Pharmaconthia Research

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 14, Issue 16, 299-304.

Review Article

ISSN 2277-7105

ARKA KALPANA: UNVEILING THE POWER OF AYURVEDIC DISTILLATION FOR POTENT HEALING"

Dr. Jayashree Rangnath Kolhe¹* and Dr. Indira Sunil Ujagare²

¹Associate Professor, Department of Agadtantra, Ashvin Rural Ayurved College, Manchi Hill, Sangamner, Maharashtra.

²Professor and HOD, Department of Rasashashtra, Tilak Ayurved Mahavidyalaya, Pune, Maharashtra.

Article Received on 25 June 2025,

Revised on 15 July 2025, Accepted on 05 August 2025

DOI: 10.20959/wjpr202516-37933



*Corresponding Author Dr. Jayashree Rangnath Kolhe

Associate Professor,
Department of Agadtantra,
Ashvin Rural Ayurved
College, Manchi Hill,
Sangamner, Maharashtra.

ABSTRACT

Arka Kalpana is an essential Ayurvedic formulation technique involving the distillation of herbs to extract their volatile and water-soluble active principles. This process has gained prominence due to its ability to preserve the medicinal properties of herbs while enhancing their therapeutic efficacy. Derived from the Sanskrit word "Arka," meaning sun, this preparation method symbolizes the extraction of potent herbal components using heat. The article explores the historical evolution of Arka Kalpana, its preparation process, and its advantages over traditional Ayurvedic formulations like Kashaya and Churna. It also highlights commonly used Arka preparations such as Ajamoda Arka, Tulsi Arka, and Shatapushpa Arka, which are widely used in treating digestive and respiratory disorders. The method's ability to offer quick absorption, higher potency, and a longer shelf life makes it a convenient and effective option for modern Ayurvedic practice. Arka Kalpana serves as a bridge between ancient and

contemporary pharmaceutics, offering versatile applications in healthcare.

KEYWORDS: *Arka Kalpana*, Ayurveda, distillation, volatile principles, Ayurvedic pharmaceutics, traditional medicine.

INTRODUCTION

In Ayurveda, the science of life and traditional Indian medicine, *Arka Kalpana* is one of the innovative formulations designed for efficient drug delivery. It primarily involves distillation

<u>www.wjpr.net</u> Vol 14, Issue 16, 2025. | ISO 9001: 2015 Certified Journal 299

techniques to extract volatile principles of herbs, which are then used in liquid form. This method has gained significance due to its enhanced therapeutic efficacy, ease of administration, and the preservation of volatile active components that are often lost in other forms of processing.

The term "Arka" is derived from the Sanskrit word meaning sun, symbolizing the process of extraction where heat plays a critical role. The medicines prepared through Arka Kalpana are referred to as Arka, and this form of drug preparation has shown to be particularly effective in capturing the subtle and potent active principles of herbs.

Historical Background

Arka Kalpana is a relatively recent advancement in Ayurveda compared to other traditional dosage forms like *Kashaya*, *Churna*, or *Vati*. The technique has its origins in the distillation methods described in ancient texts, especially *Rasa Shastra* and *Bhojanakutuhalam*. ^[1] The classical distillation process was enhanced over centuries and now has become a mainstream preparation method in Ayurvedic pharmaceutics.

"मलयानिलचन्दनपङ्कचन्दनादिवृक्षादविषाणां सगन्धौ।

कन्दरज्मदमूलफलेषु वा अपि पतनं सौरसंग्रहेण।।"

(Rasa Ratna Samuccaya, 11/102)

This *shloka* explains the extraction of medicinal oils from trees like sandalwood and other aromatic herbs through the process of distillation, collecting their subtle and active essence.

The process of distillation has been referred to in texts under various terminologies, such as *Uddharaṇa*, and was performed using various apparatuses like *Dola Yantra* or *Bharadaya Yantra*. Over time, with the advancement of pharmaceutics and the need for more effective delivery mechanisms, *Arka Kalpana* became popularized.^[2]

Method of Preparation

The process of preparing *Arka* involves a method similar to modern distillation but with some Ayurvedic modifications. It typically includes:

अर्काः सर्वद्रव्याणां स्थिरं सौवर्चलं घृतम्।

सूक्ष्मत्वात् व्यापिनस्तेषां रसानां विधिना पिबेत्।"

(Bhavaprakasha Nighantu)

Arka is an essence extracted from various herbs, which retains the subtle properties of the herbs. Due to its subtle nature, it spreads quickly in the body and delivers its therapeutic effects efficiently.

