



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

Table Of Contents

Add a header to begin generating the table of contents

Auṣadha 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, Śiśira	Śiśira	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 ḛtu & agneya dravyas in agneya ḛtu.
- For *kṣīra*, *mutra*, *pūriṣa*, 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, vīdaṅga**.

Preparation of Medicines: General Outline

1. **Technology in Making Formulations**
 - **Storage:** maintain correct container & dryness to preserve potency.
 - **Shelf-life:** each dosage form has a known “sāveeryatā” (potency duration).
2. **Parts Collected (summary)**
 - Sowing or collecting times often revolve around maximizing the active phytoconstituents in that plant part.
3. **Pañcavidha Kaṣāya Kalpanā**
 - **Swarasa** (juice by grinding & squeezing).
 - **Kalka** (paste from grinding).
 - **Kwāṭha** (decoction: 1 part dravya in 16 parts water, reduced to 1/4).
 - **Hima** (cold infusion).
 - **Phāṇṭa** (hot infusion).
4. **Other Forms**
 - **Cūrṇa, Vaṭī, Avaleha, Sneha Kalpanā (Ghṛta, Taila), Sandhāna Kalpanā (Āsava, Ariṣṭa), Pathya Kalpanā** (dietary forms like mandā, peyā, yūṣā, vīlepī, 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
Māśī Kalpanā, Añjana, Lavana kalpanā, etc.	1 year
Ghṛta, Taila	16 months (some references mention 4 months)
Āsava, Ariṣṭa, Bhasma, Rasauṣadhis	Improves over time (no strict expiry)

Jāraṇa

“जारणा हि नाम गालन-पातन-व्यूतिरिक्तेण 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 (Bhasmīkarana / Incineration)

“शोधितान् लोहादीन् विमर्द्य 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 (puta)—laghu, madhyama, tīkṣṇa.
- **Bhānupāka:** Sun-based mild heat, used when minimal heat is needed.
- **Kupipākva:** Mercury-sulfur preparations in closed flasks (kupī), producing substances like Rasasindūra or Makaradvaja 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 ॥३॥” (R.Cu. 4/38)

(Meaning: “When the ore is combined with kshāra/amlā 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 Auṣadha 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.