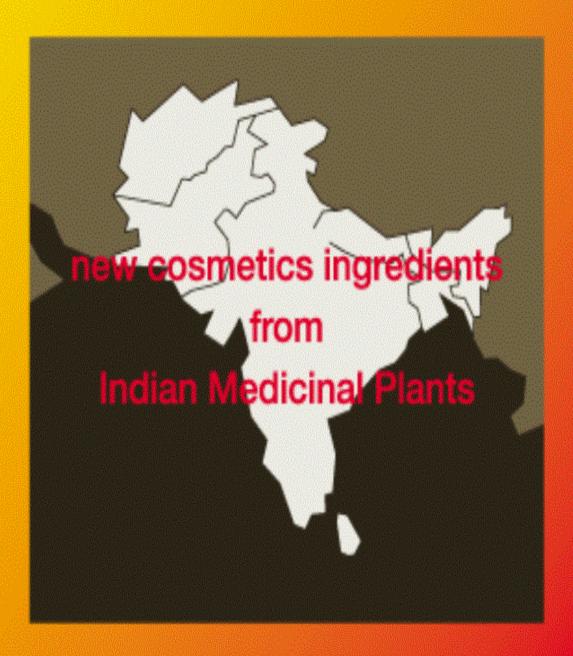
Campo Natural Products Siddha Herb Extracts





CAMPO RESEARCH PTE LTD

Level 30, 6 Battery Road, Singapore 049909

CAMPO® Multi-Purpose Cosmetic Base Chemicals & Active Ingredients CAMPO® Novel Functional Active Cosmetic Ingredient & Raw Materials

BOTANICAL EXTRACTS INDEX

Introduction

Botanical extracts

Balada Turagogandha Withania somnifera Linn. Bijaka Pterocarpus marsupium Roxb.

Bimbi Coccinia indica Linn.

Gorga Garcinia cambogia (Gaertn) Desr.

Jambu Eugenia jambolana Lam. **Kovil Tulsi** Ocimum sanctum Linn. Mahakanni

Eclipta alba Hassk.

Mahanimba Azadirachta indica A.Juss - flores Maka Eclipta alba Hassk. - neutralised Malkagni Celastrus paniculatus Willd. Sala Shorea robusota Gaertn.F Shriphala Emblica officinalis Gaertn.

Sunisannaka Marsilea minutas Roxb. **Udumbara** Ficus racemosa Linn.

Vaipillai Azadirachta indica A.Juss - folia

Vasa Kovil Tulsi Ocimum basilicum Linn.

IMPORTANT NOTICE

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6 Introduction



Sri Konganar Siddhar



Sri Pambatti Siddhar



Sri Plulasthear



Sri Azukkanneer Siddhar



Sri Pulipani Siddhar



Sri Kamala Muni Siddhar



Sri Kavuvorar Siddhar



Sri Machamuni Siddhar



Sri Punnakeesar Siddhar

The Primodial Siddhars

SIDDHA MEDICINAL HERBS AS COSMETICS INGREDIENTS

HISTORY - of invasions and linguistics

There are a number of medicinal systems currently recognised by the Indian government. Allopathy, homepathy, naturopathy and yoga therapy are all recognised together with three traditional herbal systems which have been widely used as primary health care regimes by countless millions of inhabitants of the Indian sub-continent for thousands of years. They are *Ayurveda*, which is probably the most well known, *Unani and Siddha*, which arguably predates the other two. But we must venture back through the Centuries to find the inter-relationship between these systems.

The peoples of the Dravidian culture developed the Siddha medicinal system, tribes that were the original inhabitants of what is now large part of India. Both their culture and civilization were highly developed, and centered on the large cities of Harappa and Mohenjo-Daro, sited on the banks of the River Indus. These cities date back some 4000 years, and even then boasted wide, paved streets, dwellings made from brick block structures, sophisticated sanitation including public baths and advanced drainage systems, trading complexes from which they traded with foreign lands via Lothial, their major port, writing instruments, clay tables and seals. These highly advanced and civilized tribes were known as the Indoos (later, Hindus), the 'the people who live by the Indus' by their contemporaries, the Sumerians and Chads.

Around 2000 years ago, nomadic Aryan tribes from the North in Central Asia, crossed the Deccan Plains and eventually invaded the contented and peaceful Dravidians, leading to their mass exodus further South to the very tip of the Indian subcontinent, where the highest concentration of Dravidians is still to be found today.

The invading Aryans brought with them to the Indian sub-continent their Veda, ancient books of wisdom and sacrificial ritual. From the youngest of these Vedas, the *Atharva-veda*, developed *Ayurveda*, probably with the help of residual and acquired Dravidian knowledge.

In time, the Indian sub-continent was invaded by Muslims from the West who brought with them their own medicinal system, *Unani Tibbia*. Arabic physicians who combined Greek medicinal practices with Ayurveda created Unani. *Unani* is therefore closely related to Ayurveda and was supported by India's Muslim rulers, but, interestingly, Ayurveda prospered concurrently.

The language of the Aryans and Sanskrit and it is in this language that all Ayurvedic texts are written. The most ancient of the Dravidian group of languages was Tamil. This was later assimilated into other related languages such as Malayalam, around the 12th Century A.D, which is a mixture of Sanskrit and Tamil; Telugu, a mixture of Sanskrit-derived Hindi and Tamil in the 16th Century and many hundreds of other hybrid languages and dialects, for example, Tamil with Greek, Arabic, Persian, Turkmanic etc.

The Dravidian texts on the Siddha medicinal system are thus written in pure Tamil and although many of these texts were lost during their migration South, following the invasion of the Aryans hordes from the North, many, as we shall see, are still in existence today.

SIDDHA AND AYURVEDA - a brief introduction and general principles

The Siddha medicinal system was designed to provide a cheap and efficient health care regime for the people. The word Siddha may be translated as an object to be attained, or perfection. The Siddha sages were known as Siddhars and were considered to be super-human beings who defined age and other laws to which ordinary human beings are subject. They were believed to have achieved eight miraculous powers through yoga practice, (1). Classical Tamil texts tell of eighteen Siddhars and history reveals that they had written tomes and four subjects: alchemy, medicine, yoga and philosophy.

The Siddhars had investigated and studied fully the causes of many diseases and the effect of many locally available plants and minerals on these diseases. Their works describe the chemistry of gold, silver, mercury, sulphur, their use of 64 poisons, alkalis and salts. At the same time they were said to use special secret herbs and drugs which allegedly endowed them with great virtues relating to medicine, alchemy, yoga and wisdom. There is a striking similarity here with the contemporary use of magical, often hallucinogenic herbs, by South American Shamans, to enable them to enter a dreamlike state in which they 'see' the herb that will provide a cure to their patient. Not unnaturally, the Siddhars kept the identity and availability of these mystical herbs from public knowledge for fear of abuse and misuse.

Although the most ancient of the Siddhars was Thirumoolar, perhaps the most important of them, in terms of medicinal texts, was Agathiyar. Some of his works are still standard books on medicine and surgery. About 1000 works on medicine in the Tamil language originated from the pen of the Sage Agathiyar. Although some of the original texts were palm leaf manuscripts of various sizes, others have been printed on paper. Most of the information is presented in a style that may be described as generally simple and almost colloquial and, interestingly, is presented in poetic meter rather than prose.

The general axiom of Siddha medicine, recognizes only three physical elements: air, vayu, fire, bile and water, phlegm. These formed the fundamental principles known as muppini on which the constitution of human beings is based. These three humours form the connection between the microcosm of man and the macrocosm of the world. The humours also form three of the 96 Tatwas, or constituent principles in Nature described by the Siddhars

The 96 Tatwas of the Siddhars

The five elements The five objects of the senses The five organs of action The five organs of perception The four intellectual faculties The ten nerves The five states of the soul The three principles of moral evil The three cosmic qualities The three humours The three regions The eight predominant passions The six stations of the soul The seven constituent elements of the body The ten vital airs The five cases of sheaths of the soul The nine doors or vent of the body

The Siddha school recognizes these 96 Tatwas and further adds that the body comprises 72,000 blood vessels, 13,000 nerves, 10 main arteries, 10 vital airs, Pranan, all forming a network which through possible imbalance of the three humours, equivalent to the doshas of the Ayurvedic system, becomes liable to 4448 diseases!

The Siddha theory explains the causes of disease, the amelioration of diseases and their symptoms and presents a guide to relevant therapy. The theory also very much takes into account dietary considerations, both in the cause of diseases and indeed in their cure. This may be exemplified by the following quotes from chapter 95 of the great work Thirukkural by the Sage Thiruvaluvar, "No need of medicine to heal your body's pain, If what you ate before digested well, before you eat again", and perhaps more specifically, "Diseases befall in plenty on one who takes abnormal food ignoring the power of fire within."

The reputation of the Tamil culture was well known to the Aryan invaders and they clearly wished to enrich their own culture by using Tamil knowledge. It is recognized that the Aryan compilers of the Ayur Veda sent learned men to the South and East of India to gather material to be assimilated in their developing Ayurvedic system. The man who sent to the South, i.e., the Tamilnadu region, was the sage Agasthiya, a fact lying hidden in the traditional Indian story of the marriage between Siva and Uma.

