



## A REVIEW ON SOME HERBAL MEMORY ENHANCERS (MEDHYA RASHYANA)

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### ABSTRACT

Loss of memory or dementia is a syndrome occurs due to the disease in the brain. It is a progressive impairment of thinking ability, memory learning capacity, judgment and language. It affects person's emotional, social, motivational control and other cognitive changes include restlessness, depression, apathy, anxiety, agitation and suspicion etc. There are many herbal drugs especially *Medhya Rashyana*<sup>1</sup> described in *Ayurvedic* literature used for improving the intellect of the person. By their judicious use one can improve its cognition, memory and thinking ability.

**KEYWORDS:** Syndrome occurs due, *Ayurvedic*, *Medhya Rashyana*, restlessness, depression.

### INTRODUCTION

Loss of memory or dementia is a syndrome occurs due to the disease in the brain. It is a progressive impairment of thinking ability, memory learning capacity, judgment and language. It affects person's emotional, social, motivational control and other cognitive changes include restlessness, depression, apathy, anxiety, agitation and suspicion etc.

There are many neuropsychiatric conditions and/or alone as developmental defects in which exact no anatomical defect can be detected and their pathophysiology are exactly not known and there requires nootropic to enhance their cognitive ability. There are many herbal nootropic drugs (*Medhya Rashyana*) were described in *Ayurveda*. They act by their specific

action called “*Prabhava*” and have multi-fold benefits. *Acharya Charak* has described<sup>[1]</sup> four main drugs called as *Medhya Rashyana* they can be use either single or in group.

### HERBAL MEMORY ENHANCERS AND THEIR ACTIVE COSTITUTENTS

Sl. No.	Ayurvedic Name	Botanical Name	Main Constituents	Parts used
1.	Mandukaparni	Centella asiatica	<sup>[2]</sup> Medacosides, asiaticoside, asiatic acid etc	Whole plant
2.	Yastimadhu	Glycirrhiza glabra	Glycyrrhizine, flavonones, isoflavones, glycyrrhetic acid <sup>[3]</sup> , six phenolic compound. <sup>[4]</sup>	Root
3.	Guduchi	Tinospora cordifolia	Diterpenoids lactones, glycosides, steroids, sesquiterpenoids, phenolics <sup>[6]</sup> etc	Whole plant extract
4.	Shankhapushpi	Convolvulus pluricaulis chois	Microphyllic acid, shankpushpin, kaempfero-kaempferol-3-glucoside, 3,4dihydroxycinnamic acid <sup>[8]</sup>	Whole plant
5.	Bhramhi	Bacapa monniera	Bacoside A & B, bacopasaponin G	Whole plant
6	Jyotishmati	Celestrus panniculata	Alkaloids-celestrine, paniculatin, celapagine	Seeds
7.	Kushmanda	Benincasa hispidsa	Alkaloids, flavonoids	Fruit
8.	Vacha	Acorus calamus	p-cymene, bgurjunene acorone <sup>[15]</sup>	Rhizomes
9.	Jatamamsi	Nordostachys jatamamsi	Jatamansone & nardostachone	Whole plant
10	Guggulu	Commiphora whighitti	Resine-goguuisterone	Whole plant

**1. Mandukaparni:** (*Centella asiatica* Linn. family Apiaceae) is a prostrate, perennial herb rooting at nodes. Fresh whole plant extract is used as one of the *medhya rashyana* (“...*mandukaparnya swarasa*”<sup>[1]</sup>). *Centella asiatica* Linn is proven for its anti stress effects. It is having revitalising property for brain cells and is commonly known as brain food in India.

**2. Yastimadhu:** (*Glycirrhiza glabra* Linn. of Fabacee family) is a shrub. Fine power of dried root is is used internally with milk (“...*chirena yastimadhukashya churna.*”<sup>[1]</sup>) for the therapeutic purpose as *medhya rashyana*. The root of rhizome of Glycirrhiza is an efficient brain tonic; it increases the circulation into the CNS system and balance the sugar level in the blood.<sup>[5]</sup> Liquorice has significant memory enhancing action in dementia.

**3. Guduchi:** (*Tinospora cordifolia*) it is large glabrous climbing shrub of menispermaceae family. It is found throughout tropics of the India. Therapeutically whole plant juice (“...*Rasho Guduchyastu*”<sup>[1]</sup>) is used as memory enhancer. Decoction, whole plant extract (*satva*), power are also used for therapeutic purpose as antipyretic, immunomodulator and as

anti stress agent.<sup>[7]</sup> Trace elements present in this like zinc and copper are acts as antioxidant.<sup>[8]</sup>

**4. Shankhpushpi:** (*Convolvulus pluricaulis*) it is a perennial sub erect spreading herb having hairs on its stem and found throughout Indian subcontinent. The part used therapeutic purpose is whole plant fine paste (“...*samulapushpyaha kalkah prayojyah khalu shankhpushpyah.*<sup>1.</sup>”). It is reported that *Shankhpushpi* is effective in reliving signs and symptoms of *Chittodvega*.<sup>[9]</sup> It calms the nerves by regulating the body’s production of the stress hormone.

**5. Bhramhi:** (*Bacopa monniera*) Indian pennywort also called as *Aindri*. It is small, creeping herb of scrophulariace family.<sup>[10]</sup> Whole plant juice (*swaras*) is used for therapeutically for nootropic action along with this has tranquilising, sedative property also. The chemical constituents responsible for the desire effects are mixture of two saponins bacosides A & B. they enhance protein kinase activity. It is mainly in the treatment of attention disorder.<sup>[11]</sup>

**6. Jyotishmati:** (*Celastrus panniculata* willd.) it is climber having large stem. Stem is having white dotted spot. Found in whole India especially Punjab, Kashmir up to 3000 feet height. Oil and seed is used as for the therapeutic purpose.<sup>[12]</sup>

**7. Kushmanda:** (*Benincasa hispida*) it is climbing perennial shrub of cucurbitaceae family the fruit is cylindrical covered with a waxy bloom. It is used in anxiety (*chittodvega*) disorder, Alzheimer’s disease. Part used are fruit, seed and seed oil. On colchicines induced alzheimer’s disease it has tissue protective effect via direct and indirect antioxidant activity.<sup>[14]</sup>

#### 8. Vacha

(*Acorus calamus* linn).sweet flag. It is aromatic semiaquatic, perennial herb with its rounded horizontal, vertically compressed rhizome. It is grown all over India.<sup>[16]</sup> Rhizome is used therapeutically for the purpose of nootropic action. It also having analgesic and anticonvulsant, hepatoprotective, sedative and hypothermic<sup>[17]</sup> effect. It useful in schizophrenic psychosis.<sup>[18]</sup>

#### 9. Jatamansi

(*Nordostachys jatamansi* DC) spikenard, it is an erect perennial aromatic herb, having tail like rootstock covered with reddish brown hair belonging to family valerianaceae. Rhizome is

used for its therapeutic purpose especially for psychiatric problems (bhutonmada), insomnia, convulsion, hysteria and as medhya.<sup>[19]</sup>

**10. Guggulu:** (*Commiphora whighitti*) family Burseraceae. It is small tree of about 4-6 feet long, whole stem is thorny, there are five variety of Guggulu are described in *Ayurvedic* classics. Part used is Resin of stem.

## CONCLUSION

It is clear that there is a wide range of herbal drugs which were having memory enhancing property and play vital role against poor memory were described by our ancient scholars. They can be use in their natural form for the wide range of neuro psychiatric problems without much side effect.

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