

## Kalmegh- A Medicinal Plant

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Kalmegh is a very important medicinal plant of traditional medicine system. It is used in Ayurveda, Siddha, Unani and Homeopathy to treat broad variety of diseases. It is found growing wild throughout the plains and hills of tropical India, from Uttar Pradesh to Kerala, and also in Bangladesh, Pakistan and all South East Asian countries. It is cultivated as an ornamental garden plant. All part of the plant are extremely bitter due to which plant is known as “king of bitter”. This plant is called Hemptu Bumi (meaning bile of earth) in Malaysia. Its Botanical name *Andrographis paniculata*; synonym Syn: *Justicia paniculata* Burm.



- ❖ *A. paniculata*, known on the Indian subcontinent as Chirayetah and Kalmegh in Urdu and Hindi languages.
- ❖ Respectively, is an annual plant, 1-3 ft high, that is one of the most commonly used plants in the traditional systems of Unani and Ayurvedic medicines.
- ❖ It is called Creat in English and is known as the “king of bitters.”
- ❖ It grows in hedge rows throughout the plains of India and is also cultivated in gardens.
- ❖ It also grows in many other Asian countries and is used as a traditional herbal medicine in China, Hong Kong, the Philippines, Malaysia, Indonesia, and Thailand.
- ❖ The aerial parts are most commonly used; however, the whole plant or roots are mentioned for certain limited purposes in some manuscripts.
- ❖ Traditionally, the plant was used as an infusion, decoction, or powder, either alone or in combination with other medicinal plants.
- ❖ In modern times, and in many controlled clinical trials, commercial preparations have tended to be standardized extracts of the whole plant. Since many disease conditions commonly treated with *A. paniculata* in traditional medical systems are considered self-limiting, its purported benefits need critical evaluation.

### Description of Plant

*Andrographis paniculata* is an erect plant with a height of 30–110 cm. Its stem is slender, dark green, squared in cross-section with longitudinal furrows and wings along the angles. The lance-shaped leaves have hairless blades measuring up to 8 centimeters long by 2.5 wide. The small flowers are borne in spreading racemes. The fruit is a capsule around 2 cm long and a few mm wide. It contains many yellow-brown seeds.

### Uses in Traditional Medical Systems

*A. paniculata* has been reported as having antibacterial, anti-fungal, antiviral, choleric, hypoglycemic, hypocholesterolemic, and adaptogenic effects. In the Unani system of medicine, it is considered a purgative, anti-inflammatory, emollient, astringent, diuretic,

emmenagogue, gastric and liver tonic, carminative, antihelmintic, and antipyretic. Due to its “blood purifying” activity it is recommended for use in cases of leprosy, gonorrhoea, scabies, boils, skin eruptions, and chronic and seasonal fevers. Juice or an infusion of fresh leaves is given to infants to relieve griping, irregular bowel habits, and loss of appetite. The leaves and root are also used in general debility, during convalescence after fevers, for dyspepsia associated with gaseous distension, and in advanced stages of dysentery.

### Modern Uses

A primary modern use of *A. paniculata* is for the prevention and treatment of the common cold. It appears to have anti-thrombotic actions, suggesting a possible benefit in cardiovascular disease. Pharmacological and clinical studies suggest the potential for beneficial effects in diseases like cancer and HIV infections.

### Health benefits of Kalmegh

In addition to helping to maintain healthy immunological and respiratory systems, this herbal combination also controls body temperature. There are several ailments that this plant may be used to treat. Some of its advantages are:

1. **It alleviates typical cold symptoms:** It is thought that taking andrographis either by alone or in conjunction with other herbs may help some individuals with their cough and sore throat.
2. **It can also lessen osteoarthritis:** Those who have mild to severe osteoarthritis of the knee may find that taking andrographis extract on a regular basis helps to lessen their pain and stiffness.
3. **It has a tonne of antioxidants:** Antioxidants and polyphenols abundant in kalmegh may aid in the body's defence against dangerous free radicals.
4. **The anti-inflammatory capabilities of kalmegh:** The ability of the body to successfully fight infections may be enhanced by kalmegh anti-inflammatory qualities. Additionally, this herb may aid in tissue restoration, which makes it incredibly beneficial. Additionally, kalmegh aids in reducing pain and swelling brought on by bodily inflammation.
5. **It helps with digestion:** Kalmegh assists in properly managing digestive issues including appetite loss. Due to its ushna (hot) character, it may also aid in improving the digestive fire as well as liver functioning.
6. **It is beneficial for the liver:** Additionally, kalmegh aids in the treatment of liver issues. It possesses hepatoprotective, anti-inflammatory, and antioxidant effects that may lessen the risk of free radicals damaging liver cells.
7. **It eliminates intestinal worms:** Kalmegh is said to support healthy intestinal function and aid in the elimination of intestinal worms.
8. **It may even prevent acne:** The antibacterial and antimicrobial characteristics of the Ayurvedic herb also aid in the treatment of skin conditions. Kalmegh, which is abundant in antioxidants, aids in the battle against dangerous free radicals, which can cause a variety of physical and cosmetic problems.
9. **It has antimicrobial qualities:** The body may be able to combat bacterial infections thanks to kalmegh antibacterial capabilities. It may be helpful in lowering diarrhoea and Bacterial infection

### How to use Kalmegh?

The kalmegh plant body may be utilised in its entirety to produce active pharmaceutical chemicals.

- ❖ As an official medication, the plant's juice, fresh leaves, and dried leaves are all used.
- ❖ Buttermilk and garlic are traditionally used with kalmegh leaf powder to treat jaundice.
- ❖ The plant's fresh leaves and twigs ground into a paste.