Ayurveda is the name the Aryans gave to the science of medicine. The Vedas became the four ancient sacred books of India, the oldest being the Rigveda, then Samaveda, Yajurveda and the youngest, Atharva Veda. These were handed down by word of mouth and it is a Hindu belief that man never composed them. It was believed that Gods taught them to the Sages who were considered the seers of the truth. In truth, there is no Veda called Ayurveda. It derived from the Atharva veda, in which is revealed 114 hymns describing disease and medicine topics.

Lord Brahma is believed to have taught the principles of Ayurveda to Prajapati and he in turn to several sages including Agnivesh. The Agnivesha manuscript was later re-edited by Charaka and became known as the Charaka Samhita, which contains 12,000 verses, in 8

Volumes encompass 120 chapters. During the Charaka period, medicinal plants were characterized into four classes, direct fruiters, creepers, flowery fruiters and herbs. Many different parts of the plants were described as being the source of the plant drugs.

Original Sanskrit Ayurvedic texts describe in total approximately six hundred different medicine plants. It was taught by Charaka and demonstrated by Jivaka, the Royal Physician of King Bimbisara

of Mahadha, who was appointed by the king to supervise the health of Gautama providing that we know how to use it correctly.

But we also need to take into account that both the Siddha and the later Ayurvedic systems of medicine, in a similar way to traditional Chinese herbal medicine, take a holistic approach to health: and diseases, for example, also pays an important part in general health regimes.

At heart of the Ayurvedic system are three primal forces: prana, the breath of life; similar to the Chinese Qi; tejas or agni, the fire of life; and ojas or soma, a manifestation of harmony, integration and love.

Within the system there are the Five Great Elements from which all beings are formed; earth which represents all solid matter, water, which is representative of all liquids and air which represents all gaseous elements. Fire is an element that possess that power to change other elements from one state to another and either, which although a rather nebulous element, is considered the source of all matter and the space in which is exists. Agni, the fire of life, into the three doshas, converts these five elements.

These three doshas, kapha, pitta and vata are considered to be active, but waste products of the Five Elements. Kapha is formed from water and earth, pitta from fore and water and vata from air and ether. The doshas are invisible forces that may be only be demonstrated by inference, but nevertheless it is their balance that is responsible for the general health and well being of the individual whilst, conversely, their imbalance will cause an imbalance of the mind and chaos amongst other constituents and organs of the body.

The prescription of herbal medicines is therefore designed to correct any imbalance of the doshas. As such, all herbal medicines are described in terms of their activity in correcting excess kapha, pitta or vata qualities. As all foods are also categorized in this way, diet also forms an important part of any Ayurvedic treatment regime. Additionally, taste is considered important and Ayurvedic texts describe six basic tastes, madhura, sweet, amla, sour, lavana, salty, katu, pungent, tikta, bitter and kasaya, astringent. A healthy diet should thus contain a good mixture of the six tastes and any herbal treatment should be supplemented by suitable dietary considerations.

Ayurveda may be considered, as much a code for healthy life and longevity as it is a medicinal system! Indeed, the word comes from two Indian words ayul, life, and veda, or knowledge.

Sharangdhar Samhita lists many ways of preparing plants for medicinal use. Extracts, Kashaya or Kwath, infusion, Fant, Him, paste, Kalka, and powder, Churna are regularly prepared from crushed plants. The herbs and their solutions may also be formulated into tonic jams and linctus, Leha, Avleha, Modaka, Paka or Chatan; fermented extracts or medicated wines, Asava or Arishta and pills, Gutika. The pills may be made by cooking the powdered herbs with jaggery or sugar, or by mixing with a liquid such as honey or guggulu

., A natural resin from Commiphora mukul. Medicated fats, Grit and oils, Taila also provide suitable vehicles for the administration of the active herbal compounds. Naturally, the herbs should be fresh wherever possible. Dosage is generally dependent on each individual case but considered very important as example by the following quote, "an under-dose medication cannot cure the disease just as a small quantity of water cannot quench a great fire...."

Having prepared the herbs and their dosage forms, their administration to the body may either be through any of the body's openings or topically, i.e. through application to the skin. One interesting variant of topical administration particularly appeals to me and is described by Charaka thus, "If a king or prince is suffering from a 'hot' or 'cold' fever, he should embrace a luscious woman whose body had been through smeared with the paste of sandalwood or agaru (Englewood)". What a pity that this particular form of administration is not available on the NHS!

INDIAN HERBS - a proven pedigree

Indian plants have been known for many years to posses medicinal properties for example, Dioscorides refers to many Indian plants including Datura species, which were smoked to relieve asthma and Pliny referred to, and seemingly complained of the costly import of Indian drugs and species as being a drain on Rome's reserves of gold. Perhaps the Roman Empire also suffered from a negative trade balance!

Some native Indian plants already form the basis of modern allopathic drugs, for example, psyllium seed, the husk of which is used to ameliorate bowel problems; reserpine, one of 30 alkaloids extracted from the root bark of the plant Rauwolfia serpentina, sarpaghanda, is alleviate diarrhoea, is currently being used in China as an anaesthetic and muscle relaxant. But perhaps the most important modern discovery is a chemical, forskolin, isolated from the traditionally Indian medicinal herbs, Coleus forskolin. This has been shown to be particularly effective in the activation of adenosine monophosphate which acts as a cardiotonic. Perhaps not surprisingly, the classical Sanskrit texts recommended Coleus forskolin for treating heart disease.

Gymnema sylvestre, madhuvinashini, which may be translated as 'killer of sweetness' has been used in India since the 6th Century B.C. for the treatment of the condition known as 'honey-urine'. It would seem that hundreds of years before Western physicians knew what diabetes was, the Indians knew both its diagnosis and a suitable treatment. Recent reports (2) would seem to confirm that an aqueous extract of the plant effectively doubled the number of beta cells in the pancreas, which are responsible for insulin production. No allopathic drug has been able to regenerate these beta cells which have been previously been though to be irreplaceable once destroyed in diabetes. Clinical trials seem to confirm the effectiveness of this traditional treatment which is said to have additional benefits of repairing cell damages in liver, kidney and muscles.

Eclipta alba, another Indian medicinal plant, traditionally used for the alleviation of inflammation and certain liver injury, has recently been reported as an effective anti-inflammatory, allegedly acting through the suppression of prostaglandin and cyto-kinin production (3). Similar confirmation of its traditional use as an anti-inflammatory agent for the treatment of arthritis has also been gained for Nyctanthes arbor tristic, night jasmine (4) where the effect is gained without the side effects normally noted with steroids anti-inflammatory and Embelia ribes has been demonstrated to be a potent analgesic, equivalent in strength to morphine but without the narcotic side-effects (5).

Other plants mentioned in these ancient Indian texts are being specifically investigated for effectiveness against bronchitis, an immunomodulators, antibiotics and male contraceptives and many Western pharmaceutical companies are now researching the medicinal properties of Indian plants utilizing High Throughput Screening (HTS) and Automated Screening Technologies (ASSETS) techniques.



Lord Shiva, one of the Tri-Murthys of creation, preservation & destruction, tutors Nandesar (Nandi) - a half animal-half human like being - the secret arts of Siddha.

Nandesar who represent "the potential evolutionary man" still in animal-like stage of the human paleontology, must been practising Siddha in the zoo-pharmacognosy version.





The first *Tamil Agathiyar* (The Horned Muni - 6 million - 3.7 million B.C.) inherited the arts of Siddha, probably a pre-australopithecenes (pre-Lucy ancestor) who later passes on the knowledge to the rest of the 17 Siddhars - (Homo Habilis, H. Erectus & H. Sapien).



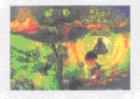


The second Tamil Agathiyar (circa. 30,000 - 25,000 BC) and of the 17 Siddhars (Neandethal contemporaries) expands the knowledge of Siddha in the context of their prehistoric environment and in their search of food with the new use of the element "Fire".





Arrival (circa. 5,000-4,000 B.C.) of the Aryan who covertly calls himself "Agathiyar" for acceptance among the Tamils and to seek unhindered - the knowledge of Siddha for incorporation in the nascent Aryan sciences "ie. Ayurvedic" to enable the Aryanic race to the acclimatization & survival in the harsh Hindu Kush mountains and the Deccan Plains.



Present day modern scientific, medicinal and cosmetology research into the ancient Siddha Sciences.



SPC MARCH 1995

Some of the resultant technological advances: Ethnocosmetology lead information for novel new Siddha herbs functional extracts, novel new natural functional colorants.





