



KG PHARMAZINE

Published by

KG College of Pharmacy and Research Institute,

Ashokapuri & Po, Villupuram-Dt.605203.

Approved by

The Govt.of Tamilnadu.

Recognized by Pharmacy Council of India

Affiliated to The Tamilnadu Dr. MGR Medical University-Chennai

Vision

To transform the institution into a global centre of learning through application of creativity, innovation and discipline.

Mission

To provide and continuously upgrade infrastructure, state-of-the-art technology, and training for students and faculty. To encourage high-quality research in drug discovery through collaboration with industries.



ADVISORY BOARD

Mr. G.Senthilkumar, Secretary

Mr. G.Sundar, Chairman

CHIEF EDITOR

Prof. Dr. S. Ganesan Professor cum Principal

ASSOCIATE EDITOR

Dr. M.V.V.Prasad, Academic Quality Head

Dr. Manjulakshmi, Professor

Mr. M.Kathiravan, Associate Professor

EDITORIAL MEMBERS

Mrs. J. Aruna, Associate Professor

Mrs. D.Ezhilarasi, Associate Professor

Mrs. T.Pradeepa, Assistant Professor

Mr. Senthil kumar, Assistant Professor

Mr. S.Vasanthapriyan, Assistant Professor

Mr. R.Sukumar, Assistant Professor

Mr. Gokul Krishnan, Assistant Professor

Mr. Vasanth Albert, Assistant Professor

Mr. Nithesh kumar, Assistant Professor

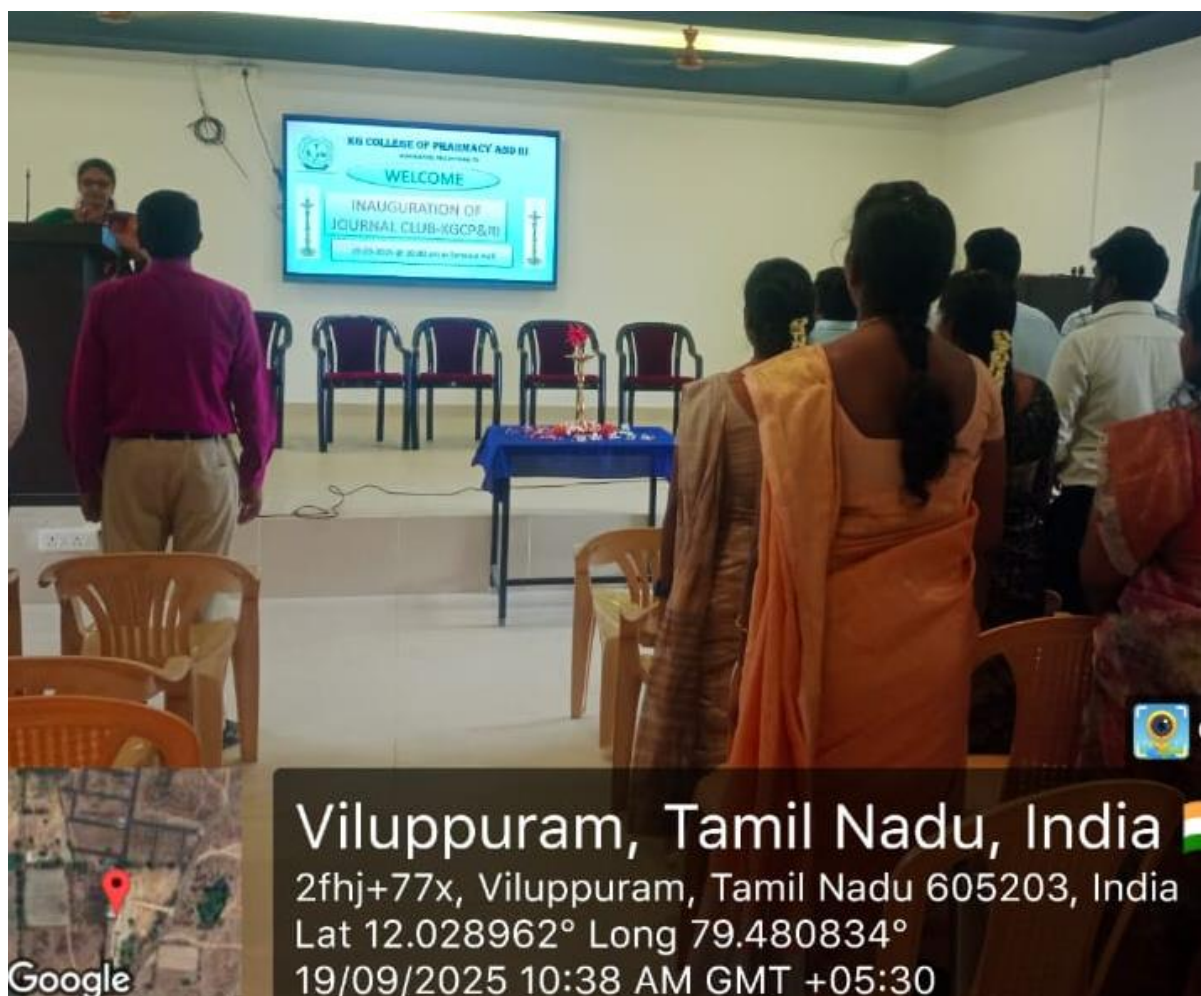
Mr. Gnanasuriyan, Assistant Professor

Mr. Gunasekaran, Assistant Professor

JOURNAL CLUB INAUGURATION

The Journal Club of KG College of Pharmacy & Research Institute was formally inaugurated on September 19, 2025. The event commenced with the melodious rendition of Thamizh Thai Vazhthu, followed by the traditional lamp-lighting ceremony, marking an auspicious beginning to the program. The Principal, Dr. S. Ganesan, addressed the gathering and emphasized the significance of the Journal Club in enhancing faculty knowledge, promoting critical appraisal skills, and fostering collaborative learning. He also officially announced the members of the Journal Club, signifying the start of its academic initiatives. A key highlight of the occasion was an enlightening talk on “Drug Development”, delivered by Dr. M. Vijaya Vara Prasad, who shared valuable insights into the process and recent advancements in pharmaceutical research.

