

# Medecinal Plant Pippali Found in Bhopal Division

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**Abstract :** Herbal remedies have become popular, due in part to the lower risk of adverse reactions. Thousands of plants have been used traditionally to treat various diseases. Among them, species of the genus *Piper* are important medicinal plants used in various systems of medicine. The *Piper Longum* fruit has been used in traditional medicine, including the Ayurvedic system of medicine. Although there are numerous indications for its use, controlled trials are needed to determine its efficacy. The primary constituents isolated from various parts of *P. Longum* are piperine, piperlongumine, sylvatin, sesamin, diaeudesmin piperlongumine, pipermonaline, and piperundecalidine. It is most commonly used to treat chronic bronchitis, asthma, constipation, gonorrhoea, paralysis of the tongue, diarrhoea, cholera, chronic malaria, viral hepatitis, respiratory infections, stomachache, bronchitis, diseases of the spleen, cough, and tumours. This study provides detailed information about the *P. Longum* fruit, including phytochemistry, pharmacological profile and safety profile. In view of the commercial, economic, and medicinal importance of the *P. Longum* plant, it is useful for researchers to study the plant in detail.

**Keywords:** adverse reactions, various diseases, important medicinal plants, traditional medicine, pharmacological profile.

**Geographical Distribution:** The plant grows in evergreen forests of India and is cultivated in Assam, Tamil Nadu, and Andhra Pradesh. Long pepper is cultivated on a large scale in limestone soil and in heavy rainfall areas where relative humidity is label broad.

**Synonyms of Pippali:** *Piper longum*, Long Pepper, Pipal, Pipli, Lendi Peepar, Dantakapha, Gonamika, Granthika, Granthikam, Kagophale, Kanamula, Pipoli, Pimpili, Piplee, Videhee, Modi, Argadi.

*Piper longum*, commonly known as “long-pepper” or “Pippali” grows as a perennial shrub or as an herbaceous vine. It is native to the Indo-Malaya region and widely distributed in the tropical and subtropical world including the Indian subcontinent, Sri Lanka, Middle-East, and America. The fruits are mostly used as culinary spice and preservatives and are also a potent remedy in various traditional medicinal systems against bronchitis, cough, cold, snakebite, and scorpion-sting and are also used as a contraceptive. Various bioactive-phytochemicals including alkaloids, flavonoids, esters, and steroids were identified from the plant extracts and essential oils from the roots and fruits were reported as antimicrobial, antiparasitic, anthelmintic, mosquito-larvicidal, antiinflammatory, analgesic, antioxidant, anticancer, neuro-pharmacological, antihyperglycaemic, hepato-protective, antihyperlipidemic, antiangiogenic, immunomodulatory, antiarthritic, antiulcer,

antiasthma tic, cardioprotective, and anti-snake-venom agents. Many of its pharmacological properties were attributed to its antioxidative and antiinflammatory effects and its ability to modulate a number of signalling pathways and enzymes. This review comprehensively encompasses information on habit, distribution, ethnobotany, phytochemistry, and pharmacology of *P. longum* in relation to its medicinal importance and health benefits to validate the traditional claims supported by specific scientific experiments. In addition, it also discusses the safety and toxicity studies, application of green synthesis and nanotechnology as well as clinical trials performed with the plant also elucidating research gaps and future perspectives of its multifaceted uses.

**Piper Longum Medicinal Uses:** Long pepper finds a wide range of applications in Ayurveda. It is used as a “Rasayana” in the treatment of respiratory disorders and also as an important constituent in digestive formulations. Ayurveda uses it as an ingredient of Trikatu (three pungent herbs). Individually long pepper is used in correcting digestive disturbances and minor respiratory ailments. Trikatu is an important constituent in many Ayurvedic formulations. Experimental studies suggest that Trikatu increases bioavailability of the substances administered along with them.

Historical The earliest known documentation of plant

treatments in Indian literature is found in Vedas, the sacred literature of Hindus, 'Pippali' the drug taken for the study is one among them. In Vedic period there is a reference that-

1. Pippali was originated during the time of Samudra Manthan.
2. When Vasisthamuni's son was ceased, he was depressed so he wished to have more progeny and he consumed Pippali fruit by which he had more progeny. So the name Pippali came to that fruit. Jaimini Brahmana.
3. Various Synonyms have been used for Pippali viz. Atividdhabhaishaja, Kshiya bhaishaja. The use of Pippali was more extensive in Purana period in comparison to Vedic period.
4. Pippali was one of the plants, which was growing in forest, has antitoxic drug, grouped under Katurasa Varga, is having Sleshmahara property.
5. decoction form is good for Amavata Patients, reported as aphrodisiacs. Agni Purana mentions Trikatu in many places. This Trikatu includes pippali as an Ingredient, useful for the patients of Rajayakshma, Trikatu was used in medoroga, tarunya pidaka and Gulma.
6. The treatment of Dhanurvata, Akshepaka. Samhita kala: the exhaustive information of pippali in this period is seen. In Charka Samhita Acharya Charka in Vimanasthana has elucidated Yogavahi karma of pippali due to this special property it is used in various formulations as a medicine and adjuvant. In Sushrut Samhita Ch.26 where Davys of Virudha Virya are mentioned, Katu Rasa dravyas are described as Avrishya Dravyas but Pippali and Sunthi are exception to them.

**Conditions of Use and Important Information:** This information is meant to supplement, not replace advice from your doctor or healthcare provider and is not meant to cover all possible uses, precautions, interactions or adverse effects. This information may not fit your specific health circumstances. Never delay or disregard seeking professional medical advice from your doctor or other qualified health care provider because of something you have read on WebMD. You should always speak with your doctor or health care professional before you start, stop, or change any prescribed part of your health care plan or treatment and to determine what course of therapy is right for you.

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### Special Precautions and Warnings

**When taken by mouth:** Indian long pepper fruit is commonly consumed in foods. But there isn't enough reliable information to know if Indian long pepper is safe or what the side effects might be when used in larger amounts as medicine.

**Pregnancy and breast-feeding:** Indian long pepper fruit is commonly consumed in foods. But there isn't enough reliable information to know if Indian long pepper is safe to use as medicine when pregnant or breast-feeding. Stay on the safe side and avoid use.

**Bleeding conditions:** Indian long pepper might slow blood clotting. Taking Indian long pepper in amounts greater than those found in foods might increase the risk of bleeding in people with bleeding disorders.

**Surgery:** Indian long pepper might slow blood clotting and affect blood sugar levels. Taking Indian long pepper in amounts greater than those found in foods might cause bleeding complications or affect blood sugar levels during surgery. Stop taking Indian long pepper at least 2 weeks before surgery.

### Side Effects

**When taken by mouth:** Indian long pepper fruit is commonly consumed in foods. But there isn't enough reliable information to know if Indian long pepper is safe or what the side effects might be when used in larger amounts as medicine.

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