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Short Communication

The Commercial Importance of the *Cymbopogon* Species

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DESCRIPTION

In Africa, Asia, and America's tropical and subtropical climates, the genus *Cymbopogon* is extensively dispersed. This genus, which has 144 species, is well-known for having a high concentration of essential oils that have been utilized in perfumes, medicines, and cosmetics. Commercial cultivation of the two main species of lemongrass, *C. flexuosus* and *C. citratus*, is carried out in the Democratic Republic of the Congo (DRC), Madagascar, and the Comoros Island.

In developing nations, aromatherapy and traditional medicine still depend heavily on aromatic and medicinal herbs. There are now several herbal treatments utilized in medicine [1,2]. In Algeria, it's usual practice to employ herbal remedies as anti-inflammatories, antifungals, and analgesics. The majority of the time, the plants' active ingredients is a mystery. A sensible strategy for development of novel medications is to investigate the biology and pharmacological characteristics of medicinal plant extracts [3,4].

People who have limited or no access to medical care is more likely to use therapeutic herbs. In Algeria, bacterial and fungal diseases, as well as stomach aches and toothaches, are treated with rose-scented geranium and lemon grass, respectively. Therefore, a number of studies that evaluated the anti-inflammatory efficacy of the organic or aqueous extracts of these plants on rats *in vivo* or on human monocytes *in vitro* have been reported [1,5]. One of the primary medicinal and aromatic plants grown in Algeria is *Cymbopogon citratus*, Stapf (Poaceae family), sometimes known as lemon grass. It is a perennial tropical grass with thin, long leaves. Additionally, it is grown in tropical and subtropical areas of Asia, South America, and Africa primarily for its Essential Oil (EO).

The EO of *Cymbopogon* species is in in demand on a global scale. By using steam distillation, Lemon Grass Essential Oil (LGEO) is produced from the plant's dried or live leaves. Steam distillation yields EO plus hydrosols or aromatic fluids, which are frequently used to treat infectious and inflammatory diseases. Due to its application in the production of perfumes, flavours, perfumery, cosmetics, detergents, and medicines, LGEO has significant commercial significance [6]. In Asia and Africa, LGEO is used to treat backaches, sprains, hemoptysis, and as an antibacterial, antitussive, and anti-rheumatic. Its leaves are used as a sedative, antibacterial, and anti-inflammatory infusions in alternative medicine. It is used to treat diabetes in various African nations.

In a well-organized research, citral, a key ingredient in EO, was mixed with the non-steroidal anti-inflammatory medicine naproxen and given orally to laboratory rats, demonstrating the medicinal potential of LGEO in rodents. The combination of naproxen and citral, when compared to naproxen alone, had a comparable anti-inflammatory effect with less adverse effects on the stomach. The Mitidja area of Algeria is home to a large traditional herbal medicine industry. In Northern Algeria, there are several tribes who have ancient customs focused on using therapeutic herbs [4].

CONCLUSION

A review of the literature revealed that relatively few investigations on the lemon grass plant growing in Algeria have been conducted. Therefore, it is crucial to look into the chemical make-up of LGEO and assess the medicinal potential of its volatile constituents. Numerous investigations have examined LGEO's chemical make-up and pharmacological assessment over the years. However, there is surprisingly little comprehensive research on its antifungal activity. Additionally, there is no information about the anti-inflammatory properties of LGEO in the literature that has been published.

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