

## Critical Review on Krishna Jiraka Arka

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### ABSTRACT-

*Arka Kalpana* is one of the Ayurvedic classical dosage forms. In *Arka Prakasha Panchavidha Kashaya Kalpana* is mentioned as *Kalka, Churna, Swarasa, Taila* and *Arka*. In comparison to all *Kalpana*, *Arka Kalpana* has been mentioned as the most potent *Kalpana* because it is colourless, effective in low dosage. In the present review, an attempt has been made to understand the method of preparation and the possible mode of action of *Krishna Jiraka Arka* in various *Roga* (Diseases) mentioned in Stanza.

**Key words-** *Arka, Jiraka, Krishna Jiraka*.

### Introduction-

Various references about pharmaceutical and therapeutic aspects of *Arka Kalpana* have been mentioned in different literatures like Ayurvedic Formulary Of India (AFI), *Rasatantrasara Siddha prayogasangraha*, *Gadanigraha*, *Ayurveda Sara Sangraha*, *Bhavaprakasha* etc. A thorough explanation about *Arka* has been mentioned in *Arka Prakasha* by *Ravana*. *Krishna Jiraka Arka* is one of *Arka* which has *Chakshushya, Gulmahara, Chardi hara* and *Atisarahara* properties<sup>1</sup>.

### Method of preparation-

- *Krishna Jiraka* is taken as desired quantity (1Part). Remove any impurities (Small stones etc. ) if present in it .
- Then make it as coarse powder.
- Add it in *Bhapka Yantra* (Distillation Still) and pour 2 Parts water into it and keep overnight.
- Next day the Distillation process (*Arka* Preparation) starts with medium flame and collects the *Arka* (Distillate).
- The collected distillate is *Krishna Jiraka Arka*.

**Characteristics-** *Arka* is a suspension of the distillate in water having slight turbidity and colour according to the nature of the drugs used and smell of the predominant drug.<sup>2</sup>

**Dosage of Arka-** 12 -24 ml, 3 times.

**Anupana-** Along with equal amount of water

**Jiraka-** In Ayurveda text *Bhavaprakasha* three varieties of *Jiraka* are mentioned as<sup>3</sup>-

1. *Jiraka*
2. *Krishna Jiraka*
3. *Karvi*

**Synonyms of *Carum bulbocastanum*-** Following are the synonyms of the Latin name of *Carumbulbocastanum*.<sup>4</sup>

**Table No. 1:-Synonyms of *Carum bulbocastanum*-**

Synonyms of <i>Carum bulbocastanum</i>
<i>Bulbocastanum balearicum, Bulbocastanum linnaei, Bulbocastanum mauritanicum, Bulbocastanum mediterraneum, Bunium agrarium, Bunium aphyllum Bunium bulbosum, Bunium collinum, Bunium crassifolium, Bunium elatum Bunium fontanesii, Bunium majus, Bunium mauritanicum, Bunium mediterraneum, Bunium minus, Bunium perotii, Carum mauritanicum, Carvi bulbocastanum, Conopodium balearicum, Diaphycarpus incrassatus, Bunium persicum</i>

**Table No. 2:-Action of *Krishna Jiraka Arka*<sup>5</sup>-**

Arka	Karma (Action)
<i>Krishna Jiraka Arka</i>	<i>Chakshushya, Gulmahara, Chardihara, Atisarahara</i>

**Table No. 3:- *Rasa Panchaka* of *Krishna Jiraka*<sup>6</sup>-**

Dravya	Rasa	Guna	Virya	Vipaka
<i>Krsihna Jiraka</i>	<i>Katu</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>

**Table no. 4:- *Karma* (Action) of Drug of *Krishna Jiraka*<sup>6,7</sup>-**

Dravya (Drug)	Karma (Action)
<i>Krishna Jiraka</i>	<i>Kapha-Vata hara, Deepana, Ruksha, Laghu, Grahi, Pitta dhatu vardhaka, Buddhi Vardhaka, Garbhashyaka Shodhaka, Jwarahara, Pachana, Vrushya, Balya, Ruchikara, Vishahara, Chakshushya, Adhmana, Gulma, Chardi, Grahani, Krumi, Atisara nashaka.</i>

**Table no. 5:- Pharmacological action of *Krishna Jiraka* in contemporary science<sup>8,9,10</sup>.**

Drug	Pharmacological action
<b>Krishna Jiraka</b> ( <i>Carum bulbocastanum</i> )	Antioxidant, Antibacterial, Anti-fungal, Anticarcinogenic, Hypolipidemic, Hypoglycemic, Immunomodulator, Hypotensive, Uricosuric, Choleric, Antifertility, Antidiabetic, Antihistaminic, Anti-oxidant, Anti inflammatory, Anti-microbial, Anti-tumor, Antispasmodic effect.