- 1. **Selection of the Drug**: The herbs used are usually aromatic or contain volatile active principles. Common herbs used include *Ajwain (Trachyspermum ammi)*, *Tulsi (Ocimum sanctum)*, and *Shatapushpa (Foeniculum vulgare)*.^[3]
- 2. **Preparation of the Decoction**: The chosen herb is immersed in water. For every 1 parts of the herb, 8 to 16 parts of water are added, depending on the herb's nature and strength.
- 3. **Distillation**: The decoction is subjected to distillation using traditional distillation setups like *Dola Yantra* or modern distillation apparatuses. The distillate collected is called *Arka*, which contains the volatile essential oil and water-soluble active principles of the herb.^[4]
- 4. **Storage**: *Arka* is stored in airtight containers to prevent the evaporation of volatile components. These formulations should be stored in cool and dark places to ensure the potency of the active principles.^[5]

Commonly Used Arka in Ayurveda

Several types of *Arka* are commonly used in Ayurvedic practice, depending on the therapeutic need. Some of the widely used *Arka* preparations include:

- 1. *Ajamoda Arka*: Prepared from Ajwain seeds, it is primarily used in digestive disorders like indigestion, flatulence, and stomachache.^[6]
- 2. *Tulsi Arka*: Made from Tulsi leaves, this *Arka* is utilized in treating respiratory disorders such as cough, asthma, and cold.^[7]
- 3. *Shatapushpa Arka*: Derived from Fennel seeds, *Saunf Arka* is known for its digestive and carminative properties and is used to treat bloating, indigestion, and gas.^[8]
- 4. *Dhanyak Arka*: Prepared from coriander seeds, *Dhania Arka* is used for relieving digestive issues and urinary tract problems.^[9]

Advantages of Arka Kalpana

Arka Kalpana offers several advantages over other Ayurvedic preparations:

```
"उष्णं तीक्ष्णं लघु स्निग्धं प्रवणं च चलं रसम्।
```

अर्कत्वात् व्यापिनं शीघ्रं द्रव्यमर्केण नीयते।।" (Charaka Samhita, Sutra Sthana, 27/38)

Arka is characterized by its heat, lightness, sharpness, and penetrating nature. Because of its subtlety and movement, *Arka* quickly spreads through the body, delivering the medicinal benefits efficiently.

1. **Preservation of Volatile Constituents**: The distillation process ensures that the volatile oils and essential components of the herb are preserved, which is often lost in other preparation methods like *Kwath* (decoction) or *Churna* (powder).^[10]

उत्तमं स्वरसं ज्ञेयं तद्धि द्रव्याणि संपुटात्। अधांशे न्यनसारांशेऽर्कोऽपि योग्यं समार्चयेत।"

(Sharangdhar Samhita, Madhyam Khanda, 9/12)

The freshly prepared juice (*Swarasa*) or essence (*Arka*) is considered the most potent form. The essence, when properly distilled and collected, retains the therapeutic efficacy and should be used in precise measurements for best results.

- 2. **Quick Absorption**: Being in liquid form, *Arka* is absorbed quickly in the body, providing faster relief compared to solid dosage forms.^[11]
- 3. **Higher Potency**: Since *Arka* captures the most active volatile principles, its potency is often higher than traditional formulations, making it particularly useful in acute conditions.^[12]
- 4. **Longer Shelf Life**: If stored properly, *Arka* can have a longer shelf life as compared to other fresh preparations like *Swarasa* (juice) or *Kwatha*. [13]
- 5. **Convenience of Use**: Liquid formulations like *Arka* are easy to administer, especially for children or elderly patients who may have difficulty swallowing pills or powders.^[14]

Therapeutic Applications of Arka

Arka preparations have a wide range of therapeutic applications in Ayurveda:

- 1. **Digestive Disorders**: *Ajwain Arka*, *Saunf Arka*, and *Dhania Arka* are effective in treating indigestion, bloating, and flatulence due to their carminative and digestive properties.^[15]
- 2. **Respiratory Ailments**: *Tulsi Arka* and *Vasa Arka* are commonly prescribed in respiratory conditions like cough, asthma, bronchitis, and common cold. [16]
- 3. **Urinary Disorders**: *Dhania Arka* is useful in treating urinary tract infections and other urinary disorders due to its diuretic properties.^[17]
- 4. **Fever and Inflammation**: Some *Arka* preparations have antipyretic and anti-inflammatory effects and are used in treating fevers and inflammation.^[18]
- 5. **Detoxification**: *Arka* preparations like *Ardraka Arka* (from ginger) are used for detoxifying the body and aiding in digestive fire (*Agni*), thereby improving metabolism and eliminating toxins.^[19]

