



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)

Re-accredited with 'A++' Grade by NAAC.CGPA 3.65/4, Category I by UGC


Coimbatore - 641 043, Tamil Nadu, India

PLAGIARISM CHECK REPORT (THESIS)

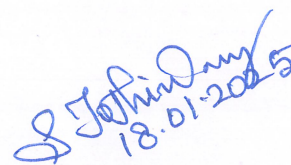
1.	Name of the Research Scholar	Jothi Nayaki S
2.	Roll No. and Year of Registration	18PHBCP001, 2019
3.	Department	Biochemistry, Biotechnology and Bioinformatics
4.	Name of the Research Guide	Dr. D. Kavitha
5.	Title of the Thesis / Dissertation	Biological Evaluation of Pillar[5]arene-Isatin Inclusion Complexes to Combat Wound Infections
6.	Similarity Content (%) Identified	4%
7.	Software Used	Turnitin
8.	Date of Verification	18-01-2025

Note : The report is excluding 14 Consecutive words, Review of Literature and Quoted Materials.

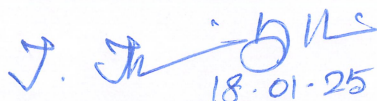
Checked by :


18/1/25

Information Scientist


18.01.2025

Research Scholar


18.01.25

Assistant Librarian


18/1/25

Research Guide

Date: 18-01-2025

Biological Evaluation of Pillar[5]arene-Isatin Inclusion Complexes to Combat Wound Infections

by central Library Avinashilingam

Submission date: 18-Jan-2025 10:49AM (UTC+0530)

Submission ID: 2379892050

File name: Plagiarism_1_2_1_1.docx (17.26M)

Word count: 27203

Character count: 173894

Biological Evaluation of Pillar[5]arene-Isatin Inclusion Complexes to Combat Wound Infections

ORIGINALITY REPORT

4%

SIMILARITY INDEX

2%

INTERNET SOURCES

4%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES

1

Sekar JothiNayaki, Ravindhiran Ramya, Sankar Srividhya, Jeyavelraman Kiruthika et al.

"Antibacterial potentials of pillar[5]arene, pillar[4]arene[1]quinone derivative and their isatin inclusion complexes", *Supramolecular Chemistry*, 2023

Publication

1%

2

Hamad H. Al Mamari, Iman Al Harrasi, Khulood Al Hadhrami, Yousuf Al Lawati, Fakhreldin O. Suliman. "Inclusion complexes of selected amines with pillar[5]arenes: experimental and molecular dynamics study", *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, 2019

Publication

<1%

3

Aishwarya Vetrivel, Preethi Vetrivel, Kavitha Dhandapani, Santhi Natchimuthu et al. "Inhibition of biofilm formation, quorum sensing and virulence factor production in *Pseudomonas aeruginosa* PAO1 by selected

<1%



Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: central Library Avinashilingam
Assignment title: Paper 2024
Submission title: Biological Evaluation of Pillar[5]arene-Isatin Inclusion Compl...
File name: Plagiarism_1_2_1_1.docx
File size: 17.26M
Page count: 128
Word count: 27,203
Character count: 173,894
Submission date: 18-Jan-2025 10:49AM (UTC+0530)
Submission ID: 2379892050

**Biological Evaluation of Pillar[5]arene-Isatin Inclusion Complexes to Combat
Wound Infections**

**"The enemy was the microbial world, and over the centuries, it has killed
more people than all of man's wars combined"**

Infectious diseases have become a prominent priority at the global level for public health due to the enhanced rate of mortality. Recent data estimated that more than 10 million sepsis-associated infections are caused by microbial infections that take ~20% of the deaths globally. Among the microbial infections, bacterial pathogens have been remarkably involved in the global infection death reports. According to the Global Burden Sepsis Survey, "13.6% of global deaths and 56.2% of sepsis-associated deaths were reported due to bacterial infections in the patient" (Wang, 2024).

Microbes can enter the host by impairing the first-line defenses especially, skin and mucous membranes to cause infections. Wound infection is described as an invasion of bacterial pathogens into the dermal and subdermal tissues, resulting in damage to the host cells. It poses a significant threat to the global community that largely influences economic development and quality of life. These infections lead to numerous fatalities, which enhances the economic crisis in the healthcare system. According to the World Health Organization's findings endorsed by the Guidelines Review Committee, surgical wound infections are the second most prevalent healthcare-associated infection globally. Approximately 11% of patients who undergo surgery become infected in developing and underdeveloped countries (WHO, 2024). According to the International consensus, the microbes proliferate in greater numbers at the site of infection and invoke local or systemic responses in the host; thus resulting in extensive local tissue damage and impeded wound healing processes. Wound infections have been initiated by the contamination of bacteria at the wound site through the colonization process to cause local infection followed by systemic infections. These worsening conditions are highly influenced by the enhanced microbial loads, virulence and the degree of pathogenicity (Kulayta *et al.*, 2024; Wömer *et al.*, 2023; Ikuta *et al.*, 2022).