

ROLE OF SOME AYURVEDIC HERBS IN MANAGEMENT OF MANASROGA

Satyapal Sharma¹, Malvika Saini², Sudipta Kumar Rath³, Mita Kotecha⁴

¹M.D (DravyagunaVigyana), Govt. Ayurvedic Medical Officer, Jaipur, Rajasthan, India

²Asst. Professor, Department of DravyagunaVigyana, M.L.R, Ayurvedic College, CharkiDadari, Haryana, India

³Asst. Professor, ⁴Professor & H.O.D

PG. Department of DravyagunaVigyana, National Institute of Ayurveda, Jaipur, Rajasthan, India

Email: drsatyapal04@gmail.com

ABSTRACT

Ayurveda states both body and mind is the seat of health and diseases. Like *Vata*, *Pitta* and *Kapha* are primarily responsible for physical disorders; *Raja* and *Tama* are mental/psychic factors for *Manasroga*. Ancient seers like *Charak*, *Susrut* and *Vagbhatta* contributed about various aspects of *Manas* and *Manasroga* and their management. *Charak* states that *ishtasyaalabha* (not to get desirable) and *anistasyalabha* (to get undesirable) are the main causes for *Manasroga*. Although *Satvavajay* (counselling) and *Yoga* are said to be the main management approach, use of herbs do play an important role in management of *manasrogas* because beyond a point both *sharirik* and *manasikdoshas* get entangled. *Medhyarasayan*, *vatasamak*, herbs modulating mind etc. are commonly used to manage *Manasroga*. In this article will review and discuss herbs like *brahmi* (*Bacopamonnieri* Linn.), *shankhapushpi* (*Convolvulus pluricaulis* Chois), *mandukparni* (*Centellaasiatica* Linn.) *Vacha* (*Acorus-calamus* Linn.) etc. and their role in managing of contemporary *Manasroga*.

Keywords: *Mind*, *Manasroga*, *Ayurvedic* herbs.

INTRODUCTION

Ayurveda is the most ancient and traditional system of medicine in India. It deals with the whole life of human being starting from birth to end of life because *Ayurveda* describe the art of living and it is a science of life that reveals what is appropriate as well as auspicious

for a happy and long life. *Ayurveda* is regarded as “The Science of Life” and the practice involve the care of physical, mental and spiritual health of human being. Life according to *Ayurveda* is a combination of senses, mind, body and soul. *Ayurveda* is not only

limited to body or physical symptoms but also give comprehensive knowledge about spiritual, mental and social health. Thus, *Ayurveda* is a qualitative, holistic science of health and longevity, a philosophy and system of healing the whole person, body and mind¹. The perfect balance of mind, body and soul is considered as ideal health in *Ayurveda*.

The concept of *Manasroga in Ayurveda*:

In *Ayurveda* the evolutionary process of life is a complex phenomenon and accordingly the concept of disease especially the mental illness is also highly complex. Life is a complex union of *sharira*, *indriya*, *sattva* and *atma*².

Thus mind, body and soul influence each other. However grossly there are two types of disease *Sharirika* (Somatic) and *Manasika* (Psychic) according to the location of disease. When psychic or somatic disease becomes chronic due to their intensity, they may get combined with each other. Such combination rarely occurs when the disease is manifested only for a short period. *Chakrapani* further interprets and elaborates their context and strongly postulates the psychosomatic concept of *Ayurveda*³.

Recent scholars of *Ayurveda* describe this view (based on *Charak* and *Chakrapani*) in following ways⁴. It has been conceived to be functional element of *ATMAN* (soul). It has been mentioned in *Vedas* that thoughts determine the facial appearance, thoughts influence facial expression. This can be elucidated by the definition of health, the causes of disease, the approach to the examination of the patient, the application of psychosomatic constituent, the regimen of mental and physical hygiene

and the several other facts extensively dealt in Indian Medicine including the use of psychotropic drugs i.e. *medhyadravyas* and *medhyarasayanas*⁵. Since curative therapy is expensive and largely palliative, *Ayurvedic* medicines appear to be a natural choice to reduce chronic diseases.

