

Maharasa

Maharasa	Synonyms	Types	Ores
Abhraka (mica) RD- 3 Hardness-2.3 (Hardness on Mohs scale)	Anantha patra, kha, ambara, vajra , bahupatra, ghana	*4. Acc to form & behaviour towards heat:- pinaka, Naga, manduka, vajra Pinaka—constipation Naga-----kushta, bhagandhara Manduka -----asmari Vajra----no change when heated:- Best:- useful in many diseases *4-swetha(muscovite), peetha(phlogopite), raktha (lepidolite), Krishna (biotite)-sreshtam – Koti koti gunadhikam *2- Dakshina sailotha-heena, Uthara sailotha- uthama *3 – Hima (Uttama), Purva (Madhyama), Dakshina(adhama) (RT)	Biotite(black) Muscovite(white) Paragonite (White) Phlogopite(yellow) Lepidolite(red)
Vaikrantha RD- 3 to 3.2 Hd- 7.7	Kuvajra, churna vajraka, kshudrakulisa, ksuvu, vikrantha, jirna vajraka	8 swetha, raktha, peetha, neela, paravatha, syava, krushna, karbura 7 Rasarnava & Rasamanjari – except Karbura	<u>Tourmaline</u> Fluorspar
Makshika RD—5 Hd—6	Swarna makshika-madhu dhathu, suvarna, tapya, tapeeja, hemamakshika, Tamra gandhayasa	*2. Swarna, tara(RRS) Madhura kanchanabhasa Kanyakubjatha (Kanpur) Swarnamakshika- thiktha madhura Tara:- Amla kashaya madhura *3- Swarna, Rajatha, kamsya	Swarna makshika- <u>chalcopryite</u> - (CuFe S ₂)/ Cu ₂ SFe ₂ S ₃ , Cu – 35%, Fe - 30%, S – 35%. Rajatha makshika— ironpyrite(Fe ₂ S ₃), kamsya makshika- iron pyrite
Vimala 5.2—rd Hd—6.2	No synonyms	3, Hema vimala, Tara vimala, kamsyavimala- medicinal (RRS) 3.Hema, thaara & Lohitha vimala- medicinal (Rasrnava)	Iron pyrite---Fe ₂ S ₃
Adrija- Asphaltum or Black Bitumen	Athithi, girijatu, adrija, amsasara, saileya, sailodbhava, siladhathu	2- karpura (oosharodbhava- KNO ₃) & gomootra (achalodbhavam)(RRS) 2. Rasarnava:- Pathitha silajathu (gomootra) & Apathitha silajathu (karpooora) Gomootra-1.satwa,2.nisatwa Based on metallic content:- RRS-3- Swarna, Roupya & Tamra Charaka-4 Swarna garbha, Rajatha garbha, Tamra garbha, lohagarbha Susrutha & AH, Rasachinthamani, Rasakamadhenu -6----above 4+Naga, Vanga	Black bitumen

Sasyakam	Thuthaka, mayuraka. Tamragarbha, sikhigreeva, amruthasanga, vithunnaka, kamsyaneela, harithasma	2- swabhavaja - Sasyaka is ghanija natural but kruthrima - thutha is artificial 2. as per colour- raktha and kalika (avara)	Bornite— Cu_5FeS_4 or Thutha - Blue vitriole($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$)
Chapala (Bismuth)		4- swetha (native bismuth), goura (bismuth oxide), aruna & krushna (bismuth sulphide)	Bismuth or Selenium
Rasaka ZnO	Gobhatta, tutha, Yasadakarana, ksitikitta, kharpara, netrarogari, Tamra ranjaka, ritikitta (Cu+Zn)	3- mruthikabha - oxide form- Utham, Gudabha - sulphide- madhyama, pashanabha - carbonate – adhama (Rasarnava) 2- dardura (Sadala used in satwa pathan), karavellaka (used for medicinal purpose)(RRS) 2- Sadala, Nirdala (RT)	Calamine (ZnCO_3), Smithsonite

Maharasa	Sodhana	Marana	Dose	Yogas
Abhraka	Prathaptham saphavaarani.... Kanjika, triphala, gomootra, godugdha	RRS:- with peetha , amalaka, soubhagya- 6 puta- sindurabham bhasma Dhanyabha marana:- Kasamarda swarasa+eranda patraswarasa+vatapatra+va tankura swarasa-bhavana, gajaputa-10(RRS)	1-2 ratti	Gagana parpati, Agnikumara rasa, Nrupathi vallabha rasa, Vijaya parpati, purna Chandra rasa
Vaikranta	Kulathakwatha swedana	Bhavana with equal Gandhaka & nimbuka+nimbu swarasa--- ---8 gajaputa or 21 times in Haya mootra(aswa)	1\24 to 1\12 1/24 to 1/11 (RT)	Ratnagiri rasa, mootrakruchranthaka rasa
Makshika	Swedana in eranda or lugambu, kadlikanda toya, taptha and kshiptha in varakwatha	Bhavana in Gandhaka+nimbu rasa- panchakroda puta (5 varaha puta)-RRS	1\2 to 1 1-2 ratti	Grahani kapata rasa, Chandraprabha vati, Jayamangala rasa, Sarveswara parpati
Vimala	Swedana in adarusha rasa	Gandhaka+nimbu rasa— bhavana---10 puta	1 -2 ratti	Kshayakesari rasa, Madanasanjivani rasa, Navaratnaraja mriganka rasa, Rasendracudamani rasa
Adrija	Abhyanthara sodhana: Dhoutha in kshara, amla,	Bhavana in Gandhaka+manahsila+talak	Charaka- (1pala/1/2	Agnimukha loha, Arogyavardhini vati,

