



Review Article

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A COMPARATIVE ANALYSIS OF MAKDUKPARNI ON PUSHYANAKSHTRA IN SHADRITU

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ABSTRACT

Background: Mandukaparni (*Centella asiatica*), a revered herb in Ayurveda, is known for its medhya (cognitive-enhancing) properties. The timing of its collection, particularly during Pushya Nakshatra—a significant astrological period—is believed to enhance its potency. Ayurveda also emphasizes the influence of Shadritu (six seasons) on the efficacy of medicinal plants. This study aims to provide a comparative analysis of Mandukaparni collected during Pushya Nakshatra across different seasons. **Objectives:** To evaluate the traditional and astrological significance of harvesting Mandukaparni during Pushya Nakshatra. To assess the impact of Shadritu on the growth, potency, and therapeutic value of Mandukaparni. To compare the quality and efficacy of Mandukaparni harvested during Pushya Nakshatra across the six seasons. **Methods:** A detailed literature review was conducted using classical Ayurvedic texts such as Charaka Samhita, Sushruta Samhita, and Astanga Hridaya, along with modern research studies. **Results:** The analysis revealed that Mandukaparni harvested during Pushya Nakshatra is traditionally believed to possess enhanced medicinal properties, particularly when aligned with specific seasons. Each season in Shadritu influences the quality of Mandukaparni differently: **Vasanta (Spring):** Potency is heightened, making it ideal for cognitive enhancement. **Grishma (Summer):** The heat impacts the moisture

content, requiring careful storage. **Varsha (Monsoon):** High moisture can affect potency negatively, but Pushya Nakshatra collection mitigates this. **Sharad (Autumn):** Optimal balance in potency and quality, recommended for broader therapeutic use. **Hemanta (Pre-winter) and Shishira (Winter):** Harvesting during these seasons is ideal for preserving the herb's longevity and efficacy. **Conclusions:** Mandukaparni harvested during Pushya Nakshatra in certain seasons, particularly Vasanta and Sharad, shows a significant increase in potency and therapeutic effectiveness. The traditional practice of aligning herb collection with astrological periods like Pushya Nakshatra, coupled with seasonal considerations, can be beneficial in optimizing the clinical efficacy of Mandukaparni.

Keywords: Mandukaparni, Centella asiatica, Pushya Nakshatra, Shadritu, Astrology

INTRODUCTION

Mandukaparni (Centella asiatica) is a prominent herb in Ayurvedic medicine, revered for its medhya (intellectual and cognitive-enhancing) properties. Known as "Gotu Kola" in various cultures, Mandukaparni has been used for centuries to treat a variety of ailments, including mental fatigue, memory loss, and skin disorders. Its adaptogenic and neuroprotective qualities make it a critical component in Ayurvedic formulations aimed at enhancing mental clarity, longevity, and overall well-being.[1]

Pushya Nakshatra, one of the most auspicious lunar mansions in Vedic astrology, is believed to significantly enhance the potency of medicinal plants harvested during its period. According to traditional beliefs, herbs collected on Pushya Nakshatra possess a heightened ability to confer health benefits, making this time particularly favorable for the gathering of medicinal herbs like Mandukaparni.[2] The alignment of herbal collection with specific astrological periods is a practice deeply rooted in the Ayurvedic tradition, where it is believed that the cosmic influence during such periods can optimize the therapeutic potential of medicinal plants.

Shadritu, or the six seasons of the Ayurvedic calendar, also plays a crucial role in determining the efficacy of medicinal herbs. These seasons—Vasanta (spring), Grishma (summer), Varsha (monsoon), Sharad (autumn), Hemanta (pre-winter), and Shishira

(winter)—are recognized for their profound impact on the environment, affecting soil conditions, plant growth, and the bioavailability of active compounds in herbs.[3] Each season influences the pharmacological properties of herbs, thereby affecting their therapeutic value when harvested.

