

Abstract

This Compilation consists of Basic Concept of Ayurveda and Dravya-Guna-Shastra and Library research of medicinal plant of Nagabala (*Grewia hirsuta*). In this compilation, morphology, distribution, properties, pharmacological Action, therapeutic uses of Nagabala and views of different classical text as well as modern books regarding Nagabala, are included.

Acknowledgement

Being a holistic system of medicine and health, Ayurveda has not restricted itself as the path, which treats diseases but being the science of life has covered all the aspects necessary to maintain health and to restore it when inflicted with a disease. There are certain rules and regulations of Ayurveda, which are nothing but guidelines, which are to be followed to remain fit, refrain from diseases and lead a healthy life.

It is immense pleasure in reading different classical texts of Ayurveda for the compilation of **Nagabala**. I found it very helpful for me, going through various books and knowing little bit more about medicinal plants; offshoot of Ayurveda, rather than before.

So, I'm much glad to respect Sir Dr. N.N. Tiwari for giving this wonderful job. His cooperation and guidance led me to complete this job. So, I am most obliged to Sir Dr. N. N. Tiwari.

Finally, I would like to be grateful to Sulochana Madam, library staffs, dear colleagues, my philosopher bro. Dr. Sanjeev Budhathoki for their kind cooperation, friend Naresh K.C. for providing his laptop (computer) and all the juniors who supported me in this job.

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Ayurveda... A Way to healthier Life

The Vedic word ayurveda has two root words--ayu and veda. Every root word in the Vedic tradition has its own definition--thus, ayu has its own definition and so does veda. Literally and concisely, ayu means "life" and ved means "science." According to this translation, ayurveda means "the science of life." But the Vedic texts expand on these definitions to offer us a more complete understanding, and our ayurvedic expert Vaidya Rama Kant Mishra has explained some of these expanded statements.

Ayu explained

What is the real meaning of ayu or life according to the fundamental principles of ayurveda? Sharirendriya sattwa atma samyogo ayuhu, goes one verse. Sharir means physical body; indriya means senses. Sattwa refers to the combination of mind and heart-overall psychological strength, and atma means soul or spirit. When all of these-body, senses, heart, mind and spirit-are in proper balance and function in a harmonious, coordinated manner, that is true life-"the living body."

Veda explained

Veda means science-not a science that changes its theories and its findings every few years but ageless, eternal knowledge built on siddhantas, fundamental unchanging principles. Veda refers to guided knowledge: it is not just theory, but also a roadmap for how to derive practical benefit from the knowledge.

A longer definition of ayurveda

Another longer definition of ayurveda goes: ayurhitahitamvyadhe nidaanamshamanam thathaa vidyate yatra vidhwadhihi tatra ayurveda uchyate. This verse takes us to a deeper level to understand what ayurveda is.

Ayurveda provides us with a complete understanding of what is life-sustaining and what is not, not just for the physical body, but also our mind, heart, senses and spirit. This includes descriptions of the kind of diet, lifestyle and behavior that is optimal for well-being, the ideal environment, and the herbal rasayanas that are good or bad for each of these aspects of health. There is great detail on each of these modalities-what to eat, when to eat and how to eat are a part of dietary recommendations, for example. The texts also include recommendations for nurturing relationships and living as part of the human community.

If an individual does not have this knowledge or has the knowledge but does not implement the knowledge, then, say the texts, the person becomes susceptible to imbalance and disorders.

When a person goes to an ayurvedic healer, the healer's first job is to find out why the person has the symptoms he or she has. Two persons can exhibit the same symptoms, but the etiological factors behind the symptoms in each case may be entirely different. The ayurvedic healer goes beyond symptoms to discover the

underlying cause of the imbalance, so that there can be ultimate resolution of the imbalance, not just an appeasement of symptoms.

Nidaanam refers to both the etiological factors behind the symptoms and the diagnosis itself. The ayurvedic diagnosis is based on etiological factors. Vaidya Mishra explains it thus: "If a fire alarm begins beeping in your home, you would try to find out from where the smoke is coming. In ayurveda, healers try to do the same thing. If a person comes to a healer saying 'I have a headache,' we do an ayurvedic pulse assessment and ask careful questions to find out the real imbalance that is creating the headaches. What is the person doing in terms of his or her diet or lifestyle to create the imbalance? What is the source of the smoke? Ayurveda does address the symptoms, but it does so by addressing the cause of the symptoms, unlike modern medicine, which sometimes pulls out the battery from the alarm to stop its beeping, and destroys Nature's signaling system in the process."

Ayurveda also discusses the ways to pacify aggravated doshas or imbalances--the tools to create balance in the imbalanced body, mind, senses or spirit.

The two objectives of Ayurveda

Ayurveda has two main objectives:

Swasthasya swaastha rakshanam, which means "keeping the healthy person healthy." Prevention is the primary and most important goal of ayurveda.

Vyadhakanam vyadhi paramokshaha, which means "for the person who does not have this knowledge of how to stay optimally healthy or does not implement the knowledge, and thus gets out of balance, ayurveda teaches that person how to get rid of the imbalance."

Ayurveda and Herbology

Ayurveda is a veda (book) of ayush (life). To lead a healthy life and to get rid of or to get cured of diseases, herbs are being used since ancient time. Each and every dravya has its own guna (property) and karma (function), by which the dravya is utilised for remedial purposes.

The science in which dravya is studied in detail is called as Dravya-guna-vigyan (Herbology). Dravya-guna-vigyan is based on the ideas of satva-raja-tama, panchmahabhootas and various experiences derived from the study of balance-imbalance of basic components of the universe.

Dravya-guna-vigyan has been formulated in context with swasthya (health) and rugna (disease). The basic ideas have been developed keeping the patient in mind. Dravya-guna-vigyan is thus a science of treatment.

