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## A REVIEW ON PARPATI KALPANA: INSIGHTS FROM CLASSICAL AYURVEDIC TEXTS

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### Abstract

Parpati Kalpana, a unique mercurial formulation in Ayurveda, involves the transformation of purified metals and minerals into thin, flaky sheets resembling parpati (flake). This dosage form enhances bioavailability, stability, and therapeutic efficacy, particularly for chronic disorders like skin diseases, gastrointestinal ailments, and respiratory conditions. This review explores the conceptual framework, preparation methodologies, pharmaceutical properties, therapeutic applications, and safety considerations of Parpati Kalpana, drawing exclusively from classical Ayurvedic texts such as *Rasa Tarangini*, *Rasaratna Samuccaya*, *Rasendra Sara Sangraha*, and *Ayurveda Prakasha*. By synthesizing these ancient references, the article underscores the scientific relevance of Parpati in contemporary Ayurvedic pharmaceuticals.

**Keywords:** Parpati Kalpana, Rasaushadhi, Mercurial preparations, Classical Ayurveda, Dosage forms.

### Introduction

In Ayurvedic pharmaceuticals (Bhaishajya Kalpana), Rasa Shastra represents the branch dealing with mineral and metallic drugs, emphasizing their purification (Shodhana), incineration (Marana), and formulation into potent dosage forms. Among these, Parpati Kalpana stands out for its distinctive "patti" (sheet-like) structure, which facilitates rapid absorption and targeted delivery. The term "Parpati" derives from its flaky appearance, akin to the leaf of the *Parijata* tree, as described in classical literature.

Classical texts highlight Parpati's superiority over other forms like churna (powder) or bhasma (calx) due to its quick disintegration in the gastrointestinal tract and enhanced potency. *Rasa Tarangini* (Chapter 13) elucidates its preparation as a method to bind multiple herbo-mineral ingredients into a stable matrix. This review systematically compiles references from primary texts to delineate Parpati Kalpana's evolution, principles, and clinical utility, ensuring originality through direct textual correlations without modern interpretations.

### Historical Evolution and Nomenclature

Parpati Kalpana traces its origins to medieval Rasa texts, evolving from rudimentary metallic processing to sophisticated formulations. *Rasaratna Samuccaya* (11th century, Chapter 6) first mentions "Parpati Vidhi" as a technique for Kajjali (mercuric sulfide) processing. The nomenclature varies: *Rasendra Sara Sangraha* (Chapter 4) terms it "Parpata Rasa," while *Ayurveda Prakasha* (16th century) refers to it as "Patti Kalpana."

Key milestones include:

- **Rasaratna Samuccaya:** Introduces basic Parpati from Parad (mercury) and Gandhak (sulphur).
- **Rasendra Sara Sangraha:** Expands to therapeutic Parpatis like Rasaparpati.
- **Rasa Tarangini** (18th century, Sadananda Sharma): Comprehensive chapter (Taranga 13) on 25+ Parpati types, standardizing procedures.

This progression reflects Ayurveda's adaptive pharmaceuticals, prioritizing patient-centric delivery.



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## Pharmaceutical Preparation: Stepwise Methodology

Classical texts outline a triphasic process: **Samskarana** (preparation of base), **Patana** (volatilization and sheet formation), and **Mardana** (trituration with herbs). The core involves heating a mixture on an iron ladle over cow dung fire until it volatilizes and condenses into thin flakes on a cow-dung leaf-covered surface.

### Key Steps from *Rasa Tarangini* (13/10-25):

- 1. Base Preparation (Kajjali Nirmana):** Purified mercury (Parad Shodhana) triturated with sulfur (Gandhak Shodhana) to form black Kajjali. Ratio: 1:1 (e.g., Rasaparpati).
- 2. Addition of Dravyas:** Incorporate Tankana (borax), Abhraka (mica), or herbal juices (e.g., lemon, ginger) for specific formulations.
- 3. Patana Process:** Heat to 300-400°C in Tula Yantra (balance apparatus). Vapours deposit as 1-2 mm thick parpati on a cooled surface.
- 4. Post-Processing:** Crush into powder, triturate with Bhavana Dravya (e.g., Kumari Swarasa), and store airtight.

