



## Traditional Medicinal Importance of *Cymbopogon citratus* (D.C.) Stapf: An Aromatic Plant

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### Article info

Received: 10/11/2020

Revised: 23/11/2020

Accepted: 25/12/2020

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### Abstract

Plants are producing a diversity of bioactive molecules with different chemical scaffolds. From the centuries, aromatic plants have become an important part of daily life despite the progress in modern medicine. The growing interest in herbs and their ability to offer economical uses is a part of the movement towards greener economics and life styles. This movement is based on the belief that the plants have a vast potential for their use as a curative medicine. Aromatic plants will also maintain their importance in the search for new, valuable sources of drugs and lead compounds. In present paper medicinal utility an aromatic plant *Cymbopogon citratus* (D.C.) Stapf commonly known as lemon grass has been highlighted in detail.

**Keywords:** *Cymbopogon citratus* (D.C.) Stapf., Medicinal importance, Aromatic Plant

### Introduction

*Cymbopogon citratus*, commonly known as lemon grass or simply lemon grass, is a tropical plant native to Maritime Southeast Asia and introduced to many tropical regions.

*Cymbopogon citratus* is part of the grass family, Poaceae. They contain simple, bluish-green leaves with entire margins and are linear in shape. The blades tend to be 18–36 inches long. Like other grasses, the leaves also have parallel venation.<sup>1</sup>

### Chemical Composition

Lemon grass oil contains 65–85% citral in addition to myrcene, citronellal, citronello, and geraniol. Hydrosteam distillation, condensation, and cooling can be used to separate the oil from the water. The hydrosol, as a by-product of the distillation process, is used for the production of skin care products such as lotions, creams, and facial cleansers. The main ingredients in these products are lemon grass oil and "negros oil" (mixture of lemon grass oil with virgin coconut oil) used in aromatherapy.<sup>2-8</sup>

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Citronellol is an essential oil constituent from *Cymbopogon citratus*, *Cymbopogon winterianus*, and *Lippia alba*. Citronellol has been shown to lower blood pressure in rats by a direct effect on the vascular smooth muscle leading to vasodilation. In a small, randomized, controlled trial, an infusion made from *C. citratus* was used as an inexpensive remedy for the treatment of oral thrush in HIV/AIDS patients.

Laboratory studies have shown cytoprotective, antioxidant, and anti-inflammatory properties *in vitro*.

#### Traditional Medicinal Importance<sup>9,10</sup>

- It is believed to have anxiolytic, hypnotic, and anticonvulsant properties.
- In traditional medicine of India the leaves of the plant are used as stimulant, sudorific, antiperiodic, and anticatarrhal, while the essential oil is used as carminative, depressant, analgesic, antipyretic, antibacterial, and antifungal agent.
- Lemongrass is a plant. The leaves and the oil are used to make medicine.
- Lemongrass is used for treating digestive tract spasms, stomachache, high blood pressure, convulsions, pain, vomiting, cough, achy joints (rheumatism), fever, the common cold, and exhaustion. It is also used to kill germs and as a mild astringent.
- Some people apply lemongrass and its essential oil directly to the skin for headache,

stomachache, abdominal pain, and muscle pain.

- By inhalation, the essential oil of lemongrass is used as aromatherapy for muscle pain.
- In food and beverages, lemongrass is used as a flavoring. For example, lemongrass leaves are commonly used as “lemon” flavoring in herbal teas.
- In manufacturing, lemongrass is used as a fragrance in soaps and cosmetics. Lemongrass is also used in making vitamin A and natural citral.

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**Cite this article as:**

Kushwaha S. (2020). Traditional Medicinal Importance of *Cymbopogon citratus* (D.C.) Stapf: An Aromatic Plant, *Int. J. of Pharm. & Life Sci.*, 11(12): 7136-7138.

Source of Support: Nil

Conflict of Interest: Not declared

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