

Registration No.

A SYSTEMATIC REVIEW ON ANTIMICROBIAL ACTIVITY OF *ZINGIBER OFFICINALE*

Suryanath Pandey and Sahil Sharma

Division of Pharmacology, Institute of Pharmaceutical Research, GLA University, Mathura-281406, Uttar Pradesh, India

E-mail:example123@xyz.com

Abstract

Zingiber officinale (Family: Zingiberaceae; ZO) commonly known as ginger, is an herbaceous perennial which grows annually in tropical rain forests of Indian Subcontinent. The rhizomes and roots of the flowering plant are widely used as a spice or food supplement in Southern Asia. In folk medicinal system, ZO has been recommended for its antimicrobial activity. The aim of this study was to provide a comprehensive review on the antimicrobial activity of ZO. Experimental studies reported the potential antimicrobial effects of ZO in the management of several infections caused due to different types of microbes. ZO showed ant-microbial activity against bacterial strains such as *Staphylococcus aureus*, *Escherichia coli*, *Bacillus subtilis*, and *Pasteurella multocida*, and fungal strains such as *Aspergillus niger*, *Aspergillus flavus*, *Rhizopus solani*, and *Alternaria alternate*. ZO also inhibited *Candida* yeast such as *C. albicans* and *C. krusei*. ZO exhibits broad spectrum antibacterial activity and is effective against multi-drug resistant strain of *P. aeruginosa*. ZO also exhibited antileishmanial activity against *Leishmania amazonensis* perhaps through activating nitrite production in the microbe without any effect on the host cells. ZO chemically consists of monoterpene and sesquiterpene hydrocarbons such as α -zingiberene, α -curcumene, β -bisabolene and β -sesquiphellandrene that are possessing anti-microbial activity. Thus, it can be considered as a safe herbal medicine in the management of microbial infections which has to be substantiated by further mechanistic studies.

Instructions for submitting abstract:

- Abstract should not exceed more than 250 words.
- The heading should be in uppercase, bold and font size should be 12.
- Name of author and corresponding should be of font size 10 and the name of presenting author should be underlined.
- Affiliation and email id should be kept in font size 10 and has to be italics.
- Abstract should contain objectives, material and methods, result, discussion and conclusion.
- **Registration no.** will be provided by email after the verification of registration.
- All the abstracts received for the presentation will be re-viewed by the Scientific Committee, and the participants or the author will be notified for their abstract acceptance on October 15, 2018.
- The confirmatory email for acceptance of abstract will be sent to the email-id mentioned in the abstract.