

“Multidisciplinary Approach towards Indian Knowledge System”

Recent Trends in **Arts, Humanities, Management & Science**

JANUARY 2023



Chief Editor

Dr. S. R. Kattimani

Publisher

Siddharth Publications (M.S.)

ISBN : 978-93-5980-212-1



Ocimum gratissimum L.: A Herbal Tea

Desai Mrunalini N., Kagale Lubdha A., Jagtap Dashrath G.

Department of Botany, Vivekanand College, Kolhapur (Empowered Autonomous)

Vijaysingh Yadav College, Peth Vadgaon

mndesai2306@gmail.com

Abstract:

Tea in general and Herbal tea in particular, are gaining increasing consumer attention due to a growing awareness of health benefits derived from their use, but research in product development of flavored herbal tea is limited. The objectives of the study were to conduct formulation mixture of *Ocimum gratissimum* in order to assess their potential for new herbal tea development. Formulation of herbal tea with this herb was done, which imparts colour, aroma, flavor, astringency and overall acceptability to herbal tea and impart many health benefits. Herbal Tea of *Ocimum gratissimum* L. or clove basil with *Camellia sinensis* in proportion of 1:1 is beneficial for increase blood circulation, maintain blood viscosity, reduce acidity, fat burning etc. Further study is necessary to make combinations of specific herbs for different types of ointments.

Key words: Herbal tea, *Ocimum gratissimum*, *Camellia sinensis*, Aroma, Astringency

Introduction:

The Tea is the most consumed beverage in the world, but its origination is attributed to china [1] and becomes as an important commercial food product in the world. After china, the 2nd largest producer of tea is India [2]. These days consumers are cautious of their health so they are demanding for more natural and health benefitting food so tea seems to be a good vehicle in this respect because of its good taste and aroma. Hence tea belongs to a quickly growing market of wellness beverages [3]. Traditionally, tea is classified as green, black and herbal tea [4] and can be differentiated on the basis of their processing stages at the time of manufacturing. *Camellia sinensis* is the plant from which green tea and all kinds of tea are made. Fermentation is not done during herbal tea processing. Herbal tea imparts several health promoting components because of its high range of phenolic compounds. Herbal tea is covered to deliver nearly 4000 bioactive compounds under which one third is polyphenols [5]. Tannins and flavonoids are the important polyphenols present in the Green tea. Catechins, one of the important flavonoid present in the green tea which is also known as vitamin E [6]. Herbal tea imparts several health

benefits like weight loss in obese, to control alzheimer's, parkinson's, blood pressure, diabetes and heart diseases. There are many flavored green teas. Popular flavored green teas are lemon green tea, ginger & mint green tea, lemon honey green tea, jasmine green tea, etc. It is thus

imperative to research the potential of native plant materials in the expansion of new flavored Herbal tea. On the basis of some unpublished reports, however, green tea imparts poor in sensory appeal due to the lack of distinct Flavor properties. Therefore, it may be needed to blend Herbal tea with other herbs as a means of improving its sensory appeal and for good health and wellness. The herbs discussed in the research work are *Ocimum gratissimum* and *Camellia sinensis*.

Ocimum gratissimum L. is commonly known as clove basil or lemon basil and its native range is tropical and sub tropical old world. A polymorphic branched, aromatic shrub nearly 0.5 to 3 m tall belonging to family Lamiaceae, has been identified as a culinary herb with wide applications. *Ocimum gratissimum* is an aromatic, perennial herb, 1-3 m tall; stem erect, round-quadrangular, much branched, glabrous or pubescent, woody at the base, often with epidermis peeling in strips. The plant is mainly distributed in tropical regions and native to South Asia, Africa and various regions of South America Polynesia, Bismarck, Archipelago and the West Indies [5]. The phytochemical study of the plant shows the presence of several bioactive compounds. The aqueous leaf extract assay shows the presence of steroids, tannins, flavonoids, saponins, terpenoids alkaloids, inulins, phenolic compounds, B-carotene, glycosides carotenoids, reducing sugars, phlobatannins, anthraquinones and cardiac glycosides with steroidal ring and deoxy-sugar [3]. *O. gratissimum* is used as a spice and possesses nutritive value and flavouring properties [4]. The plant has a wide application in the traditional system of medicine to cure various ailments. The plant produces essential oil with antibiotic, antioxidant, antimalarial, antifungal, antibacterial, antidiarrheal, antidiabetic, anti-carcinogenic, insecticidal, antimutagenic and antiurolithiatic properties[6].

Materials and Methods:

Kingdom: Plantae

Division: Magnoliophyta

Order: Lamiales

Family: Lamiaceae

Genus: *Ocimum*

Species: *gratissimum*

Binomial name: *Ocimum gratissimum* L.