The concept of herbology (dravya-guna-vigyan)

Dravya-guna-vigyan is not only a useful factor for swasthya (maintenance of health) and chikitsa (treatment) but is also the chief factor involved in various substances as well as non-substances which are instrumental in vitiating health and creating disharmony in the equilibrium of body components. The use of Dravya-guna-vigyan is necessary for restoring this equilibrium. If drugs are to be used then thorough knowledge of these is essential.

According to Vedas...

It has been seen, that mention of the use of medicinal plant is found in all the four Vedas namely Rigveda, Samaveda, Yajurveda and Atharvaveda. Ayurveda, which is a text on the preventive and curative aspects of disease, is a part of Atharvaveda.

Herbs are being used since ancient time to maintain health, to treat disease and regain the healthy state of mind and body. All the above mentioned Vedas have described herbs (medicinal plants) in different ways but the concept of pran (life) is common to all.

According to Rigveda one who possesses a variety of herbs should be called as a vaidya (Ayurvedic Physician). In Atharvaveda mainly four types of treatments have been mentioned:

- Atharvani
- Angirasi
- Daivi
- Manushi

Among these four, Manushi refers to the use of plants in its treatment.

Treatment by dravyas or herbs of plant origin is given more emphasis than by animal source. The panchabhautik composition of herbs, their rasas, vipak, veerya etc. are classified on the basis of their action. Though medicinal classification is action based, it is also done on morphological basis in relation to diet.

Herbs are used in the following forms

Formula Name	Meanings
Kashaya	Decoctions.
Churana	Powders.
Ghrut	Ghee preparation.
Ras	Mercuric preparation.
Mishra	Miscellaneous preparations
Gutika	Pills.
Avleha	Linctus (syrups).
Tail	Oil.

Lepa	External application.
Dhup	Fume, fumigation.
Aasavarishta	Tonic wines.
Dumra	Smoking.
Nasya	Nasal drops.
Anjan	Corrylim (drugs used for internal application in eyes).
Kalp	Mixture of drugs.
Guggul	Guggul, extract of gum.
Pak	Semi - solid sweet preparation.

Specific Characters

The five main characteristics of herbs are discussed herein

- **Ras** - When a substance is produced from panchamahabhootas (five elements), at that time different tastes develop in the substance depending on the proportion of the panchamahabhootas e.g. sweet, sour, salty, bitter and astringent.
- **Vipak** - Diet or drugs, both, as they get digested, undergo change i.e. the food item that initially taste sweet, has an altogether different taste after digestion due to the digestion brought about by the jathragni.

Vipak is of three types :

- Madhur (sweet)
- Amla (sour)
- Katu (pungent)
- **Veerya** - The effectiveness of all gunas (properties) is known as veerya. It consists of two types :
 - Sheet veerya
 - Ushna veerya
- **Prabhav** - The innate and specific property of a dravya is known as prabhav. This means that a specific action generated by prabhav may prove to be generated by it through circumstantial evidence but the exact mechanism by which prabhav brings about the action is hard to describe. A prabhav attributed to a particular dravya can be obtained only by using that particular dravya, any other dravya with the same properties and actions will not be able to generate the same prabhav i.e. dravyas (herbs) have their own exclusive prabhav.

- Karma - The changes brought about by the dravyas through their rasa, gunas etc. within the body are known as karma (action) for e.g. Panchakarma, langhan, bruhan etc.

Dravya -samskar (Basic preparations of herbs)

The drugs selected for the treatment of any disease may be of plant origin/animal origin/mineral origin.

- To make them fit for therapeutic administration and to keep them potent for many days, they have to undergo some modifications known as "Samskara"
- A small quantity of a simple drug becomes component to cure even the most complicated disease by the influence of different modifying procedures, such as:
 - Toyagni Sannikarsa (Contact of drug with liquid and heat)
 - Sauca (Purification / Detoxification)
 - Manthan (Churning)
 - Vasana (Flavouring)
 - Bhavana (Trituration / grinding)
 - Kala Prakarsa (Time factor)

Fundamental preparations for the dravyas are known as "**Panchavidh Kasaya Kalpana**" (five fundamental preparations) and they are as follows