	and gojala. Swedana in kshara amla and guggulu 2 methods for Bahya sodhan:- Sooryathapi silajathu sodhana: by keeping in sunlight Agni thapi:- by using mrudwagni	a+nimburasa (mathulunga ras) ----Kapotha puta--- 8vanopala	pala,1/4 pala)& duration is 7weeks, 3weeks and 1 week. pravara— 4thola to 7 saptha, madhyam a-2—3, Avara-1--- 1, Bhasma matra:- 2-8 ratti	Chandraprabha vati, Sivagutika, Meghanatha rasa, Purnachandra rasa, Rasendravati, Yogaraja ras
Sasyakam	Triturated with Nimbu swarasa, Bhavana with rakthavarga (khadira,manjista, laksha, kusumbha etc.) 7 times, sweda in go,mahisha and ajamootra, put in sneha dravya for 7 days	Bhavana with Gandhaka+tankana+nimbu rasa---kukkutaputa or laghu puta	1\8 to 1\4	Jatyadi ghritha, Kanaka Sundara rasa, Varisoshana rasa, Badavanala rasa, Tuthamrita malaharam, Jatyadi tailam.
Chapalam	Bhavana with jambeera, karkotaka and sringabera rasa	Marana by Girimasthaka+ nirgundi rasa+ vaalukaputa Or Sudha gandhaka and Nimbu swaraas		
Rasaka	Swedana in katukalabu rasa, quenching in Bijapurarasa Naramootra/ aswamootra or Takra or Kanji Or Bhavana with Nimburasa	Rasaka + Harithala / Rasaka + equal sudha Parada with Kumari swarasa+ vaaluka yantra-rakthavarna rasaka bhasma	1-2 ratti ½ -2 ratti (RT)	Kshayakesari rasa, Lakshmivilasaras, Pradaranthaka ras, Teekshnadi vati, Ratnaprabhavati, Somanadha ras, Mahajwarankusa rasa, Kasturi bhairava rasa

Abhraka

- Gouriteja - VP kshayaghnam, akapham, Prajnabodhi, sutendrabandhi
- Satwapatanam – Ksharamla dravakair yuktam. Abhraka + 1/4th Tankana + Musali rasa in tiksnagni. Satwam is Aluminium.
- Amriteekaranam (Vaisista dosa nivaranam) is mentioned for Abhraka & Tamra. Lohit
- Abhraka 10 parts, Triphala kwatha -16 parts, Goghrita – 8 parts.
- Divyabhra rasayan – 1 vallam
- Sataputa & Sahasraputa – Rasayana

Vaikranta

- Astras astaphalaka shadkona
- Bhasma – pink colour
- Shadrasam. Vikritayanti lohani (cutting metals)
- Red & Paravatha chavi – all sidhi
- Athi vrishya, vishaghna

Makshika

- Madhave masi drishyate
- Karshe kanakvat ghristam hema makshikam
- Included in Upadhatu varga (RT)
- Tamra tulya satwam – Gunja beeja samachayam
- Ghriste karae kalimam
- Antidote – Dadima kwatha, Kulatha kwatha

Vimala

- Varthula kona samyukta
- Athirasayana
- Fools gold

Adrija

- Black bitumen or Asphaltum punjabinum
- Odour like cow's urine due to the presence of Hipuric acid
- Composition % - Minerals 38.65, Org substances 36.2, Water 9.5, nitrogenous subst 1.3, lime 7.8, mica 1.35
- Vahnou ksiptam bhavet yad tad lingakaram adhoomakam
- Karpooa – sikatakaram
- Lohasannibha satwam

Sasyakam

- Listed in WHO ATC codes V03AB20 as antidotes
- Asudha causes vanti bhranti
- Lekhana, bhedana, krimighnam, KP haram, switrapaham
- Antidote – Jambeera rasa or Laja mandam (3 days)
- Satwapatanam – Sasyaka + Tankana + Nimbu rasa
- Satwa is copper (Indragopakriti)

Chapala

- Vangavat dravate, Lakshavat seeghra dravo (Selenium Melting point – 220 deg C)
- Rasaraja sahaya
- Rasabandha vidhayaka
- Sphatichaya, Shadasra (six angles)
- Said as Eswara nasarandhra mala

