Preparation & Characterization of herbal Tea from leaves of *Ocimum sanctum*

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Abstract: People have hailed the health benefits of green tea for centuries. Studies suggest that consuming green tea may positively affect skin health, help with weight loss, and reduce the risk of cardiovascular disease. Herbal teas are widely represented in the traditional medicine of various cultures, due to their health-promoting activities that include as expectorant, antimicrobial, anti-diabetic, anti-inflammatory, antioxidant & Immunity booster properties. Our product has combination of *Zingiber officinale* (Ginger), *Ocimum sanctum* (Rama) & Tulsi (Shyama) which have Immunobooster properties & Act as Expectorant .Its having Cardamom help in digestive system. Have no side effect & Characterization of herbal tea.

Key word: *Ocimum sanctum, Zingiber officinale*, Characterization of herbal tea.

1. INTRODUCTION

People have hailed the health benefits of green tea for centuries. Studies suggest that consuming green tea may positively affect skin health, help with weight loss, and reduce the risk of cardiovascular disease. Herbal teas are widely represented in the traditional medicine of various cultures, due to their health-promoting activities that include as expectorant, antimicrobial, anti-diabetic, anti-inflammatory, antioxidant & Immunity booster properties.Our product has combination of *Zingiber officinale* (Ginger), *Ocimum sanctum* (Rama) & Tulsi (Shyama) which have Immunobooster properties & Act as Expectorant .Its having Cardamom help in digestive system. Have no side effect & Characterization of herbal tea. The predominant cause of global morbidity and mortality is lifestyle-related chronic diseases, many of which can be addressed through Ayurveda with its focus on healthy lifestyle practices and regular consumption of adaptogenic herbs. Of all the herbs used within Ayurveda, tulsi (*Ocimum sanctum* Linn) is preeminent, and scientific research is now confirming its beneficial effects. There is mounting evidence that tulsi can address physical, chemical, metabolic and psychological stress through a unique combination of pharmacological actions. Tulsi has been found to protect organs and tissues against chemical stress from industrial pollutants and heavy metals, and physical stress from prolonged physical exertion, ischemia, physical restraint and exposure to cold and excessive noise. Tulsi has also been shown to counter metabolic stress through normalization of blood glucose, blood pressure and lipid levels, and psychological stress through positive effects on memory and cognitive function and through its anxiolytic and anti-depressant properties. Tulsi's broad-spectrum antimicrobial activity, which includes activity against a range of human and animal pathogens, suggests it can be used as a hand sanitizer, mouthwash and water purifier as well as in animal rearing, wound healing, the preservation of food stuffs and herbal raw materials and traveler's health. Cultivation of tulsi plants has both spiritual and practical significance that connects the grower to the creative powers of nature, and organic cultivation offers solutions for food security, rural poverty, hunger, environmental degradation and climate change. The use of tulsi in daily rituals is a testament to Ayurvedic wisdom and provides an example of ancient knowledge offering solutions to modern problems.

2. MATERIAL & METHODS:

Take all require ingredients like *Ocimum sanctum, Zingiber officinale, Cardamom, Glcerrahiaza Glabra & Tea and Shade Dry it.Then we will take 60 gm. of Tea, 15 gm. of leaves Ocimum sanctum, 14 gm. of Ocimum Tenciflorum(Holy basil),10 gm of Zingiber*

officinale, 0.5gm of Glcerrahiaza Glabra & 0.5 gm of Cardamom weigh accurately. Then mixed to all required ingredients.

Formula:

S.No	Name of Ingredients	Quantity
1.	Tea (Teasinesis)	60 gm.
2.	*Ocimum sanctum(Tulsi)*	15 gm.
3.	*Ocimum Tenciflorum(Holy basil)*	14 gm.
4.	*Zingiber officinale(Ginger)*	10 gm
5.	*Glcerrahiaza Glabra (Liquorice)*	0.5 gm
6.	*Cardamom*	Q.S.

Characterization: Characterization of prepare herbal Tea by Morphological Study, Solubility test, Stability test

Morphological Study: Morphological study done by following parameter like tast, colour, order, Size & Shape etc.

3. RESULTS

3.1 Morphological Study: Morphological study was performed by using following parameter.

S.No.	Parameters	Observation
1.	Tast	Characteristic
2.	Colour	Greenish -brown
3.	Order	Characteristic
4.	Size & Shape	Uneven & Uniform

3.2 Solubility test: solubility studies wazs performed by using following parameters.

S.No.	Parameter	Observation
1.	Solubility with Normal Water	Give Light brown colour
2.	Solubility with Hot Water	Give Dark brown colour

3. 3 Stability test:
Stability Study Stability study of different mulberry tea preparation was carried out and result is obtained from that study is the colour of tea was changed and preparations makes very thick after 5 days.

3.4 Density:
Density is calculated using density bottle
Density = Mass/ Volume = weight of filled bottle – weight of empty bottle/Volume =
38.886 – 12.83/25 = 1.04

3.5 Viscosity:
Viscosity = viscosity is calculated using viscometer
Viscosity of test = Density of std × time required by std/ density of test × time required by test × viscosity of test. = 0.84 = 0.21.

4. CONCLUSION

Herbal teas are widely represented in the traditional medicine of various cultures, due to their health-promoting activities that include as expectorant, antimicrobial, anti-diabetic, anti-inflammatory, antioxidant & Immunity booster properties. It's having Immunoboosters Properties. Acts as Expectorant for respiratory disease. It's having ant diabetic & anti-hypertensive Properties. Act as CNS stimulant. Use in Weight loss. Our product has combination of Ginger, Tulsi (Rama) & Tulsi (Shyama) which have Immunobooster properties & Act as Expectorant .Its having Cardamom help in digestive system. Have no side effect.

REFERENCE

[1] Killedar, Suresh G., Aarti V. Pawar, and C. Suresh Killedar. "Preparation of herbal tea from mulberry leaves." *Journal of Medicinal Plants Studies* 5.2 (2017): 325-328.

[2] Siva, M., et al. "Ocimum sanctum: a review on the pharmacological properties." *Int. J. Basic Clin. Pharmacol* 5 (2016): 558-565.

[3] Mohan, Lalit, M. V. Amberkar, and Meena Kumari. "Ocimum sanctum linn.(TULSI)-an overview." *Int J Pharm Sci Rev Res* 7.1 (2011): 51-53.

[4] Zhao, J., et al. "Advanced phytochemical analysis of herbal tea in China." *Journal of Chromatography A* 1313 (2013): 2-23. Poswal, Fatima S., et al. "Herbal teas and their health benefits: a scoping review." *Plant Foods for Human Nutrition* 74.3 (2019): 266-276.

[5] Sandasi, Maxleene, et al. "Non-destructive quality assessment of herbal tea blends using hyperspectral imaging." *Phytochemistry Letters* 24 (2018): 94-101.

[6] Apak, Reşat, et al. "The cupric ion reducing antioxidant capacity and polyphenolic content of some herbal teas." *International journal of food sciences and nutrition* 57.5-6 (2006): 292-304.

[7] Chong, K. L., and Yau Yan Lim. "Effects of drying on the antioxidant properties of herbal tea from selected Vitex species." *Journal of Food Quality* 35.1 (2012): 51-59.

[8] Ariffin, Fazilah, et al. "Antioxidant capacity and phenolic composition of fermented Centella asiatica herbal teas." *Journal of the Science of Food and Agriculture* 91.15 (2011): 2731-2739.