



## **A Review on Herbs used in Cough Medication**

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### **ABSTRACT**

Spices with black pepper are very beneficial in life. Due to its unique flavor, it is most frequently utilized as a spice in cooking. One of the earliest spices, black pepper is most commonly used In culinary and traditional medicine. It is known as the “king of spices.”The internet was used to gather the data, which came from reliable journal publishers, Google Scholar, Researchgate, Science Direct, and books on black pepper published between 2000 and 2020. Plants found in nature, such as easier-to-obtain roots, stems, branches, leaves, flowers, and fruits, are used in traditional medicine. Not only are they non-toxic, but they also have a lengthy shelf life. The primary components of black piperine and essential oil. A cough is a strong explosive expiration used to remove foreign objects and fluids from the tracheobronchial canal. The purpose of this review study was to list the plants that are used in traditional culture and ethnobotany to treat and alleviate cough, given the prevalence of cough in both adults and children. the problems associated with treating cough in a range of respiratory diseases using conventional opioid antitussive drugs, such as codeine and compounds similar to codeine. Compounds with substantial antitussive properties and minimal adverse effects may be found in medicinal plants. Specification of active chemicals responsible for therapeutic activity, as well as their quantification in healing drugs, are recent breakthroughs in modern phytotherapy, allowing for treatment rationalisation, particularly dosing and monitoring of undesirable effects.

Keywords: Black pepper (Piper nigrum L.), night jasmine ,[nyctanthes arbortristis], kantakari.[nigh shade ]cough , antitussive. Expectorant .

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### **INTRODUCTION:**

A cough is a strong explosive expiration used to remove foreign objects and fluids from the tracheobronchial canal. The purpose of this review study was to list the plants that are used in traditional culture and ethnobotany to treat and alleviate cough, given the prevalence of cough in both adults and children. the problems associated with treating cough in a range of respiratory diseases using conventional opioid antitussive drugs, such as codeine and compounds similar to codeine. Compounds with substantial antitussive properties and minimal adverse effects may be found in medicinal plants. Specification of active chemicals responsible for therapeutic activity, as well as their quantification in healing drugs, are recent breakthroughs in modern phytotherapy, allowing for treatment rationalisation, particularly dosing and monitoring of undesirable effects. The term “spices” refers to any plant, including the skin, flowers, fruit, roots, leaves, rhizomes, seeds, tubers, and other plant components, that is used to enhance the flavor of food. Spices are very fragrant or flavorful plant parts that are used i One of the many spices that Indonesia possesses is pepper. Pepper comes in two varieties: black pepper and white pepper. Black pepper (Piper nigrum L.) is referred to as the “king of spices” since it is such a valuable medicinal herb [2]. Black pepper is utilized in many different kinds of food around the world. Since ancient times, black pepper has been utilized in medicine to treat a variety of illnesses.is beneficial for therapy,.Indonesians have long been familiar with black pepper, having utilized it for generations (empirically) [5]. Consequently, the writers are curious to examine black pepper from the perspectives of its botanical features, chemical composition, and pharmacological properties (Piper nigrum L..Cough medications is used to not only Suppress the cough, but also to relieve the discomfort Caused by coughing repeatedly. Extrathoracic Symptoms such back pain, headaches, fever, and Malaise may warrant symptomatic treatment. Treatment For a productive cough may include correcting the Abnormalities that cause sputum production or changing The composition of the secretions to make expectoration Simpler. Therapy is required to treat the underlying Pathology or reduce the frequency of a non-productive Cough. Many patients are particularly interested in the Latter, and hence seek out an antitussive that can also Help them control their cough.

#### **Type of Cough:**

1. Dry cough
2. Wet cough

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**Data Collection:**

The method used to compile this review article was a literature review, which involves searching for primary data, official book forms, national and international journals, and other sources of literature within the last 20 years (2000-2020). After that, the review article is created, and data is found using online media by searching for *Piper nigrum* L., its chemical content, and its pharmacological activity. The main sources of information utilized in this review study were found on reputable websites including ScienceDirect, ResearchGate, Google Scholar, and other well-known and respected periodicals.

**Medicinal plant profile:**

1. Black pepper
2. Night jasmin
3. Kanthakari.

**Black pepper :**

The pepper plant's stem resembles a long, knuckle-shaped vine. Older stems have a diameter of 4-6 cm and are woody, whilst young stems are green. The knuckle's length ranges from 5 to 12 cm. Climbing tendrils and fruit tendrils are the two primary forms of vines seen on the dimorphic pepper plant. The nodes on the ascending tendrils have knuckles that grow into long, sticky roots that are incapable of producing fruit. The fruit tendrils, or branches, grow horizontally (plagiotope) and feature a sympodial branching system. The fruit's tendrils are not tied to the knuckles by a root. Climbing tendrils are phototropically negative, but fruit tendrils are phototropically positive. Apart from these two varieties of tendrils, pepper.