Local name: Ram tulas

Sample collection and extraction:

The plant specimens were identified and prepared for herbarium. Specimens were authenticated and deposited herbarium in department of botany, Shri V Y college, Peth Vadgaon.

The herbal tea prepared with the help of powder of *Camellia sinensis* and *Ocimum gratissimum*. Powder of *Camellia sinensis* were collected from a local market of

Pethvadgaon. *Ocimum gratissimum* were thoroughly washed under tap water. The clean sample was dried in shade and coarsely powdered by hand crushing and then stored in air-tight, container for further use. Dried Leaves of *Ocimum gratissimum* 50gm and dried leaves of *Camellia sinensis* 50gms (1:1) proportion.

Preparation of Herbal Tea:

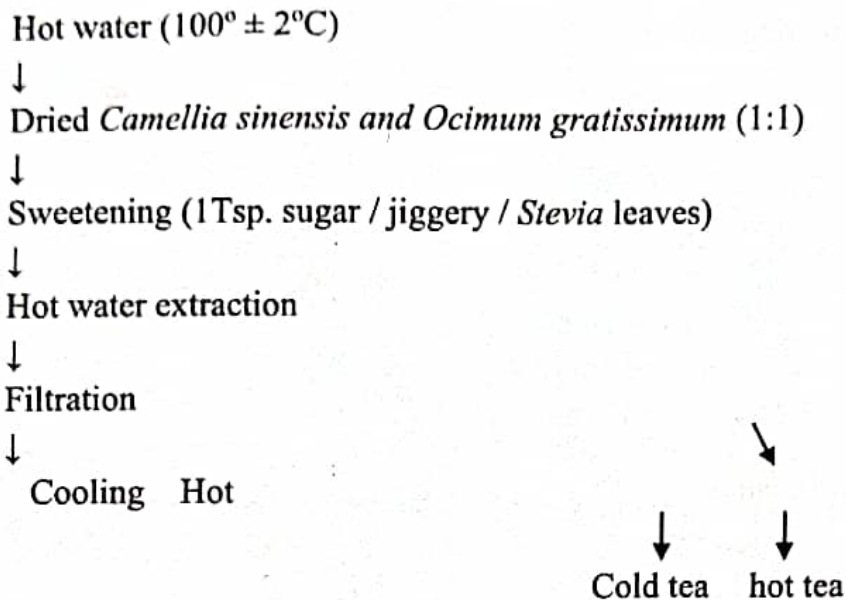


Fig 1: Steps involved in the Process of Herbal Tea preparation

Results:

Herbal tea looks like tea and is brewed in the same way as tea, but it not actually a tea at all. This is because they do not come from the *Camellia Sinensis* bush, the plant from which all teas are made. Herbal teas are actually infusions, and are properly called tisanes. Tisanes are made from mixtures of dried leaves, seeds, grasses, nuts, barks, fruits, flowers, or other botanical elements that give them their taste and provide the benefits of herbal teas. They also taste well and are easy to drink. Your herbal tea may consist of one main herbal ingredient or it may be a blend of herbal ingredients, designed to bring about a specific purpose, such as relaxation, rejuvenation, relief from a specific condition, amongst other things.

Uses of Herbal Tea

- Herbal teas (which are also called 'tisanes') are simple, effective, inexpensive ways to enjoy the taste and benefits of herbs and spices.
- Herbal tea as a refreshing drink.
- Achieving a more calm and relaxed state of mind.

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- Supporting heart health.
 - Aiding with stomach and digestive problems.
 - Providing cleansing properties for the body.
 - Promoting energy and wellness.
 - Nourishing the nervous system.
 - Strengthening the immune system.
 - Providing antioxidants to the body.
 - Boosting energy levels and invigorating the body.
 - Relieving stress.
 - Helping to avoid colds.
 - Stimulating the internal organs.
 - Promoting a good night's sleep.
 - Reduce Acidity
 - Fat burning
 - **Organoleptic Characters**

Camellia sinensis + *Ocimum gratissimum*

Colour: Greenish brown

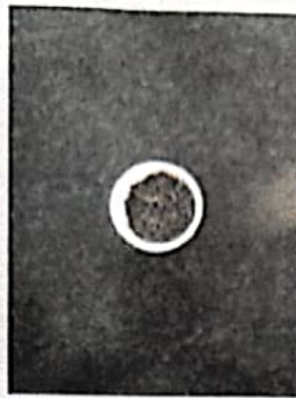
Odour: Bitter

Taste: Bitter

PH(range): 8-9.

Conclusion:

The above infusion will provide new alternatives to traditional flavored teas which can impart health benefits too. There is lot of uses of this herb which acts like antioxidant, immunomodulator, a mood stabilizer, antiviral and antibacterial. This preparation can be used in dry or liquid form to improve human health. It can be served with or without sugar. Further study is necessary to make combinations and concentrations of specific herbs for treatment of different types of diseases.



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