REDISCOVERY of the finding of original Siddha texts and search for the plants

Although may of the Sanskrit texts describing Ayurvedic medicinal herbs have survived relatively unscathed through the centuries, generally due to their safekeeping by Indian priests, the Brahmans, some also found their way to Nepal and Tibet in the hands of fleeing monks following the invasion of Northern India by the Muslims. On the other hand, many of the Tamil scripts describing the more ancient Dravidian Siddha medicinal herbs have been lost, many during the flight South following the invasion of the Aryan hordes. Some survived, however, and are to be found in libraries and museums in the West, including the Vatican Library, Polish Institute of Oriental Studies etc., (1).

Some 5 years ago, a Japanese scholar and researcher of the Tamil language found, in the Bibliotheque National in Paris, a treatise on cosmetology by the Siddha sage Bogar dating from about 12 A.D. This text described herbal remedies for the treatment of a variety of hair and skin disease and conditions.

It then became a detective-like hunt by the Dr M Balasubramaniam Plant Medicines Research Institute to track down and identifies the plants described in Bogar's treatise and to mass cultivate them naturally or to mass tissue culture the components, which could then be, translated to 20th century cosmetics' active ingredients. The following data sheets described some of the treatments described in Bogar's treatise and the plants used in them.

References: -

- 1. V.R.Madhavan ed., Siddha Medicinal Manuscripts in Tamil (1984), Intl. Inst. of Tamil Studies, Madras 113
- 2. J Ethnopharmacognacy, 30 (1990) 265 279
- 3. Fitotherapia 58 (1), 1987, 23 32
- 4. J Ethnopharmacology, 11 (1984) 319-330
- 5. Personal Comm. Dr Balasubramaniam M.Ph.D., 1986-1992
- 6. J Ethnopharmacology, 11 (1984) 309 317

Other Recommended Reading

Naveen Patnaik, The Garden of Life - An Introduction to the Healing Plants of India, (Nov 1993), Doubleday, New York, ISBN 0-385-42469-8 and references therein

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Siddha Medicinal Herb



Sri Agasthiyar Siddhar The original Tamil Siddhar



Sri Thirumoolar Siddhar The Teacher of Hermes/Xermes



Sri Korakkar Siddhar The Teacher of Avicenna



Sri Theriyar Siddhar



Sri Kalangi Nathar Siddhar Hermes/Xermes (Greece, Asia Minor) Idris (Sufi Islam)



Sri Kudambai Siddhar



Sri Edaikadar Siddhar



Sri Bogar Siddha alias Lao Tze - founder of Taoism - China



Sri Ramadevar Siddhar alias Yacob Siddhar also Avicenna (Greece/Asia Minor)

The Primodial Siddhars

Siddha Name	Latin Name	ITS	RTS	RSS	OGS	ADS	SSS	DBH	OGH	DIS	NSH	SRB	SSB	нтв	UV
															A&B
Balada Turagogandha	Withania somniferum								+						+SPF 9
Bijaka	Pterocarpous marsupianus	+		+	+				+			+			+SPF 10
Bimbi	Coccinea indica	+		+	+				+			+			+SPF 24
Jambu	Eugenia jambolana	+	+	+				+					+		+SPF 13
Kovil Tulsi	Ocimum sanctum		+	+		+				+	+			+	+SPF 19
Mahakanni	Eclipta alba					+	+	+							+SPF 22
Mahanimba	Azadirachta indica - flores	+	+	+	+	+	+	+	+	+	+	+			+SPF 16
Maka	Eclipta alba - neutralised					+	+	+							+SPF 23
Malkangni	Celastrus paniculata		+		+				+	+			+		+SPF 30
Sala	Shorea robusta	+	+	+	+		+		+			+			+SPF 15
Shriphala	Emblica officinalis	+	+	+		+	+			+	+				+SPF 18
Sunisunnaka	Marsilea minuta	+	+	+								+	+		+SPF 25
Udumbara	Ficus racemosa	+	+	+	+		+		+		+				+SPF 12
Vaipillai	Azadirachta indica - folia		+	+				+			+			+	+SPF 17
Vasa Kovil Tulsi	Ocimum basilicum	+	+	+				+						+	+SPF 16

Decode for therapeutic categories:

my gording and agricing stack skin	ITS -	-	invigorating and tightening slack skin
------------------------------------	-------	---	--

RTS - regenerating of tired, reddened skin

RSS - revitalisation and strengthening of the skin

OGS - against oily or greasy skin conditions

ADS - against dry skin conditions

SSS - against dry skin conditions

DBH - against dry, brittle hair conditions

OGH - against greasy (excessive oily secretions) hair conditions

DIS - against dandruff and itchy scalp

NSH - for normal hair and scalp

SRB - for soothing / relaxing baths

SSB - for stimulating / invigorating baths

HTB - for healing / therapeutic baths

UV A&B -sun protection factor / UV A&B filter/ absorbtion

CAMPO RESEARCH

PRODUCT #916.0000

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO BALADA TURAGOGANDHA

HYDROGLYCOL EXTRACT

Other Trade Names(CampoResearch) Hair flowers tree; Asvagandha Extract

CTFA TRADE NAME CAMPO BALADA TURAGOGANDHA

Existing CTFA/INCI Name Withania Somniferum Flower

CAMPO PRODUCT # 916.0000

CAS# N/A EINECS# N/A EINECS Name: N/A

English name: hair flower tree
Other names: Amukura - Tamil

Asvagandha, Vijaya Kala Gandha -Sanskrit

Reference literature:

Active substances: essential oils soothing, relaxing

Azulene anti-inflammatory
Flavonoids circulation stimulant
Phytosterols protective cares
UVzymes ™ UV absorber

Ethnobotany:

The flowers of Withania are an exclusive hair care remedy in India. Other parts of the shrub are considered for diverse applicants, including use as an aphrodisiac, immuno-stimulant and to combat debility due to old age. It nurtures and clarifies the mind, calms and strengthens the nerves and promotes sound, restful sleep. A leaf infusion is given in fevers and bruised leaves are applied with good effect to boils and swellings. The fruit and seeds are diuretic whilst the seeds are said to be hypnotic.

The plant is also found throughout Africa where Tanzanians used the roots as a sexual stimulant whilst the Zulus use the root to prepare an enema for feverish children. Its Sanskrit name, Asvagandha, translates as horse smell after the alleged odour of the fresh root.

Application and dosage recommendations:

Balada flowers are effective in hair care preparations for stimulating the circulating of the scalp largely through the action of the flavonoids. It can be utilised in special preparation for improving the structure of the hair, and in preparation for regular use against greasy hair and dandruff.

Hair cares products 2 - 5 %

Application codes: AGH, SPF UV A & B

SPECIES Withania Somniferum Flower

Syn: Withania Somniferum Flower (Withania

somniferum)

PARTS USED flowers RAW MATERIAL - ORIGIN I NDIA

CONCENTRATION 1 kg extract = 0.9 kg Balada flores

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Clear, yellow - brownish liquid	Visual
Odour	Aromatic	Oil Factory
Specific Gravity(20deg.C)	1.010 - 1.060	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.350 - 1.390	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	3.5 - 6.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	50 - 85%	-
Propylene Glycol	25 - 45%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<1.000 ppm	USP XXIX /
• • • • • • • • • • • • • • • • • • • •	11	Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT # 913.0000

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO BIJAKA HYDRO GLYCOL EXTRACT

Other Trade Names(CampoResearch) VENGAI; VIJAYA SARA EXTRACT

TRADE NAME CAMPO BIJAKA

Existing CTFA/INCI Name Pterocarpus Marsupium

CAMPO PRODUCT # 913.0000

CAS# N/A
EINECS# N/A
EINECS Name: N/A

English name:

Other names: Vengai (Tamil)

Vijaya Sara - Ayurvedic (Sanskrit)

Reference literature:

Active substances: saponins softening

flavonoids circulation stimulant

tannins astringent mucins hydrating UVzymes ™ UV absorber

Ethnobotany:

Bijaka is traditionally used for treatment of tanjam, which is described as hideous or excessive sebaceous secretions.

Application and dosage recommendations:

In bath preparations, the astringent effect of the tannins in **Bijaka** normalizes these excessive secretions, whilst in skin care preparations, Bijaka exhibits a pronounced vasoconstructive effect making it a valuable ingredient in creams for the treatment of large pored skin. The presence of flavonoids also serves to stimulate the circulation and improves normal cutaneous respiration

Whilst the softening effect of the saponins and the hydrating properties of the mucins also serve to improve the general appearance of the skin.

