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# Review of herbs for Nervine tonic in traditional Siddha Medicine

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#### Abstract

Medicinal plants are sources of great economical value in Indian subcontinent. It is the one of the precious creatives of god to an environmental reservoir, in recent years the importance and value of herbal remedies for all sorts of diseases are being discussed widely herbal remedies have their origin in the household of Indians. Medicinal plants are naturally gifted with invaluable bio active compounds which form the back bone of traditional medicine. Presence of phytochemical components or not only for the discovery of therapeutic agents but are also an asset for the future genura. This review paper deals with the single herbs and prepared medicine in traditional siddha Indian medicine as potent as nervine tonic.

Keywords: Medicinal plants, phytochemical components, nervine tonic..

#### Introduction

Herbal medicines are being used by nearly about 80% of world population primarily in developing countries for health care. It has been reported that there has been an alarming increase in number of diseases and disorders caused by synthetic drugs from prompting a switch over to traditional herbal medicine. Many patients suffered from neurological disorders like hemiplegia and nerve compression of disc in vertebras. The following herbs in siddha act as a nervine tonic and neuro stimulator as in the literature review of traditional medicine.

#### **Materials and Methods**

Literature reviews of various traditional siddha medicine.

### List of herbs

The common names are mentioned below with their tamil names within bracket.

- III. Velvet Bean (Poonai Kaali)
- IV. Ignatius Bean (Kayapankottai)V. Black oil plant / climbing staff ti
  - . Black oil plant / climbing staff tree (Vaaluzhuvai)
- I. Water hyssop (Neer Bhirami) [1,5&15]
- II. Black gram (Ulunthu)

# Information about individual herbs effective in Nervine Tonic. [1,5&15]

S. No	Common Name	Botanical Name	Family Name	Part of used	Uses in Siddha	
1.	Water hyssop	Bacopa Monnieri	Plantaginaceae (or) Scrophulariaceae	Whole plant	Nervine Tonic	
2.	Black Gram	Vigna Mungo	Fabaceae	Seed	Nervine Tonic, Aphrodisiac	
3.	Velvet Bean	Mucuna Pruriens	Fabaceae	Seed	Nervine Tonic, Diuretics	
4.	Ignatius Bean	Strychnos Ignatii	Loganiaceae	Seed	Nervine Tonic, Stimulant	
5.	Black oil plant	Celastrus Paniculatus	Celastraceae	Leaf, Seed	Aphrodisiac, Stimulant Nervine Tonic, Diaphoretic, Alterative	

### Review of in-vitro studies of individual herbs

#### In tamil it is called as 'Brahmi or Neer Brahmi'

Regarding ancient literature Bacopa is a medicinal herb used in siddha where it is also called as brahmi

after brahma the creator of god of the hindu pantheon

Water hyssop (Bacopa monneri) [5&15]

#### **Description:**

It is a perennial herb planted in Australia, Europa, Asia, Africa and North and South Africa and asia.

# Pictorial representation of Bacopa monneri - neer brahmi



- It belongs to family scrophulariaceae
- Parts used Whole plant
- Actions Nervine Tonic, Neurorejunavator

#### **Chemical constituents:**

The best characterized compounds in Bacopa monnieri are **dammarane-typer triterpenoid** saponins known as **bacosides**, with **jujubogenin** or



**pseudo** - jujubogenin moieties as aglycone units. Bacosides comprise a family of 12 known Dmannitol, apigenin, hersaponin, monnerasides I-III,cucurbitacin and plantainosides B.

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Bacoside profile present in *Bacopa* monneri :-[15&16]

Bacopaside I -5.37%

Bacoside A3 – 5.59%

Bacopaside II -6.9%

Bacopasaponin C isomer – 7.08%

Bacopasaponin C – 4.18%

#### Medicinal importance of bacopa monneri:

Whole Plant (Samoolam) Powder used to treat epilepsy (kakkai valippu)

Ghee prepared from this plant used to treat psychological problems such as hallucination, manic

disorders (Kirigaigal) and schizophrenia. (soothiga vaatham)

It also increases memory power.

Some times it is used in delirium tremens

#### Black gram: (Vigna mungo)

#### **Description:**

It is a bean grown in the Indian subcontinent especially district of andhrapradesh and tamilnadu. Black gram also bean introduced to other tropical areas mainly by Indian immigrants.

In tamil it is called as ulunthu. it is traditionally used in food items such as vadai, dosai, payasam, kali all over in India. [5&15]

#### Pictorial representation of vigna mungo - ulunthu





It belongs to family - Fabaceae Parts used – Seed and roots Actions – Nervine Tonic, Aphrodisiac Chemical Constituents: It contains > starches > Proteins

Fatty acid

# Nutritional values of Black Gram:

Black gram is very nutritious as it contains high levels of

Carbohydrate	- 58.99gm/100gm		
Protein	- 25.21gm/100gm		
Dietary fiber	- 18.3gm/100gm		
Fat	- 1.64gm/100gm		

#### Minerals:- [15]

Potassium(k<sup>++</sup>) - 983mg/100gm Calcium (ca<sup>++</sup>) - 138mg/100g Iron (fe<sup>++</sup>) - 7.7mg/100gm

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#### Vitamins:

Thiamine (vitamin B1)	-	0.273mg/100gm
Riboflavin (vitamin B2)	-	0.254mg/100gm
Niacin (vitamin B3)	-	1.447mg/100gm

#### **Medicinal uses :**

It is used in the Nervine tonic for the treatment of male sterility problem and also act as a good aphrodisiac agent.

It is also used to treat urinary reflex disorder

Extracted oil from vigna mungo (ulunthu thylam) is used to treat neurological problems like hemiplegia (Pakka Vaatham), polio myelitis (Ilampillai Vaatham) and rhumatological problems in Siddha and ayurvedic system.