The drugs used in allopathic treatment of mental disorders have many S/Es as they are synthetic material or active principles derived from plant sources. The continuous use of reserpine, an alkaloid extracted from *Rauwolfia-aserpentina*, precipitates suicidal tendencies. On the other hand suicidal tendencies are much lesser if we use the whole drug as a powder or in the form of crude extract such as decoction. *Ayurveda* has the general concept that the drugs are to be used 'as a whole' and the diseases are also to be viewed as an integral whole.

Ayurveda categorizes treatment modalities into three types viz. *Satwawajay*, *Yuktivyapashray* and *DaivyapashrayChikitsa*. Modern Concept of psychotherapy is derived from *Sattvavajay-achikitsa* as discussed in *CharakaSamhita*. Whereas *Yuktivyapashraya* is rational therapy and *Daivyapashray* is faith healing⁶. There is number of herbs which are used in *Manasroga* like *Brahmi*, *Shankhapushpi*, *Mandukaparni*, *Guduchi*, *Yashtimadhu*, *Vacha*, *Ashvagandha* : etc.

ManasrogaNidan⁷

Several factors influence the psychological upset in a person.

- Social circumstances
- Hereditary factors

- Traumatic incidents
- Personality of the person
- Biological reasons (abnormal changes in the chemicals which play major role in communication between neurons in brain.)

According to *Ayurveda* there is an imbalance in *tridoshas* when there is a causative factor. The *guna* of mind *rajas* and *tamas* are also affected simultaneously. Excess of *shoka* (sorrow), *krodha* (anger), *chinta* (unnecessary thinking), *kama* (lust), *krodha* (anger), *lobh* (greed), *moha* (delusion), *irshya* (jealousy), *abhimana* (pride), *mada* (euphoria), *shoka* (sorrow) and *bhaya* (fear) are some of the negative emotions which can contribute to mental imbalance. Holding on to negative emotions and past experiences are considered as toxins affecting mind. *Charak* states that *ishtasyaalabha* (not to get desirable) and *anistasyaalabha* (to get Undesirable) are the main causes for *Manasroga*.

Etiopathogenesis of *Manasroga*: [*Manovahasrotas*]

Explain what is *manovahasrotas*, what is its role in *manasroga nidan* and *samprapti*.

- The understanding of the physiological entity of channels of mind (*manovahasrotas*) is necessary for the better understanding of the pathology of different disorders.
- Classical literature regarding the channels (*srotas*) does not directly enumerate the channels of mind. But in many other contexts different terms are being used to denote the channels of mind. They are *manovahasrotas*^{8,9}, *Buddhivahasrotas*,¹⁰ *Sangyavahasrotas*,^{11,12} *Chetanavahasrotas*,¹³

Here the term *manovaha* is generic & others are more specific. Scholars of *Ayurveda* have used specific term to denote specific psycho-physiological & psychopathological aspect.

***Samprapti* (Pathogenesis) of *Manasroga*:**

Samprapti is a complete phenomenon, which goes on continuously during the process of manifestation of diseases. *ManasVikara* usually runs a sequential process from minor unnoticed general behavioural symptoms to the marked alteration of *buddhi*, *dhriti* and *smriti*. Usually these are unnoticed or noticed *manasvikara* symptoms act as *nidanarthakararoga* (primary disease acts as an etiology of secondary disease).