Rasaka/Kharpara

- Netraroga kshayaghnam
- Satwa is Yasada

Uparasa

Uparasa	Synonyms	Types
1. Gandhaka Sulphur RD—2.06 HD – 1.5 to 2.5	Bali, Saungandhika, Pamari, Balivasa, Sulvari, Kusthari, Navanita, Rasagandha, Lelitaka, Putigandha, Gandhapasana, Keedaghna, Daityendra	(2) Amalasara (int. use), Pinda (ext. use) (3) Sukacancunibha, Pitavarna, Suklavarna (R.R.S) (4) Sveta (adhama) loha marana and lepanartham- anti fungal), Pita (Sookapicha or amalasaara Gandhaka- madhyama- dehaloha sidhi), Rakta (uthama – loha sidhi), Krisna (rare- jaramruthyu hara) (RRS)
2. Gairika (Red Ochre)- Fe ₂ O ₃ Haematite	Raktadhatu, Lohadhatu, Gaireyam, Girijam.	(2) Swarnagairika Pasanagairika (3) Raktham , Hemam, Dhavalam (Rasarnava)
3. Kasisa (Green vitriol)	Pamsuka, Valuka, Khaga, Khecara,	(2) Valuka kasisa, Puspa kasisa (RRS) (3) Sukla, Pita, Krsna.

	Ayogandhasma sambhuta, Annabhedi,	(4) Sukla, Pita, Krsna, Harita. (4) Sukla, Krsna, Pita, Rakta. (anandhakandham)
4. Kanksi (alum)	Tuvari, Subra, Rangada, Sphatika, Drdha ranga, Saurastri.	(2) Phataki (eeshad peetha), Phullika(subravarna) (RRS,Rasendra chudamani) (2) Sveta (Khanda rupa) Krsna (Curna rupa) (Rasarnava)
5. Haratala (orpiment)- As_2S_3	Natabhusana, Pinjara, Ala, Karbura, Vamsapatraka, Natamandanaka, Mallagandhaja, Lomahrta, Romahrta, Vangari, karchura, Godanta, Kharjura, Vidalaka, Citragandhaja, Pitanakha, Sailusa bhusana.	(2) Pinda talakam, Patra talakam (RRS) (2) Padalathaalam & Pindathaalam (adhamam) in Rasarnava
6. Manasila (Realgar)- As_2S_2	Kunati, Manogupta, Manohva, Nagamata, Gola, Nepali, Kalyanika, Kulati, RasaGandhaka, Rasanetrika, Rogasila.	(3) Syamangi {syama raktha sagoura cha bharadya} Kanaviraka {thejaswini cha nirgoura Tamrabha} Khandaka {choorni bhutha athi rakthangi sa bhara}
7. Anjanam (collyrium)- Antimony and Lead compound	Mecaka, Locaka.	(5) Sauviranjana – Sb_2S_3 Rasanjanam – Extract daruharidra Srotonjanam – Sb_2S_3 Puspanjanam – ZnO Nilanjanam – PbS (6) (Raja nighantu) Above 5+ Kulathanjanam
8. Kankushtam (Rhubarb) Gambose tree	Kakakushtam, Varanga, rechaka, hemavathi, Kolavaluka.	(2) Nalika (grahya), Renuka(agrahya) (2) Raktakalaka, Andaka.

Uparasa	Ores	Sodhana	Dose	Yoga
Gandhaka (brimstone)	Iron pyrite ($Fe_2 S_3$) Galena (PbS) Realgar(As_2S_2) Cinnabar(HgS) Kiserite($FeSO_4 . 7 H_2O$) Orpiment (As_2S_3) Copper pyrite (CU_2S)	Swedana in godugdha, bharjana in goghrutha / draavitho brungarasair kshiptho visudhyathi (RRS)	1 to 8 ratti	Gandhakavati, Makaradhwaja, Rasaparpati, Rasasindura, many parpatis like Panchamrutha parpati etc.
Gairika (Ochre)	Haematite (Fe_2O_3)	Godugdha bhavana or Bharjana in go ghrita	2-4 ratti	Jatyadi tailam, Arimedadi tailam, Rasnadi churna Pushyanuga churna

