

# Sitopaladi churna as a warming agent: A Research

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#### Abstract

Ayurvedic medicine known as "SitopaladiChurna" is used as an analgesic, antipyretic, and antitussive. The current study uses guinea pig cough models created with acetic acid to examine the anti-tussive performance of the macerated extract of SitopaladiChurna in comparison to other commercially available formulations and the reference medication, codeine phosphateThe phenolic compounds found in the ingredients of Sitopaladi churna may directly relate to the antioxidant potential. The results of this study point to a possible usage of Sitopaladi churna as a natural antioxidant agent.

## Introduction

The W.H.O. supports the value of public health and healthcare in developing nations. Ayurvedic remedy recommended for chest and pharyngeal congestion as well as intercostal neuralgia, colds, pneumonia, viral respiratory infections, and cough connected to bronchitis and pneumonia. [1-3] The use of quality control tests is urged by ayurvedic pharmacies to ensure that the formulated goods meet the requirements laid out by ayurveda. Equal opportunity is a key factor in determining the efficacy and safety of herbal medications. Thus, the there is a need for standardisation, and it is crucial to design a trustworthy quality policy for ayurvedic formulation utilising current analytical methods.[4-5] Indian traditional medicine, or ayurveda, has a rich history and solid mental, experiential, and experimental bases. Attention has been made to the quality, safety, efficacy, and standards of Ayurvedic formulations in response to a growing desire for safer medications.[6-7] Itopaladi Churna (SPC) is a polyherbal Ayurvedic medication used to treat a variety of ailments, like pleurodynia, intercostal neuralgia, colds, coughs linked to bronchitis, pneumonia, and tuberculosis, burning in the extremities, respiratory viral infections, allergies, digestive problems, and chest and pharyngeal congestion. According to states, all the elements in Sitopaladi churna have antioxidant effects.[8-10]

# Ingredients

# Sitopaladi

An Ayurvedic solution called Sitopaladi Churna is said to contain a number of substances: cinnamomum zeylanicum, elettaria cardamom, piperlongum, bambusa bambos mulethi and cane sugar have antihistaminic actions. It is used to treat bronchial problems and congestion in the upper respiratory system[11]

f74

Cardamom is identifiable by its small seed vessel, a three-sided in cross-section, spindle-shaped, and has a thin, papery outer shell and small black seeds. Elettaria seed vessels are light green and smaller, yet Amonum seed vessels are larger and dark brown. It is used to treat indigestion, nausea, vomiting, and to help the body get rid of phlegm . [12-14]

Botanical name: Elettaria cardamomum

Family:Zingiberaceae

Kingdom: Plantae



Cinnamon, also known as twak, is a species that comes from the inner bark of many tree species.Cinnamomum verum trees grow to a height of 10-15 metres (30–50 ft). The ovate-oblong-shaped leaves are 7-18 cm (3-7 inches) long.

The flowers, which are clustered into panicles, are greenish in colour and smell strong. The fruit is a 1-cm purple drupe with a solitary seed. In order to relieve diarrhoea and issues with digestion, it is mainly use in sweet dishes, tea, and common foods.[15]

Botanical name:Cinnamomum zeylanicum

Family: Lauraceae

Common name: True cinnamon

Kingdom: Plantae



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Sitopala is good for the eyes, reduces tiredness or tiredness is a laxative promotes men's seminal fluid, increases strength oversees blood acid levels and treats vomiting and nausea.

Botanical name:Saccharum officinarum

Family:Poaceae

Kingdom: Planta



Pippali: The pepper's fruit is made up of several small fruits, each about the size of a poppy seed, that are embedded in the top of a flower spike that resembles a hazel tree catkin. It helps weight loss, improves skin clarity, speed up metabolism, builds up bones, and treats respiratory disorders.[16]

Biological Name: Piper Longum

Family:Piperaceae

Kingdom: Plantae



Vamsalochan : It naturally grows in the woods of the arid zones and reaches height of 10 to 35 feet. used as an abortifacient, astringent, laxative, diuretic, anti-ulcer, anti-arthritic, and other medical uses It is a tall type of pointed

© 2023 JJNRD | Volume 8, Issue 6 June 2023 | ISSN: 2456-4184 | IJNRD.ORG bamboo with amazing green foliage that grows in thickets made up of several densely grouped, massively branching culms.[17-18]