1. Swarasa (Extracted juice)
2. Kalka (Paste)
3. Kasaya (Decoction)
4. Hima (Cold infusion)
5. Phanta (Hot infusion)

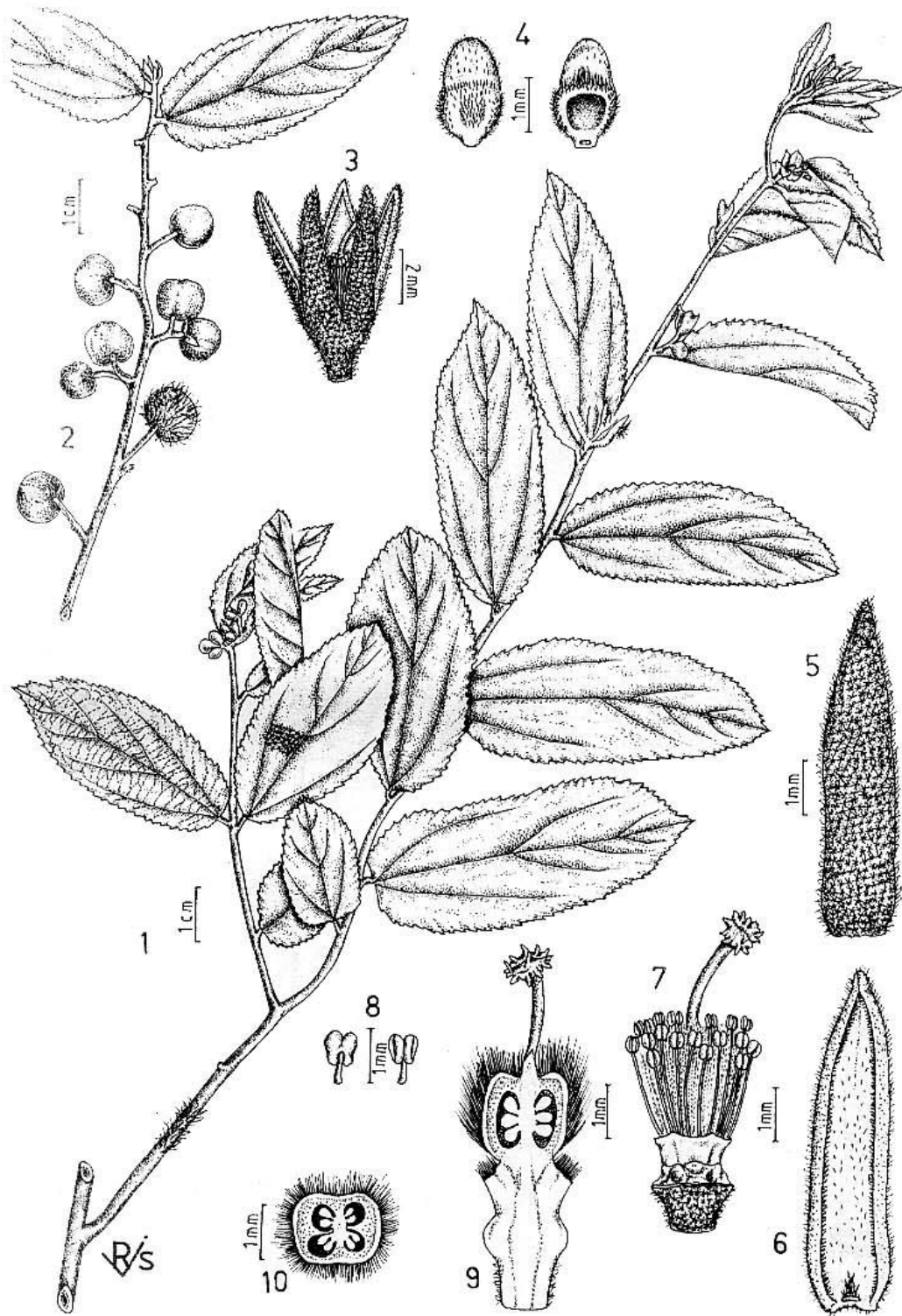
These five fundamental preparations are potent therapeutically in their ascending order and are light for digestion in their descending order.

Swarasa is the most potent preparation but heavy for digestion and Phanta preparation is the least potent and lightest for digestion.

A patient having good digestive power but suffering from a chronic and severe disease, Swarasa Kalpana is advisable.

A patient having weak digestive power and less severity of disease, Phanta Kalpana could be advised.

Diagrammatic Sketch of Nagabala (*Grewia hirsuta*)



Grewia hirsuta M. Vahl கருவந்தி 1 twig ; 2 drupes (cluster) ; 3 flower ; 4 petal, dorsal & ventral ; 5 & 6 sepal, dorsal & ventral ; 7 stamens with pistil ; 8 anther ; 9 & 10 ovary, l.s. & t.s. (1 from RHT 15365 ; 2 from RHT 18762 ; others from RHT 3450)

गुवान्फ (*Grewia hirsuta* Vahl.)

Vernaculars:

Sanskrit Name: Nagabala, Gangeruki, Hraswa Gawedhuka, Chatu:phala, Jhasha,

Nepali Name : Nagbala

Hindi Name : Gangeran, Gulshakari, Gulaskari, Jangalimethi, Kakarundah, Kukurvicha.

Panjabi Name : Gangeran,

Telugu Name : Jibilike

Urdu Name : Kakarundehrumi

Marathi Name : Govli

Burma Name : Kyettayaw

Persian Name : Karafasrumi

Porebunder Name : Khaddharammi

Santal Name : Setaandir

Arabic Name : Kamafetusa

Latin Name : *Grewia hirsuta* Vahl.

Systemic Classification

Kingdom: Plantae

Division: Magnoliophyta

Class: Magnoliopsida

Order: Malvales

Family: Tiliaceae

Genus: Grewia

Species: hirsuta

Family : Tiliaceae

Trees, shrubs or herbs, usually with mucilaginous juice. Leaves usually alternate, simple or lobed, usually stipulate. Flowers regular, hermaphrodite or rarely 1-sexual, usually in cymes. Sepals 3-5, free or connate, usually valvate. Petals 3-5 or 0, inserted round the base of the torus, contorted imbricate or valvate. Stamens usually in indefinite, inserted on a torus; filaments free or sometimes 5-10adelphous, but not united into a tube. Ovary free, 2-10 celled; ovules 1-many; style entire, divided or 0. Fruit 2-10 celled, or by false septa many celled, often drupaceous.

Genera 35.

Species 380.

Distribution: Tropical and temperate, chiefly South-East Asia and Brazil.

In general the leaves are mucilaginous and emollient; the bracts and flowers are aromatic, antispasmodic and slightly sudorific. The bark may be bitter and astringent.

Among the products obtained may be mentioned: (i) a volatile oil; (ii) laevo-rotatory physterols; (iii) vanillin; and (iv) glucosides- capsularin, corchorin, tiliacin.

Genus : Grewia Linn.

Trees or erect straggling or climbing shrubs, usually stellately pubescent.

Leaves alternate, 3-7 nerved.

Flowers usually yellow, in axillary, extra-axillary or terminal cymes, fascicles or panicles. **Sepals** 5, distinct. **Petals** 5, usually with a gland at the base within, generally shorter than the sepals, very rarely 0. **Stamens** numerous, inserted on a short or elongated often glandular tours. **Ovary** 2-4 celled; **ovules** 2-several in each cell; style 1; stigma 2-5 lobed or laciniate.