	Red oxide of iron			Sahakara vati, Laghu sutasekhara rasa
Kasisa	Ferrous sulphate (FeSO ₄ .7 H ₂ O)	Sodhana - Bhringaraja swarasa. Or Panchapitta & Stree rajas (RRS) Marana with Kanji, Nimbu swarasa – laghu puta or bhavana with Snuhi patra swarasa & laghu puta. Putra continued till the amlarasa is lost.	1½ to 2 ratti	Rajapravarthini vati, Sithapithabhanjana rasa, Lauha rasayana, Switrari rasa, Hingwadi taila, Kumarika vati
Kankshi(alum) K ₂ SO ₄ Al ₂ (SO ₄) ₃ . 24 H ₂ O		Immersed in Kanjika for 3 days and dried. (RT)	2ratti	Eladimantha, Vishakalpa, Garudanjana, Sankha dravaka, Swetha parpati
Harithala(orpiment) Arsenic trisulphideAS ₂ S ₃		Swedana in kushmanda rasa, thila ksharodaka, triphalakwatha – 1 yaama swedana Marana – palasa mula (brahmamula)kwatha, mahisha mutra – laghu puta	1/8 to 1/4 or ¼ to ½ (RT)	Sameerapannaga rasa, nithyandarasa, rasamanikya, sarveswari ras, vidhyadhara ras, vethal ras
Manahsila (As ₂ S ₂) realgar		Sodhana - bhavana in agasthya patra, ardraka swarasa, sudha jala for 7 days. No maarana	1/8 to 1/4 ratti, 1/24 to 1/16 (RT) 1/32 to 1/16 Ratti	Kalanala rasa, marichyadi tailam, Trailokyachinthamani rasa, Swasakuthara rasa, Ksayakesari rasa, Trailokyachintamani rasa
Anjanam		Bhringaraja swarasa Satwapathana similar to Manahsila Srothoanjana similar to Rajavartha		
Kankushtam <i>Garcinia morella</i> (Mysore gambose tree)		Shunthi kashaya bhavana- 3 times No maarana and satwapathan	1 yava	Dhanwantharam ghruta, Sothodarari lauham, Udavartha hara ghruta, Mrutha sanjeevani ras

Gandhaka

- Atomic number 16, Atomic mass 32
- Sukapicha samachaya navaneetha samaprabha
- MP – 112 deg C, BP – 444 deg C
- Marana & Satwapatana not required
- Atirasayana, KTK rasa, Usna virya, Madhura vipaka (RCu), Katu (Ay.Pr.)
- Gara hara, krimi hara, Amonmochana soshana, Kandu kushta visarpa dadru hara
- Sootendra veeryaprada
- Gandhaka druti
- Gandhaka rasayana, Gandhakadya malahara
- Antidote – warm milk with ghee
- Pathya – jangala mamsa, chhagala mamsa

Gairika

- Marana & Satwapatana not required as per Nandhi
- Satwapatana similar to Rajavarta (RRS)
- Madhura, Netrya, Hidhma, Vami, Vishagham – Swarna gairika (RRS)

Kasisa

- Amloshnam, tiktam, tuvaram
- Ink preparation in ancient India
- Valuka – ksharamla agarudhumabha, vishapaha, switraghnam, kesharanjanam; Pushpa – atiprasastam, kashayamlam, netrya, switrakshayagham, kacharanjanam
- Kasisadrava used in Gudabhramsa, Visarpa etc.

Kamkshi

- Phataki – sarva kushtaghni, eshat pita
- Phullika – snigdha, amla, nirbhara, subhra varna
- Soluble in water
- Switrapaham netrahita, 3Dosha santhi, Parada jarini
- Reduce bleeding, nose bleeds, haemorrhoids
- Ratimandira sankochakarini
- Satwpatana – ksharamlair mardita

Haritala

- Patratata – bahupatram rasayanam (RRS)
- Pindatata – Stree pushpaharanam
- Bhasma – cures Phirangam, VR, vicharchika, Apasmara, Nadi vranam, Bhagandaram
- Antidote – Kusmanda swarasa with sugar or jeeraka churna (3 times a day)
- Haritala bhasma test – when put on fire if it does not produce smoke, it is properly prepared bhasma.
- Used as hair remover
- Katu Kashaya rasa, Usna, Snigdha.
- Satwapatana – kulatha, tankana, mahishajya & madhu. Another method in Kachakupi
- Used for Rasamanikya nirmana

Manasila

- Sarvarasayanagrya
- Tiktakatusna, KV hara
- Kasa kshaya harini
- Manasiladi dhooma varti, Chukkumtipalyadi gulika
- Improperly purified causes asmari & murtrakrichra
- Antidote – Milk with honey for 3 days.

Anjana

- Souviranjana – smoky or white, Rasanjana – Yellow, Srotoanjana – anthill appearance, blue, Pushpanjana – white, Nilanjana – blue
- **Sodhana**
- Souvira – Triphala kwatha or Bhringaraja rasa
- Nila – Nimbu swarasa
- Pushpa – not required (artificially prepared in lab)
- Rasa – swarasa/kwatha of anyone of the Suryavartadi yoga dravya
- Rasanjana (VP haram) used in Pushyanuga churna, Asoka ghritha

Kankushtam

- Controversial drug (RRS)
- Himavat pad sikharae kankushtamupajayate
- Sadyojata danti varcha
- Vahaanam nalam (umbilical cord of new born horse)
- Antidote – Babbulamula kwatha+jeeraka churna and tankana.

