



A review on *Anisomeles malabarica* and their usage

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ABSTRACT

Anisomeles malabarica is a medicinal plant has been used as a folkloric medicine *Anisomeles malabarica* belongs to family Lamiaceae is found throughout tropical and subtropical regions of India and it acts as an antimicrobial drug it having some acidic properties like anisomelic acid, anisomelolide, 2-acetoxymalabaric acid, betulinic acid, gerainic acid etc., treatment of various kind of diseases like amentia, anorexia, cancer, allergy, inflammatory disease, methanolic extract of *Anisomeles malabarica* showed inhibitory activity for gram positive and negative bacteria, viruses

Keywords: *Anisomeles malabarica*, anisomelic acid, betulinic acid, amentia, anorexia.

INTRODUCTION

In Recent years multiple drug resistance in human pathogenic microorganisms has developed due to indiscriminate use of commercial antimicrobial drug commonly used in the treatment of diseases. This situation forced the scientist for searching new antimicrobial chemotherapeutic agent. *Anisomeles malabarica* (L) (Malabar catmint) cogn. syn. *Nepeta malabarica* (Amalraj and Gopi, 2017). *Anisomeles* belong to Lamiaceae family is represented by 45 genera and 574 species with 256 endemic species. It is an Aromatic, densely pubescent, perennial herb, 1.2-2m in height belonging to the family Lamiaceae (Hammer, 1999). The antimicrobial compound from plant may inhibit bacterial growth by different mechanisms than those presently used (eloff, 1988).

Distribution of *Anisomeles malabarica*:

Anisomeles malabarica (L) R.Br. (Labiatae), distributed throughout India, Which is commonly known as Aruvaachadachi. A number of pharmacological effects of *Anisomeles malabarica* have been reported by Chopra et al. (1956) *Anisomeles malabarica* belongs to family Lamiaceae is found throughout tropical and subtropical regions of India. It is erect shrub commonly known as 'Malabarcatmint' distributed throughout South India (Orient longman, 1994).

Botany:

A. malabarica is an aromatic, densely pubescent, perennial herb, 1.2-2.0 meter in height (figure 1). Leaves are simple, opposite, very thick, aromatic, oblong-lanceolate, acute, pale above, white below, crenate-serrate, and woolly; flowers purple, in dense whorls of more or less interrupted spikes; fruits nutlets, bearing ellipsoid and compressed seeds (Joshi, 2000)

Phytochemical studies :

phytochemical studies of *A. malabarica* have shown the presence of anisomelic acid, anisomelolide, 2-acetoxymalabaric acid, anisomelyl acetate anisomelin, betulinic acid, β sitosterol, Citral, geranic acid, malabaric acid, ovatodiolide, and triterpenebetulinic acid (Bakshi et al., 1999; Choudhary et al., 2001)

Antimicrobial Sensitivity Test

Antibacterial activity of field grown *Anisomeles malabarica* was screened against gram positive and gram negative bacteria such as *E.coli*, *S.aureus*, *P.mirabilis*, *P.aeruginosa*, *k.pneumonia*.

Both extracts showed varying of inhibitory effects. The inhibitory effects of extracts were directly proportional to the increasing concentration of field grown leaf. The ethanolic extract produced good antimicrobial activity at 200 μ g/ml. The ethanolic extracts showed a 25mm zone of inhibition against *S.aureus* and 24mm zone of inhibition against *P.aeruginosa* and 23mm against *E.coli*, *k.pneumonia*, *P.mirabilis*. Diethyl ether extracts produced 30mm, 25mm, 24mm, 23mm, 25mm against *E.coli*, *S.aures*, *P.mirabilis* *P.aeruginosa*, *k.pneumonia* respectively It was reported that the methanolic extract of *Anisomeles malaborica* showed inhibitory activity for Gram-positive and negative bacteria (Boobalan, 2010).

Health Benefits:

Anisomeles malabarica useful in halitosis, epilepsy, hysteria, amentia, anorexia, dyspepsia, colic, flatulence, intestinal worms, fever arising from teething children, intermittent fever, gout, swelling and diarrhea (Gupta, 2008) *Anisomeles malabarica* (L.) (Malabar catmint) Cogn. Syn. *Nepeta malabarica* L., (Family: Lamiaceae) is a medicinal plant has been used as a folkloric medicine to treat amentia, anorexia, fevers, swellings, rheumatism [Chopra, 1956]. The herb is reported to possess anticancer, allergenic, anthelmintic, antiallergic, antianaphylactic, anti-

bacterial, anticarcinomic, antiedemic, antihistaminic, antiinflammatory, antileukemic, antinociceptive, antiplasmodial, antiseptic and antiperotic properties (Jeyachandran, 2007) Flavanoids have been reported to expert multiple biological effects such as anti-inflammatory, anti allergic, anti-viral and anti-cancer activities. The one of the chemicals produced by plants are the alkaloids and their amazing effect on humans has let tothe development of powerful pain killer medicine (Raffuf, 1996) Tannins has important roles such as antioxidants (Rease and Evans, 1983). Herbs having tannins are astringent in nature and are used for the treatment of diarrhea and dysentery (Dharmanaada, 2003).

SUMMARY AND CONCLUSION

Herbs and their extracts have long been used for uring health related components and metabolic disorders as natural remedies. Functional components present in them aids in performing a wide range of biological functionalities. *Anisomeles malabarica* having antibiotic effects, inhibitory effects on bacterial ,viral disorders ,allergy and inflammation.

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