### Velvet Bean (Mucuna pruriens)

#### **Description:**

It is a tropical legume native to Africa and tropical Asia and naturalized and cultivated

Its english common names include velvet bean, Bengal velvet bean, Florida velvet bean, Mauritius velvet bean, yokohama velvet bean, cowage, cowitch and Iyon bean.

In tamil it is called as "poonaikali" [15&5]

#### Pictorial representation of mucuna pruriens- poonaikali





#### It belongs to family - Fabaceae Parts used – Seeds, whole plant Action – Nervine tonic, Neuro Stimulator, Aphrodisiac

#### Chemical components:

The seeds of the plant contains,

L-DOPA - 3.1 – 6.1% Serotonin Nicotine Bufotenine

Trace levels

[5&15]

### Medicinal importance:

The main action of the herb act as a nervine tonic in siddha scientific medicine.

Dried seed powder mix with milk for the treatment of parkinson disease (nadukku vaadham) in siddha.

Poonaikali ooral kudineer 30ml OD to treat neurological disorders.

Whole plant (Poonaikali Samoolam) Chooranam mix with Ghee as an adjuvant to treat psycho neurological disorders. [1&14]

### Traditional uses:

The plant and its extract have been long used in tribal communities as a toxin antagonist for various snakebites. It has been studied for its effects against bites by **naja sps** (cobra snake), **echis** (saw scaled viper) **calloselasma** (Malayan pit viper) and **bangarus** (krait)

The seeds of mucuna pruriens have been used for treating many dysfunctions in unani medicine

#### Ignatius bean (strychnos ignatii)

#### **Description:**

Strychnos ignatii is a tree in the Loganiaceae family, native to the Philippines , particularly in Catbalogan and parts of China. The plant was first described by the Czech Jesuite working in the Philippines, brother Georg Kamel who named its fruits as the beans of strychnos ignatitus, after the founder of his religious order. [15]

#### In tamil it is called as kayappankottai

It belongs to the family – Loganiaceae [5&6] Parts used – Seed and Whole plant Action – Nervine Tonic, Neuro stimulator [1]

# Pictorial representation of strychnos ignatii- kayappankottai [15]



**Chemical Components:** 

#### The beans of plant contains the alkaloids

Strychnine – Crystalline alkaloid [5&6]
 Brucine – Used as a tool for stereo specific chemical synthesis

#### Medical importance :

It is a one of the best nervine tonic in siddha scicentific medicine [1&14]

> It is used in the treatment for epilepsy and psychic disorders.

Oil extract from this plant is used to treat male sterility and neurological problem



> Brucine has been shown to have good anti tumour effects on both hepatocellular carcinoma and breast cancer

#### Black oil plant (Celastrus paniculatus)

#### Description: [15]

It is a Woody liana commonly known as black oil plant, climbing staff tree and intellect tree

This climbing shrub grow throughout India at elevation up to 1,800m

### In tamil it is called us – "vaaluzhuvai" [5&6]

It belongs to the family – celastraceae [5&6]

Parts used - Seed, Whole plant

 $\geq$ 



#### Pictorial representation of celastrus paniculatus- vaaluzhuvai

# [15]

# **Chemical Constituents**

- Aromatic oil extract from this plant [5&6]
- Dyes and reagents
- Tannins
- > Alkaloids Cleastrinine and paniculatine

### Medicinal uses:

> vaaluzhuvai chooranam mix with milk as an adjuvant to treat neurological imbalance in male sterility problems.

- vaaluzhuvai chooranam is used in the treatment for epilepsy (Valippu noi)
- > Traditionally it is used in neuro stimulator in siddha scientific medicine

> Oil from the seeds is used as a traditional medicine in Indian, Unani, and Ayurvedic medicine [1&14]

# List of siddha medicine act as a nervine tonic

S. No	name of the medicine and their physical form	Main Ingredients - Common name with tamil name as an bracket	uses	reference
1.	Brahmi nei (internal use)	Bacoppa Monnieri (Neer Bhirami)	Nervine tonic, Neuro psychological disorders like hallucination, Manic disorders, schizophrenia	Gunapadam Mooligai vaguppu/ Sirappu Maruthuvam [1]
2.	Ulunthu Thailam (External use)	Vigna Mungo (Ulunthu)	Neurological disorders like hemiplegia, sciatica, disc problem	Theriyar Thaila Vargam [17]
3.	Poonaikaali Vithai Chooranam and Poonaikaali ooral Kudineer (Internal Use)	Mucuna Pruriens (Poonaikaali)	Nervine Tonic,Neurological disorders, parkonisonism and aphrodiasiac action	Gunapadam Mooligai vaguppu & sarabendrar vaithiya muraigal [1&11]
4.	Kayappan Kottai chooranam (Internal Use)	Strychnos Ignatii (Kayappan Kottai)	Nervine Tonic, aphrodiasiac action	Siddha Marunthugal Seimurai & sarabendrar vaithiya muraigal [11&14]
5.	Vaaluzhuvai Chooranam	Celastrus Paniculatus (Vaaluzhuvai)	Nervine Tonic, Anti epileptic, aphrodiasiac action	Gunapadam Mooligai vaguppu [1]

# Conclusion

Siddha medicines are well functioning to treat neurological disorders like hemiplegia, sciatica, disc problems with nerve compression in the modern scientific world. The following herbs act as not only a nervine tonic but also it is a well known neuro rejenuvator. So it is concluded that the medicine preparation documented centuries by our great siddhars are relevant even today which is evedent through the in-vitro studies carried out with universal parameters.

# Acknowledgments

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