Sadharana rasa

Sadharana rasa	Synonyms	Types
Kampillaka(kamila) <i>Mallotus philippinesis</i> - plant Phalarajas	Karaskara, rakthanga, rechana, rochana, Chandra, rakthachurnaka	

Gouripashana (arsenous trioxide) Illustrative is the roasting of orpiment. $2 \text{As}_2\text{S}_3 + 9 \text{O}_2 \longrightarrow 2 \text{As}_2\text{O}_3 + 6 \text{SO}_2$	Phenasma , mallaka, somala, sankhavisha, trikati, vyakthadeha, shankamusha, mushaka, darumoosha, darumocha, hatachurnaka, sambala, aghupashana	2- Sweta, Raktha 2-Kruthrima, Ghanija 2- Ullipashana, Doddipashana 3- Pita, Vikata, Hathachurnaka 3- Sphatikabha(best), Sankhabha (better), Haridrabha / Dadimabham(good) (RRS)
Navasaram (ammonium chloride)	Ishtika lavana, kittasara, cullikalavana, narasara, vidalavana	Khanija Sahaja:- Ishtika lavana, kittasara, cullikalavana, narasara
Kaparda(cowry)- Calcium carbonate	Varatika, balakrdanaka, charachara, Raktharenu	3types – 1 ½ nishka(uthama) 1nishka(madhyama), ¾ nishka(adhama)
Girisindura (red oxide of Hg)	Mahila- bala- bhushana, mangalya, Nagagarbha, srungara bhushana	2- rasagarbha (HgO) Nagagarbha (Nagasindura) (PbO) - artificial 2-Girisindura (swabhavaja) Naagasindura (kruthrima)
Agnijara(amber)	Ambara, tundamaya, jarayu, agnigarbha, badavagni mala, agniriyasa, arunodbhava, sindhuplava, sindhupala	
Hingula (Cinnabar) Mercuric sulphide - HgS	Darada, churnaParada, mlecha, chitranga, lohagna, rasodbhava, ingilika	2- Sukatunda, Hamsapata (RRS) 2- Swabhavikam, kruthrimam 3- sukatunda (sa peetham), hamsapata(japapushpavat), charmara(haritharaktha) (Ay. praksha)
Mruddara srunga (litharge - PbO)	Bodara srunga, seesa satwa, murda sankaka	2- sveta, svetapita Khanija, Kritrima

Sadarana rasa	Sodhana	Dose	Yogam
Kampillaka (malotus philippensis)	swedana in haritaki kashaya bhavana in jambira swarasa Put in water and collect those in surface Maarana:- not required	1 masha	Krumighataki gutika Mahakalka rasa, Bindu ghrita, Patoladi and Syamadi churna, Triphaladi churna, Ganagana garbhavati
Gauripashana- arsenic oxide (As_2O_3)	Swedana in karavella swarasa, Godugdha Swedana in Meghanatha rasam (FATAL DOSE:-1Ratti) Satwathan:- Thaalavat	1\120 to 1\30 ratti	Sameerapannaga rasa, Mallasindura, Chandeswara ras, badawanala ras, Suchikabharana rasa, Chukkumtipalyadi gulika
Navasaara (ammonium chloride NH_4Cl)	mix in water –make dry or oordhapathana by Dhamaru yantra	2- 8 ratti Navasara satwa – 1-5 ratti	Ksharaparpati (Sweta parpati), Rohithakyadi churna, Dravakarasa, sankhadravaka
Kaparda	Kanjika swedana(1 yaama) Maarana:- heat and powder (Gajaputa)	2-4 ratti	Pravala panchamrutha rasa, Lokanatha rasa, Grahani kapata rasa, Agnikumara rasa, Yogeswara ras,

			Bhaskara ras, Lavangadi vati
Agnijara (amber)-used in tetanus		1\4 to 1\2 ratti / 1/8 to 1\4 ratti	Jaharamohra vati, Dhatri rasayana, Brihat Vata Chinthamani Ras, Ratneswara ras
Girisindura	7 times bhavana in nimbu swarasa	1-2 grain	Sinduradya malahara Sinduradya tailam
Hingula (cinnabar)- red sulphide of mercury (HgS)	7 times bhavana in nimbu swarasa or ardraka swarasa or lakucha swarasa No maarana But satwapathana is there	1 gunja	Hinguleswara rasa, Anandabhairava rasa, Mahakaleswara, Kamagni sandeepana, Mritha sanjeevani, Jwara murari, Sarveswara ras
Mruddara srunga (litharge-PbO)	3 days bhavana in matulunga swarasa or ardraka swarasa		

* Common drug for sadharana rasa purification—ardraka and mathulunga

Kampillaka

Grahya – Ishtikachurna sankasam, atirechana (RRS)
Adhmana vibandhahari, Gadapahari
Soluble in alcohol, golden red dye used to colour silk & wool.