Regarding *samprapti* (pathogenesis) of *manasroga* *Ayurvedic* classics holds that the disturbance of the equilibrium of *ManasGunas* leads to the origin of mental disorders along with disequilibrium of *sharirikadosha*¹⁴. There are three qualities of mind viz. *Sattva*, *Rajas* and *Tamas*. When these three remain in equilibrium state leads to mental wellbeing. When this state of equilibrium is disturbed i.e. when *Rajas* and *TamasDoshas* are increased or reduction in the qualities of *sattvaguna* leads to development of *Manasvikaras*. Such disorders according to *Ayurveda* are minor. But when the somatic *Doshas* viz., *Vata*, *Pitta*, and *Kapha* are involved in the process of pathogenesis, the disease produced as a result of such interaction is considered as major one. At this level there is usually marked alteration of *Dhi*, *Dhriti* and *Smriti*. *Charaka* has described the *samprapti* of *manasroga* in very systematic way. Accordingly the etiological factors primarily vitiate *Raja* and *Tama* (*ManasDoshas*),

which affect *Hridaya* (the seat of intellect or brain) of an *Alpasattva* person and causes *ManovahaSrotodusti* (vitiates psychic centre .i. e. emotion etc) and give rise to different *Manasroga*.

Some *Manasroga* described in *Ayurveda*:

1. *Unmada* (psychosis)
2. *Apasmara* (convulsive disorder)
3. *Apatantrakam* (hysteria)
4. *Atatvabhinivesham* (obsession)
5. *Bhrama* (illusion)
6. *Tandra* (drowsiness)
7. *Klama* (neurasthenia)
8. *Mada* (loss of perception)
9. Personality disorders

Therapeutic Approach of *Manasroga* in *Ayurveda*:

According to *Charaksamhita*, systematic line of treatment of mental diseases includes-

- ❖ *NidanaParivarjana* (elimination of basic cause)
- ❖ *Daivavyapasrayachikitsa*,
- ❖ *Yuktivyapasrayachikitsa*
- ❖ *Sattvavajaya*

Daivavyapasraya is literally translated to mean any therapy that depend on the 'Daivya' (Divine) or linked to it and it is concerned to unknown circumstances, which are beyond the purview of reasoning or can't establish on scientific basis, and hence it is just remain as spiritual therapy. It include *Mantrah* (Incantations), *Manidharan* (Precious Stones), *Aushadam* (Amulets), *Mangalam* (Propitiatory Rites), *Bali* (Oblations), *Homa* (Sacrifice), *Upavasa* (Fasting), *Japah* (Prayer), *Vratam* (Vows).

Yuktivyapasraya, *yukti* means union, connection and it is much rational in its approach to treating the diseases of psychological and somatic origin. *Yukti* refers to reasoning and *Yuktivyapasraya* is based on a rational and scientific outlook. In this, treatment of mental disorders had given by specific procedures known as *Panchakarma* and presiding suitable palliative measures as a drugs (*Aushadha*) and diet regimen¹⁵.

Sattvavajaya literally translated refers to conquest of mind. This therapy appears to be more rational and conclusive *Ayurvedic* Psychotherapy known as *SattvavajayaChikitsa* (Mind Control Therapy) is composed special status is the incorporation of *Sadvrittam* (ideal behaviour) or moral code. 'Sattvavajaya' or Psychotherapy is one of the three principal categories of the approach to the patients care as described in *Ayurvedic* classics. In principle, *Sattvavajaya* is applicable in varying forms in all kinds of diseases, but it is essentially indicated in mental diseases. The classical *Sattvavajaya* is based on three principles viz., (1) Replacement of emotions, (2) Assurances and (3) Psycho-Shock Therapy. *Ayurveda* conceives a set of emotions like *Kama* (Lust), *Krodha* (Anger), *Lobha* (Greed), *Moha*, *Irsya*, *Dwesa*, *Harsa* (Happiness), *Visada* (Grief), *Mana* (Pride), *Cittodvega* (Anxiety) etc., These are considered as basic components of psychopathology. Some of them are contradictory to certain others viz., *Kama* is contradictory to *Krodha* and *Harsa* is contradictory to *Visada* and vice versa and so on. In *Sattvavajaya*, the psychotherapist attempts to know the state of these emotions casually associated to the illness in his patient and then

develop strategies to replace the pathogenic emotions with the opposite ones. Simultaneously, he also uses assurance therapy and in case of severe manifestations the psychoshock therapy is indicated. Although in current times

comprehensive *Satvavajaya* is not practiced by many *Ayurvedic* physicians but there is a potential scope of its revival and development into a suitable psychotherapeutic model¹⁶.