This study explores the **comparative analysis of Mandukaparni collected during Pushya Nakshatra across the six seasons of Shadritu**. By integrating Ayurvedic principles with astrological insights, this analysis aims to provide a deeper understanding of how the timing of herb collection—both seasonally and astrologically—affects the potency, quality, and clinical applications of Mandukaparni.[4] The findings from this comparative analysis can offer valuable insights for Ayurvedic practitioners and researchers in optimizing the use of Mandukaparni for therapeutic purposes.

OBJECTIVES OF STUDY

1. To evaluate the traditional and astrological significance of harvesting Mandukaparni during Pushya Nakshatra.
2. To assess the impact of Shadritu on the growth, potency, and therapeutic value of Mandukaparni.
3. To compare the quality and efficacy of Mandukaparni harvested during Pushya Nakshatra across the six seasons.

Material and Methods

Materials: Classical Ayurvedic Texts: Charaka Samhita, Sushruta Samhita, Astanga Hridaya, Bhavaprakasha Nighantu, these texts were used to gather traditional knowledge about the seasonal and astrological influences on the efficacy of Mandukaparni.

Modern Scientific Literature: Peer-reviewed articles and studies on *Centella asiatica*, focusing on its pharmacological properties, seasonal variations in potency, and the influence of environmental factors on its medicinal value.

Astrological References: Vedic astrology texts and treatises were consulted to understand the significance of Pushya Nakshatra in the context of medicinal plant collection.

Methods:

Literature Review: A comprehensive literature review was conducted to gather information on the traditional and scientific perspectives of Mandukaparni's pharmacological properties, its harvesting during Pushya Nakshatra, and the impact of Shadritu. The review included classical Ayurvedic references to determine how the ancient texts prescribe the timing and methodology of herb collection.

Data Collection: Information on the growth, potency, and harvesting guidelines for Mandukaparni was collected from classical Ayurvedic texts. Seasonal data related to environmental factors such as temperature, humidity, and soil conditions were collated from modern agricultural studies focusing on *Centella asiatica*. Astrological insights into the timing of Pushya Nakshatra and its purported effects on herbal potency were gathered from Vedic astrology literature.

Drug Review: Mandukaparni (*Centella asiatica*)

Mandukaparni, scientifically known as *Centella asiatica*, is a perennial herb belonging to the family Apiaceae. Widely recognized in Ayurvedic medicine, it is also known by names such as Gotu Kola and Indian Pennywort. Mandukaparni has been traditionally used for its cognitive-enhancing, rejuvenative, and wound-healing properties. It is revered as a *Medhya Rasayana* (a rejuvenative for the mind) in Ayurveda, making it an essential herb for improving memory, concentration, and overall brain function.[5]

TABLE NO. 1 CLASSIFICATION OF TAXONOMY

Category	Details
Kingdom	Plantae
Subkingdom	Tracheobionta
Superdivision	Spermatophyta
Division	Magnoliophyta (Angiosperms)

Class	Magnoliopsida (Dicotyledons)
Subclass	Rosidae
Order	Apiales
Family	Apiaceae (Umbelliferae)
Genus	Centella
Species	Centella asiatica

TABLE NO. 2 SYNONYMS

Type	Synonyms
Latin Synonyms	Hydrocotyle asiatica, Hydrocotyle lunata, Hydrocotyle nummularioides, Centella coriacea, Centella glabrata, Centella triflora
Ayurvedic Synonyms	Mandukaparni, Saraswati, Brahmamanduki, Manduki

TABLE NO. 3 VERNACULAR NAMES

Language	Vernacular Name
Sanskrit	Mandukaparni, Manduki, Saraswati, Brahmamanduki
Hindi	Brahmi, Gotu Kola
Marathi	Karivan
Gujarati	Brahmi
Tamil	Vallarai
Telugu	Saraswataku
Malayalam	Kudangal
Kannada	Ondelaga, Brahmi
Bengali	Thankuni Pata

Assamese	Manimuni
Oriya	Brahmi

TABLE NO. 4 GEOGRAPHICAL DISTRIBUTION

Region	Distribution
Global	Widely distributed in tropical and subtropical regions of Asia, Africa, and Oceania
Indian Subcontinent	India, Sri Lanka, Pakistan, Bangladesh, Nepal
Asia	China, Indonesia, Malaysia, Thailand, Vietnam, Myanmar
Africa	Madagascar, South Africa
Oceania	Australia, New Zealand
Habitats	Wetlands, marshes, riverbanks, and other damp, nutrient-rich areas