Skin creams 2 - 10 %

Shampoos & bath care preparations 5 - 10%

Application codes ITS, RSS, OGS, OGH, SRB, SPF UV A & B

SPECIES Pterocarpus Marsupium

Syn: Pterocarpus Marsupium (Pterocarpus marsupum

Roxb)

PARTS USED leaves RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 12.3 kg Bijaka

Specification Parameter Analysis	Specification Range	<u>Methods</u>
Physical Form	Liquid	Visual
Colour	Light brown liquid	Visual
Odour	Almost odorless	Oil Factory
Specific Gravity(20deg.C)	1.010 - 1.060	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.360 - 1.425	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 -5.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55.5 - 85.5 %	-
Propylene Glycol	25.5 - 40.5%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	<0.05ppm	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.010 ppm	USP XXIX /
-		Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT # 910.0000

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO BIMBI HYDRO GLYCOL EXTRACT

Other Trade Names(CampoResearch) Kovai; Rakta phala Extract

CTFA TRADE NAME CAMPO BIMBI

Existing CTFA/INCI Name Coccinia Indica

CAMPO PRODUCT # 910.0000

CAS# N/A EINECS# N/A EINECS Name: N/A

English name:

Other names: Kovai - Tamil

Rakta phala - Sanskrit

Reference literature:

Active substances: saponins softening

mineral salts moisture regulating

amino acids tightening

flavonoids circulation stimulant phytosterols protective cares tannins astringent UVzymes ™ UV absorber

Ethnobotany:

Bimbi is a unique Southern Indian plant, which is traditionally used for hair care. It possesses ingredients that make it suitable for incorporation in all shampoo and conditioner formulations but it is particularly suitable for products to normalise greasy hair.

Application and dosage recommendations:

The action of saponins is to cleanse and soften the hair. Tannins gently close large pores in the scalp whilst stimulation and normalise of the blood circulation of the scalp is effected by the presence of flavonoids. These actions combine to make **Bimbi** a particularly suitable ingredient for shampoos and conditioners for greasy hair. In terms of skin care, the products can also be included to effect in creams and lotions for greasy hair

Shampoos and conditioners up to 10% Foam baths up to 5 % Skin creams 2 - 5 %

Application codes OGS, OGH, RSS, ITS, SRB, SPF UV A & B

SPECIES Coccinia Indica

Syn: Coccinia Indica (Coccinia indica L)

PARTS USED Fruit
RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 3.50 kg Bimbi

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Clear, Light	Visual
Odour	Almost Odorless	Oil Factory
Specific Gravity(20deg.C)	1.010 -1.060	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.350 -1.450	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	3.5-5.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	10 - 30%	-
Propylene Glycol	50 - 90%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.60 ppm	USP XXIX /
,	1 1	Ph.Eur2.6.12(97)
		(/

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT #95-02-10

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

CAMPO GORGA HYDRO GLYCOL EXTRACT **PRODUCT Name (Campo Research)**

Other Trade Name(Campo Research) GORGA TREE; GORGAKKAI EXTRACT

CTFA TRADE NAME **CAMPO GORGA**

Existing CTFA/INCI Name Garcinia cambogia

CAMPO PRODUCT # 95-02-10

CAS# N/A **EINECS#** N/A **EINECS Name:** N/A

English name: Gorga tree/Gorga fruit Other names: Gorgakkai (Tamil Siddha)

Reference literature: 1. Anon., China Tourist, (P.R.O.China)Beijing Feb, 1993

2. Anon., Siddha Medicine, Heritage of the Tamil, Int

Tamil Studies Rs. Inst., Madras, Tamil Nadu, S.India, 1986

3. J.M.Lowenstein, J.Biol.Chem., Feb 1971

4.A.C.Sullivan,ARchives of Biochemistry Biophysics,

Feb, 1972

5.A.C. Sullivan, Lipids, Vol 9, No.2

6.A.C.Sullivan & \hat{J} Triscari, The Am J. of Clinical Nutrition 7. Annals of the New York Academy of Science, 1987 8. Personal Comm. - Hoffman LaRoche, 1963 -1991

9.Personal Comm - Anthony Conte, FDA Clinical Trials Phase

1, 1991-1992

Active substances: (-)hydroxycitric acid anti-cellulite, skin

> rejuvenation weight

control

UV absorber UVzymes ™

Ethnobotany:

Tamil Siddhar Bogar was the founder of the Shao-Lin Temple, (Bamboo Grove Temple) in China, whose history can be traced back 1200 years. Siddhar Bogar was said to prescribe the rinds of the Gorga fruit to the overweight and obese daughter of the Chinese emperor, who in return as a sign of gratitude, granted. Bogar the land, known as Bambo Grove, on the mountain top where he was to build the Shao Lin temple. This was glorified as the birthplace of the Oriental martial arts and popularized in the West by Bruce Lee in the 1970,s.

Gorga has a history of use in China and India for weight and obesity control and for traditional skin care remedies faithfully recorded in the annals of Chinese Imperial families of various dynasties.

The name **Gorga** was given to honour another Siddhar, Siddhar Gorrakkar, author of the famous book Malai Vaggaddam (Malai - Hills or mountains; Vagaddam - literary prose: hence Prose of the Hills of the Bills, circe 11th century). This book is a dictionary of Siddha materia medica, namely trees, shrubs, herbs, minerals and other natural products, describing in vivid detail distance from the nearest established human settlements, topography of the habitat, botanical or morphological features of the material, selectivity of the favoured soil conditions, for plants, assessment of the medicinal, therapeutic properties of the material, its bioavailability, and its compatibility in complex multi-component formulae, dosage, application levels and duration of treatment etc.

This book is famous for making its knowledge available to the common people, for in as much as other Siddhar's works were usually allegorical in nature and written in difficult prose, usually only understood by other Siddhars, Siddha physicians and literary scholars, and totally incomprehensible to the common Tamil folk, this volume was written in simple terms that made much of its contents available to, and understood by, these people, offering them availability of Siddha knowledge on the use of natural products for preventative health and as treatment for many diseases and conditions.

Application and dosage recommendations:

Gorga has undergone human clinical trials in USA. It is known to have profound anorectic action and it's active principal, (-) hydroxycitric acid inhibits the synthesis of fatty acids by inhibiting ATP citrate lyase, the cytoplasmic enzyme which catalyses the conversion of the citrate to acetyl coenzyme A and oxalo-acetate.

Citrate+CoA+ATP-Acetyl CoA+Oxaloacetate+ADP+P The Acetyl-CoA is required for lipid (fatty acid) biosynthesis

The active ingredient that makes this possible (-)-HCA..This is an organic acid, but unlike citric acid, which is widely distributed throughout the plant kingdom. HCA is unique to the Garcinia species, particularly Garcinia cambogia. This particular isomer (-)-hydroxycitric acid is a naturally occurring and biologically active form of HCA which exhibits the property of initiating viable weight loss. It is safer in use than critic acid and does not exhibit direct central nervous system (CNS) suppression.

In Campo **Gorga** PG is a novel form of HCA that can be absorbed by and penetrate the skin in cosmoceutical formulations. At the cellular level, HCA has been shown to inhibit ATP-citrate lyase, thus signaling a decrease of fat and cholesterol formation and accumulation in the cells. The pathway at cellular level requires essentially the same signals as that of the gastro-hepto-CNS, the inhibiting of ATP-citrate lyase. This signal triggers an additional or redirectional glycogen synthesis in turn, increases the glycoreceptor stimulation and amplifies the signalling of sufficient fat and cholesterol deposits already accumulated in the cells. Previously accumulated fats are then preferentially consumed during normal metabolism, without new fats being formed or accumulated in the cellular region subject to the therapeutic applications.

As (-)-HCA in Campo Gorga is not a CNS stimulant, but a peripheral acting agent, it does not enter the brain or CNS or cause other side effects such as insomnia, nervousness, depression, hypertension or rapid heart rate.

Application & dosage recommendations:

Campo **Gorga** (-)-HCA extract is a decolourised extract containing not less than 5% (-)-HCA. It is recommended for anti-cellulite and contour forming formulations at 15 - 25 %.

For anti-cellulite creams and lotions
For bath care preparations:
10%
For oily hair products
5%
General skin rejuvenation
10%

Application codes: AGH, SPF UV A & B

SPECIES Garcinia cambogia

Syn: Garcinia cambogia (Garcinia cambogia

(Gaertn)Desr)

PARTS USED Biogenic gorga plants, harvested fruitpulpy rind

RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 12.00 kg Gorga fruit

Specification Parameter Analysis	SpecificationRange	<u>Methods</u>
Physical Form	Liquid	Visual
Colour	Clear almost	Visual
	Colorless liquid	
Odour	Faint characteristic	Oil Factory
Specific Gravity(20deg.C)	1.010-1.070	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1290-1.400	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 - 6.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55. 5 - 85.5 %	
Propylene Glycol	25. 5- 45. 5%	_
Tropylene Grycor	23. 3- 43. 370	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg./2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	< 0.01 ppm	Pflanzaniaschuttal
		1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.0005 ppm	USP XXIX /
		Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT #911.0000

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name(Camp CAMPO JAMBU HYDRO GLYCOL EXTRACT

Research) SAMBU NAVAL; PHALENDRA EXTRACT

OtherTradeNames(Campo

Research) CAMPO JAMBU

CTFA TRADE NAME

Jambul (Eugenia Cumuni) Fruit & Leaf

Existing CTFA/INCI Name 911.0000

CAMPO PRODUCT # N/A

N/A

CAS# N/A

EINECS#

EINECS Name:

English name:

Other names: Sambu Naval (Tamil)

Phalendra - Sanskrit

Reference literature:

Active substances: amino acids tightening

histamine vasodilatory

carotinoids granulation promoting

chlorophyll deodorant

mineral salts moisture regulating phytosterols protective cares UVzymes ™ UV absorber

Ethnobotany:

Tribal use of Jambu in India is as a ritual post-natal facial wash and in facial wound healing remedies. Jambu is a unique Southern Indian plant, which also has the properties of stimulating the scalp and regenerating damaged hair.

