

iv. Principles of auśadha nirmāṇa, jāraṇa, māraṇa, satvapātana, nirvāpa and āvāpa

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Auśadha Nirmāṇa (Preparation of Medicines)

Raw drug collection in Ayurveda follows **strict guidelines** to ensure each plant part (or mineral) is harvested at its peak potency. The references from Caraka, Suśruta, Rāja Nighaṇṭu indicate specific **ṛtu** (season) best suited for each part:

Part	Caraka	Rāja Nighaṇṭu Suśruta	
Śākhā	Varṣā & Vasanta	—	—
Patra	Varṣā & Vasanta	Grīṣma	Varṣā
Mūla	Grīṣma, Śīśira	Śīśira	Pravṛt
Tvak	Śarat	—	Śarat
Kandha	Śarat	Hemanta	—
Kṣīra	Śarat	—	Hemanta
Sara	Hemanta	—	Vasanta
Puṣpa	Yathā-kāla (flower season)	Vasanta	—
Phala	Yathā-kāla	—	Grīṣma
Pañcāṅga	—	Śarat	—

Additional Notes:

- **Suśruta** states sowmya dravyas in sowmya ṛtu & agneya dravyas in agneya ṛtu.
- For *kṣīra*, *mutra*, *purīṣa*, collect after *āhāra* is jīrṇa.
- Vamana dravyas from agni-ākāśa-vāyu predominant soils, Virecana dravyas from pṛthvī-ambu soils.
- Some dravyas used after 1 year: **guda**, **ghṛta**, **kṣoudra**, **dhānya**, **pippalī**, **vidaṅga**.

Preparation of Medicines: General Outline

- Technology in Making Formulations**
 - **Storage:** maintain correct container & dryness to preserve potency.
 - **Shelf-life:** each dosage form has a known “saveeryatā” (potency duration).
- Parts Collected (summary)**
 - Sowing or collecting times often revolve around maximizing the active phytoconstituents in that plant part.
- Pañcavidha Kaṣāya Kalpanā**
 - **Swarasa** (juice by grinding & squeezing).
 - **Kalka** (paste from grinding).
 - **Kwātha** (decoction: 1 part dravya in 16 parts water, reduced to 1/4).
 - **Hima** (cold infusion).
 - **Phāṇṭa** (hot infusion).
- Other Forms**
 - **Cūrṇa**, **Vaṭī**, **Avaleha**, **Sneha Kalpanā** (**Ghṛta**, **Taila**), **Sandhāna Kalpanā** (**Āsava**, **Ariṣṭa**), **Pathya Kalpanā** (dietary forms like *mandā*, *peyā*, *yūṣā*, *vilepī*, etc.).

Shelf Life (Sāveeryatā Avadhi)

Name of the Kalpanā	Shelf life
Pañcavidha Kaṣāya Kalpanā	Immediate
Dadhi, Pānaka, Peya, Māṇḍa, Māṃsa rasa, etc.	1 day (some texts mention Lakṣā rasa 7 days)
Śākṭu	1 month
Malahāra, Cūrṇa	2 months



Khanda Kalpanā	1–4 months
Aścyotana, Dhūpa Kalpanā	6 months
Kṣāra sūtra	4–6 months
Arka	3–6 months or 1 year
Māṣī Kalpanā, Añjana, Lavana kalpanā, etc.	1 year
Ghṛta, Taila	16 months (some references mention 4 months)
Āsava, Ariṣṭa, Bhasma, Rasauśadhis	Improves over time (no strict expiry)

Jāraṇa

“जारणा हि नाम गालन-पातन-व्यतिरिक्तेण ग्रस्त घन-हेमादि-रसस्य पूर्वावस्था प्रतिपन्नत्वम् । (आ.प्र. 1/107)”

(Meaning: Jāraṇa is a specialized process distinct from simple melting/distillation, in which mercury ‘digests’ or envelops metals like gold but retains its original form and weight.)

1. Significance

- Mercury “swallows” or “assimilates” metals (e.g., gold, silver), forging synergy for advanced rasāyana or potential transmutation.
- Ensures no net weight change of mercury itself, indicating successful assimilation.

