

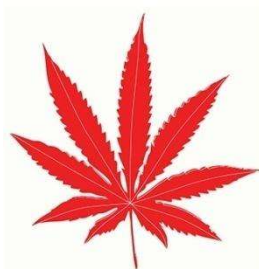


12<sup>th</sup> Pak Pharma Healthcare Expo

## 4<sup>th</sup> Pakistan Food -Nutrition International Summit 2023

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### Conference Abstract

#### PAKISTAN'S MEDICINA PLANTS WITH POTENTIAL TO INHIBIT XANTHINE OXIDASE ENZYME ACTIVITY

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### Abstract

Gout is in the most common type of arthritis, occurs as a result of hyperuricemia. Xanthine oxidase inhibitors are generally recommended to treat gout. Despite the availability of treatment options, these therapies are associated with side effects. In this respect, natural remedies can prove advantageous. The purpose of this systematic review is to provide all-inclusive information on the available medicinal plants in Pakistan that have inhibitory effect on xanthine oxidase. An in-depth literature review indicates that no such studies are currently available to systematically shorten available data. This study was carried out in compliance with the PRISMA guidelines. Several databases, included Google Scholar, Web of Sciences, Scopus and PubMed were used for the search of literature from January 2000–April 2021. To assess the potential for bias, the SYRCLE RoB tool was used. There were 22 articles that met inclusion criteria. The study outcomes shown that the following plants had an increased inhibitory activity of XO (>75%); *Zingiber officinale*, *Tribulus terrestris*, *Croton sparsiflorus*, *Laggera aurita*, *Trianthema triquetra*, *Trachyspermum ammi* and *Bryophyllum pinnatum*. Many phytochemicals were also identified with strong activity such as acacetin 1, umbelliferone, ranuncoside, chrysin 2, methyl-3,4,5-trihydroxybenzoate and costinone A. The current study will provide useful information on herbal medicines and serve as a reference for future studies on the treatment of gout. A thorough

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pharmacological and clinical evaluation of medicinal plants is necessary to assess their efficacy and safety.

**Competing Interests:**

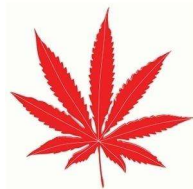
The authors declare no competing interests

**Keywords:** Medicinal plants, Gout, Xanthine oxidase, Traditional Medicine, Folklore remedies

Additional information is available at the end of the article.

**Declaration**

The abstract is reviewed and accepted by the Conference Organization Committee of 12<sup>th</sup> Pak Pharma Healthcare Expo. The presenter was permitted to share his research after final approval of the committee. The scientific research information was presented at 4th Pakistan Food -Nutrition International Summit 2023 held on February 15-16, 2023 at Expo Centre Lahore, Pakistan. Hence, the journal is publishing this abstract on behalf of the aforesaid Conference Organization Committee.



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