Application and dosage recommendations:

In facial skin care, the presence of carotenoids promotes granulation whilst the amino acids exert a tightening effect on the skin. The combination of amino acids with the moisture regulating properties of the mineral salts would also tend to suggest application in anti-wrinkle creams and lotions. Additionally, jambu would prove an effective ingredient in products for dry, brittle hair.

Shampoos and conditioners up to 10 % Skin creams 2 - 5 %

Application codes RTS, RSS, ITS, DBH, SSB, SPF UV A & B

SPECIES Jambul (Eugenia Cumuni) Fruit & Leaf

Syn:. Jambul (Eugenia Cumuni) Fruit & Leaf (Eugenia

jambolana Lam) fruits & leaves

PARTS USED fruits & RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 4.70 kg Jambu

Specification Parameter Analysis	Specification Range	<u>Methods</u>
Physical Form	Liquid	Visual
Colour	Light brown liquid	Visual
Odour	Slightly fruity, herbal	Oil Factory
Specific Gravity(20deg.C)	1.010 -1.050	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.360 -1.410	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 - 7.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55 - 95%	-
Propylene Glycol	10 - 30%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	< 0.10 ppm	USP XXIX /
		Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT # bsi 072/94

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO KOVIL TULSI HYDRO GLYCOL

EXTRACT

Other Trade Names (Campo Research) THULASI; TULSI EXTRACT

CTFA TRADE NAME CAMPO KOVIL TULSI

Existing CTFA/INCI Name Ocimum Tenuiflorum

CAMPO PRODUCT #: bsi 072/94

CAS# N/A EINECS# N/A EINECS Name: N/A

English name:

Other names: Thulasi - Tamil

Holy Basil, Holy Tulsi, Tulsi - Ayurvedic

Reference literature:

Economic Plants of India (New Delhi 1980),

Sushrut Sanhita, Charak Samhita;

Dhanvantari Nighantu (Hindu University Benares -

1974 reprint)

Indian Aromatic & Medicinal Plant Abstracts;

Central Science and Industry Research (CSIR) New Delhi, 1989

Agasthir 'Sol Maruthavam' (Tamil), Sage Agathiyar Medicinal Plant Preparations; All-India Siddha Practioners Association, Madras 1945

Active substances: amino acids tightening

carotenoids granulation promoting

tannins astringent polysaccharides hydrating

flavonoids circulation stimulant

UVzymes [™] UV absorber

Ethnobotany:

Kovil Tulsi is a well-known sacred plant throughout India. It is grown in houses and temples in all areas of the sub-continent. Indeed, any courtyard centered on holy basil is considered a place of peace and virtue. The leaves and seed oil(s) are known to have anti-bacterial and insecticidal properties. Medicinally, Tulsi is indicated for respiratory diseases, genito-urinary problems and skin diseases. An infusion of the leaves is applied locally on ringworm and other skin diseases and for removing skin blemishes.

Note: Kovil or Koil (Tamil) = Temple : Kovil Tulsi = Temple Tulsi

Application and dosage recommendations:

Kovil Tulsi may be used in shampoos, conditioners and rinses as a protection against environmental factors. In parallel with traditional uses, however, Tulsi is particularly important in skin care formulations where it may be used for improving skin elasticity and in moisturizing and circulation stimulating formulations. In bath preparations, Tulsi is said to offer vasodilatory and deodorant effects.

skin creams and lotions	3 - 5 %
hair cares preparations	< 10 %
bath cares products	2 - 10%

Application codes OGS, OGH, RSS, ITS, SRB, SPF UV A & B

SPECIES Ocimum Tenuiflorum

Syn: Ocimum Tenuiflorum (Ocimum sanctum L.)

PARTS USED Dried and cured leaves

RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 0.85 kg Kovil Tulsi

Specification Parameter Analysis	SpecificationRange	Methods
Physical Form	Liquid	Visual
Colour	Clear light yellowish brown	Visual
Odour	Characteristic	Oil Factory
Specific Gravity(20deg.C)	1.000 -1.050	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.350-1.400	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 - 5.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55 - 95%	-
Propylene Glycol	10 - 50%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
Total Collins	Pathogenic Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
1000 1000 11010		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.600 ppm	USP XXIX /
	rr	Ph.Eur2.6.12(97)

Comments:

Custom extracted from wild shrubs.

This material has not been animal tested for efficiency, bioavailability or therapeutic content. External use only

NOT FOR DRUG USE

CAMPO RESEARCH

PRODUCT #19004

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO MAHAKANNI HYDRO GLYCOL

EXTRACT

Other Trade Names(CampoResearch) Karusalai, Bhringaraj, Bhangra, Susuki namura

CTFA TRADE NAME CAMPO MAHAKANNI

Existing CTFA/INCI Name Eclipta Prostrata

CAMPO PRODUCT # 19004

CAS# N/A **EINECS#** N/A **EINECS Name:** N/A

English name:

Other names: Karusalai (Tamil)

Bhringaraj (Sanskrit), Bhangra (Hindi)

Susuki namura (Jap)

Reference literature:

Active substances: softening saponins

> mucins hydration

vitamins activating & regenerating napthaquinones improves hair structure

/colourant

circulation stimulant flavonoids protective cares

phytosterols

cinnamate esters UV adsorption/sunblock anthraglycosides **UV** adsorption essential oils soothing, antiseptic

UVzymes ™ UV absorber

Ethnobotany:

This herb may be considered almost to be the Indian equivalent of the English dandelion. It is an annual herb growing in moist places throughout the plains of India. Fresh leaf juice is used to increase appetite, improve indigestion and as a mild bowel regulator. The plant has a reputation as an anti-ageing agent and is popularly used to enhance memory and learning. It is used as a general tonic.

Externally, it is used to treat inflammation, minor cuts and burns and the fresh leaf juice is an effective styptic. Leaf juice mixed with honey is used to treat upper respiratory infection in children. It is also used for eye and ear infections.

In cosmetic applications, the chief use of MAHAKANNI is for hair treatment. In many parts of India it is used in the form of oil to promote healthy long, black hair and to reduce hair loss. It is also used for toning and stimulating of the skin.

Application and dosage recommendations:

Mahakanni is recommended for all hair care products. The flavonoids stimulate the peripheral circulation of the scalp thus promoting healthy hair. Naphthaquinones have, in addition to darkening the hair, been empirically observed to improve its structure. The presence of anthraglycosides and cinnamic acid esters serves to protect the hair and skin from the adverse effects if UV light, suggesting use in pre-sun products. The presence of the naphthaquinones may cause skin darkening and use in artificial tanning products may be considered. The combination of mucins, flavonoids, saponins and phytosterols also suggest use of Mahakanni in skin care creams and after-sun products.

for skin creams 2 - 5 % for hair care preparations 2 - 10% for sun care products 2 - 10%

Application codes ADS, DBH, SSS, SPF UV A & B

SPECIES Eclipta Prostrata

Syn: Eclipta Prostrata (Ecipta Alba Hassk)

PARTS USED Herb RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 9.00kg Mahakani

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Dark brown	Visual
Odour	Characteristic, aromatic	Oil Factory
Specific Gravity(20deg.C)	1.023-1.045	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.340-1.345	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	3.0 - 6.0	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55 - 90%	-
Propylene Glycol	15 - 30%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.60 ppm	USP XXIX /
-		Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

NOT FOR DRUG USE

CAMPO RESEARCH

PRODUCT # 915.0000

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO MAHANIMBA HYDRO GLYCOL

EXTRACT

Other Trad Names(Campo Research) Neem Tree Extract; Vembu Extract; Akshadru

Extract; Margosa Extract

CTFA TRADE NAME CAMPO MAHANIMBA

Existing CTFA/INCI Name Neem (Melia azadirachta) Flower

CAMPO PRODUCT #: 915.0000

CAS# N/A
EINECS# N/A
EINECS Name: N/A

English name: Neem tree, Margosa, Nim tree, Nimba tree

Other names: Vembu (Tamil)

Akshadru - Sanskrit

Reference literature:

English name: Neem tree, Margosa, Nim tree, Nimba tree

Other names: Vembu (Tamil)

Akshadru - Sanskrit

Reference literature:

Active substances: carotenoids granulation promoting

amino acids tightening
phytosterols protective cares
mucins hydration

polyacetylenes bacteristatic/fungicidal sesquiterpenes anti-inflammatory UVzymes ™ UV absorber

Ethnobotany:

Throughout the entire Indian sub-continent, this is a sacred tree of a thousand uses. Virtually all parts of the tree are utilised for uses ranging from medicines, cosmetics, agrochemicals, furniture and farm tools. Traditional cosmetics and pharmaceutical uses are almost unlimited. It is particularly effective for treatment of skin complaints and has a special reputation for curing itching of all kinds. It facilitates wound healing, skin softening, and the treatment of dandruff and greasy hair. Neem extract is a unique insecticide, which is believed to enter the leaves of other plants to which it is applied making the recipient plants poisonous to insect predators.