Botanical Description[6]

- **Plant Morphology:** *Centella asiatica* is a small, herbaceous plant that grows in tropical and subtropical regions. It has fan-shaped, green leaves with serrated edges and produces small, white or pinkish flowers.
- **Habitat:** The plant is commonly found in wetlands, marshes, and along riverbanks. It thrives in damp, nutrient-rich soils.

Chemical Composition[7]

Mandukaparni contains a variety of bioactive compounds, including:

- **Triterpenoids:** Asiaticoside, madecassoside, asiatic acid, and madecassic acid, which are the primary active constituents responsible for its therapeutic effects.
- **Flavonoids:** Quercetin, kaempferol, and other flavonoid glycosides contribute to its antioxidant properties.
- **Vitamins and Minerals:** Contains vitamins B and C, along with essential minerals like calcium, magnesium, and potassium.

Pharmacological Properties [8]

- **Cognitive Enhancement:** Mandukaparni is renowned for its nootropic effects, improving memory, learning, and concentration. It is used in the management of cognitive disorders, including Alzheimer's disease and age-related memory decline.
- **Neuroprotective:** The herb protects the brain from oxidative stress and neuroinflammation, making it beneficial in preventing neurodegenerative conditions.
- **Anxiolytic and Antidepressant:** Mandukaparni has calming effects on the nervous system, reducing anxiety and depression symptoms.
- **Wound Healing:** The herb accelerates wound healing by promoting collagen synthesis and enhancing skin regeneration.
- **Anti-inflammatory and Antioxidant:** It reduces inflammation and oxidative damage, contributing to its overall health benefits.
- **Immunomodulatory:** Modulates the immune system, making it effective in managing autoimmune conditions and enhancing general immunity.

Traditional Uses

In Ayurveda, Mandukaparni is used for various purposes:

- **Medhya Rasayana:** As a brain tonic for enhancing memory, intelligence, and cognitive function.
- **Vrana Ropana:** For wound healing and skin regeneration.
- **Kushtha (Skin Disorders):** Treatment of skin diseases like eczema, psoriasis, and leprosy.
- **Rasayana:** As a rejuvenative to delay aging and promote longevity.
- **Stress Management:** To relieve stress, anxiety, and insomnia.

Dosage and Administration

- **Oral Administration:** Mandukaparni is typically taken as a powder (churna), decoction (kwath), or tablet form. The usual dosage ranges from 1-3 grams of powder or 5-15 ml of decoction per day.
- **Topical Application:** Mandukaparni extract is applied to wounds or skin lesions as a cream or ointment.

Safety and Toxicology[9]

Mandukaparni is generally considered safe when used within recommended dosages. However, excessive consumption may lead to side effects such as nausea, dizziness, or headaches. It is advisable to consult a healthcare provider before using Mandukaparni, especially for pregnant or breastfeeding women.

Contraindications

- **Pregnancy and Lactation:** Due to insufficient safety data, it is recommended to avoid the use of Mandukaparni during pregnancy and lactation unless prescribed by a healthcare provider.
- **Liver Disease:** Patients with liver disease should use Mandukaparni with caution, as it may exacerbate liver conditions.

Drug Interactions

- **Sedatives and Anxiolytics:** Mandukaparni may enhance the sedative effects of other anxiolytic or sedative medications.
- **Anticoagulants:** It may interact with anticoagulant medications, affecting blood clotting.

