

Psychotropic Medicinal Plants in Ayurveda with Special Reference to Medhya Dravya

Dr. Rathod Mangal R.¹, Dr. Chindarkar Pritam², Dr. Gavand Rajshree³

¹PG Scholar, Department of Dravyaguna

²Guide and Professor, Department of Dravyaguna

³HOD and Professor, Department of Dravyaguna

Sion Ayurvedic College, Sion, Mumbai.

Abstract: Mental and behavioural disorders represent a major global health burden affecting cognition, emotions, and quality of life. Ayurveda, the ancient Indian system of medicine, presents a holistic view of mental health through the integrated functioning of *Śarīra* (body), *Manas* (mind), and *Ātmā* (consciousness). Ayurvedic classics describe numerous medicinal plants exhibiting psychotropic actions by influencing memory, intellect, emotional balance, sleep, and higher mental functions. Among them, *Medhya Dravya* constitute a unique group known for enhancing *Dhi* (intellect), *Dhṛti* (retention), and *Smṛti* (memory). The present article critically reviews psychotropic medicinal plants described in Ayurveda with special emphasis on *Medhya Dravya*, their classical references, Ayurvedic mode of action, and contemporary relevance. The concept of *Medhya Rasāyana* offers a rational, preventive, and sustainable approach to modern mental healthcare.

Keywords: Psychotropic medicinal plants; *Medhya Dravya*; *Manas Roga*; *Rasāyana*; Cognitive enhancement; Ayurveda

I. INTRODUCTION

Ayurveda considers mental health an integral component of complete well-being. Health is not limited to physical balance but also includes mental and sensory satisfaction.

समदोषः समाग्निश्च समधातु मलक्रियः ।
प्रसन्नात्मेन्द्रियमनाः स्वस्थ इत्यभिधीयते ॥

— *Suśruta Samhitā*, Sūtrasthāna 15/48¹

This definition emphasizes that clarity and contentment of mind are essential criteria of health. Mental disorders are described under *Manas Roga*, and Ayurveda provides detailed accounts of herbal drugs capable of modulating mental functions. Although the term *psychotropic* is modern, the functional actions of such drugs are comprehensively documented in Ayurvedic literature.

Ayurvedic Concept of Psychotropic Action

In Ayurveda, *Manas* (mind) functions in association with *Buddhi* (intellect) and sense organs. Drugs influencing mental activities act through:

Regulation of *Rajas* and *Tamas* *Guṇa*

Nourishment of *Majjā Dhātu* (nervous tissue)

Enhancement of *Sattva Guṇa* (mental clarity)

Stabilization of *Prāṇa Vāyu* (vital force governing mental functions)

These mechanisms collectively correspond to psychotropic effects described in contemporary neuroscience².



Manas and Its Guṇa

Ayurveda describes three mental qualities (Mānasika Guṇa):

Sattva: clarity, intelligence, stability

Rajas: agitation, hyperactivity

Tamas: inertia, ignorance

Excessive Rajas and Tamas lead to mental disorders. Psychotropic medicinal plants act by suppressing these disturbed qualities while strengthening Sattva Guṇa³.

Concept of Medhya Dravya

The term Medhya refers to substances that specifically enhance intellectual functions and memory. These drugs are beneficial for students, elderly individuals, and patients with cognitive impairment.

Classical Reference:

मण्डूकपर्णी यष्टिमधु गुड्हची शङ्खपुष्पिका ।
एता मेध्याः स्मृताः प्रोक्ताः रसायनविशेषतः ॥

— *Caraka Saṃhitā*, Cikitsāsthāna 1/3⁴

Caraka identifies four principal Medhya Rasāyana, indicating their rejuvenative and psychotropic significance.

Medhya Dravya with Psychotropic Action

1. Maṇḍūkaparṇī (Centella asiatica)

Maṇḍūkaparṇī is a brain-nourishing rejuvenative drug balancing all three doṣas, especially Pitta and Kapha.

Psychotropic Action:

It calms mental hyperactivity without causing sedation. Its cooling potency reduces anxiety, fear, restlessness, and mental fatigue while improving attention and cognitive clarity⁵.

Ayurvedic Mode of Action:

Nourishes Majjā Dhātu

Regulates Prāṇa Vāyu

Enhances Sattva Guna

Acts through Prabhāva on higher cortical functions

Indications:

Unmāda, Apasmāra, Smṛti bhramśa, anxiety disorders⁶

2. Yaṣṭimadhu (Glycyrrhiza glabra)

Yaṣṭimadhu is a nutritive psychotropic drug with sweet taste and unctuous qualities, pacifying Vāta and Pitta.

Psychotropic Action:

It strengthens brain tissue, enhances learning ability, improves speech clarity, and stabilizes emotional fluctuations, especially in stress-related cognitive decline⁷.

Ayurvedic Mode of Action:

Direct nourishment of nervous tissue

Pacification of aggravated Vāta

Promotion of mental stability through Sattva

Indications:

Buddhi daurbalya, speech disorders, emotional imbalance, Vātaja insomnia⁸

3. Guḍūcī (Tinospora cordifolia)

Guḍūcī is a Medhya Rasāyana with adaptogenic properties, balancing all three doṣas.



Psychotropic Action:

Rather than acting as a stimulant or sedative, Guḍūcī improves stress tolerance by correcting Āma and enhancing tissue metabolism, thereby reducing mental fatigue and dullness⁹.