After one hundred years of life, a neem tree is believed, on a day that can not be predicted, to begin secrete a nectar or sap that is believed to be its very essence. That nectar is believed to be capable of curing many diseases.

Application and dosage recommendations:

The properties of **Mahanimba** have already been utilised by several cosmetic manufactures in Japan, where it is known as Tnimpa or Kshadoo. It is being used as a functional ingredient in skin care products where is exhibits beneficial properties in day creams and special preparations for the treatment of greasy skin. In shampoos, conditioners and rinses it is being used as a remedial for greasy hair and dandruff.

hair cares products	<15%
skin creams	3 - 5 %

Application codes ITS, RTS, RSS, OGS, ADS, SSS, DBH, OGH, DIS, NSH, SRB, SPF UV A & B

SPECIES Neem (Melia azadirachta) Flower

Syn: Azadirachta indica A. Juss.(Melia azadirachta L)

PARTS USED flowers, inflorescence

RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 1.0 kg Mahanimba flores

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Clear yellow	Visual
Odour	Aromatic	Oil Factory
Specific Gravity(20deg.C)	1.020-1.063	USP XXIX / Paar, DMA35
Refractive Index(20deg.C)	1.363-1.394	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 - 6.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55.5 - 85.5 %	-
Propylene Glycol	25.5 - 40.5%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal
		1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.10 ppm	USP XXIX /
		Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

NOT FOR DRUG USE

CAMPO RESEARCH

PRODUCT #910.0010

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO MAKA HYDRO GLYCOL EXTRACT

Other Trade Names(Campo Research) MAKA EXTRACT

CTFA TRADE NAME CAMPO MAKA

Existing CTFA/INCI Name Eclipta Alba Hassk (E. Prostrata L)

CAMPO PRODUCT # 910.0010

CAS# N/A
EINECS# N/A
EINECS Name: N/A

English name:

Other names: Maka (Ayurvedic)

Reference literature:

Active substances: saponins softening

mucins hydration

vitamins activating & regenerating flavonoids circulation stimulant improves hair structure phytostorols protective cores

phytosterols protective cares

cinnamate esters UV adsorption/sunblock

anthraglycosides essential oils soothing, antiseptic UVzymes ™ UV absorber

Ethnobotany:

This herb may be considered almost to be the Indian equivalent of the English dandelion. It is an annual herb growing in moist places throughout the plains of India. Fresh leaf juice is used to increase appetite, improve indigestion and as a mild bowel regulator. The plant has a reputation as an anti-ageing agent and is popularly used to enhance memory and learning. It is used as a general tonic.

Externally, it is used to treat inflammation, minor cuts and burns and the fresh leaf juice is an effective styptic. Leaf juice mixed with honey is used to treat upper respiratory infection in children. It is also used for eye and ear infections.

In cosmetic applications, the chief use of **Eclipta Alba** is for hair treatment. In many parts of India it is used in the form of oil to promote healthy long, black hair and to reduce hair loss. It is also used for toning and stimulating of the skin.

Application and dosage recommendations:

Maka is recommended for all hair care products. In this case the extract has been neutralized to remove the coloring effect of the naphthaquinones whilst still retaining their hair structure

improving properties. The flavonoids stimulate the peripheral circulation of the scalp thus promoting healthy hair. The presence of anthraglycosides and cinnamic acid esters serve to protect the hair from the adverse effects of UV light and also suggest use in pre-sun products. The combination of mucins, flavonoids, saponins and phytosterols also suggest use of Maka in skin care creams and after-sun formulations.

 $\begin{array}{ccc} \text{for skin creams} & 2 - 5 \% \\ \text{for hair care preparations} & 2 - 10\% \\ \text{for sun care products} & 2 - 5\% \\ \end{array}$

Application codes ADS, DBH, SSS, SPF UV A & B

SPECIES Eclipta Alba Hassk (E. Prostrata L)

Syn: Eclipta Alba Hassk (E. Prostrata L). (Eclipta

Alba Hassk)

PARTS USED Herb RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 9.00 kg. Maka

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Clear light reddish	Visual
Odour	Characteristic - aromatic	Oil Factory
Specific Gravity(20deg.C)	1.020-1.045	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.330-1.345	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 - 6.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55 - 95%	
Propylene Glycol	10 - 30%	-
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal
		1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.600 ppm	USP XXIX / Ph.Eur2.6.12(97)

Comments:

100% wildcrafted herb

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT# 980.018

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO MALKAGNI HYDRO GLYCOL

EXTRACT

Uluvai Extract; Intellect Tree Extract; Black

Oil Tree Extract

CTFA TRADE NAME CAMPO MALKAGNI

Existing CTFA/INCI Name Celastrus paniculata

CAMPO PRODUCT # 980.018

CAS# N/A
EINECS# N/A
EINECS Name: N/A

English name: intellect tree, black oil tree

Other names: Val-uluvai (Tamil)

Jyotismati, Pitatila - Sanskrit

Reference literature:

Active substances: tannin astringent

minerals salts moisture regulating

saponins softening

iridic glycosides anti-inflammatory UVzymes ™ UV absorber

Ethnobotany:

Application and dosage recommendations:

Taken internally, **Malkagni** is generally used as a memory promoter and for the treatment insanity. It has also been traditionally used for the treatment of sleeplessness, high blood pressure, joint pain, paralysis, coughs, liver complaints and rheumatic. It has also been utilised for the treatment of heart disease, kidney problems and oedema. It is considered aphrodisiac.

Externally, Malkagni is used for pain relief, to heal infected skin ulcers and to cure leucoderma. It is a traditionally ingredient of skin care products.

Applications and dosage recommendation:

Mirroring its traditional use, **Malkagni** is a suitable ingredient for skin cares products, both in the form of face creams and also as a component of bath care formulations. Its overall action is one of revitalisation, whilst the tannins provide a natural astringency resulting in the closing of large skin pores. This effect in conjunction with the softening action of the saponins and

the moisture regulating properties of the mineral salts helps restore the natural elasticity of the skin.

Facial care products	2 - 3 %
Bath preparation	< 10 %
Shampoos and conditioners	3 - 5 %

Application codes RTS, OGS, OGH, DIS,SSB, SPF UV A & B

SPECIES Celastrus paniculata

Syn: Celastrus paniculata (Celastrus paniculatus Willd)

PARTS USED Seeds, leaves & flowers

RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 1.05 kg Malkagni

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Brown	Visual
Odour	Pleasantly aromatic	OilFactory
Specific Gravity(20deg.C)	1.020-1.060	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.370-1.395	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 - 6.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55.5-85.5 %	
Propylene Glycol	35.5-50.5	-
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.10 ppm	USP XXIX /
· · · · · · · · · · · · · · · · · · ·		Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT #914.0000

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO SALA SIDDHA HYDRO GLYCOL

EXTRACT

Other TradeNames(Campo Research) Sala-maruthu; Agnivallabha Extract

CTFA TRADE NAME CAMPO SALA SIDDHA

Existing CTFA/INCI Name Damar (Shorea Robusta)

CAMPO PRODUCT # 914.0000

CAS# N/A
EINECS# N/A
EINECS Name N/A

English name:

Other names: Sala-maruthu (Tamil)

Agnivallabha - Ayurvedic (Sanskrit)

Reference literature:

Active substances: tannin astringent

Flavonoids circulation stimulant phytosterols protective cares mucins hydrating UVzymes ™ UV absorber

Ethnobotany:

Sala is rich in tannins and it's functionally generally results from the astringent action of these chemicals. It has traditionally been used for the treatment of tanjam, which is described as hideous or excessive sebaceous secretions.

Application and dosage recommendations:

Sala is recommended for use in creams for the treatment of large pored and greasy skin and for the treatment of tired, reddened and sun burned skin where the astringent action of the tannins is supported by the circulation stimulating properties of the flavonoids and the hydrating properties of the mucins.