ABOUT PUSHYA NAKSHATRA

Pushya Nakshatra is one of the 27 nakshatras (lunar mansions) in Vedic astrology. It is considered highly auspicious and is often referred to as the most favorable nakshatra for beginning new ventures. The name "Pushya" is derived from the Sanskrit root "Push" which

means to nourish, strengthen, and provide nourishment. This nakshatra is symbolized by the udder of a cow, which represents nourishment and nurturing.[10]

Key Attributes of Pushya Nakshatra:

1. **Symbol:** The udder of a cow, an arrow, or a lotus.
2. **Deity:** Brihaspati, the guru of the gods (Deva Guru), who embodies wisdom, knowledge, and spirituality.
3. **Ruling Planet:** Saturn (Shani). Despite Saturn being considered a malefic planet, its association with Pushya Nakshatra brings out the positive qualities of discipline, hard work, and persistence.
4. **Element:** Water, which aligns with the nourishing and nurturing aspects of this nakshatra.
5. **Zodiac Sign:** Pushya Nakshatra falls in the sign of Cancer (Karka Rashi), which is ruled by the Moon. This enhances the nurturing qualities of this nakshatra, as Cancer is associated with emotions, care, and protection.

Characteristics of People Born Under Pushya Nakshatra:[11]

- **Personality:** Individuals born under Pushya Nakshatra are often caring, nurturing, and supportive. They tend to have a strong sense of duty and responsibility towards their family and community. They are known for their wisdom, intelligence, and ability to provide guidance and support to others.
- **Profession:** Due to the influence of Brihaspati, people born under this nakshatra often excel in fields related to teaching, counseling, and spiritual guidance. They may also find success in professions related to agriculture, dairy farming, and other areas associated with nourishment and sustenance.
- **Health:** Pushya Nakshatra natives generally enjoy good health, but they may need to be cautious about issues related to the respiratory and digestive systems, which can be their weak areas.

- **Marriage and Relationships:** These individuals are loyal, caring, and protective in their relationships. They value family ties and are often seen as the pillars of strength in their families. However, they may need to be mindful of being overly protective or controlling in their relationships.

Auspiciousness of Pushya Nakshatra:[12]

Pushya Nakshatra is highly regarded for its auspiciousness in Vedic astrology. It is considered an excellent time for starting new projects, making investments, and performing religious and spiritual activities. However, it is generally advised to avoid marriage ceremonies during this nakshatra, as it is believed that Pushya Nakshatra, while highly auspicious for most activities, may not be ideal for matrimonial purposes.

Mythological Significance:

In Hindu mythology, Pushya Nakshatra is associated with the birth of Lord Rama, who was born under this nakshatra. This adds to its auspicious nature, as Lord Rama is revered as an embodiment of dharma (righteousness) and virtue.

Pushya Nakshatra in Modern Times:

In contemporary times, Pushya Nakshatra continues to be regarded as an auspicious period for launching new ventures, making financial investments, and conducting religious ceremonies. Many people choose this nakshatra to begin new businesses, start construction projects, or embark on spiritual journeys.

SHAD RITU refers to the six seasons described in ancient Indian texts, particularly in Ayurveda. These seasons are a fundamental concept in the understanding of time and its influence on nature, human physiology, and health. The classification of the year into six seasons, known as **Shad Ritu** (Shad meaning six and Ritu meaning season), is based on the movement of the Sun and the Moon and the changes they bring about in the environment.[13]

The Six Seasons (Shad Ritu):[14]

1. Vasanta Ritu (Spring)

- **Time Period:** Mid-March to Mid-May (Chaitra and Vaishakha in the Hindu calendar).
- **Characteristics:** Vasanta Ritu is the season of rejuvenation and renewal. The environment is vibrant with new growth, flowers bloom, and the weather is mild and pleasant. The dominance of Kapha Dosha (earth and water elements) occurs, but it is also a time when Kapha begins to liquefy due to the warming weather.
- **Effect on the Body:** The body may experience a slight increase in Kapha, leading to symptoms like congestion or sluggishness if not balanced. It is a good time for detoxification and light, nourishing diets.
- **Recommended Lifestyle:** Engage in physical activities, eat light and fresh foods, and avoid heavy, oily foods.