*Rasaratna Samuccaya* (6/45-50) specifies temperature control via "Mandagni" (mild fire) to prevent Paradabhighata (mercurial toxicity). Variations include:

- **Rasaparpati:** Kajjali + Tankana (for grahani).
- **Naga Parpati:** Naga (lead) + Tamra (copper) for krimi.
- **Tamra Parpati:** For pandu roga.

Quality parameters: Parpati should be "Sita, Mridu, Bahala" (cold, soft, thick), float on water (*Rasa Tarangini* 13/30), and pass Varitara test (non-reversible on heating).

## Therapeutic Applications

Parpati's micro-fine structure ensures "Sukshma Gati" (subtle penetration), ideal for Rasayana (rejuvenation) and Roga Nivarana (disease palliation).

| Parpati Type    | Classical Reference         | Indications             | Dose ( <i>Rasa Tarangini</i> ) |
|-----------------|-----------------------------|-------------------------|--------------------------------|
| Rasaparpati     | 13/50-60                    | Grahani, Ajeerna, Arsha | 125-250 mg                     |
| Naga Parpati    | Rasendra Sara Sangraha 4/20 | Krimi, Udara            | 60-125 mg                      |
| Tamra Parpati   | Ayurveda Prakasha 4/15      | Pandu, Pleeha           | 125 mg                         |
| Abhraka Parpati | Rasaratna Samuccaya 6/70    | Swasa, Kasa             | 250 mg                         |

*Rasendra Sara Sangraha* (4/25) praises Rasaparpati as "Sarva Roga Hara" for its Yogavahi (bioenhancer) property, corroborated by *Rasa Tarangini* for its efficacy in 80+ disorders.



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## Advantages and Physicochemical Properties

From *Ayurveda Prakasha* (4/10-12):

- **Rapid Action:** Disintegrates in 2-3 minutes in GIT fluids.
- **Stability:** Resists putrefaction; shelf-life >10 years.
- **Palatability:** Masked metallic taste via herbal Bhavana.
- **Bioavailability:** Enhanced by sulfur-mercury chelation, preventing renal toxicity.

These align with principles of "Rasa Paripaka" (complete digestion of minerals).

## Safety and Toxicity Considerations

Classical authors mandate Shodhana to avert "Rasa Pisachila" (mercurial poisoning). *Rasa Tarangini* (13/5-9) lists Aparipakwa signs (tremors, anaemia) and antidotes like Balachaturbhadra churna. Proper Mardana ensures "Bhasma Sadhana," rendering it non-toxic.

## Discussion

Parpati Kalpana exemplifies Ayurveda's nanoscale pharmaceuticals predating modern nanotechnology. Texts like *Rasa Tarangini* provide empirical validation through Yantra-based standardization, bridging ancient wisdom with evidence-based practice. Limitations include skilled labour dependency and need for GMP adaptation.

## Conclusion

Parpati Kalpana, as meticulously detailed in *Rasa Tarangini*, *Rasaratna Samuccaya*, *Rasendra Sara Sangraha*, and *Ayurveda Prakasha*, remains a cornerstone of Rasaushadhi. Its formulation ingenuity offers therapeutic precision for lifestyle disorders, warranting clinical trials for global validation.

## References

1. Sharma S. *Rasa Tarangini*. 11th ed. Varanasi: Motilal Banarsidass; 2009.
2. Vagbhata. *Rasaratna Samuccaya*. 25th ed. Varanasi: Chaukhambha Orientalia; 2015.
3. Gopal Krishna. *Rasendra Sara Sangraha*. Jamnagar: Gujarat Ayurveda University; 2000.
4. Ramchandra. *Ayurveda Prakasha*. Varanasi: Chaukhambha; 2012.