Skin creams 2 - 5 % Bath cares preparations < 20%

Application codes ITS, RTS, RSS, SSS, OGS, OGH, SRB, SPF

UV A & B

SPECIES Damar (Shorea Robusta)

> Syn: Shorea obust Gaertn F (Shorearobusta Gaertn. F)

PARTS USED leaves **INDIA** RAWMATERIAL -

ORIGIN

CONCENTRATION 1 kg extract = 7.2 kg sala

CONCENTRATION	1 kg extract = 1.2 kg sala	
Specification Parameter Analysis	Specification Range	<u>Methods</u>
Physical Form	Liquid	Visual
Colour	Light reddish brown	Visual
Odour	Odourless	Oil Factory
Specific Gravity(20deg.C)	1.010-1.030	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.360-1.385	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5 - 6.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55.5 - 85.5 %	-
Propylene Glycol	25.5 - 40.5%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	<0.05 ppm	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-	LISP XXIX /

Total Germs <100 Cfu/ml - **Non-**USP XXIX / **Pathogenic** Ph.Eur.2.6.12(97) <100 Cfu/ml USP XXIX / Total Yeast/Mold Ph.Eur.2.6.12(97) USP XXIX / <0.10 ppm

Heavy Metals(Total)As,Pb,Hg Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

CAMPO RESEARCH

PRODUCT #912.0000

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO SHRIPALA HYDRO GLYCOL

EXTRACT

Other TradeNames(Campo Research) Nelli; Amalaki Extract

CTFA TRADE NAME CAMPO SHRIPALA

Existing CTFA/INCI Name Phyllanthus Emblica Fruit

CAMPO PRODUCT # 912.0000

CAS# N/A EINECS# N/A EINECS Name: N/A

English name: beautiful fruit

Other names: Nelli (Tamil)

Amalaki - Ayurvedic (Sanskrit)

Reference literature:

Active substances: amino acids tightening

Vitamin C protective cares

mucins hydration

mineral salts moisture regulating

tannins astringent

flavonoids circulation stimulant phytosterols protective cares UVzymes ™ UV absorber

Ethnobotany:

Shripala is one of the famous Triphala, or three valuable fruits used throughout India in various native remedies for skin and hair care. The other two are Terminalia chebula or Haritaki and Terminalia belerica or Bibhitaki. They feature in many traditional Siddha remedies as well as Unani and Ayurvedic texts. In traditional Ayurvedic texts, Emblica officinalis is recommended for hair treatment, particularly in the prevention of premature greying.

Application and dosage recommendations:

Shripala is unique in its action and is highly suitable for regeneration and relaxation of reddened and stressed skin. The water uptake and water retention capacity of the skin is promoted by the action of the mucins and mineral salts and supported further by the gentle

astringent action of the tannins. Shripala is recommended for inclusion in moisturizing creams, night creams and sun care products.

sun cares products 2 - 10 % skin creams 2 - 10%

Application codes RTS, ITS, RSS, SSS, NSH, DIS, ADS, SPF UV

A & B

SPECIES Phyllanthus Emblica Fruit

Syn: Phyllanthus Emblica Fruit (Emblica officinalis

Gaertn)

PARTS USED fruits RAW MATERIAL – ORIGIN INDIA

CONCENTRATION 1 kg extract = 23 kg shripala

SpecificationRange	Methods
Liquid	Visual
Light brown	Visual
Almost odourless	OilFactory
1.010-1.050	USP XXIX / Paar,DMA35
1.360-1.440	USP XXIX / DGF IV C (52)
4.5-6.5	USP XXIX / DGF H III (92)
55.5 - 85.5 %	-
25.5 - 40.5%	
Soluble	-
-	-
-	-
1 - 15 %	Mettler 16J
None	-
None	Pflanzaniaschuttal 1989
<100 Cfu/ml - Non-	USP XXIX /
Pathogenic	Ph.Eur.2.6.12(97)
<100 Cfu/ml	USP XXIX /
	Ph.Eur.2.6.12(97)
<0.10 ppm	USP XXIX /
	Ph.Eur2.6.12(97)
	Liquid Light brown Almost odourless 1.010-1.050 1.360-1.440 4.5-6.5 55.5 - 85.5 % 25.5 - 40.5% Soluble - 1 - 15 % None None <100 Cfu/ml - Non- Pathogenic <100 Cfu/ml

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

NOT FOR DRUG USE

SIDDHA HERB EXTRACTS

CAMPO RESEARCH

PRODUCT # 9199.023

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO SUNISANNAKA HYDRO GLYCOL

EXTRACT

Other Trade Names(CampoResearch) Marsilla; Neerarai; Chanpatiya, Susunishak

Extract

CTFA TRADE NAME CAMPO SUNISANNAKA

Existing CTFA/INCI Name Marsilea Minuta

CAMPO PRODUCT # 9199.023

CAS# N/A
EINECS# N/A
EINECS Name: N/A

English name: Marsilla

Other names: Neerarai (Tamil)

Chanpatiya, Susunishak - Sanskrit

Reference literature:

Active substances: amino acids tightening

mucins hydration

mineral salts moisture regulating

vitamins regeneration acetylcholine vasodilatory

carotenoids granulation promoting

UVzymes ™ UV absorber

Ethnobotany:

Sunisannaka is considered a plant drug for the treatment of womens diseases. It is prescribed for a variety of afflictions. The pulp of this minute, aquatic plant is applied to facial skin to bring about a youthful complexion and a tightening of the skin. In certain towns, women are known to bathe in the expressed juice of Sunisannaka for skin tightening and toning.

Application and dosage recommendations:

Very clearly with the combination of mucins and mineral salts, Sunisannaka is an excellent moisturizing agent and moisture regulator. Additionally, the amino acids effect a tightening of the skin. It is recommended for incorporation in all moisturizing creams, lotions, face packs, etc. The plant is very similar in its actions to Vellalari, or cucumber, which is sometimes added to the expressed juice. A combination of Sunisannaka with cucumber extract or Hua Gua from the range of Campo Chinese medicinal herb extracts is particularly effective

skin care products 5 - 15 %

Application codes ITS, RTS, RSS, SSB, SRB, SPF UV A & B

SPECIES Marsilea Minuta

Syn: Marsilea quadrifolia L.(Marsilea minutas Roxb).

PARTS USED Whole plant RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 25.0 kg Sunisannaka

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Clear, yellowish-	Visual
Coloui	greenish tint	Visuai
Odour	Characteristic	OilFactory
0 40 41	cucumber-like aroma	one actory
Specific Gravity(20deg.C)	0.979 - 1.100	USP XXIX / Paar, DMA35
Refractive Index(20deg.C)	1.310 - 1.420	USP XXIX / DGF IV C
(1 1 1 8 1 7		(52)
pH(20°C) (100% Concentrate)	4.5-5.5	USP XXIX / DGF H III
		(92)
		` '
Carrier Menstrual (Vehicle)		
Water	40 - 80%	-
Propylene Glycol	10 - 30%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal
		1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.1000 ppm	USP XXIX /
		Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

NOT FOR DRUG USE

SIDDHA HERB EXTRACTS

CAMPO RESEARCH

PRODUCT# 914.0000/A

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO UDUMBARA HYDRO GLYCOL

EXTRACT

Other Trade Names(CampoResearch) Athi; Jantuphala Extract

CTFA TRADE NAME CAMPO UDUMBARA

Existing CTFA/INCI Name Ficus Racemosa

CAMPO PRODUCT # 914.0000 /A

CAS# N/A
EINECS# N/A
EINECS Name: N/A

English name:

Other names: Athi (Tamil)

Jantuphala - Sanskrit

Reference literature:

Active substances: carotenoids granulation promoting

flavonoids circulating stimulant sesquiterpenes bacteristatic/fungicidal

saponins softening amino acids tightening' phytosterols protective cares UVzymes ™ UV absorber

Ethnobotany:

Kanni tribes use **Udumbara** for the treatment of damaged and reddened skin, generally caused by exposure to high altitude sunlight, which is believed to have a higher UV activity than that which has filtered through the atmosphere to sea-level. The other traditional use is as hairs wash and body wash, particularly after sesame oil baths as a means of cutting excessive oil.

Application and dosage recommendations:

Udumbara can be used effectively in preparations designed for the treatment of reddened, damaged and tired skin and for other remedial cosmetics for the treatment of open sores, spots etc. Udumbara when formulated into hair care products may be used to stimulate and improve the circulation of the scalp, effectively ameliorating greasy scalp and hair conditions.

hair cares products 5 - 10 % skin creams 2 - 5%

Application codes RTS, ITS, RSS, SSS, OGH, OGS, NSH, SPF

UV A & B

SPECIES Ficus Racemosa

Syn: Ficus Racemosa (Ficus racemosa L)

PARTS USED fruit
RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 2.5 kg Udumbara fructus

Specification Parameter Analysis	SpecificationRange	Methods
Physical Form	Liquid	Visual
Colour	Light reddish brown	Visual
Odour	Aromatic, fruity, characteristic	OilFactory
G 'G' G '(201 G)		HCD WWW / D DMA 25
Specific Gravity(20deg.C)	1.010-1.063	USP XXIX / Paar, DMA35
Refractive Index(20deg.C)	1.370-1.398	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5-5.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	20 - 70%	-
Propylene Glycol	15 - 50%	
Water Solubility	Soluble	-
Saponification Value	_	-
Viscosity	_	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal
		1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX /
	Pathogenic	Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX /
		Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.005 ppm	USP XXIX /
	**	Ph.Eur2.6.12(97)

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

NOT FOR DRUG USE

SIDDHA HERB EXTRACTS

CAMPO RESEARCH

PRODUCT # BSI.009/94

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (CampoResearch) CAMPO VAIPILLAI HYDRO GLYCOL