Fruit of 1-4 pyrenes, entire or 2-4 lobed. Pyrenes usually 1- or 2 seeded.

Species: 150

Distribution : Asia, Africa, Australia, especially tropical.

Uses: Mucillaginous and demulscent, useful in the treatment of diarrhoea and dysentery.

The following species are used medicinally

In Indo China- *G. paniculata* Roxb.; in the Philippine Islands- *G. paniculata* Roxb.,
G. umbellata Roxb.; In Australia- *G. hirsuta* Vahl; in the Gold Coast- *G. mollis* A.
Juss.; in Southern Africa- *G. occidentalis* Linn.



Fig: Leaf (above) and fruit of Nagabala from herbarium

Grewia hirsuta Vahl. –gfuanf_

Morphological Characters:

A shrub 30-90 cm high, branches slender.

Leaves 5-11 by 0.7-2.5 cm., oblong or linear-lanceolate, narrowed gradually to the apex, serrate, the teeth blunt, small, often irregular in size, base rounded, 3-nerved, clothed with very small stellate hairs above, densely stellate-pubescent beneath; petiole 2.5-3.8 mm. long, stout hairy; stipules 2.5 mm. long, linear-subulate, hairy.

Flowers white turning yellow, male and bisexual, 2-4 together; peduncles axillary, solitary or sometimes paired, 5-25 mm. long, slender; pedicels 3.8-10 mm. long; buds ovoid, densely hairy.

Sepals 5 mm long, oblong, tomentose outside.

Petals 3 mm long, oblong, claw distinct.

Fruit 7.5-10 mm diameter, more or less 2-4 lobed, shining, brown, with scattered hairs and a ring of hairs at the top of the androgynophore.

Floral Formula :



Distribution :

Sub-Himalayan tract upto 4,500 ft. from the Indus eastwards, salt range, Burma, Ceylon- North Australia.

Properties:

गुण : गुरु, स्निग्ध, पिच्छिल

रस : मधुर, कषाय

विपाक : मधुर

वीय : शीत

Pharmacological Action

Doshakarma : It is *Vata-Pitta samaka*.

Systemic Action- External : It is haemostatic, analgesic and wound healing.

Internal :

Nervous System : It is nerve-tonic and brain tonic.

Digestive system : It is oleating, antacid and carminative.

Cardiovascular System : It is cardiac tonics.

Respiratory System : It is cough expectorant.

Reproductive System : It is semenagogue and uterine tonic.

Urinary System : It is diuretics.

Temperature : It is anti-inflammatory and antipyretics.

Satmikanana : It is vitalizer (rasayana).

Therapeutic Uses:

Use : It is use in *Vatapatik* disorders.

Systemic Action- External : Its paste is used in haemorrhage, wound.

Internal Action :

Nervous System : Used in nerve disorders, memory loss and *vyatavyadhi*.

Digestive System : It is used in hyperacidity, *kosthagata vata* and constipation.

Cardiovascular System : It is used in heart diseases and *raktapitta*.

Respiratory System : It is useful in bronchial asthma, cough, TB and hoarseness of voice.

Reproductive System : It is used in erectile dysfunction, leucorrhoea and abortion.

Urinary System : It is useful in dysurea, urinary discharge.

Temperature : Used in fever, specially malarial fever.

Satmikanana : Used in weakness, debility.

Parts used :

Root

Dosage :

Decoction : 50-100 ml; Root-bark powder : 3-6 gm.

Other uses:

The leaves are of two kinds: bitter, and tasteless.

(1) The bitter leaves lessen inflammation; useful in nose and eye disease; anthelmintic. The root of this variety is astringent to the bowels; useful in cholera, hydrophobia, kidney pain, piles; anthelmintic.

(2) The leaves and fruit of the second variety- with tasteless leaves- are purgative, expectorant, carminative, abortifacient, emmenagogue, vulnerary, galactagogue; useful in splenic enlargement, eye troubles, piles, rheumatism, pain in the joints and in the breasts (Yunani).

The fruit is employed as a medicine by the Santals, in diarrhoea and dysentery. The root pounded is also prescribed for the same diseases, and powdered in water is applied externally to hasten suppuration, and as a dressing for wounds. The paste dries and forms a hard coating, thus effectually excluding air from the raw surface.

This plant is used by the aborigines of North-Western Australia as a remedy for dysentery.

Ayurvedic Preparation:

Nagabala Rasayan (According to Charaka Samhita)

Nagabala Ghrita (According to Astanga Hridaya)

Toxicity

Not found.

Economic Importance:

Being one of the best rasyana, Nagabala has significant economic value. It is being sold as Nagabala rasayana, Nagabala ghrita in the market at the expensive rate. In this present context, the world is suffering from sexual impotence, different types of ageing disorders, Nagabala can be useful as vitalizer, antisenility agent (rasayana) and aphrodisiac (bajikara). So, it is cultivated properly, then there will be definitely significant economic benefit Nagabala.

Controversy of Nagabala

Nagabala is one of the controversial medicinal plants. There are different arguments of Acharays regarding Nagabala.

According to **Bhavaprakasanighantu**, 3 different nagabalas are mentioned. They are as follows:

i. Nagabala 1 (*Sida veronicaefolia* Lam.)

ii. Nagabala 2 (*Sida spinosa* Linn.)

iii. Nagabala 3 (*Grewia hirsuta* Vahl.)

I. Nagabala 1

Sanskrit name : Bhumibala, Nagabala, Bishvadeva.

Hindi Name : Bananiyar, Bhiunli, Kharenti

Telugu name : Gayapuwaku

Marathi Name : Bhoybal, Bhuichikana

Latin name : *Sida veronicaefolia* Lam.

Family : Malvaceae.