The program was ably convened by Dr. Manjulakshmi P., ensuring its smooth conduct and academic relevance.



JOURNAL CLUB MEETINGS

We are pleased to announce the successful completion of the **2nd Journal Club Meeting** of **KG College of Pharmacy and Research Institute**, held on **27th September 2025** at the College Seminar Hall. The session was led by our esteemed Principal, **Prof. Dr. Ganesan**, who delivered an insightful talk on **“Bloom’s Taxonomy”**, focusing on effective teaching, learning, and assessment strategies. The subsequent Journal Club sessions were successfully conducted by:

- **Dr. Manjulakshmi, Professor** – *“Research Methodology – An Overview”*
- **Mr. Kathiravan, Associate Professor** – *“CADD – Computer-Aided Drug Design”*

The sessions witnessed enthusiastic participation from faculty members and students, providing a valuable platform for **knowledge sharing, research awareness, and professional development.**



A PROUD ACHIEVEMENT

Delighted to share a Proud moment that our KG College of Pharmacy and Research institute, got the Pharm.D final approval from PCI, New Delhi. and also got Provisional affiliation from Our The Tamil Nadu Dr.M.G.R. Medical University, Chennai. This milestone marks our college other steps forward in pharmaceutical education. I thank our chairman for continuous support and all the staff members for their team work.

भारतीय भेषजी परिषद्
(संरक्षण एवं परिवर्तन अधिनियम के अन्तर्गत स्थापित किया गया)
भारत सरकार
आई-300, तीसरी मंजिल, टावर-1, वर्ल्ड ट्रेड सेंटर,
नारोजी नगर, नई दिल्ली-110029
टेलीफोन नंबर 011-65218900-01
E-mail: registrar@pci.nic.in


भारत के स्वास्थ्य एवं परिवार कल्याण विभाग

PHARMACY COUNCIL OF INDIA
(Statutory body under Ministry of Health & Family Welfare)
Government of India
I-300, 3rd floor, Tower-1, World Trade Centre,
Naroji Nagar, New Delhi-110029
Telephone No. 011-65218900-01
E-mail: registrar@pci.nic.in

DECISION LETTER

Institute Name/Inst ID
Kg College Of Pharmacy And Research Institute / PCI-3387

State
TAMIL NADU

District
-

Village/Town/City
ASHOKAPURI

Pin Code
605203

Sir/Madam

With reference to the subject cited above i am directed to convey the approval of PCI as per Following Details

