



## Review

An overview on traditional uses and pharmacological profile of *Acorus calamus* Linn. (Sweet flag) and other *Acorus* speciesSandeep B. Rajput<sup>a</sup>, Madan B. Tonge<sup>b</sup>, S. Mohan Karuppaiyil<sup>a,\*</sup><sup>a</sup> DST-FIST and UGC-SAP Sponsored School of Life Sciences, SRTM University, Nanded 431-606, MS, India<sup>b</sup> Prabhu Ayurvedic Clinic, Nanded 431-606, MS, India

## ARTICLE INFO

## Article history:

Received 10 June 2013

Received in revised form 19 August 2013

Accepted 29 September 2013

## Keywords:

*Acorus calamus*

Sweet flag

Pharmacological properties

## ABSTRACT

*Acorus calamus* (Sweet flag) has a long history of use and has numerous traditional and ethnomedicinal applications. Since ancient times, it has been used in various systems of medicines such as Ayurveda, Unani, Siddha, Chinese medicine, etc. for the treatment of various ailments like nervous disorders, appetite loss, bronchitis, chest pain, colic, cramps, diarrhea, digestive disorders, flatulence, gas, indigestion, rheumatism, sedative, cough, fever, bronchitis, inflammation, depression, tumors, hemorrhoids, skin diseases, numbness, general debility and vascular disorders. Various therapeutic potentials of this plant have been attributed to its rhizome. A number of active constituents from leaves, rhizomes and essential oils of *A. calamus* have been isolated and characterized. Of the constituents, alpha and beta-asarone are the predominant bioactive components. Various pharmacological activities of *A. calamus* rhizome such as sedative, CNS depressant, anticonvulsant, antispasmodic, cardiovascular, hypolipidemic, immunosuppressive, anti-inflammatory, cryoprotective, antioxidant, antidiarrheal, antimicrobial, anti-cancer and antidiabetic has been reported. Genotoxicity and mutagenicity of beta and alpha-asarone is reported, which limits their use at high dosage. Though *A. calamus* has been used since ancient times, many of its uses are yet to be scientifically validated. In the present review an attempt has been made to explore traditional uses and pharmacological properties of *A. calamus*.

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