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 (THESES)

1.	Name of the Research Scholar	A. Reena Joy
2.	Roll No. and Year of Registration	18PHBTF001, 2018
3.	Department	Biochemistry, Biotechnology & Bioinformatics
4.	Name of the Research Guide	Dr. S. Gayathri Devi
5.	Title of the Thesis / Dissertation	Therapeutic Effects of Silver Nanoparticles Synthesized Ethanolic Extract of *Boerhaviadiffusa*L. on Experimentally Induced Diabetic and obese in Rats
6.	Similarity Content (%) Identified	**4%**
7.	Software Used	Turnitin
8.	Date of Verification	01-12-2025

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

Checked by :

1/12/25
Information Scientist

Reenajoy
Research Scholar

K. Mahalakshmi 1/12/25
Assistant Librarian

01/12/25
Research Guide

Date: 01-12-2025

Therapeutic Effects of Silver Nanoparticles Synthesized Ethanolic Extract of Boerhavia diffusa L. on Experimentally Induced Diabetic and obese in Rats

by Central Library Avinashilingam

Submission date: 01-Dec-2025 10:13AM (UTC+0530)
Submission ID: 2551099195
File name: Introduction_-Plag_18phbtf001.docx (3.07M)
Word count: 26507
Character count: 171652

Therapeutic Effects of Silver Nanoparticles Synthesized Ethanolic Extract of Boerhavia diffusa L. on Experimentally Induced Diabetic and obese in Rats

ORIGINALITY REPORT

4%	2%	3%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Antony Stalin, Subramani Kandhasamy, Balakrishnan Senthamarai Kannan, Rama Shanker Verma et al. "Synthesis of a 1,2,3-bistriazole derivative of embelin and evaluation of its effect on high-fat diet fed-streptozotocin-induced type 2 diabetes in rats and molecular docking studies", Bioorganic Chemistry, 2020 Publication	1%
2	bdpsjournal.org Internet Source	<1%
3	www.science.gov Internet Source	<1%
4	Shahriyar Sahraeian, Ali Rashidinejad, Mohammad-Taghi Golmakani. "Recent advances in the conjugation approaches for enhancing the bioavailability of polyphenols", Food Hydrocolloids, 2023 Publication	<1%
5	bmccomplementmedtherapies.biomedcentral.com Internet Source	<1%
6	worldwidescience.org Internet Source	<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:	Therapeutic Effects of Silver Nanoparticles Synthesized Ethano…
File name:	Introduction_-Plag_18phbtf001.docx
File size:	3.07M
Page count:	107
Word count:	26,507
Character count:	171,652
Submission date:	01-Dec-2025 10:13AM (UTC+0530)
Submission ID:	2551099195

Therapeutic Effects of Silver Nanoparticles Synthesized Ethanolic Extract of *Boerhavia diffusa* L. on Experimentally Induced Diabetic and obese in Rats

ABSTRACT

The growing commonness of Diabetic, obeseand their intercorrelated metabolic deficiencies has raised the need for therapeutic compounds with wide and additive mechanisms of deed. This study synthesized silver nanoparticles using the ethanolic extract of *Boerhavia diffusa* L. (EBdAgNPs) and its "antidiabetic" and "antiobesity" efficacy through both *invitro* and *invivo* experimental models. FTir, XrD, SeM-EDX, zeta potential analysis, and Uv-Visible Spectroscopyware used to analyze the EBdAgNPs nanoparticles. It verified that the EBdAgNPs exhibit stability, a spherical morphology, a crystalline structure and reducing and capping properties. *Invitro* assays revealed strong AntiOxidant potential and significant inhibition of α- Amylase, α-Glucosidase, protein glycation, glucose diffusion and pancreatic lipase activities. the animal studies in diabetic and obese and obesediabetic albino mice exhibited significant improvements in blood fasting glucose, profile of lipids kidney liver and function markers and hematologic strictures. Restored the antioxidant modulating key metabolic enzyme activities and weight highness ocured weakened in obese-swmodels. Genetic factor countenance analysis by RT-qPCR confirmed the stabilization of all PPaR-αand PPaR-γ levels, the synergistic interplay between the phytochemical constituents together with a significant decrease in Rbp4 countenance, telling heightened lipid oxidation, suppression of adipogenesis, and improved insulin sensitivity. *B. diffusa* and the nanoscale transfer of silver nanoparticles contributed to lessening oxidative stress, and restoring both glucose and lipid homeostasis. Cooperatively, these consequences place EBdAgNPs as a capacity multifunctional beneficial strategy for Diabetic handling, obeseand associated metabolic malfunctions.

1.0 INTRODUCTION

Diabetic mellitus is considered into four primary functions such as Type 1 Diabetic (T1D), Type 2 Diabetic

40