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**Botany Aspect:****Classification of the pepper plant :**

**Kingdom :** Plantae (Plant)



**Fig 1 Black pepper plant**

**Subkingdom :** Tracheobionata

**Super divisi :** Spermatophyta (Seed plant)

**Divisi :** Magnoliopsida (Two pieces/dicotyledon)

**Kelas :** Magnoliidae

**Sub-kelas :** Monocotyledonae

**Ordo :** Piperales

**Famili :** Piperaceae (the Betel Tribe)

**Genus :** Piper

**Spesies :** *Piper nigrum* L

- **Uses:**
- Relieve cold and cough
- Anti asthmatic agent

- Help in weight loss
- Rich in antioxidants
- **NIGHT JASMINE**
- the blossoms lose their brightness during the day, *Nyctanthes arbor-tristis* is also known as the “tree of sorrow.” The scientific term *arbor-tristis* also translates to “sad tree.” One can use the blooms as a source of yellow dye for apparel. The flower is the official flower of the Thai province of Kanchanaburi as well as the Indian state of West Bengal. Occasionally misattributed as either *Nyctanthes arbor-tristis* or *Nyctanthes arbor-tristis*, *Nyctanthes arbor-tristis* comes from Greece.



**Fig2 night jasmine**

- **Synonyms:** night blooming Jasmine, night scented jasmine
- **Family:** solanaceae
- **Biological source:** *cestrum nocturnum* the lady of night blooming jasmine of *Nyctanthes arbor-tristis*
- **Chemical constituents:** Benzoic acid, fructose, glucose, ascorbic acid, methyl salicylate, tannic acid, flavonol glycoside
- **Uses:**
- Cough
- Fever reduce
- Cold
- Expectorant
- Anti tussive
- **Conventional Applications** The blooms are typically collected for garlands and religious offerings. The technique of dyeing silk and cotton with orange hearts originated with Buddhist monks, whose orange robes were dyed with this flower. In Hindu mythology, the Parijata tree is considered one of Devaloka's five wish-granting trees. [1] Tribal people in the Indian subcontinent have long used various portions of *Nyctanthes arbor-tristis* Linn to treat a variety of diseases. Ayurveda, Sidha, and Unani medicinal traditions all use this plant.
- **Flower :**
- The flowers are utilized as an expectorant, stomachic, carminative, astringent to the colon, antibilious, hair tonic, and in the treatment of ocular conditions as well as piles and other skin conditions. A coloring component called nyctanthin, which is the same as  $\alpha$ -Crocetin from saffron, is present in the vivid orange corolla tubes of the flowers. The corolla tubes were previously used to dye silk, occasionally in conjunction with turmeric or sunflower seeds. [1] stems Historically, the pow • Cough • Fever reduce • Cold • Expectorant • Anti tussive
- **KANTAKARI**



**Fig 3 kantakari**

Medicinal Plants or Medicinal herbs are essences of Traditional medicine practice. Treatment using herbs developed in different parts of the world with different names. Herbalism is the systematic study of medicinal herbs and their botany. Mainly focusing on its medicinal uses. Ethnomedicine is the study of traditional medicine. Researchers identify and separate various active chemicals in medicinal plants.

The World Health Organization (WHO) defines herbal medicine as a practice that includes herbs, herbal materials, herbal preparations, and finished herbal products, that contain active ingredients parts of plants, or other plant materials, or combinations.<sup>[2]</sup> Over the years, the usage of traditional medicine has given us invaluable knowledge on the choice, preparation, and use of herbal medicines. Today, herbal medicine is still the primary healthcare system for roughly 80% of the world's population, especially in underdeveloped nations. To be a credible alternative to western medicine, the same rigorous clinical and scientific techniques must be used to confirm the efficacy and safety of therapeutic products. Indian herbal remedies or Ayurvedic treatments are fundamentally based on plants. They have remarkable results when utilized properly and in keeping with the basic principles. Their function extends beyond the simple treatment of illness. Thus, Ayurvedic medicines are appropriately referred to as the elixirs of life.

- **Synonyms:** yellow berried nightshade, kanthakini
- **Biological source:** the kanthakari is plant solanum

Xanthocarpum.

- **Family :** solanaceae
- **Chemica :I** constituents:solasodine,solamargine,beta solamargine ,solanocarpine,diglycoside,caffeic acid

Therapeutic Uses:

The plant is effective for treating asthma, coughing, and fever.

- The stem, flowers, and fruits are recommended to treat burning feet accompanied by vesicular eruptions.
- For the treatment of fever, cough, and heart conditions, dried fruit aqueous extract is heated.
- Given in piles-post drinks, Kantakari-Sunthi Dhanyak acts as a laxative and carminative. If one wishes to get rid of piles, drink buttermilk that has been stored overnight in a container that has been pasted inside a
- Numerous medical benefits of the fruit include anthelmintic, antipyretic, anti-inflammatory, anti-tumor, cytotoxic, anti-asthmatic, antispasmodic, and hypotensive properties.
- Solanum surratense fruit juice is useful for rheumatism and sore throats.
- Management of respiratory problem like cough and asthma
- Enhance respiratory health
- Relive breathing problem
- Expectorant

Useful in cough and thyroid

- Helpful during arthritis and asthma
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## Conclusion

Among respiratory tract disorder cold and cough are common symptom having variety of reason behind them. It can lead to serious disease if not treated time.proper diagnose cure this problem by different types of medicinal drug commonly found use alone or in combination .

The Preformulation studies of all formulations were within specifications. Also the physiochemical properties of prepared syrup like colour, odour, pH, taste were satisfactory but among the all three formulation is was within the all specification, it has proper concentration of honey as per IP and also good preservative.

Drug like kanthakari have bronchodilator activity

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