Course	Name of Affiliation body/University	Decision	Approval Status	Approval Up to / Academic Session	Intake
D.Pharm	The Joint Director of Medical Education and Research/Pharmacy/Kilpauk, Chennai - 600010	D.Pharm Extend approval upto 2025-2026 academic session for 60 admissions for D.Pharm course.	Approved	2025-2026	60
B.Pharm	The Tamilnadu Dr. MGR Medical University, Chennai	B.Pharm Extend approval up to 2025-2026 academic session for 100 admissions for B.Pharm course.	Approved	2025-2026	100
Pharm.D	The Tamilnadu Dr.MGR Medical University Chennai	Pharm.D Grant approval for 2025-2026 academic session for the conduct of 1st year for 30 admissions for Pharm.D course.	Approved	2025-2026	30

Communication Date: 10 Sep 2025

Copy to
i) Registrar of the University
ii) Principal of the college
iii) Secretary/Chairman of the Trust/Society
iv) Guard File (PCI)

For Registrar-cum-Secretary
PCI

Note: Validity of the course details may be verified at pci.gov.in


THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY
No.69, ANNA SALAI, GUINDY, CHENNAI - 600 032.
Website : www.tnmgmu.ac.in Ph : 22353574, 22353576 - 79, 22301760 - 63, 22353094
E-mail : mail@tnmgmu.ac.in Fax : 91-44-22353698

PROCEEDINGS OF THE REGISTRAR (FAC)
PRESENT: Dr. K.SIVASANGEETHA, M.D,

Proc.No. AMu.I(1)/39833/2024 Dated: 09.10.2025

Sub:	Affiliation – The Tamil Nadu Dr. M.G.R Medical University, Chennai – KG College of Pharmacy and Research Institute, Villupuram – Grant of Provisional Affiliation for starting First year Pharm.D course with an annual intake of 30 seats for the academic year 2025-2026 – Orders - Issued.
Ref:	1 Letter received from the Principal, KG College of Pharmacy and Research Institute, Villupuram along with the Orders of the Hon'ble High Court of Madras passed in W.P.No.1078/2025, dated : 14.02.2025. 2 Inspection report dated : 19.06.2025 3 Letter of Consent of Affiliation, dated: 28.06.2025 4 Letter dated : 10.09.2025 received from the Principal, KG College of Pharmacy and Research Institute, Villupuram. 5 PCI approval dated:10.09.2025 6 This University letter of even No. Dated: 15.09.2025 7 Inspection report, dated : 17.09.2025 8 This University letter of even No. Dated: 08.10.2025 9 Letter dated : 08.10.2025 received from the Principal, KG College of Pharmacy and Research Institute, Villupuram.

PREAMBLE:
In the reference 1st cited, the Principal, KG College of Pharmacy and Research Institute, Villupuram has requested to grant the Letter of Consent of Affiliation for the starting of Pharm.D course, submitting the copy of the Hon'ble High Court Order, dated: 14.02.2025.
2. Based on the request of the Principal and the Orders of the Hon'ble High Court, Madras, an Inspection was conducted on 19.06.2025 to verify the infrastructural, teaching and other facilities available for the conduct of Pharm.D course. On scrutiny of the inspection report, no specific adverse remarks or objection was found. Consequently, Letter of Consent of Affiliation has been issued on 28.06.2025.

WORLD PHARMACIST DAY CELEBRATION

25-09-2025, on the occasion of World Pharmacist Day, the Principal, Heads of Departments, Professors and students of our KG College of Pharmacy & RI, Villupuram, took the Pharmacists Oath and subsequently planted tree saplings in the college Premises.



PHARMA TWIGS – 2025

KG College of Pharmacy & Research Institute, Villupuram, organized the inaugural function of “Pharma Twigs – 2025” on 15-10-2025 at the college auditorium. The event was graced by **Ln. Dr. G. Senthilkumar**, Chairman, Chokalingam K Educational Trust, as Chief Guest. **Dr. S. Ganesan**, Principal, presided over the function and highlighted the institution’s academic excellence and facilities. **Dr. M.V.V. Prasad**, IQAC Coordinator, delivered a special lecture on innovation and quality in pharmaceutical education. **Mr. M. Kathiravan**, Associate Professor, addressed students on discipline and campus culture. The program was hosted by **Dr. P. Manjulakshmi**, Professor, and the Vote of Thanks was delivered by **Mrs. J. Aruna**, Associate Professor. The function formally welcomed **150 newly admitted students** of B.Pharm, D.Pharm, and Pharm.D programs along with their parents, marking a successful and inspiring beginning to the academic year.



INTERNATIONAL MEDICAL CONFERENCE PARTICIPATION

Our Tamilnadu Dr.M.G.R. Medical University, Chennai, organized an international level Medical Conference Future of Medicine 2.0 (FOM2.0) at Trade Centre, Chennai on from 16-10-2025 to 18-10-2025. From our college 46 Final and Pre-Final year students and 2 faculties are registered and attended the conference. The conference certificate has 30 credit Points. It was very helpful for our students' academic curriculum.