Gouripashana

Marana – bhavana with Lajavanthi kalka or snuhi swarasa
Phenasma – first mentioned by Susruta (dhatu visha varga)
Rasabandhakara snigdho dosaghno rasa viryakrit (RRS)
KV samanam, Vrischikadi vishapranut.
Cures swasa, kustam sleepada, phiranga, hritsula, atisaram (RT)
Trisenox (trade name) – chemotherapeutic agent used to treat acute promyelocytic leukemia.
Antidote – Milk+Ghee+Sugar or Butter+Sugar+Tilachurna or Juice of bitter gourd or Tankana jala.

Navasagara

Rasendra jaranam, Loha dravana, Jadaragni krit
Bhukta mamsadi jarana
Sal ammoniac – natural form
Vrischika vishaghna

Kapardam

Peetabha granthika prushtae deergha vrutha varatika (RRS) – Grahya lakshana
Parinamadi soolaghni
Rasendra jaranae
Peeta, sweta & dhoosara - types
Calcium carbonate is an antidote to poisoning by minerals.

Agnijara

Agninakra niryasa
Dhanurvati vatanut
Vardhano rasaviryasya

Girisinduram

Rasabandhanam agrimam, 3D samana
Netryam
Sindooradyam malaharam – Pooyanirharana param

Hingulam

Sweta rakta pravalabho
Jaranaya ati sasyate
Ati rasayana
Japakusuma varnabham

Hingulotha parada – peshanam with Paribhadra rasa or Nimbu rasa or

Collected in the upper part of Patana yantra or triturated with nimbu rasa, ardraka or lakucha rasa – by adhapatana yantra or urdhwapatana yatra.

Vidyadhara yantra is also used.

It can be used without ashtasamskara

Kha – Abhraka
Khaga – Kasisa
Paksi – Parada

Rechaka – Kankushta
Rechana – Kampillaka
Vangari – Haritala

Mangalya - Girisindura
Maangalya - Swarna
Sringari – Manikya

Dhatu Varga

Dhatu	Synonyms	Type
Swarna	kanaka, kanchana, hema, agniveerya, mangalya, lohavara, tapaneeya, bhaswara agnidipika, camikara, jambunadha	3- rasarnava- rasaja, ksh etraja, lohasamskaraja 5- Nagarjuna- prakrutha, sahaja, agnisambhavam, ghanija, rasaviddha (rasendravedha sambhutham)
Rajatha	Chandralauha (Chandras semen), mahasubha, darvanaka, soudha, tara, roupika,	3- sahaja, ghanija, kruthrimaja
Tamra	Trayambaka, nepaliya, ravipriya, sooryalauha, lohithayasa, sulbam	3- sahaja, ghanija, krutrima 2- mlecha, nepala
Loha	Ayasa, kalayasa, teekshnaka, sastraka	3- munda, teekshana, kantha (RRS)
Munda-3- mrudu(best), kundam, kadaram 3. acc to colour Peetha- brahma- rasavedha Krushna- Vishnu- sreshta rasayana Raktha – siv- in rasabandhana	Teekshna-6-ghara, sara, hrunnala, taravatta, vajira, kala lauha(best) 6 type as per faces According to sparsa vedha:- ekathomuga(adhama), 2/3 faces- madhyama, 4/5 faces- sreshta Sarvathomuga-- utham	Kantham- 5 as per magnetic property- bhamaka(adhama), chumbhaka, karshaka(uthama), dravaka(sarvothama), romaka
Vanga (Sn)	kutula, kurupya, trapusa, putigandha, ranga, sakralauha	2- Ghura(pure) Misraka (syama subhraka)
Naga (Pb)	kuranga, kuvanga, bujanga, krushnayasi, sindurakaraka, seesam, seesakam, bhogeshta, suvarnari, yakshma dathu, yavaneshta, ranjaka	2- kumara (for rasakarma)- sreshtam samala
Yasada (Zn)	Gharparasatwa, rasaka satwa, reethihethu, Tamraranjaka, netra rogari	
Pithala (brass)	Kapi lauha, kshudra suvarna, ritika, pingala, aara, aarakuta, pitaloha	2- ritika, kakathundika
Kamsya (bronze)	Ghoshaka, deepthaka, dipthopala, vahnilauha, kamsaka, saourashtraja	2- Pushpa (sreshta) Tailaka(heena)
Varthaloha (German silver)	Pancharasa, panchalauha, bhartha, varthula, vartha	No types

Dhathu	Sodhana	Marana
Swarna	Red hot dipped 7 times in taila, takra, gomootra, aranala, kulatha.	Mardana with Parada- 3 days, mix with hingula,