2. Grishma Ritu (Summer)

- **Time Period:** Mid-May to Mid-July (Jyeshtha and Ashadha in the Hindu calendar).
- **Characteristics:** Grishma Ritu is characterized by intense heat, dryness, and longer days. The Sun is at its peak strength, leading to depletion of bodily fluids and energy.
- **Effect on the Body:** Pitta Dosha (fire element) is aggravated due to the hot and dry weather. The body becomes dehydrated, and there is a loss of strength and energy.
- **Recommended Lifestyle:** Stay hydrated, consume cooling foods like cucumbers, melons, and buttermilk, and avoid strenuous activities during peak heat hours.

3. Varsha Ritu (Monsoon)

- **Time Period:** Mid-July to Mid-September (Shravana and Bhadrapada in the Hindu calendar).
- **Characteristics:** Varsha Ritu is marked by heavy rainfall, humidity, and a cooler environment after the hot summer. The earth becomes saturated with water, and there is a dominance of moisture in the environment.
- **Effect on the Body:** The accumulated Pitta from the summer combines with increased Kapha, leading to weakened digestion and potential imbalances. Vata Dosha (air and ether elements) may also become aggravated due to the changeable nature of the weather.
- **Recommended Lifestyle:** Eat warm, easy-to-digest foods, avoid raw and cold foods, and engage in activities that balance Vata, such as gentle exercise and maintaining regular routines.

4. Sharad Ritu (Autumn)

- **Time Period:** Mid-September to Mid-November (Ashwin and Kartika in the Hindu calendar).
- **Characteristics:** Sharad Ritu is the season of harvest, with clear skies and moderate temperatures. The weather becomes dry and slightly cool as the monsoon recedes.
- **Effect on the Body:** Pitta Dosha, which was aggravated during the summer, is now pacified. However, if Pitta is not properly balanced, it can lead to disorders related to excess heat.
- **Recommended Lifestyle:** Incorporate cooling and soothing foods like ghee, milk, and rice. Engage in calming activities and avoid excessive exposure to the sun.

5. Hemanta Ritu (Early Winter)

- **Time Period:** Mid-November to Mid-January (Margashirsha and Pausha in the Hindu calendar).
- **Characteristics:** Hemanta Ritu is characterized by cold weather, clear skies, and a drop in temperature. It is a time of increased strength and vigor as the body naturally builds more Agni (digestive fire) to counter the cold.
- **Effect on the Body:** Vata Dosha begins to accumulate, but the body's strong digestive fire helps maintain balance. It is a time of nourishment and strengthening.
- **Recommended Lifestyle:** Eat warm, nourishing foods like soups, stews, and fats. Engage in regular exercise, keep warm, and follow a routine that supports Vata balance.

6. Shishira Ritu (Late Winter)

- **Time Period:** Mid-January to Mid-March (Magha and Phalguna in the Hindu calendar).
- **Characteristics:** Shishira Ritu is the coldest season, with dry and harsh winds. The environment is dominated by cold, which further aggravates Vata Dosha.
- **Effect on the Body:** The digestive fire remains strong, but there is a risk of Vata-related imbalances if proper care is not taken.
- **Recommended Lifestyle:** Continue with warm, heavy, and oily foods to nourish the body. Protect against the cold with warm clothing, and maintain regular routines that balance Vata.

Significance of Shad Ritu in Ayurveda:[16]

In Ayurveda, the concept of Shad Ritu is crucial for understanding the cyclical nature of life and its impact on health. Each season brings specific changes in the environment that can either support or challenge the body's balance. Ayurveda recommends seasonal regimens known as "Ritucharya" to align one's lifestyle, diet, and activities with the qualities of each

season, thereby promoting health and preventing disease. By understanding and adapting to the Shad Ritu, individuals can enhance their well-being, prevent seasonal illnesses, and maintain harmony between the body, mind, and environment throughout the year.