Morphological Characters:

A perennial much-branched herb; branches prostrate or trailing, sometimes rooting, more or less hairy. **Leaves** 1.2-5 cm long, cordate, ovate, acute or acuminate, serrate, sparsely clothed with stellate hairs; petioles 1.2-2 cm long. **Pedicles** 1.2-3.8 cm long, slender, axillary-solitary or twin, joined a little above the middle. **Calyx** 4 mm long, 5-angled, hairy; lobes triangular, acute or acuminate. **Corolla** pale yellow, slightly exceeding the calyx. **Carpels** 5, smooth, not reticulated, mucous or with a small slightly 2-lipped beak, not cuspidate. **Seeds** brown, glabrous.

Distribution : Throughout the hotter part of India. Tropical and subtropical regions of the world.

Uses:

Flowers and unripe fruit are given together with sugar for burning sensation in micturation.

Among the santals the leaves are pounded and used as local application to cuts and bruises. They are also given in the diarrhoea of pregnancy.

भावप्रकाशनिघण्टु अनुसार : यो उत्तम रसायन, पुष्टिदायक, आयुबर्द्धक तथा बलबर्द्धक मानिएको छ । राजयक्ष्मा तथा क्षतमा यो लाभदायक छ ।

रसायनको लागि यसको मूलत्वक $\frac{1}{2}$ -१ तोला दूधमा पिसेर वा घ्यू र महको साथ सेवन गर्ने विधान उल्लेख छ । पथ्यमा रक्तशाली अथवा साठी चामलको साथ सेवन गर्ने निर्देश गरिएको छ । (च.चि.अ. १) ।

यसप्रकार प्रतिदिन $\frac{1}{2}$ तोलाबाट बढाएर ४ तोलासम्म मात्रा बढाएर दूधको साथ सेवन तथा दूध पिउनुपर्छ । क्षतक्षयीमा यसप्रकार एक महिना प्रयोग गरे पुष्टि, आयु, बल तथा आरोग्य प्राप्त हुन्छ । (च.चि. अ. ११) ।

राजयक्ष्मामा दूधको साथ नागबला चूर्ण सेवन गरे लाभ हुन्छ (सु.उ.अ. ४१) ।

ii. Nagabala 2

Sanskrit name : Gulsarkari, Gangeruki, Chatusphala, Avishta, Nagabala.

Hindi Name : Gulshakari, Bariara, Gangeran, Jangalimethi.

Marathi Name : Gangeti

Bengali Name : Gorakshachakule

Punjabi Name : Gangerana

Latin name : *Sida spinosa* Linn.

Family : Malvaceae.

Morphological Characters:

A suberect branched shrub, grey from minute stellate hairs. Leaves up to 5 cm long, elliptic, crenate, obtuse or cuneate at the base, rounded or narrowed at the top to obtuse triangular, not acuminate, ultimately glabrate above, grey beneath; petioles 1.2-2.5 cm long, with often 1-3 small recurved spines beneath petiole. Pedicels 0.2 cm long, clustered or solitary, jointed just below the calyx. Calyx grey, pale yellow. Carpels 5, pubescent; awns 2, about half the length of the carpel from a conic base, slightly divergent, with spreading or erect hairs. Seeds smooth, blacke-brown.

Distribution: Throughout the hotter parts. Tropical and subtropical regions of both hemispheres.

Uses:

The root, leaf and fruit destroy *Kapha* and *vata*; tonic in wasting diseases; cure ulcers and biliousness; useful in urinary discharge, scalding urine, leprosy and skin infections; the fruit is also astringent and cooling (Acc. to Ayurveda).

The leaves are demulcent and refrigerant, and are useful in cases of gonorrhoea, gleet and scalding urine.

The decoction of the bark-root and root is used as demulcent in irritability of the bladder and in gonorrhoea.

The root acts as a gentle tonic and diaphoretic, and is employed in mild cases of debility and fever.

iii. Nagabala 3

Latin Name : *Grewia hirsuta* Vahl.

Mentioned above.

Literary Survey:

Charaka Samhita

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One should collect the roots of **nagabala** in *cala muhurta* in the month of *magha* or *phalguna* (late winter) while being clean and attentive, having worshipped the deities and having made the brahmanas to recite auspicious mantras. The plant should have grown in a forest area covered with *kusa* grass; having soil unctuous, black and sweet or of golden colour; devoid of poison, injurious animals and defects of wind, water and fire, and also of cultivation, ant-hill, cremation ground, sacred tree, unfertile area and habitation; and having proper access of air, water and the sun according to season. The roots should be undamaged, unencroached, neither immature nor too old, possessed with potency, having shed off the old leaves and with new leaves not appeared (on the plant). The roots should be washed well and the bark should be taken in the dose of 40 gm. the roots should be washed with milk in every morning or as powder with milk or along with honey and ghee. After the drug is digested, one should take the diet of *sali* or *sastika* rice along with milk and ghee. If used regularly for a year, it makes the life span stable for one hundred years without senility. Other attainments are as said earlier [C.S.Ci. 11]. Thus is *nagabala rasyana*.

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The juice of bala, chandana, aguru, dhava, tinisha, khadira, and simsapa and the ten age-sustaining drugs (ending with punarnava) are used by the method as in case of **nagabala**. If the juice is not available this method should be adopted- 2kg, 560 gm drug should be dipped in equal quantity of water for day and night, then it should be pressed and filtered and used as swarasa (fresh juice). (C.S.Ci. 1.1/12)

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Indra, having infused the nectar of Ayurveda to the sages said- "Now all this has to be implemented. This is the auspicious time for rasayana and the celestial drugs grown in Himalayas are also matured such as aindri, brahmi, payasa, ksirapuspi, sravani, mahasravani, satavari, vidari, jivanti, punarnava, **nagabala**, sthira, vacha, chatra, atichatra, meda, mahameda, and other vitality-promoting drugs if taken with milk for six months provide certainly the maximum life-span, youthful age, diseaselessness, excellence of voice and complexion, corpulence, intellect, memory, superior strength and other desired merits. (C.S.Ci. 1.4/6)

