



A PHYTOMEDICINE- BACOPA MONNIERI (BRAHMI)

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ABSTRACT

Bacopa monnieri is the medicinal plant which produce great medicinal value. It is the belong to the family of Plantaginaceae. The plant of Bacopa monnieri is also called water hyssop, Brahmi, thyme-leafed gratiola and Indian pennywort. It is used in alternative system of medicine in Ayurveda. It produce very pretty flower the flower of Bacopa monnieri is bluish white in color and it's leaves is green in color. These herb is non-aromatic in nature. It is used in the memory improvements, anxiety, depression, seizures, Asthma, Back pain, Hoarseness, ulcer and cancer.

KEYWORDS

Introduction , Biological source, Geographical source, Botanical classification, Vascular name, Organoleptic property, Cultivation and collection, Chemical constituents , Pharmaceutical uses

INTRODUCTION

Bacopa monnieri is an important medicinal plants which is belong to the family of Plantaginaceae. It is the perennial, creeping herb which is indigenous to the wetlands of Southern and Eastern India, Australia, Europe, Africa, Asia, and North and South America.[1] The common name of Bacopa monnieri is also called water hyssop, water hyssop, Brahmi, thyme- leafed gratiola, and Indian pennywort.[1][2] It is also used in the Ayurveda. It is a non- aromatic herb. It's flowers is the small, white in color , it may be present 4 to 5 petals.[3]



Bacopa monnieri

SYNONYMS [4]

Bacopa monniera Hayata & Matsum.

Bramia monnieri (L.) Pennell

Gratiola monniera L.

Herpestes monniera (L.) Kunth

Herpestis fauriei H.Lev.

Herpestis monniera

Herpestris monniera

Lysimachia monnieri L.

Moniera cuneifolia Michx.

FAMILY

Plantaginaceae

BIOLOGICAL SOURCE

The biological source of Bacopa monnieri is fresh and dried leaves and stems of this plant and its various species. [5]

GEOGRAPHICAL SOURCE

It is indigenous to Madagascar. It is found to the tropical regions like India, Nepal, Sri Lanka, China, Pakistan, Taiwan, Vietnam tropical and Southern Africa, Australia Caribbean. [4][5]

BOTANICAL CLASSIFICATION**Botanical Name :**Bacopa monnieri**Family Name :**Plantaginaceae**Kingdom :**Plantae**Division:** Tracheophyta**Class:** Magnoliopsida**Order:** Lamiales**Family:** Plantaginaceae**Genus:** Bacopa**Species:** Bacopa monnieri (L.)**Vascular name [7]****Chinese name:** Jia-ma-chi-xian**Sinhala name:** Lunuwila**Tamil name:** Neera brahmi**Kannada name:** Jala brahmi**Telugu name:** Sambarenu**Bengali name:** Birami**Hindi name:** Brahmi**English name:** Thyme leaved gratiola, water hyssop, Indian pennywort, Herb of grace**Latin name:** Bacopa monnieri**ORGANOLEPTIC PROPERTIES****Color:** Leaves are green in color and flower is bluish white in color**Odour:** Characteristic**Taste:** Bitter**Size:** Leaves are about 2cm**Seed:** minute and numerous

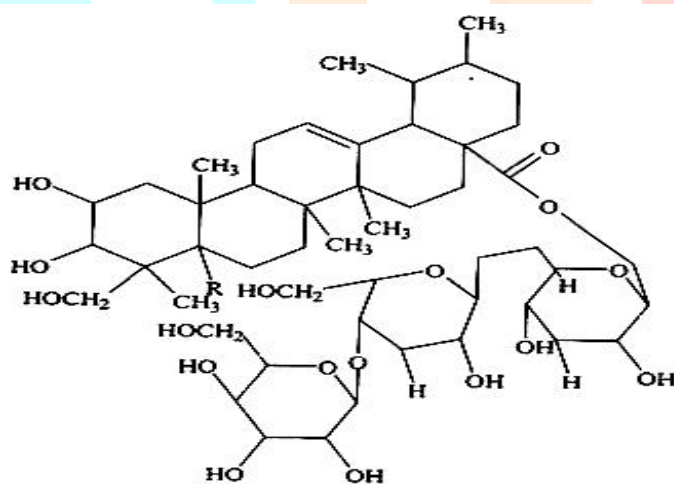
- It's Leaves about 2cm and it's color is green.
- It's flower is stalked, solitary, corola is bluish white in colour and above 1cm in size which present the 4to 5 petals.
- It's Leaves are flachy, obovate ,alternate, simple,entire,with broad apex, sessile and lower surface is dotted in shape.

- It's taste is bitter.[8]

CULTIVATION AND COLLECTION

- It is moist and water loving plant.
- It cultivated under the varied soil and climate conditions.
- It grow faster under the 30-40°C temperature and 65-80% humidity condition. It is cultivated in summer rainy season.
- It is planted in March-June month allowed to grow.
- If before planting, field is cultivate, make free from the cannabis, moistened the soil.
- After removing from the nursery, nursery should be flooded. Take care in cutting and digging. During the cutting it is approximate 6-8 cm long, consisting nodes with root used in transplanting.
- After 1 day planting, vermicompost is spread on the surface of the plots and mixed throughly with the top 10cm soil and flooded.
- The cutting saw in wet soil at a 15*15cm distance.
- It is provided gently before planting it should be flood irrigation.

CHEMICAL CONSITUITENT



Asiaticoside (R = H)
Madecassoside (R = OH)

- It consist of Saponin glycosides such as Brahmoside (triglyceride of brahmic acid with rhamnase, glucose and arabinose), Brahminoside (Tetraglycoside of brahmic acid), Thankunoside: on hydrolysis a triterpenes acid, thankunic- acid, glucose and rhamnase, Asiaticoside, and Oxyasiaticoside
- It consist of Triterpene Acids such as Brahmic acid, isobrahmic acid, Asiatic acid Madasiatic acid, Madacass acid, Centic acid and Centoic acid.
- Bacopa is consist of Tannins.
- It is consist of Flavonoid glycosides such as 3-glycosylquercetin and 3-glucosylkaempferol.
- It contains the Hydrocotyline alkaloids.

- It consist of Sterol such as Stigmasterol, β - sitosterol.
- It consist of Amino acid such as Aspartic acid, glycine, glutamic acid.[5]

PHARMACEUTICAL USES

- Daily dose of bacopa syrup in 4 week which reduce the symptom of anxiety.
- To take bacopa in 6 months seems to improve the Attention deficit-hyperactivity disorder (ADHD) symptom.
- Bacopa is shows antidepressant property which is reduce depression in patients.
- Bacopa is improve the memory which is used in memory and thinking skills improvements
- To take bacopa extract in 5 months it is prevent seizures in some people with epilepsy.
- It is also used in the Insomnia, Asthma, Back pain, Hoarseness and Mental illness.
- It is prevent Joint pain, Sexual problems and fluid retention.
- It is used in ulcers, cancer and other condition.[9]

CONCLUSION

In this review literature we are discussed about the Bacopa monnieri which is belongs to the family of Plantaginaceae. It is broadly used in Ayurveda. It is mostly used in preparation ayurvedic medicine. It is used in the asthma, Back pain, Hoarseness, Metal illness, ulcer, and memory improvement etc.

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