EXTRACT

Other TradeNames(CampoResearch) Margosa; Vembu extract

CTFA TRADE NAME **CAMPO VAIPILLAI**

Existing CTFA/INCI Name Neem (Melia Azadirachta) Leaf

CAMPO PRODUCT # BSI.009/94

CAS# N/A **EINECS#** N/A **EINECS Name:** N/A

English name: Neem tree, Margosa, Nim tree, Nimba

tree

Other names: Vembu - Tamil

Nimba - Ayurvedic

Reference literature: Economic plants of India (New Delhi 1980)

Sushrut Sanhita, Charak Samhita;

Dhanvantrai Nighantu (Hindu University,

Benares - 1974 reprint)

Indian Aromatic & Medicinal Plant

Abstracts; Central Science and Industry

Research (CSIR) New Delhi 1989

Agasthir 'Sol Maruthavam (Tamil), Sage Agathiyar Medicinal Plant Preparations;

All- India

Siddha Practioners Association Madras

Active substance: amino acids tightening

carotenoids granulation promoting

deodorant

chlorophyll acetylcholine vasodilatory

tannins astringent

azadirachtin fungistatic, bacteriostatic

healing nimbidin UVzvmes ™ **UV** absorber

Nimbidin is one of the bitter principals in Neem leaf. In the preparation of this extract, the leaves are dried and cured by traditional methods in accordance with the tests of the Siddha Sage, Agasthiyar. This reduces the nimbidin concentration to 0.005 ppm. At higher concentrations, say in excess of 100 ppm, it will cause skin redness and possibly blistering. In traditionally Siddha medicinal cosmetic preparations usage of Vaili pilla Taila is well known using similarly cured Neem leaves.

Ethnobotany:

Green twigs of the Neem trees are used as tooth brushes. Leaves soaked overnight are used as a prophylactic for teeth, mouth and skin complaints.

Uncured seed oil is used in leprosy and for the treatment of skin disorders resulting from serious venereal diseases.

Garlands of leaves and stones from the fruit are hung on sick rooms and sick room doors during epidermis of smallpox and chicken pox.

Application and dosage recommendations:

The extract may be used for hair regeneration where hair loss is as a result of fungal infection, and as a general scalp stimulation remedy. Neem leaf extract may be used for the treatment of slow healing skin conditions and in day and night moisturizing and skin tightening formulations. In bath care preparations Neem acts as a vasodilator and deodorant.

Hair cares products	2 - 5 %
Skin creams	< 10%
Bath cares preparations	< 10%

Application code: RT

RTS, RSS, DBH, NSH, HTB, SPF UV A & B

SPECIES Neem (Melia Azadirachta) Leaf

Syn: Neem (Melia azadirachta) (Azadirachta indica

A.Juss)

PARTS USED Dried and cured leaves

RAW MATERIAL - ORIGIN INDIA

CONCENTRATION 1 kg extract = 1.05 kg. Cured Neem leaves

Specification Parameter Analysis	Specification Range	Methods
Physical Form	Liquid	Visual
Colour	Clear light yellowish brown	Visual
	liquid	
Odour	Characteristic	OilFactory
Specific Gravity(20deg.C)	1.010-1.060	USP XXIX / Paar, DMA35
Refractive Index(20deg.C)	1.350-1.380	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	4.5-6.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)		
Water	55- 95%	-
Propylene Glycol	15 - 35%	
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal 1989
Total Germs	<100 Cfu/ml - Non-Pathogenic	USP XXIX / Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 Cfu/ml	USP XXIX / Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.600 ppm	USP XXIX / Ph.Eur2.6.12(97)
	* *	

Comments:

This material has not been animal tested for efficiency, bioavailability or therapeutic content. Wildcrafted plant material from wild trees - custom extracted

External use only NOT FOR DRUG USE

SIDDHA WERB EXTRACTS

CAMPO RESEARCH

PRODUCT # BSI 018/94

INDIAN MEDICINAL HERBAL EXTRACTS FOR COSMETICS FORMULATIONS

PRODUCT TECHNICAL DATA SHEET

PRODUCT Name (Campo Research) CAMPO VASA KOVIL TULSI HYDRO

GLYCOL EXTRACT

Other Trade Names(CampoResearch) Sweet Basil; Baragha Tulsi Extract

CTFA TRADE NAME CAMPO VASA KOVIL TULSI

Existing CTFA/INCI Name Basil (Ocimum Basilicum)

CAMPO PRODUCT # BSI 018/94

CAS# N/A EINECS# N/A EINECS Name: N/A

English name: Sweet Basil/Sweet Tusil
Other names: Thiruneetru Patchai - Tamil
Baragha Tulsi - Ayurvedic

Reference literature: Economic plants of India (New Delhi 1980)

Sushrut Sanhita, Charak Samhita;

Dhanvantrai Nighantu (Hindu University,

Benares - 1974 reprint)

Indian Aromatic & Medicinal Plant

Abstracts; Central Science and Industry

Research (CSIR) New Delhi 1989

Agasthir 'Sol Maruthavam (Tamil), Sage AgathiyarMedicinalPlantPreparationsAll-India Siddha Practitioners Association Madras 1945

Active substances: vitamins regeneration

saponins softening tannins astringent polysaccharides hydrating

flavonoids circulation stimulant

Ethnobotany:

Vasa Tulsi or Vasa Kovil Tulsi is a well-known sacred plant throughout India. It is grown in houses and temples in all areas of the sub-continent. Indeed, any courtyard centered on holy basil is considered a place of peace and virtue.

The leaves are used in flavouring, perfumery and in religious garlands. Most parts of the plant are used medicinally. An infusion of the leaves is applied locally on sunburn, and as a protection from the effects of the sun by village maidens of rural India.

Note:Kovil or Koil (Tamil)=Temple; Vasa Kovil Tulsi = Sweet (Aromatic) Temple Tulsi **Application and dosage recommendations:**

Vasa Kovil Tulsi may be used in shampoos, conditioners and rinses as a protection against environmental factors. It also serves to improve the manageability of the hair. In skin care products, in addition to providing similar protection from environmental factors, it may also be used to good effect in moisturising creams and lotions relying on the softening effects of the saponins and moisturising properties of the polysaccharides. In after-sun preparation Vasa Kovil Tulsi effectively prevents excessive drying of the skin. In bath preparations, the flavonoids and saponins provide effective stimulation of the peripheral circulation and softening of the skin.

Application codes ITS, RTS, RSS, DBH, HTB, SPF UV A & B

SPECIES Basil (Ocimum Basilicum)

Syn: Ocimum sanctum var Basilicum muk.

(Ocimum Basilicum L.)
Dried and cured leaves

RAW MATERIAL - ORIGIN INDIA

PARTS USED

CONCENTRATION 1 kg extract = 0.85 kg. Vasa Kovil Tulsi

Specification Parameter Analysis	Specification Range	<u>Methods</u>
Physical Form	Liquid	Visual
Colour	Clear light yellowish	Visual
Odour	Characteristic	OilFactory
Specific Gravity(20deg.C)	1.010 - 1.060	USP XXIX / Paar,DMA35
Refractive Index(20deg.C)	1.350 - 1.385	USP XXIX / DGF IV C (52)
pH(20°C) (100% Concentrate)	3.5 - 4.5	USP XXIX / DGF H III (92)
Carrier Menstrual (Vehicle)	40 - 90%	
Water	10 - 30%	-
Propylene Glycol		
Water Solubility	Soluble	-
Saponification Value	-	-
Viscosity	-	-
Dry Residue (160deg.C /2hrs)	1 - 15 %	Mettler 16J
Preservation	None	-
Pesticide Content	None	Pflanzaniaschuttal
		1989
Total Germs	<100 Cfu/ml - Non-	USP XXIX / Ph.Eur.2.6.12(97)
	Pathogenic	
Total Yeast/Mold	<100 Cfu/ml	USP XXIX / Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.60 ppm	USP XXIX / Ph.Eur2.6.12(97)
Comments:		

Custom extracted from wild shrubs.

This material has not been animal tested for efficiency, bioavailability or therapeutic content.

External use only

NOT FOR DRUG USE

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Brinjal

Solanum melalonga Linn

Siddha Herbs - Siddha Medico Colour Herbs - Ayurvedic Herbs Balada Turagagandha Mahanimba Withania somnfera Linn. Azadirachta indica A.Juss - flores Henna Eugenia jambolana Lam. Lawsonia inermis Linn Sunisunnaka Marsilea minutas Roxb. Pterocarpus marsupium Celastrus paniculatus Roxb. Willd. Ocimum sanctum Linn. Karuppu Kathalai Black Aloe Aloe Indica Udumbara Ficus racemosa Linn. Bimbi Coccinia indica Linn. Shorea robusota Gaertn.F Mahakanni Eclipta alba Hassk, Kasturi Manjal Curcuma longa Linn Vasa Kovil Tulsi Ocimum basilicum Linn. Gorga Garcinia cambogia (Gaertn) Desr. Mahanimba Azadirachta indica A. Juss - folia

Shriphala Emblica officinalis

Gaertn.

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