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Ghee in equal quantity of milk cooked with decoction of yasti and **nagabala** and paste of papaya, pippali and vamsalochana is efficacious in chest wound. (C.S.Ci. 11/33)

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The root of **nagabala** with the initial dose of 5 gm increasing by 5 gm daily upto 40 gm should be taken with milk for a month keeping on non-cereal milk diet. This application is an excellent promoter of corpulence, life-span, strength and health. (C.S.Ci. 11/91)

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Bala, **nagabala**, haritaki, bhurja-granthi (nodule formed in bhurja tree), bibhitaki, vamsa leaves, agnimantha- these together should be applied as paste on granthi. (C.S.Ci. 21/125)

Susruta Samhita

A case of potent obesity should be avoided. A case of patent obesity should be checked with a medicated compound, consisting of such drugs as Payasya, Ashvagandha, Vidari, Vidarigandha, Shatavari, Vala, Ativala, **Nagabala**, and such other drugs of sweet taste. (S.S.Su. 15/39)

Vala-Kalpana: A pala or half pala weight of the (powdered) roots of the *Vala* should be well-stirred in cow-milk and taken (every day), and the patient or the user should not be allowed to stir out of his room as prescribed before (during the entire course of taking the medicine). He should be advised to take a meal consisting of boiled rice, milk and clarified butter after the medicine had been fully digested. Premature old age and senile decay would be arrested for a period of twelve years by taking this elixir continuously for twelve days in the forgoing manner, whereas an extension of its course to hundred days would add a hundred summers to the duration of his youthful age. *Ati-vala*, **Nagabala**, *Vidari*, *Satavari* may be similarly taken for the same purpose, with this distinction that the (powders of) the *Ati-vala* should be taken with water, those of the *Nagabala*, with honey, whereas *Vidari* and the *Satavari* powders should be taken with milk. The regimen of diet and conduct as well as the beneficial results produced therefrom should be the same (as from the use of Vala). The present remedies are recommended to persons seeking strength or suffering from an attack of haematesis or haematochezia. (S.S.Ci. 23/9)

A phthisical patient should likewise be made to take Rasona (garlic) or **Nagabala** or Magadhika or Silajatu with milk, in the prescribed manner (laid down in connection with the medical treatment of Maha-vyata-vyadhi). (S.S.U. 41/57)

The patient suffering from *Panatyaya* would find relief by the frequent use of a Panaka (draughts) composed of *Yasthimadhu*, *Katurohini*, *Draksha* and *Trapusha*-roots, or of *Karpasa*-roots, **Nagabala** and *Suvarchala* all taken in equal parts. (S.S. U. 47/34)

The use of clarified butter duly cooked with *Satavarii*, **Nagabala** and *Vala* beneficial to a person afflicted with cough. (S.S.U. 52/47)

अष्टाङ्गहृदयम्:

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मुलहठी र नागबलाको क्वाथमा क्वाथ समान घृत मिलाएर विदारी, पिप्पली तथा वंशलोचनको कल्कमा घृत सिद्ध गर्ने । यो घृत क्षत कासमा उत्तम हुन्छ ।

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एक माससम्म अन्न छाडेर दूधको भरमा रहेको मानिस **नागबला** मूलको एक पत्र मात्राबाट प्रारम्भ गरी गरी प्रतिदिन आधा कर्ष बढाकर दूधको साथ लिनपर्छ । यो प्रयोग पुष्टि, आयु, बल तथा वर्णको लागि श्रेष्ठ हुन्छ । यो कल्पना मण्डूकपर्णी, मुलहठी तथा सुण्ठीमा गर्नुपर्छ ।

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नागबला एक तुला लिएर द्रोणजलमा क्वाथ बनाउने । चौथाई शेष रहेपछि यसमा चतुर्थांश घृत तथा घृत बराबर दूध हालेर अतिबला, बला, मुलहठी, पुनर्नवा, प्रपौण्डरिक, गम्भारी, पियाल,

कपिकच्छु, अश्वगन्धा, दुर्वा, शतावरी, मेदा, महामेदा, गोक्षुर, काकोली, क्षीरकाकोली, विदारी, जीरा, कालाजीरा, मृणाल, विस, खर्जूर, श्रृंगटक, कसेरु यी सबै द्रव्य आधा पल लिएर घृत सिद्ध गर्ने । या नागबला घृत पित्तरक्त, क्षत, क्षय, प्यास, दाह तथा भ्रमको नष्ट गर्न उपयोगी हुन्छ । वर्ण, आयु, ओजको लागि पनि उत्तम हुन्छ । यो वलीपलितनाशक छ, यो ६ महिनासम्म सेवन गरेर वृद्ध पनि तरुण हुनसक्छ ॥१२०-१२५॥

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नेपालीनिघण्टु

संस्कृत नाम : नागबला, भद्रौदनी, खरगन्धा, चतुःपला, महोदया, महाशाखा, महापत्र, महाफला, विश्वदेवा, अरिष्टा, खर्वा, ह्रस्वा, गवेधुका, देवदंश, महागंधा, गाङ्गेरुकी, रुषा, ह्रस्वगवेधुका, विञ्जना ।

हिन्दी नाम : गङ्गेरन, गुलशकरी ।

Latin name : *Sida spinosa*

स्वभाव : मधुरो, अमिलो टर्रो छ । गरम र भारी छ । चिलाउने रोग, कुष्ठरोग, वायु, व्रण र पित्तको विकारलाई शमन गर्दछ । मूत्रकृच्छ्र, उरःक्षत र क्षीणमा पनि हित छ । यसको बोट नालुको जस्तो हुन्छ ।

निघण्टु आदर्शः

गाङ्गेरुकी

नाम : नागबला, गांगेरुकी (संस्कृत), गंगेटी (पोरबन्दर), गंगेरन, गुलशकरी (हिन्दी), गांगी, गांगेटी (मराठी), गोरक्षचाकुले (बंगाली),

Latin name : *Grewia papulifolia*, *Grewia tenax* Syn.