**Table no 6:- Pathogenesis of disease and probable mode of action of Krishna Jiraka Arka-**

Roga (Disease)	Samprapti (Pathogenesis)	Mode of action of Krishna Jiraka Arka
<i>Gulma</i> (Abdominal Lump)	Due to <i>Nidana sevana</i> (Etiological Factors) <i>Vata prakopa</i> occurs in <i>Koshtha</i> then <i>Vata</i> combines with <i>Pitta</i> and <i>Kapha</i> accumulated in <i>Panchasthana</i> ( <i>Hridya, Nabhi, Parshva, Udara, Basti</i> ) of Body. <sup>11</sup>	Due to its <i>Deepana -Pachana</i> action it improves the <i>Agni</i> and removes the obstruction. <i>Vata anulomana</i> action of <i>Arka</i> balances the movement of <i>Vata</i> .
<i>Chardi</i> (Vomitting)	Due to <i>Nidana Sevana</i> (Etiological Factors) <i>Vatadi Tridosha Prakopa</i> occurs and <i>Udana&amp;Vyana Vayu</i> get vitiated and along with <i>Amasaya Stitha Utaklishta Anna</i> (Gastric content) come out through the mouth. <sup>12</sup>	Due to its <i>Deepana, Pachana, Ushna Guna</i> it balances the <i>Udana&amp;Vyana Vayu</i> and <i>Vata</i> gets <i>Anulomana Gati</i> . with these <i>Guna Utkleshana Avastha</i> subside.
<i>Atisara</i> (Diarrohea)	Due to <i>Nidana Sevana</i> (Etiological Factors) <i>Agnimandya</i> occurs and <i>Jaliyansh bhaga</i> (Watery Content) of <i>Mala</i> (Stool) increases and leads to <i>Atisara</i> . <sup>13</sup>	Due to its <i>Deepana, Pachana</i> action it improves the <i>Agni</i> ( <i>Jatharagni&amp;Dhatvagni</i> ) and with <i>Grahi guna</i> it reduces the peristaltic movement.

### Discussion-

*Arka* has been mentioned as the most potent formulation because it is an extraction technique, less dose needed, having more self-life because of volatile oil present in it, shows quick action, easy to absorb for patients even paediatrics patients are comfortable while consuming it and easy to prepare.

There are so many similarities between *Krishna Jiraka* and *Karvi*, which is very difficult to differentiate between them. The latin name for *Jiraka* is *Cuminum cyminum*, for the *Karvi*

variety of *Jiraka* latin name is *Carum Carvi Linn* and for *Krishna Jiraka* the latin name *Carum bulbocastanum* is considered.

*Krishna Jiraka* has *Katu Rasa*, *Laghu*, *Ruksha Guna*, *Ushna Virya*, *Katu Vipaka* and *Kaphavata hara* properties. As per Ayurveda science it has various therapeutic values as *Deepana*, *Pachana*, *Sangrahi*, *Ruchya*, *Chakshushya*, *Jvaraghna* and is useful for the treatment of *Atisara*, *Chardi*, *Gulma*, *Jeernajvara*. In contemporary science its pharmacological actions are as Antioxidant, Immunomodulator, Antispasmodic effect, Anti inflammatory etc.

In Ayurveda any *Roga* (Disease) is cured by doing *Nidana Parivarjana* (Avoiding Etiological Factors), *Samprapti Vighatana* (Breaking Pathogenesis). With above mentioned properties *Krishna Jiraka Arka* is effective for eye disorders (*Chakshushya*), abdominal lump (*Gulmahara*), vomiting (*Chardihara*) and diarrhoea (*Atisarahara*).

### Conclusion-

*Krishna Jiraka* is an easily available and cost effective drug. Preparation of Arka is also not tedious work and can be easily prepared. *Krishna Jiraka Arka* is an Ayurvedic formulation which is mainly administered for eye disorders (*Chakshushya*), abdominal lump (*Gulma*) vomiting (*Chardi*) and Diarrhoea (*Atisara*).

### References-

1. Tripathi Indradev. Arka Prakasha. Commentary. 3<sup>rd</sup> ed, Varanasi: Chowkhamba Krishanadas Academy; 2011. P38.
2. The Ayurvedic Formulary of India. 1st Ed. New Delhi: Govt.Of India, Ministry of Health and Family Welfare; 2003 Part I. P. 102.
3. Sharma P.V. Dravya Guna Vijnana. Varanasi: Chaukhambha Orientalia; Reprint 2017. VolII, P. 368.
4. [https://en.wikipedia.org/wiki/Bunium\\_bulbocastanum](https://en.wikipedia.org/wiki/Bunium_bulbocastanum)
5. Ravana Indradev Tripathy. Arkaprakasha . 2nd ed. Varanasi: Chowkamba; 2006, P.
6. Sharma P.V. Dravya Guna Vijnana. Varanasi: Chaukhambha Orientalia; Reprint 2017. VolII, P. 369.
7. Misra Brahmasankara, Vaisya Rupalalji. Bhavaprakasa, Varanasi: Chaukhambha Sanskrit Bhawan; 12<sup>th</sup> Edition; 2018. P. 234.
8. Kapoor, Inder & Singh, Bandana & Singh, Gurdip & Heluani, Carola & Lampasona, Marina & Catalan, Cesar. (2009). Chemistry and antioxidant activity of essential oil and oleoresins of black caraway ( *Carum bulbocastanum* ) fruits: Part 69. Journal of the science of food and agriculture. 90. 385-90. 10.1002/jsfa.3824.
9. Srinivasan, Krishnapura. (2018). Cumin (*Cuminum cyminum*) and black cumin (*Nigella sativa*) seeds: Traditional uses, chemical constituents, and nutraceutical effects. Food Quality and Safety. 2. 10.1093/fqsafe/fyx031.

10. Sekine, Takayuki & Sugano, Mami & Azizi, Majid & Fujii, Yoshiharu. (2007). Antifungal Effects of Volatile Compounds from Black Zira (*Bunium persicum*) and Other Spices and Herbs. *Journal of chemical ecology*. 33. 2123-32. 10.1007/s10886-007-9374-2.
11. Mishra Siddhi Nandan, Kushwaha Harish Chandra Singh. *Charaka Samhita Ayurveda-Dipika Ayusi Hindi Commentary*, Varanasi: Chaukhambha Orientalia; First Edition: 2009.P.159.
12. Ambikadutta Shastri. *Sushruta Samhita*, Varanasi: Chaukhambha Publications; Reprint 2016. Part-II; P.456-7.
13. Ambikadutta Shastri. *Sushruta Samhita*, Varanasi: Chaukhambha Publications; Reprint 2016. Part-II; P.273.