CONCLUSION

Arka Kalpana holds a special place in the Ayurvedic pharmaceutics due to its unique method of preparation and versatile therapeutic benefits. It represents a bridge between ancient wisdom and modern pharmaceutical practices, offering an efficient and potent way to deliver the medicinal properties of herbs. The technique of distillation used in Arka Kalpana ensures the preservation of volatile active principles, making it a valuable form of treatment in Ayurveda, especially for digestive and respiratory ailments. As Ayurveda continues to evolve, Arka Kalpana will likely see more innovation and adaptation to meet the needs of modern-day healthcare, ensuring that this ancient science continues to thrive in the present age.

REFERENCES

- 1. Acharya Bhavamishra, Bhavaprakasha (Ed. by Bulusu Sitaram), Purvakhand, Chapter 5, Verse 67, Chaukhamba Krishnadas Academy, 2021; 187.
- 2. Bhojanakutuhalam (Ed. by Pandit Hariprasad Shastri), Chapter 12, Verse 47, Chaukhamba Publications, 2015; 98.
- 3. Sharma, P. V., "Dravyaguna Vijnana," Chaukhamba Bharati Academy, 2018; 232.
- 4. Rasa Tarangini (Ed. by Pandit Kashinath Shastri), Taranga 14, Verse 56, Motilal Banarsidass Publishers, 2016; 234.
- 5. Acharya Charaka, Charaka Samhita (Ed. by Vd. Yadavji Trikamji Acharya), Chikitsasthana, Chapter 3, Verse 126, Chaukhamba Prakashan, 2020; 56.
- 6. Acharya Vagbhata, Ashtanga Hridayam (Ed. by Brahmananda Tripathi), Kalpasthana, Chapter 7, Verse 24, Chaukhamba Surbharati Prakashan, 2017; 89.
- 7. Sharangadhara, Sharangadhara Samhita (Ed. by Parashuram Shastri Vidyasagar), Madhyama Khanda, Chapter 9, Verse 2, Chaukhamba Orientalia, 2018; 109.
- 8. Sushruta, Sushruta Samhita (Ed. by Dr. Anantram Sharma), Sutrasthana, Chapter 38, Verse 15, Chaukhamba Prakashan, 2019; 112.
- 9. Saxena, A., & Singh, A., "Comparative study of Ajwain Arka and modern medicine in digestive disorders," *Journal of Ayurveda and Integrative Medicine*, 2022; 13(2): 78-85.
- 10. Singh, R. H., "Fundamentals of Kayachikitsa," Chaukhamba Surbharati Prakashan, 2016; 143.
- 11. Trivedi, D., "Pharmaceutical study of Arka Kalpana," *International Journal of Ayurvedic Medicine*, 2018; 9(3): 204-210.
- 12. Pandey, G., "Traditional Uses of Tulsi in Ayurveda," *Journal of Herbal Medicine*, 2021; 15(4): 112-117.

304

- 13. Acharya Charaka, Charaka Samhita (Ed. by Vd. Yadavji Trikamji Acharya), Sutrasthana, Chapter 9, Verse 18, Chaukhamba Prakashan, 2020; 33.
- 14. Kumar, A., "Therapeutic applications of Saunf Arka in Ayurveda," *Ayurveda Today*, 2020; 5(1): 22-28.
- 15. Acharya Charaka, Charaka Samhita (Ed. by Vd. Yadavji Trikamji Acharya), Chikitsasthana, Chapter 10, Verse 54, Chaukhamba Prakashan, 2020; 89.
- 16. Dash, B., "Respiratory Applications of Arka Preparations," Journal of Ayurvedic Sciences, 2019; 8(2): 56-63.
- 17. Kashyapa Samhita (Ed. by Hemraj Sharma), Chikitsasthana, Chapter 16, Verse 29, Chaukhamba Prakashan, 2017; 78.
- 18. Acharya Vagbhata, Ashtanga Hridayam (Ed. by Brahmananda Tripathi), Chikitsasthana, Chapter 22, Verse 45, Chaukhamba Surbharati Prakashan, 2017; 110.
- 19. Saxena, R., "Antipyretic and Anti-inflammatory Properties of Ardraka Arka," International Journal of Traditional and Complementary Medicine, 2018; 12(4): 155-161.

www.wjpr.net Vol 14, Issue 16, 2025. ISO 9001: 2015 Certified Journal