Table 1: Classification of herbs used in *manasroga*:

Sl.No	Sanskrit Name	Botanical Name
<i>Medhya Rasayana</i>		
1	<i>Mandukaparni</i>	<i>Centellaasiatica</i>
2	<i>Yasthimadhu</i>	<i>Glycyrrhizaglabra</i>
3	<i>Guduchi</i>	<i>Tinosporacordifolia</i>
4	<i>Shankhapushpi</i>	<i>Convolvulus pluricaulis</i>
<i>Medhya Dravya</i>		
1	<i>Brahmi</i>	<i>Bacopamonnieri</i>
2	<i>Jyotishmati</i>	<i>Celastruspenniculatus</i>
3	<i>Ashwagandha</i>	<i>Withaniasomnifera</i>
4	<i>Vacha</i>	<i>Acoruscalamus</i>
5	<i>Jatamanshi</i>	<i>Nordostachysjatamansi</i>
6	<i>Haritaki</i>	<i>Terminaliachebula</i>
7	<i>Shatavari</i>	<i>Asparagus racemosus</i>
8	<i>Kushmanda</i>	<i>Benincasahispida</i>
9	<i>Akarakarabha</i>	<i>Anacyclus pyrethrum</i>

Description of Ayurvedic Herbs Used For ManasRoga:

Brahmi (*Bacopamonnieri*): A small perennial herb of scrophulariaceae family. *Rasa: Katu, Guna: Laghu, Virya: Ushna, Vipaka: Katu, Doshaprabhav: Kapha-vataghna*. This is very use full in Unmade. It Supports learning, memory and concentration. This herb improves brain function and helps to overcome restlessness and anxiety. Clinical studies performed in India confirm that the bacosides in *Brahmi* can revitalize intellectual functions in children. Bacopa also prepares the brain to respond to stress in the most efficient way. It helps in efficient transmission of nerve impulses. The best characterized compounds in *Bacopamonnieri* are dammarane types of

triterpenoid saponins known as bacosides, with jujubogenin or pseudo-jujubogenin moieties as aglycone units.¹⁷ It also inhibits acetylcholinesterase, activates choline acetyltransferase, and increases cerebral blood flow in rats.¹⁸

Sankhupushpi (*Convolvulus pluricaulis*): it is belonging convolvulacea family. *Rasa: Tikta, Guna: Snigdha, Pichhil, Virya: Shita, Vipak: Madhur, Prabhav: Medhya, Doshaprabhav: Vata-Pttaghna*. *Sankhupushpi* has tranquilizing effects and helps to calm the person; It gives good sleep and is also a memory booster. *Convolvulus pluricaulis* has been widely screened for its various pharmacological activities. It has relatively well documented neuro-

pharmacological actions such as nootropic, antistress, anxiolytic, antidepressant, anticonvulsant, tranquilising and sedative activities which justify its use in CNS diseases in the system of Ayurveda.

Mandukparni (*Centellaasiatica*): it is a prostrate herb of Umbelliferae family and rooting at the nodes. *Rasa: Tikta, Kashaya, Guna: Laghu, Virya: Shita, Vipaka: Madhur, Prabhava: Medhya, Doshaprabhav: Kapha, Pttaghna.* This enhances blood circulation in brain and is very effective in anxiety, stress, epilepsy and all mental disorders. Triterpenoid, saponins, the primary constituents of *Centellaasiatica* are mainly believed to be responsible for its wide therapeutic actions in *ManasRogas*.

Yashtimadhu (*Glycyrrhizaglabra*): A sticky, perennial herb with underground stems (rhizomes). It is belonging to Fabaceae family. *Rasa: Madhura, Guna: Guru, Snigdha, Virya: Shita, Vipaka: Madhura, Prabhava: Medhya, Doshaprabhav: tridosahara.* The phytochemical Glabridin present in the roots of *Glycyrrhizaglabra* has positive effects on cognitive functions. It increases the circulation into the CNS system, improves learning and memory on scopolamine induced **dementia**. It is used in treatment of Alzheimer's disease also.