2. Prerequisite

- Often Gandhaka jāraṇa is done first, preparing mercury to integrate other metals sequentially (abhraka, naga, vanga, etc.).

3. Types

- Bāla, Yuva, Vṛddha**: Variation in how much metal is introduced relative to mercury.
- Bhūcārī** vs. **Khecārī**: Different operational environment or apparatus.

4. Procedure

- Typically uses special yantras (Kacchapa Yantra).
- Balanced heat, repeated trituration, or layering with supporting dravyas ensures stable assimilation of metal in mercury.

Māraṇa (Bhasmīkaraṇa / Incineration)

“शोधितान् लोहादीन् विमर्दय स्वरसादिभिः,
अग्निसंयोगतो भस्मीकरणं मारणं स्मृतम् ।”

(Meaning: “Māraṇa is incineration: purified metals/minerals, thoroughly ground with herbal juices, then exposed to fire, yielding bhasma.”)

1. Importance of Māraṇa

- Transforms metals/minerals into a fine, non-toxic **bhasma** easily assimilated by the human body.
- Bhasma tested for classical yardsticks (rekhāpūrṇa, varṭi tests, etc.) ensuring safe ingestion.

2. Methodologies

- Agnipāka**: employing various intensities of fire (puṭa)—laghu, madhyama, tīkṣṇa.
- Bhānupāka**: Sun-based mild heat, used when minimal heat is needed.
- Kupipāka**: Mercury-sulfur preparations in closed flasks (kupī), producing substances like Rasasindūra or Makaradhvaja with potent rasāyana attributes.

3. Outcome

- Freed from heavy-metal toxicity, the resultant bhasma is considered therapeutic, e.g., svarṇa bhasma, abhraka bhasma.

Sātva-pātana

“क्षाराम्लद्रावकैर्युक्तं ध्यातमाकारकोष्ठके ।

यस्ततो निर्गतः सारः सत्वमित्यभिधीयते ॥” (R.Cu. 4/38)

(Meaning: “When the ore is combined with kshāra/amla dravakas and heated in a furnace (ākāra koṣṭha), the extracted essence is known as sātva.”)



1. Concept

- Extracting the pure metallic essence (sātva) from an ore or compound.
- Typically involves fluxes (like borax) and repeated high-temperature cycles.

2. Classification

- *Dhātu-rūpa sātva* (metals like iron, copper, abhraka satva).
- *Adhātu-rūpa sātva* (non-metal ore like orpiment, etc.).
- *Nagarjuna* credited with early references to sātva extraction processes.

3. Yantras and Dravyas

- Common apparatus: *muṣā* (crucible), *koṣṭhi*, *patana yantra*, etc.
- Supportive agents: tankana (borax), certain acids or kshāra, reduce the melting point and assist separation.

Nirvāpa and Āvāpa

Nirvāpa (Quenching)

- **Synonyms:** *Niśeka*, *Snāpana*.
- A red-hot metal/mineral is immediately plunged into water, oils, or decoctions.
- Often modifies metal's mechanical or chemical property, removing subtle doṣas or adding beneficial transformations.

Āvāpa (Prativāpa / Acchādana)

- **Definition:** Pouring molten metal onto or into another metal/mineral, or vice versa.
- Used for partial alloy formation, doping, or surface layering, e.g., melding a base metal with a more potent alchemical substance.

Conclusion

The **principles of Auśadha Nirmāṇa** in Ayurveda unify:

1. **Raw drug collection** with seasonal appropriateness,
2. **Pharmaceutical manipulations** (kalpanā) for turning raw substances into classical forms (kwātha, cūrṇa, etc.),
3. **Rasaśāstra**-specific transformations:
 - **Jāraṇa** (mercury's assimilation of metals),
 - **Māraṇa** (incineration into bhasma),
 - **Sātva-pātana** (extracting pure essence from ore),
 - **Nirvāpa** (quenching hot metals), and
 - **Āvāpa** (pouring molten metal onto another).

Each technique ensures **safety** (removal of toxicity), **efficacy** (enhancing rasāyana or therapeutic potency), and synergy in combined formulations. This methodical approach—rooted in classical texts—underscores the sophistication of Ayurveda's pharmaco-alchemical knowledge and fosters integrative possibilities alongside modern scientific validations.