

Antibacterial Activity of *Ocimum Sanctum* Linn. And it's Role in water purification

(MS-73/304096/XII/13-14/CRO/dated24/6/2014)

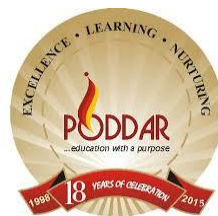


Summary

Minor Research Project

Submitted to

**University Grant Commission,
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SUMMARY

Tulsi Leaf extract have great potential as antimicrobial agent for the treatment of water. The treatment is simple, cost effective, eco-friendly, reachable for all and the components present in *Ocimum sanctum* leaves have no side effects to human compared to chemical treatment. More over the water treated with Tulsi extract serve not only as germ free but also as Medicinal water.

Phytochemicals are secondary metabolites, which are produced by medicinal plant. In Pharmacological studies, *Ocimum sanctum* is considered as important medicinal plant. It is commonly known as tulsi, belongs to family Lamiaceae. Plant essential oils and extracts have been used for many thousands of years, in food preservation, pharmaceuticals, alternative medicine and natural therapies. It is necessary to investigate those plants scientifically which have been used in traditional medicine to improve the quality of healthcare. Plant extracts are potential sources of novel antimicrobial compounds especially against bacterial pathogens. The major aim of present study was to investigate the phytochemical screening of *Ocimum sanctum* Leaves. The leaves have shown the presence of all the phytoconstituents like carbohydrate, alkaloids, glycosides, phenolic compounds tannins, and flavanoids etc. The results of the above studies support the use of this plant for human and animal disease therapy and the importance of the ethno-botanical approach as a potential source of bioactive substances.

LIST OF PUBLICATIONS

Research papers published in proceedings of International/National/ State level Conferences/Symposium

Praveen Goswami(2018) : Phytochemical Analysis and evaluation of *Ocimum sanctum*. National Conference on Biodiversity Conservation and Environment Management 26-27 Feb 2018 Department of Botany and Zoology Poddar International College, Jaipur.(Oral Presentation)

Praveen Goswami, Neha Sharma Utkarsh Kaushik, Shilpi Damor and Preeti Sharma (2016) : औषधीय पौधे तुलसी का जीवाणुरोधी प्रभाव.3rd National Hindi Science Conference University Rajasthan Jaipur 16-17th Dec.2016 .P11.(Oral Presentation)

□ **Goswami Praveen** and Shilpi dammor (2016): Herbal Disinfectant of water treatment. National Conference on Environmental impact on health and its management :Eco-Friendly strategies AND XXVII ALL India Congress of Zoology Feb7-8 2016.Department of Zoology,University of Rajasthan, Jaipur .OP-84 PP280 (oral presentation).

□ **Goswami Praveen** (2016): **Antibacterial Potentially of Tulsi**. International Conference on Computational Technologies (ICCT)2016 Jointly organized by poddar international college, jaipur and International associations of Academician , USA ,26th-27th March ,2016

□ **Goswami Praveen** (2015): **Effect of Ocimum sanctum Linn. (Tulsi)as a disinfectant for water treatment**. National Conference on herbal medicine :Current Strategies and future prospectus (NCHM-2015) 22-23rd Dec2015, Department of Zoology, University of Rajasthan, Jaipur PP(f)24 P91(Poster Presentation).

□ **Goswami Praveen** (2015): **Antibacterial Effect of Ocimum sanctum Linn. (Tulsi)**.3rd Rajasthan Science Congress,Manipal University , Jaipur 45 (Oral Presentation).