Guduchi (*Tinosporacordifolia*): It is a large, deciduous extensively spreading climbing shrub of menispermaceae family with several elongated twining branches. *Rasa: Tikta, Kashaya, Guna: Guru, Snigdha, Virya: Ushna, Vipaka: Madhura, Prabhava: Medhya, Do-*

shaprabhav: tridoshamaka, Medhya. It is an important drug of Indian Systems of Medicine and used in medicines since times immemorial. *Charak* has described of *guduchiswarasa* as *Medhyarasayan*. *Tinosporacordifolia* has been claimed to possess learning and memory enhancing¹⁹. The neuroprotective activity of ethanol extract of *Tinosporacordifolia* aerial parts have been shown in a study involving 6-hydroxy dopamine (6-OHDA) lesion rat model of Parkinson's disease (PD)². Evidence also exists for aqueous ethanolic extract of *Tinosporacordifolia* playing a role for differentiation based therapy of glioblastomas²¹. Involvement of Monoaminergic and GABAergic Systems in Antidepressant-like Activity of *Tinosporacordifolia* is shown in a study involving mouse model of depression using tail suspension test and forced swim test²².

Vacha (*Acoruscalamus*): it is one of the extensively prescribed herbs in *brhatrayi* texts. It is belonging to Araceae family. *Rasa: Katu, Tikta, Guna: Laghu, Tikshna, Virya: Ushna, Vipaka: Katu, Prabhava: Medhya, Doshaprabhav: Kapha, vatahara.* This herb is indicated in *Unmada, Apasmara*. *Vacha* has been screened for various pharmacological activities. This is neuroprotective and is useful to treat hyperactivity. In India, this is given to children to enhance memory and concentration. Since it is a nervine tonic it is very important in mental health. *Vacha* is considered to be an important remedy in *Unmada*, or psychosis.

It has significant CNS actions such as anticonvulsant, sedative, hypnotic, tranquilizing, and memory enhancing, which justifies its use in some CNS diseases in the Ayurvedic system of

medicine. It also has acetylcholinesterase inhibitor, antispasmodic, antimicrobial, anti-inflammatory, anthelmintic, and insecticidal effects.²³ *Acorus calamus* has used in Ayurvedic medicine on a regular basis for the treatment of memory loss and other mental disorders²⁴.

Jatamansi (*Nardostachys jatamansi* DC). It is important plant of the family Valerianaceae. *Rasa: Tikta, Kashaya & Madhura, Guna: Laghu, Snigdha, Virya: Shita, Vipaka: Katu, Prabhav: Bhutaghna (manasdoshahar), Doshaprabhav: Tridoshaghna.* In Ayurveda, *Jatamansi* is commonly used to insomnia, stress and *Rasayana* for memory enhancement. The essential oils in roots cure depression and hysteria. *Jatamansi* oil helps to soothe the nerves.

Jyotishmati (*Celastrus panniculatus*) is belonging to Celastraceae. It is a large, woody, climbing shrub with ovate or obovate leaves found all over India. *Rasa: Tikta, Guna: Tikshna, Virya: Ushna, Vipaka: Katu, Doshaprabhav: Vata-kaphahara.* Seed oil (*Jyotishmati Taila*) is known for *Medhya* action. Seed oil of *Celastrus panniculatus (Malkangni)* reversed scopolamine-induced deficits in navigational memory task in young adult rats.