Botanical name:Bambusa bambos

Family:Poaceae

Subfamily:Bambusoideae

Kingdom : Plantae



Mulethi: Ayurvedic remedies sometimes contain the medicinal herb licorice, also known as mulethi. Its roots and underground stems are utilised medicinally. It has hepatoprotective, antibacterial, anti-inflammatory, and antioxidant effects.[19]

Biological Name: Glyeyrrhiza glabra

Family: fabaceae

Kingdom: Plantae



#### **Collection of Plant Materials**

Baidynath Ayurveda BhawanPvt. Ltd., Kolkata, India (SPC-II) and Dabur India Ltd., New Delhi, India (SPC-III) are commercially available SPC brands that were bought from the local market. SPC-I was made using equal weight amounts of each of the five formulation ingredients in line with the Indian Ayurvedic Formulary.

## Ingredients of Sitopaladi churna

Sanskrit Name	Plant Name	Plant Used	Quantity
Sitopala	Saccharum officinarum	Sugar candy	40 gm
Vamsalochan	Bambusa bambos	Siliceous concretion	30gm
Pippali	Piper longum	Dried fruit	15gm
Ela	Eletarica cardamomum	Dried seed	10gm
Twak	Cinnamonum zeylanicumm	Stem bark	5 gm
Liquorice root	Glycyrrhiza glabra	Licorice	5 gm

# **Plant Material**

Cane sugar, dried fruit from Piper longum, stem bark from Glycyrrhiza glabra and licorice Cinnamomum zeylanicum, bambusabambos, and dried seed from Elettaria cardamom are all contained in Sitopaladichurna.

These ingredients were all acquired from the local market.

## **Manufacturing Material**

The chemicals employed in the tests were all of the analytical sort. The experiment's acetic acid came from Nice Chemical Ltd. in Cochin, India.

# **Preparation of Sitopaladi Churna**

Sitopaladichurna was created in the lab using an Indian Ayurvedic recipe. Each ingredient is ground to a powder in a pulverizer before going through an 80# sieve. The following parts were weighed on their own and then combined to create an even mixture: Piper longum (15 gm), Bambusa bambos (30 gm),Glycyrrhiza glabra (5gm)Elettria

JNRD2306509	International Journal of Novel Research and Development ( <u>www.ijnrd.org</u> )	f78

cardamom (10 gm), Cinnamomum zeylanicum (5 gm), and cane sugar (40 gm) mixed together to obtain a homogeneous blend [20]

## Marketed Samples

Two retail samples for various SitopaladiChurna brands, namely Dabur India Ltd. in Rajasthan and Badyanathayurvedbhawanpvt. ltd. They were gathered to be used for comparison between various tasks.

#### Animals

Male and female Saxes guinea pigs ranging 500–150g were employed in the study. Animals were kept at temperatures of 25 and 270 degrees Celsius with free access to guinea pig pellets for the lab and filtered water.[21]

#### **Plant Extract**

We used the maceration procedure to prepare the various extracted formulations. We macerated 50g of each formulation with 300ml of water and stirred it for 48 hours. The solvent was then observed to be abandoned under reduced pressure to obtain the crude extracts.[22]

## Health Benefits of Churna Enhales Respiratory Problems

To mitigate fever brought on by the flu, congestion, and other respiratory conditions, sitopaladichurna has been used. In Ayurveda, sitopaladichurna is used to treat a variety of respiratory issues, such bronchitis, pneumonia, and tuberculosis. This expectorant aids in dissolving and eliminating phlegm. [23]Furthermore, sitopaladichurna is a flexible therapy that is suggested for all of these kinds. It may be administered combined with other medicinal products or mixed with honey, water, or ghee, depending on the type of cough. Studies on animals proved its ability to stop coughing. This drug's anti-tussive effects are explained by its capacity to influence the central nervous system and reduce coughing. Children are thought to be safe with this gentle cure. [24]Additionally assisting in the treatment of respiratory infections are its anti-inflammatory and antioxidant effects.