	Spl:- Swarna plates of 1karsha size+ lepana with saidhava and nimbura. Also with Panchamrittika- heat in saravasamputa for ½ prahara(3/4hr)	Gandhaka manhsila and navasara- 15 kukkutaputa Or:- take kandakabhedyani Swarnapatra+ lepana with rasabhasma and Lungambhu – do 10 Kukkudaputa
Rajatha	1.Dipped 3 times in agasthya patra rasa 2.Use Naga tankana and heat+and pour in Jyothishmathi taila 3 times (RRS)	1.Coated with kajjali and ghruthakumari- laghuputa 2. Makshika churna + mathulungarasa- 30 kukkudaputa (RRS)
Tamra	1. Dipped 7 times in taila... 2. Lepana with nimbu ambu + patu – heat—8 times nimajjana in Nirgundi swarasa (RRS)	Kajjali and nimba rasa- 3 gajaputa (RRS)
Lauha	1. Dipped 7 times in taila... 2. Dip 7 in Triphala kwatha or gomutra- this cures Girija dosha Dipped in Samudra lavana & Triphala kwatha	Triphalakhwatha bhavana, 21 puta. Punarnava swarasa bhavana- 30 gajaputa Kantha lauha visesha marana:- naramootrabhavana and 21 times sarava samputa
Naga	7 times nishchana in choornodaka	Nimbu swarasa bhavana kukutaputa Or by using manahsila and arka ksheera(RRS)
Vanga Saamanya:- dip in nirgundi swarasa for 7 days or add nirgundi churna	7 times nishchana in choornodaka / Misraka sodhana:- molten Vanga is poured 7 times in to the curd with punarnava and kaanjiram	Ghruthakumari swarasa bhavana, kukkutaputa Ghuravanga sodhana:- molted ghuraVanga is poured 3 times into mixture of nisa and nirgundi(RRS)
Yasada	7 times nishchana in choornodaka or 21 times nishchana in go dugdha	Mardana with Parada and nimbu swarasa, mardhana with Gandhaka and kajjali – varaha puta
Pithala	Heat and dip 5 times in haridra churna and nirgundi swarasa	Pithala lepana with rasa Gandhaka kajjali and nimbu rasa -3 puta
Kaamsya	Heat and dip in gomootra (RRS)	Use Gandhaka and Harithala and Gaja puta
Vartha lauha	Dip in Ajamutra or hayamutra 7 times	Gandhaka and Harithala and puta

Dhathu	Ores	Dose	Yoga
Swarna	Sylvanite (AuAgTe ₂) Calaverite (AuTe ₂) Native gold (Au)	1¼ to 1½ ratti (Swarna) Bhasma matra:- 1/8 (15.6 mg) to ¼ ratti (31.2 mg)	Chinthamani rasa, Chaturmukha rasa, Yogendra rasa, Brihat Vata Chinthamani rasa
Rajata	Pyrargirite (ruby silver) - (3Ag ₂ S, Sb ₂ S ₃) Cerargyrite- (horn silver) AgCl	1¼ to 1½ ratti ¼ to 1 ratti (RRS)	Vijayaparpati, indu Vati, jayamangala rasa

	Argentite- silverglans- Ag_2S Stomerite- Ag_2S Cu_2S		
Tamra	Copper pyrite- CuFeS_2 , malachite- CuCO_3 - $\text{Cu}(\text{OH})_2$, coverite- CuS , Azurite- CuCO_3 - (Cu OH) ₂ , bornite- Cu_5FeS_4 , copper glans- Cu_2S	2 valla Dose of Tamra- $\frac{1}{8}$ to 1 ratti tamra) $\frac{1}{8}$ to $\frac{1}{2}$ ratti	Hrudayarnava rasa, arogyavardhini rasa, chandramrutha rasa
Loha	Hematite- red- Fe_2O_3 , copper pyrite- Cu_2FeS_3 Grey- $2\text{Fe}_2\text{O}_3\text{H}_2\text{O}$	$\frac{1}{4}$ to 2 ratti Also Mandura bhasma	Siderite- FeCO_3 Iron pyrite- Fe_2S_3 Green vitriol- FeSO_4 $7\text{H}_2\text{O}$ Magnetite- Fe_3O_4
Naga	Galena- PbS Anglesite- PbSO_4 Lead oxide- PbO Matlochite- PbCl_2 Cerussite- PbCO_3	$\frac{1}{4}$ to 1 ratti	Manikyarasa, Trailokyachintamani rasa, Suchikabharana rasa
Vanga	Tinstone or cassiterite- SnO_2	1-2 ratti	Vasantakusumakara rasa, Somanatha rasa
Yasada	Zinc blend- ZnS , calamine- ZnCO_3 (smithsonite)	$\frac{1}{2}$ to 1 ratti(yasada)	Trivanga bhasma Silajatvadi vati
Pithala		$\frac{1}{2}$ to 1 ratti	Shadanana rasa, ratna prabha vati, megha natha rasa, Swarna sindura rasa
Kamsya		$\frac{1}{2}$ to 1 ratti	Kamsyadi varthi, kshaya kesari, lakshmi vilasa, mukthadi churna, meganatha rasa, shadaaanana, pithala rasayana
Vartha lauha		1-2 ratti	

Another common Sodhana – Rambha mula jala, Sasa rudhira (mundadi lohas)

Swarna

Atomic number – 79

Sp.gravity – 19.32

Snigdham, medhyam, visha gada haram, brimhanam vrishyamagryam.