निरुक्ति :

गांगेरुकी- गाङ्गं जलमीरयति । (इर् गतौ क्षेपणे च) यसले चोप निकाल्छ, अतः यसलाई गांगेरुकी भनिन्छ ।

नागबला- नागानां हस्तिनां बला नागबला ।

भ्रषा- भ्रषति वातम् । भ्रष् हिंसार्थः ।

टीका :

गांगेरुकं नागबलाफलम् । (च.सू. २७१ चक्रपाणिदत्त)

गांगेरुकी नागबला (डल्हण) सु.सू. अ. ४६)

नागबला गांगेरुकी । (प्र. ४१४, शार्ङ्गधर)

नागबला गोरक्षचाकुलिया इति ख्याता । (चक्रदत्त)

नागबला गोरक्षतण्डुला- १७९, २६७, ३६९, चक्रदत्त ।

उत्पत्तिस्थान : - नागबला सौराष्ट्रको बरडा पहाडमा बढी पाइन्छ ।

उपयुक्त अंग- मूल ।

वर्णनः

नागबला ३-६ या ५-१० फुट अग्लो हुन्छ । यो घना जंगलमा नभई ऊसर स्थानमा पाइन्छ । यसको पत्र १/२-१^१/२ इन्च लामो हुन्छ र चौडाइ पनि लगभग त्यति नै हुन्छ । पुष्प श्वेत रंगको केही सुगन्धित हुन्छ र जेठ तथा असारमा विकसित हुन्छ । शीतकालमा फल पाक्छ । यसको फलमा २-४ बीज हुन्छ । फलमा २-४ अस्थि हुन्छ । यसको फल शिकारी मेवाको नामले पनि जानिन्छ, किनकि

प्यास लाग्दा शिकारीहरु यसको फल मुखमा राख्ने गर्दछन् । नागबला मूलको बोक्रा सजिलै निकाल्न सकिन्छ, र चूर्ण पनि सजिलै गर्न सकिन्छ ।

गुण :

नागबला मधुर, अम्ल, कषाय, कटु, तिक्त रस हुन्छ । यो उष्णवीर्य, क्षयहर, कुष्ठघ्न, वातहर, व्रण, पित्तविकारजित्, ग्राही, वृष्यः, क्षत् तथा क्षीणमा उपयोगी, स्निग्ध, रोचक तथा बल्य छ ।

रसः मधुर, अम्ल, कषाय, **वीर्यः** उष्ण, **विपाकः** मधुर, **दोषघ्नताः** वात, पित्त ।

उपयोग :

चक्रदत्त :- हृदोरागे-मूलं नागबलायास्तु चूर्णः दुग्धेन पाययेत् ।

शार्ङ्गधर :- सद्योव्रणे-खड्गादिच्छिन्नगात्रस्य तत्कालपूरितो व्रणः । गांगेरुकीमूलरसैः जायते गतवेदनः ॥

शोढल :- क्षये- चूर्णं नागबलायास्तु घृतमाक्षिकमिश्रितम् । प्रलिप्त्यात् प्रातरुत्थायक्षयव्याधिनिवारणम् ॥

शार्ङ्गधरसंहिताका वनस्पतिहरु (Plants of Sharangadhar Samhita)

नागबला : - नागश्व बलति (सर्पजस्तै जमिनमा फैलनेवाला बला)

नागानां हस्तिनां बला (यसको सेवनले हात्तीजस्तै बल प्राप्त हुने)

प्रयोग : - बली, पलित, श्वास, कास, कफवातरोग, मुत्रदोष, प्रमेह, अर्श, ग्रहणी आदि रोगको चिकित्सार्थ उपरोक्त योगमा नागबलाको उपयोग हुन्छ । नागबलाको अर्थ गंगेरुकी हुन्छ । ताजा लिने द्रव्यमा नागबलालाई भनिएको छ भने बाजीकरणद्रव्यको उदाहरणमा पनि नागबलाको उल्लेख छ ।

विशेष : नागबला सन्दिग्ध द्रव्य मानिएको छ : विभिन्न ग्रन्थहरुमा निम्न द्रव्यलाई नागबला मानिएको छ:

1. Sida veronicaefolia Lam.
2. Sida spinosa Linn.
3. Grewia hirsuta Vahl. var. nelicteifolia
4. Grewia papulifolia Vahl.
5. Urena lobata Linn.

गंगेरुकी एवं गुडशर्कराको यदि नागबलाभन्दा पृथक मान्ने हो भने उपयुक्त द्रव्यमा सर्वप्रथम नागबला नै हुनसक्छ । यहाँ बला प्रजातिको हुँदो हो त यो सर्प जस्तै भूमिमा फैलिएर रहने थिएन । यसैले यसलाई नागबला नै भनिन्छ । पत्र हृदयाकार, अण्डाकार, पुष्प हल्का पहेँलो, बीज खैरो रंगको हुन्छ ।

आचार्य प्रियवत शर्माले पनि माथि उल्लेखित नं १ को द्रव्यलाई राजबला, प्रारिणी तथा नं ३ को द्रव्यलाई नागबला, गुडशर्करा, गुडशपडी मानेका छन् ।

वनस्पति विज्ञान:

संस्कृत नाम : नागबला,

बंगाली : गोरख,

मराठी : गांगेरी

Latin name : *Sida spinosa*

विवरण : गंगेरनको वृक्ष सहदेइको समान हुन्छ । किन्तु यसको पत्र केही मोटो तथा दुई अंगुल हुन्छ । यसको फल सहदेई भन्दा ठूला हुन्छ । फलको रंग गुलाबी हुन्छ । सुकेपछि ५ भागमा विभाजित हुन्छ ।