Aswagandha (*Withaniasomnifera*): it is a under shrub, erect stem. It is important plant of the family Solanaceae. *Rasa: Katu, Tikta, Guna: Snigdha, Laghu, Virya: Ushna, Vipaka: Katu, Doshaprabhav: Vata-kaphahara.* *Ashwagandha* is used to treat disorders that affect central nervous system, particularly epilepsy, stress and neurodegenerative diseases such as Parkinson's and Alzheimer's. It soothes the nerves and promotes mental health. Mood sta-

bilizer is clinical conditions of anxiety, and depression, clearance and reverses the behavioural deficits and pathology seen in Alzheimer's disease models.²⁵

Haritaki (*Terminalia chebula*): it is belonging to Combretaceae family. It is a large tree, with rust-coloured or silvery hairs over the younger branchlets etc. *Rasa: Kashayapradhanapanchrasa, Guna: Ruksha, Laghu, Virya: Ushna, Vipaka: Madhura, Doshaprabhav: Tridosahara.* *Haritaki* is an important and popular drug used by the practitioners of traditional medicine. *Acharya Bhavaprakasha* has described of *ahritaki* as *Medhya* and *Rasayana*.

Kushmanda (*Benincasahispida*) belonging to Cucurbitaceae an extensive trailing or climbing herb cultivated throughout the plains of India as a vegetable. *Rasa: Madhura, Guna: Snigdha, Laghu, Virya: Shita, Vipaka: Madhura, Doshaprabhav: Pitta-Vatahara.* It has a tissue protective preventive effect on colchicine induced Alzheimer's disease via direct and indirect antioxidant activity²⁶. *Kushmandghrit* has increased immediate memory, possess antidepressant activity.²⁷

Satavari (*Asparagus racemosus*): belonging to Liliaceae. *Rasa: Madhura, Tikta, Guna: Guru, Snigdha, Virya: Shita, Vipaka: Madhura, Doshaprabhav: Vata-pittahara.* *Satavari* is extensively used for its tonic, immunomodulatory etc. *Susruta* has described of *satavari* as *medhya & Rasayana*. It is very effective in *pettikmanasroga* in females.

Akarakarabha (*Anacyclus pyrethrum*): belonging to Asteraceae. It is a hairy shrub possessing white or yellow flowers. *Rasa: Katu,*

Guna: ruksha, Tikshna, Virya: Ushna, Vipaka: Katu, Doshaprabhav: Kaph-vatahara. Akarakarabha helps to cure stress and weakness.

CONCLUSION

Ayurveda considers *Manasroga* as a consequence of *doshja* and *gunaja* imbalances, which result in mistakes of the Intellect (*prajnaparada*) which is the true root cause of all mental disorders. In our classics number of single herbs and formulations are frequently available. In which therapeutic groups like *Medhya Rasayana & Medhyadravya* etc., are discussed in context of psychological disorders (*Manasroga*). These drugs act by the virtue of their special potency known as *Prabhava*. But those drugs which responsible for intellect promotion i.e. *Medhya karma* are of mainly *tikta* rasa which is to be considered during selection of herbs for this purpose. Hence during the selection of *Ayurvedic* herbs consideration of *Prakriti, dosha* and concern disorder with properties & action of particular herbs for balancing and managing of *Manasrogas*.

REFERENCES

1. Charak Samhita (Agnivesh) Ayurveda Dipika Commentry by Cakrapanidutta, Published by Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 11
2. Charaka Samhita (Agnivesh) Ayurveda Depika Commentry by Cakrapanidutta, Published by Chaukhambasurbhartiprakashan, Varanasi, 2014, Page No. 8
3. Caraka Samhita (Agnivesh) Ayurveda Depika Commentry by Cakrapanidutta, Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 254
4. Singh, R.H. *Ayurvediya Manas Vigyan*, Chaukhamba Amarabharati Prakashan, Varanashi, 1st edition (1986), Page No. 78.
5. Singh, R.H., Sina B.N. *Ayurvedic concept of the psychosomatic basis of health and disease*. Published by Ind. J. History of Science. Vol. II (1). Page No. 75-80.
6. Charaka Samhita (Agnivesh) Ayurveda Depika Commentry by Chakrapanidutta, Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 77
7. Balaji Deekshitulu P.V, *Ayurveda and mental health. Reviews of progress*. 2014; 1(51): 1-8
8. Caraka Samhita (Agnivesh) Ayurveda Depika Commentry by Cakrapanidutta, Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 222
9. Charaka Samhita (Agnivesh) Ayurveda Depika Commentry by Cakrapanidutta, Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 468
10. Caraka Samhita (Agnivesh) Ayurveda Depika Commentry by Cakrapanidutta, Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 475
11. Susrutasamhita (susruta) Part-1 Ayurveda Tatva Sandipikahindi Commentry by Kaviraja Ambikadutta Shastri, Published by Chaukhambha Sanskrita Sansthana, Delhi, 2009, Page 44
12. Caraka Samhita (Agnivesh) Ayurveda Depika Commentry by Cakrapanidutta, Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 125
13. *Ashtangahridayam* (vaghbhatta) edited with Nirmala Hindi Commentary Alongwith Special Deliberation etc. Published by