Swarnabhasma – paramam medhyam, pumsavanopayogi.

Madhura tiktam himam guru, vidyasmritikaram, vishahari, rasayanam – Sa.Sam.

Artificial preparation mentioned by Nagarjuna.

Antidote – Pathya choornam with sita

Vilwa phala majja – only apathya during Swarna sevana (R.Cu).

Marana – Best with Parada bhasma, Madhyama – Mooli, Kanista – Gandhakadi, Durguna prada – ariloha maranam.

Swarna druti – RRS (mandukasthi etc used)

Vishanasaka guna – first mentioned by Caraka.

Garbhasthapanamuthamam

Rajata

Atomic number – 47

Sp gravity – 10.4

Vayasthapanamuthamam

Paramam lekhanam

Tuvaramla saram

Garbhasaya visodhanam

Bhramahari

Adhyapanadou suchiram ratanam yunam sisunam ca param prasastam

Tamra

Ghana aghata kshamam - Nepalam

Japakusuma samaprabham

Amritikarana – with ½ Sulphur & Panchamrita in Surana kanda (Elephant yam) – Gajaputa

Kashaya rasa madhura vipaka

Paramam lekhanam

Lauha

Atomic number – 26

Munda – 10 times better than Kittam, Teekshna 100 times better than munda, Kantha – laksha times better than Teekshna

Kanta – oil drop not spread, smell of Hingu vanishes, Bitterness lost, Milk do not spill.

Bhramaka – Eka, Dwi, Tri, Chatur, Pancha and Sarvatomukha.

Loha paka – 3 types. Bhanu, Sthali, Puta

Quantity for Puta – Min 5 palas, Max 13 palas (RT)

Lekhanam, athi netryam, Varnyam, Vrishyam, Medhyam

Mandura

Above 100 yrs – sresta, Above 70 yrs – madhyama, less than 60 yrs is useless.

Raktavridhikaram param (RT)

Naga

Metal not attacked by sulphuric acid or hydrochloric acid

Athyushnam seesakam snigdam tiktam, lekhanam, sara gunam

VK haram prameha toya doshagham deepanam ca amavatanut

Naga jarana – melt and add 1/4th Aswatha twag churna

Asudha causes – Prameha, kshaya, kamala.

Antidote – Suddha Gandhaka

Nagarasayana – 1 valla, cures 80 vata vikara

Vanga

Tin becomes a superconductor below 3.72K

Chandraloha samaprabham

Sresta, pramehaharam

Tiktoshnam, vataprakopanam

Medogham, kriminasanam

Vanga jaranam – apamarga panchanga choornam

Vangarasayanam – 4 vallam (dose). Vimsati pramehaharam

Swarnavangam – Vanga, Parada, Gandhaka, Navasara, all 1 part each – Kupipakwa vidhi (Talastha).

Pramehagham, 1-2 ratti.

Swarnavanga panchakarasayanam – sukramehaharam

Antidote – Meshasringi churna+Sita (3 days)

Yasada

Yasada jarana – melt & add ganja

Kampavata haram

Used in excessive night sweat (pravala also has same property)

Pittala

Brass – Cu+Zn – 2:1

Janthughni, yogath sa usna virya ca seethala (Reetika) (RRS)

Yakrit pleeha haram (Kakatundika)

Pittala rasayana – sweta kushta vyatha haram

Kamsya

Cu+Sn – 4:1

Drikprasadanam

Sunadam. Bhaswaram (Grahya lakshana)

Varta loha

German silver

Bell metal

Kamsya, Pittala, Tamra, Naga, loha

Himamla katukam ruksha

KP haram, krimighnam, netryam, malavisodhanam

Druta dravam mahabharam – naga
Druta dravam sagauravam – vanga
Druta dravam visphotam – munda
Druta dravam ca seethala - makshika
Bhunaga satwa, Mayurapicha satwa – Copper

Number of Lohas mentioned

Rasarnava, Veda, Goraksha, Yajnavalkya – 6
BP, Sa Sam, RT, AP, RU – 7
CS, SuS, AH, Manu – 8
RHT, RCu, RRS – 9

Colour of Dhatu bhasma

Swarna – Campakapushpa, Gairika varna
Rajata, Tamra – black
Kamsya – Dhusara
Vanga – white
Naga – Kapotha
Loha – Jambuphala
Abhraka – ishtika churna
Mandura – Rakta

Percentage of depletion

Swarna – 0, Rajata – 2, Cu – 5, Pb,Sn – 8, Fe – 10

Melting point in Deg Celsius

Au – 1064
Ag – 961
Cu – 1083
Fe – 1535
Pb – 326
Sn – 232
Zn – 419