It is especially pertinent to note Sitopaladichurna's capacity to soothe coughs. Vata (dry cough with minimal mucus), pitta (cough with mild, sticky mucus), kapha (cough with heavy mucus and congestion), ksataja (cough due to a chest injury), and ksaya (cough owing to a chronic disease like TB) are the five categories that Ayurveda divides coughs into [25]

#### Fights against allergies

While safeguarding you from poisons, your immune system may occasionally frightened off substances it identifies as allergies. An allergic reaction follows. In ayurveda, sitopaladichurna is used to cure allergies. Research additionally backs this historical use. So how does it function? A substance known as histamine is released by an allergic person's immune system in response to an allergen such as dust, dander, pollen, etc. This is the cause of the signs and symptoms of an allergic reaction, such as a runny nose, watery eyes, and a sore throat. According to animal research, sitopaladichurna has antihistaminic properties and can help you manage allergies. It prevents the discharge of nflammatory mediators from mast cells in our body and stabilizes them. This, in turn, helps to controlthose classic allergy symptoms[26]

#### Help in Digestion And Appetite

Digestion-related problems are treated with sitopaladichurna.As faulty digestion results in "ama" or poisons, according to ayurveda, proper digestion is vital for preserving health and preventing disease. The body's 13 various manifestations of the fire element, or "agni," are in charge of metabolism and digestion.Sitopaladichurna is thought to promote digestion, boost appetite, and remove ama. Its carminative effect could be beneficial for issues like gas and bloating.

## **Inflammation and Free Radicals Damage**

Strong antioxidant properties of sitopaladichurna may aid in preventing the negative effects of free radicals. Your body makes free radicals as it uses food as fuel to produce energy. They can also be produced by outside factors such processed meals, alcohol, cigarette smoke, pollutants, and the environment. Due to its capacity for antioxidants, Sitopaladichurna may be able to prevent free radical damage to DNA and cells, which is a risk factor for many diseases including cancer, diabetes, and cardiovascular disease as well as the ageing process.Sitopaladichurna can combat chronic inflammation, which is once more harmful to the body, by preventing the body from releasing inflammatory mediators, according to animal research. Because of this dual function, sitopaladichurna can help you feel better generally.[27]

## **Usefull to Improve Anemia**

You may feel out of breath, cold, woozy, worn out, and angry if you have anaemia. And the most typical cause of this disease is an iron shortage. In addition to vitamins, ayurvedic treatments like sitopaladichurna can help with the nutritional deficits that are the cause of anaemia. In one study, sitopaladichurna and the ayurvedic remedy known as sootshekhar rasa were used as part of an ayurvedic treatment regimen for teenagers. Copper, mercury, silver, bhringraj, cinnamon, ginger, and other minerals can be found in the herbo-mineral concoction known as sootshekhar rasa. It was discovered that this combination significantly improved nutritional anaemia. How does it function? The capacity of the formulation to improve the body's absorption of iron was cited by the researchers as the cause.[28]

# **Recovery With A Migraine**

Around 1 in 5 women and 1 in 15 men suffer from migraines, making it an extremely common medical disease. They usually start throughout early adulthood. One study used an ayurvedic therapy regimen on individuals who taking sitopaladichurna together with four more pharmaceuticals, including narikellavan, sootshekhar rasa, rasonvati, and godantimishran, as well as making lifestyle modifications including eating a nutritious diet, getting enough sleep, and exercising.

# fight with Diabetes

You may be able to manage your diabetes using the use of sitopaladi churna. usually your digestive system converts food into sugar, which then enters the blood and raises blood sugar. Before they can be absorbed, complex carbohydrates must first be broken down by the digestive enzyme amylase and other secondary enzymes. Sitopaladi churna shows high -amylase inhibitory action, according to in vitro tests. Important compounds known as amylase inhibitors can aid in limiting the body from absorbing these starches, preventing the rise in blood sugar after meals, and controlling postprandial hypoglycemia. More studies on humans as well as animals will support the role of sitopaladichurna as a natural diabetes therapy alternative.

Sitopaladichurna seems to be safe for use because it is not known to have any serious side effects.

# Conclusion

Right now, sitopladichurna is used to treat Cough, and the tradition says it is acceptable. using particular antagonists in the same setup as an experiment for This mechanism is categorically proven by the supporting research and examination of the effects of the extracts on the central nervous system.

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