kakaradi Gana* are suggested to detoxify the body and to nullify the ill effect of the retained part of *Rasaauashadhi*.

The *Kakaradi gana* fruits and vegetables if consumed during the period of the *Rasasevana kala*, the drug interaction may be like antagonism(17). It may hassle the absorption of the drug into the intestine. It may show impact on the final result of the medicine on the disease and desired effect may not be obtained. Use of *Kakaradi Gana* should be done judiciously and should not be used wherever marked as contraindicated. *Ayurveda Prakasha* and *YogRatnakar* included only six drugs in *Kakaradi gana or Kadina Gana*; is the least number of drugs described as *Kakaradi* drugs compared to other texts. The ingredients mentioned in both the classics are similar with no change. In *RasaRatnaSamucchaya*; under the *Shrikrushnadevokta Kakaradi Gana*, there are twenty number of drugs mentioned which can be considered to be maximum number of drugs compared to other texts. The drug

*Karira* is discussed only by Ayurveda Prakasha and Yogaratnakara under the *KakaradiGana*. The drug *Kalambi* is mentioned in *Kakarashataka Gana* only by *RasaChandamshu* and *Rasendrasarasamgraha*, while others included *Kadali* instead. The drugs which are commonly included by all the Acharyas in their respective texts under *Kakaradi Gana* are around four while under *Kakarashataka Gana*; they are around seven in number. Along with herbal drugs some animal origin regimens are also included in the *Kakaradi Gana* like the meat of Tortoise, Cock, Pigeon, Peacock, Pig etc. All the *Kakaradi dravyas* mentioned should be avoided during the period of *Paradasevana kala* for that particular mercurial formulations. Though for other *Rasakalpas* also better to avoid with the due consultation of the expert physician. Acharya Sharangadhara in his book *Sharangadhara Samhita* has quoted that all articles (i.e. foods, vegetables) whose names commence with syllable “KA” should be avoided during the course of treatment of administration of Lokanatha Rasa(34).

## Conclusion

Commonly three group of regimens found under *Kakaradi gana* where in *Kadiana* or *Shatakadina* group, the number of drugs restricted to six; in *Kakarashataka gana*, it is restricted to eight and in *Kakaradi gana*, there is no such limit is seen. After the review through various *Rasashastra* texts about the *Kakaradi Gana* and *Kakarashataka Gana*; it can be concluded that; *Kakaradi Gana*, *Kakarashataka Gana* or *Shatakadina gana* are the group of dietary drugs which are having a wider therapeutic utility and has a significant role in the various processes of the *Rasashastra*. Though they are suggested as contraindicated in *Rasasevana kala* but they are also advised to take if ill effects of the *Rasaushadhi* occurs. These drugs are mentioned in many nodal texts of *Rasashastra*. In many classical books; both the *ganas* *Kakarashataka* and *Kakaradi Gana* are described separately. These group of regimens contains herbal source (Fruits, vegetables etc) as well as animal source (Meat) of origin drugs. As a whole, *Kakaradi Gana* and *Kakarashataka Gana* has various utilities in many aspects along with contraindicated during *Rasasevanakala*. Also in some books like *Sharangadhara Samhita*, the *Kakaradi gana* drugs are said to be contraindicated during the course of treatment of some specific formulation also. Hence this review may prove to be helpful to provide a different aspect of *Kakaradi Gana* along with the detailed information about this *gana* under one roof.

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