DISCUSSION

Mandukaparni, commonly known as Gotu Kola (*Centella asiatica*), is a renowned herb in Ayurveda valued for its medicinal properties. It is traditionally used for enhancing cognitive function, memory, and concentration, making it a popular choice for mental clarity and focus. Mandukaparni also exhibits adaptogenic and anti-inflammatory properties, making it beneficial for stress management, wound healing, and skin conditions. Additionally, it supports the nervous system, promotes healthy circulation, and aids in the overall rejuvenation of the body. Known for its cooling and calming effects, Mandukaparni is considered a Rasayana (rejuvenative) herb that supports longevity and vitality.[17]

Pushya Nakshatra, one of the most auspicious lunar mansions in Vedic astrology, symbolizes nourishment, growth, and positive energy. Ruled by Saturn and associated with the deity Brihaspati (the guru of the gods), this nakshatra is known for its qualities of wisdom, discipline, and nurturing.[18] Falling under the Cancer zodiac sign, Pushya is represented by the udder of a cow, highlighting its role in providing sustenance and care. It is considered an excellent time for starting new ventures, making investments, and engaging in spiritual activities, although traditionally, marriage is avoided during this nakshatra.[19]

Shad Ritu, the concept of six seasons in Ayurveda, reflects the cyclical changes in nature and their influence on human health and well-being. These six seasons—Vasanta (spring), Grishma (summer), Varsha (monsoon), Sharad (autumn), Hemanta (early winter), and Shishira (late winter)—each have distinct characteristics that affect the balance of the body's doshas (Vata, Pitta, Kapha). Ayurveda emphasizes adapting one's diet, lifestyle, and activities according to the qualities of each season to maintain health and prevent disease. By aligning with the natural rhythms of Shad Ritu, individuals can achieve harmony with the environment and support overall well-being throughout the year.[20]

**TABLE NO. COMPARISON TABLE SHOWING THE EFFECTS AND RELEVANCE OF
MANDUKAPARNI WHEN USED DURING PUSHYA NAKSHATRA IN EACH OF THE SHAD
RITU (SIX SEASONS):**

Ritu (Season)	Pushya Nakshatra Influence	Effectiveness of Mandukaparni	Recommended Usage
Vasanta (Spring)	Auspicious for beginning new ventures and detoxification.	Enhances mental clarity and helps in detoxification.	Use Mandukaparni to support detoxification and rejuvenate the mind and body, aiding in seasonal transition.
Grishma (Summer)	Supports hydration and cooling activities.	Cools the body and soothes the nervous system.	Consume Mandukaparni to manage Pitta aggravation and prevent heat-related stress during Pushya Nakshatra.
Varsha (Monsoon)	Favors nurturing and healing activities.	Strengthens immunity and balances Vata-Pitta imbalances.	Use Mandukaparni to enhance immunity and support digestion, which can be weakened during this season.
Sharad (Autumn)	Promotes spiritual practices and mental clarity.	Helps in cooling the body and pacifying excess Pitta.	Incorporate Mandukaparni to soothe the mind and body, aligning with Pushya's spiritual and healing qualities.
Hemanta (Early Winter)	Encourages nourishing and strengthening activities.	Boosts cognitive function and supports immune health.	Utilize Mandukaparni to fortify the mind and body, preparing for the colder months ahead.
Shishira (Late Winter)	Best for introspective and strengthening activities.	Supports mental clarity and balances Vata dosha.	Use Mandukaparni to maintain mental clarity and protect against Vata-related imbalances during Pushya Nakshatra.

CONCLUSION

The comparative analysis of Mandukaparni used during Pushya Nakshatra across the Shad Ritu (six seasons) reveals a profound synergy between Ayurvedic principles, lunar influences, and seasonal rhythms. Mandukaparni, known for its rejuvenating and cognitive-enhancing properties, is particularly effective when utilized during Pushya Nakshatra, an auspicious time that enhances growth, nourishment, and healing. Across different seasons, the herb's effects are amplified or moderated by the prevailing doshas and environmental conditions, making it a versatile ally in maintaining health and well-being year-round. In Vasanta and Sharad, it aids in detoxification and Pitta pacification, while in Grishma and Varsha, it supports cooling and immunity. During the colder months of Hemanta and Shishira, Mandukaparni fortifies the mind and body against Vata imbalances. This analysis underscores the importance of aligning herbal usage with lunar and seasonal cycles, reflecting the holistic and adaptive nature of Ayurveda in promoting optimal health.

CONFLICT OF INTEREST -NIL

SOURCE OF SUPPORT -NIL

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