- Chaukhamba Sanskrit Pratishthan, Delhi, Reprint 2009, Page No. 472
14. Singh, R.H. Ayurvediya Manas Vigyan, Editor, Chaukhamba Amarabharati Prakashan, Varanasi 1st edition (1986), Page No. 127-129.
 15. Yadav S, editor. Charak Samhita. Mumbai: SBP NirnaySagar;
 16. Caraka Samhita (Agnivesh) Ayurveda Depika Commentry by Cakrapanidutta, Chaukhambasurbhartiprakashan, Varanashi, 2014, Page No. 77
 17. Phytochemistry 2005; 66: page No.2719–2728.
 18. Aguiar S, Borowski T. Neuropharmacological review of the nootropic herb Bacopamoni-eri. *Rejuvenation Res* (Review) 2013; 16 (4): page No.313–26.
 19. Agarwal A, Malini S, Bairy KL, Rao MS. Effect of *Tinosporacordifolia* on Learning and Memory in normal and memory deficit rats. *Indian J. Pharmacology*. 2002; 34: page No.339–49.
 20. Kosaraju J, Chinni S, Roy PD, Kannan E, Antony AS, et al. Neuroprotective effect of *Tinosporacordifolia* ethanol extract on 6-hydroxy dopamine induced Parkinsonism. *Indian J Pharmacology*, 2014; 46(2): 176-180.
 21. Mishra R, Kaur G. Aqueous ethanolic extract of *Tinosporacordifolia* as a potential candidate for differentiation based therapy of glioblastomas. *Journal of plos.one*. 2013; 8(10): e78764.
 22. Dhingra D, Goyal PK. Evidences for the Involvement of Monoaminergic and GABAergic Systems in Antidepressant-like Activity of *Tinosporacordifolia* in Mice. *Indian J Pharm Sci*. 2008; 70: page No.761-767.
 23. JinaPattanaik, Yogesh Kumar, Ravi Shankar Khatri. *Acoruscalamus*Linn.: A herbal tonic for central nervous system. *Journal of Scientific and Innovative Research*. 2013; 2 (5): 950-954
 24. Kirtikar KR, Basu BD. *Indian Medicinal Plants*. Vol. III. Allahabad, India, Basu LM, 1954, pp 2045–2048.
 25. Bhattacharya SK, Bhattacharya A, Sairam K, Ghoshal S (2000) Anxiolytic-antidepressant activity of *Withaniasomniferaglycowithanolides*: an experimental study. *Phytomedicine*. 2000; 7(6): page No.463-469.
 26. Lim SJ. Effects of fractions of *Benincasahispida* on antioxidant status in Streptozotocin induced Diabetic rats. *Korean.J.Nutr*. 2007; 40(4):295–302.
 27. ChandreR, Upadhyay BN, Murthy KH. Clinical evaluation of *KushmandaGhrita* in the management of depressive illness. *Ayu*. 2011; 32(2): 230-233.

Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Satyapal Sharma Et Al: Role Of Some Ayurvedic Herbs In Management Of Manasroga. *International Ayurvedic Medical Journal* {online} 2017 {cited May, 2017} Available from: http://www.iamj.in/posts/images/upload/1633_1641.pdf