Ayurvedic Mode of Action:

Improves Dhātvāgni of Majjā Dhātu

Stabilizes Prāṇa and Udāna Vāyu

Reduces Tamas-induced lethargy

Indications:

Mano daurbalya, stress-induced exhaustion, memory impairment¹⁰

4. Śaṅkhaṇḍī (Convolvulus pluricaulis)

Śaṅkhaṇḍī is considered the best Medhya Dravya for memory enhancement.

Psychotropic Action:

It reduces anxiety, emotional instability, and insomnia while promoting calm awareness and improved attention span¹¹.

Ayurvedic Mode of Action:

Pacifies hyperactive Vāta

Strengthens Sattva Guṇa

Facilitates restorative sleep essential for memory consolidation

Indications:

Buddhi daurbalya, anxiety disorders, insomnia, supportive therapy in Unmāda¹²

Other Psychotropic Medicinal Plants in Ayurveda

Drug	Psychotropic Effect
Brāhma	Memory enhancer
Aśvagandhā	Adaptogenic, anti-stress
Jatāmāṁsi	Sedative, anxiolytic
Vacā	Stimulates consciousness
Tagara	Hypnotic

These drugs act as stimulants or tranquilizers depending on their Guṇa and Vīrya¹³.

Mode of Action of Medhya Dravya (Ayurvedic Perspective)

Nourishment of nervous tissue (Majjā Dhātu)

Stabilization of Prāṇa Vāyu

Enhancement of Sattva Guṇa

Rasāyana action preventing neuro-degeneration

This multi-targeted approach distinguishes Medhya Dravya from single-target modern psychotropic agents¹⁴.

Contemporary Significance

Modern psychotropic drugs are effective but often associated with sedation, dependency, and cognitive dullness.

Medhya Dravya offer:

Safe long-term cognitive support

Preventive mental healthcare

Applicability across age groups

Integration with lifestyle and dietary measures

Recent studies support their role in stress-related and neurodegenerative disorders¹⁵.



Discussion

The concept of psychotropic medicinal plants in Ayurveda is fundamentally different from the contemporary pharmacological approach, which largely relies on symptom-oriented, single-target drug therapy. Ayurveda emphasizes the maintenance of mental equilibrium through a harmonious interaction between body (Śarīra), mind (Manas), and consciousness (Ātmā). Mental disorders are understood as the result of derangement in Rajas and Tamas Guṇa, often associated with disturbances in Prāṇa Vāyu, Majjā Dhātu, and systemic metabolic imbalance (Āma).

Medhya Dravya occupy a unique position among Ayurvedic psychotropic agents due to their dual role as both therapeutic and rejuvenative substances. Unlike modern psychotropic drugs, which may produce sedation, dependency, or cognitive dullness upon prolonged use, Medhya Dravya enhance mental functions by nourishing nervous tissue, stabilizing vital energies, and promoting Sattva Guṇa. This makes them particularly valuable in chronic, stress-related, and degenerative mental conditions.

Maṇḍūkaparṇī and Śāṅkhapuṣṭī primarily act through Śīta Vīrya and Sattva-vardhaka properties, thereby reducing excessive mental activity, anxiety, restlessness, and insomnia. Their calming influence on Prāṇa Vāyu explains their usefulness in anxiety disorders, attention deficit, and memory impairment. Yaṣṭimadhu, with its Madhura Rasa and Snigdha Guṇa, contributes to direct nourishment of Majjā Dhātu, offering neuroprotective and stabilizing effects that are beneficial in stress-induced cognitive decline and speech disorders. Guḍuci, on the other hand, functions as an adaptogenic Medhya Rasāyana, improving mental endurance and resistance to stress by correcting metabolic derangements and strengthening tissue-level Agni.

From an Ayurvedic perspective, the psychotropic action of Medhya Dravya is not limited to neurotransmitter modulation but extends to the systemic regulation of mental faculties. Their Rasāyana property ensures long-term preservation of cognitive health, delaying age-related mental decline and enhancing mental resilience. This integrative action is particularly relevant in modern lifestyles characterized by chronic stress, sleep deprivation, and cognitive overload.

Recent experimental and clinical studies have shown promising results regarding the neuroprotective, anxiolytic, and memory-enhancing effects of these plants, supporting their classical indications. However, the Ayurvedic rationale for their effectiveness lies in their ability to restore homeostasis at both mental and physical levels, rather than merely suppressing symptoms. This multidimensional mechanism positions Medhya Dravya as ideal agents for preventive psychiatry and psychosomatic medicine.

Thus, Medhya Dravya offer a scientifically meaningful bridge between traditional Ayurvedic wisdom and contemporary neuroscience, warranting further interdisciplinary research to explore their therapeutic potential in mental and neurodegenerative disorders.

II. CONCLUSION

Psychotropic medicinal plants described in Ayurveda, particularly Medhya Dravya, provide a comprehensive and holistic approach to mental health care. Their therapeutic actions extend beyond symptom control to include cognitive enhancement, emotional stabilization, stress adaptation, and mental rejuvenation. Through nourishment of nervous tissue, regulation of Prāṇa Vāyu, and enhancement of Sattva Guṇa, Medhya Dravya address the root causes of mental imbalance.

In contrast to conventional psychotropic medications, which are often associated with adverse effects and long-term dependency, Medhya Rasāyana offer a safe, sustainable, and preventive strategy suitable for prolonged use. Their applicability across various age groups—from students and working professionals to the elderly—highlights their wide clinical relevance.

In the context of rising global mental health challenges, Ayurveda's Medhya Dravya present a valuable therapeutic option that aligns with contemporary demands for integrative, patient-centric, and holistic healthcare. Incorporation of these drugs into modern mental health practices, supported by evidence-based research and standardized formulations, may contribute significantly to the development of safe, effective, and sustainable neuro-psychiatric interventions.

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