गुण : मधुराम्ला नागबला कषायोष्णा गुरुस्तथा ।

कटूष्णा कफवातघ्नी व्रणपित्तविनाशिना ॥ (राजनिघण्टु)

विशेष उपयोग : (१) खुजलीमा गंगेरनको पात (२) दाहमा गंगेरनको चूर्ण शीतल जलको साथ (३) अम्लपित्तमा गंगेरनको रसमा मह मिसाएर पिउने ॥

वनौषधि निर्देशिका (Ayurvedic Pharmacopia)

गुलशकरी (गुडशर्करा)

नाम- संस्कृत : गुडशर्करा, चतुष्फला, नागबला । हिन्दी : गुलशकरी, गंगेरन । बिहार- सेतापरेडी, सेतापेट्ट, सेताजरका, सेतकट, सेताण्डीर, कुकुरविचा, कुकुरांड । Latin name : *Grewia hirsuta* Vahl. Family: Tiliaceae

प्राप्तिस्थान : हिमालयदेखि तराईका जंगलमा पाइन्छ ।

परिचय : यसको गुल्म ४५ सेमि देखि ९० सेमिसम्म हुन्छ । शाखाहरु प्राय मूल नजिक निस्कन्छन् र रोमयुक्त हुन्छ । पातको स्वरूपमा भिन्नता पाइन्छ, जुन लट्वाकार, प्रासवत् अथवा आयातकार, प्रायः लम्बाग्र तथा अल्पवृन्त एवं तीक्ष्ण दन्तुर हुन्छ । फूल पहेलो तथा फल चार खण्डयुक्त हुन्छ र मृदु रौले ढाकिएको हुन्छ । पक्वफल मधुर स्वादिष्ट हुन्छ । यसमा ५-६ बीज हुन्छ । जाडो समयमा पुष्प, फल लाग्दछ ।

उपयोगी अंग : मूल (विशेषतः मूलत्वक्)

मात्रा : क्वाथार्थ- ६ माशा देखि १ तोलासम्म, चूर्ण- १-३ ग्राम ।

संग्रह एवं संरक्षण : जाडोको अन्तमा मूलको संग्रह गरी स्वच्छ पानीले सफा गरेर छायामा शुष्क गर्ने र मुखबन्द पात्रमा अनार्द्र शीतल स्थानमा राख्ने ।

वीर्यकालावधि : १-२ वर्ष ।

स्वभाव : गुण-गुरु, स्निग्ध, पिच्छिल । रस-मधुर, कषाय । विपाक-मधुर । वीर्य-शीत । कर्म-वातपित्त शामक, नाडीबल्य, मेध्य, स्नेहन, अम्लतानाशन तथा अनुलोमन, हृद्य, रक्तपित्तशामक, कफनिःसारक, दाहप्रशामन, ज्वरघ्न, मूत्रल, गर्भस्थापन, वृष्य, रसायन । स्थानिक प्रयोगमा नागबलाको मूल तथा पत्र रक्तस्तम्भन, वेदनास्थापन तथा व्रणरोपण छ ।

शोढल निघण्टुमा घृत एवं मधुको साथ क्षयमा प्रयोग गर्ने निर्देश छ ।

यसैगरी टीकाकार चक्रपाणीले पनि हृद्रोग, कास तथा श्वासमा दूधको साथ यसको चूर्ण सेवन उल्लेख गरेका छन् ।

Conclusion (निष्कर्ष)

There are different views of Acharyas regarding **Nagabala**. But, it is one of the precious medicinal plants in Ayurveda. According to Charaka is best rasayana. According to him, if is used regularly for a year, it makes the life span stable for one hundred years without senility. According to Vagbatt, **Nagabalaghrita** is an excellent promoter of *oja*, corpulence, life-span, strength and health.

Properties: **Guna:** Guru, Snigdha, Pichchil **Rasa:** Madhura, Kashaaya
 Vipaka : Madhura **Virya :** Sheeta

धेरै विद्वानहरुले नागबलालाई भूमिबला (*Sida humilis*) लाई मानेका छन्, तथापि 'नाग इव बलते संचलति इति नागबला' व्युत्पत्ति अनुसार सर्पवत् भूमिमा फैलने वनस्पति नागबला हुनुपर्छ । भूमिबला सर्पवत् तर टेढामेढा भएर भूमिमा फैलिएको छोटो गुल्म हुन्छ ।

भूमिबला वर्षा ऋतुमा हुने गुल्म हो भने नागबला जांगलदेशमा हुने ठूलो गुल्म हो । चरकले पनि जांगलदेश (धन्वनि) मा हुने नागबलालाई लिने भनेका छन् । साथै 'शीर्षपुराणपर्णीनि' पुरानो पात भर्ने तथा 'असंजातान्यपर्णीनि' नयाँ पात लाग्ने, र 'तपसि तपस्ये वा मासे' माघ-फागुन महिनामा नागबलामूल निकाल्ने लेखिएको छ । यसबाट यो पुष्टि हुन्छ कि गांगेरुकी मूल नै लिनको लागि चरकले भनेका छन् । सब बलामा नागबला नै अधिक पौष्टिक हुन्छ । सुश्रुतले पनि भनेका छन्- गुणमा धन्वन सदृश नागबला फल हो- 'siffo+ lxd+ :jfb' wfGjg+ skmjftlht\ . tåb\ uf+u]?s+ ljb\oft\ .. (सु.उ.अ.४६)' धन्वन फल सदृश नागबला फलको गुण हो । धन्वन र नागबला दुई एउटै वर्गको वनस्पति हो । जब कि भूमिबला तथा नागबला भिन्न वर्गको हो । गांगेरुकी नै नागबला हो ।

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