

# Review on Evaluation of Phytochemical Analysis of Kalmegh (*Andrographis Paniculata*) Leaf Extract

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**Abstract:** *Andrographis paniculata* is an herbaceous plant which is commonly known as “King of Bitters” and belongs to the family Acanthaceae. *Andrographis paniculata* is one of the commonly used herbal medicines worldwide. It is an erect plant which grows mainly as under shrub in tropical moist deciduous forests. It grows erect to a height of 32-100cm in moist shady places with glabrous leaves and white flowers with rose-purple spots on the petals. This plant is the richest source of bioactive constituents. Andrographolide is generally considered an essential bioactive component of plant *A. Paniculata*. Andrographolide is colorless, crystalline in appearance and has a very bitter taste. The andrographolide are multifarious and include: analgesic, antipyretic, antiretroviral, antimalarial, anti-hyperglycaemic, hepatoprotective, immunomodulatory, protective against alcohol induced toxicity and cardio protective activity and anticancer activity. Its phyto extract can protect human against a number of diseases. Kalmegh is used both in Ayurvedic and Unani System of medicines for possess immunological, antibacterial, anti-inflammatory, antithrombotic and hepatoprotective properties. Andrographolide is an interesting pharmacophore with anticancer and immunomodulatory activities and hence has the potential to be developed as an anticancer chemotherapeutic agent as well. The *A. paniculata* treats a wide range of diseases in traditional medicinal systems, and its intended benefits must be evaluated. The present communication deals with the anti-diarrhoeal properties of the alcoholic extract, its fractions and pure compounds isolated from *A. paniculata*. In the ayurvedic system of medicine currently widely practiced in Indian, *Andrographis paniculata* is often used in combination with other herbs and health care procedures for helping patients suffering from diverse spectrums of organ pathologies and mental health problems.

**Keywords:** *Andrographis paniculata*, Kalmegh, Phytochemicals, Andrographolide, Neoandrographolide, hepatoprotective, diterpenoids

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