RECOGNITION FOR SOCIAL SERVICE

On 29-10-2025. Our KG College of Pharmacy and Research Institute, received an Appreciation Certificate and Medals from the Joint Director of Health Department and the District Health Officer, Villupuram, in recognition of our continued support and contribution in organizing Blood Donation Camps at our institution. The award was presented during the National Blood Donation Day 2025 event held at Government Villupuram Medical College and Hospital. A heartfelt thanks to our Honourable Chairman Sir, Management, and all our dedicated student volunteers for their active participation and consistent efforts in making this achievement possible. Together, we continue to promote the spirit of "Donate Blood, Save Lives".



EDUCATIONAL INSTITUTION VISIT

A group of 250 (+2 studying) Students and 20 staff from Kalamaruthur & Kedilam Government Schools visited our KG College of Pharmacy Research Institute, Villupuram, on 7th and 8th November 2025. During their visit, the students were shown around the college campus, laboratories, and various departments. They learned about the modern machines and equipment used in pharmacy education. They also visited the Mesum, Library and Herbal Garden. our faculty members explained their importance in Pharmacy studies and research. The visit helped the students understand how medicines are prepared and analysed. The management, Principal and Faculties are encouraged them to learn more about the Pharmacy field.



CYBER CRIME AWARENESS PROGRAMME

On 18 November 2025, KG College of Pharmacy & Research Institute, Ashokapuri, organized a **Cyber Crime Awareness Programme** in collaboration with the **Cyber Crime Police Department, Villupuram Branch**. Police Inspectors addressed the students and explained various types of cyber crimes, preventive measures, and safe online practices. The programme was attended by **First Year B.Pharm, B.Pharm, and Pharm.D students**, and it greatly enhanced their awareness and understanding of cyber safety.



ONE-DAY PROGRAMME ON “CAREER WISE PERSONALITY DEVELOPMENT & PERSONALIZED WOMEN CARE

Our KG College of Pharmacy & Research Institute, Villupuram, organized a one-day programme on “Career Wise Personality Development & Personalized Women Care” on 4th December 2025. The programme began with Tamil Thai Vazhthu followed by the ceremonial Kuthuvilakku lighting by dignitaries. Dr.S.Ganesan, Principal, delivered the Welcome Address & Ln.Dr.G.Senthilkumar, Chairman, Chokalingam K Educational Trust, honoured the guests. The Inspirational three sessions were delivered by distinguished Speakers, Mr.Leonard Kumar (Chief, TED-Ex Global), Professor. Amlan Bhattacharya (Project Director-ARAVALI & TED-Ex Global), and Dr. Bhuvana Sharma (Scientist, NCBS–GKVK Campus). Programme Concluded with Vote of Thanks by Prof.M.V.V.Prasad, Academic Quality Head. Dr.P.Manjulakshmi, coordinated the programme. Our Faculty members Mrs.J.Aruna, Mr.M.Kathiravan, Mrs.T.Pradeepa, Mr.M.Senthil Kumar, introduced the speakers across the sessions. Totally 400+ students were enthusiastically attended in the seminar. The Management and Principal appreciated the efforts of all



GUEST LECTURE ON PHARMACOVIGILANCE

On 09 December 2025, KG College of Pharmacy & Research Institute, Ashokapuri, Villupuram, organized a guest lecture on Pharmacovigilance delivered by Dr. Ajitha, AMO, on behalf of the Government of Tamil Nadu, Department of AYUSH. The session highlighted the importance of drug safety and adverse drug reaction reporting. Third- and final-year students actively participated and benefited from the expert interaction.



APPRECIATION CEREMONY BY GRT GOLD AND DIAMONDS

An Appreciation Ceremony was organized by GRT Gold and Diamonds on 09 December 2025, during which the GRT Management honoured the teaching and non-teaching faculties of Our KG College of Pharmacy & Research Institute. The event recognized the dedication, commitment, and valuable contributions of the faculty members towards academic excellence and institutional development.



GUEST LECTURE ON “ARTIFICIAL INTELLIGENCE IN PHARMACY”

Our KG College of Pharmacy & Research Institute, Villupuram, organized a **Guest Lecture on “Artificial Intelligence in Pharmacy”** for III & IV -Year B.Pharm students on **10th December 2025** at the Seminar Hall, KGCP&RI. The session was delivered by **Dr. U. Ubaidulla**, Professor, Crescent School of Pharmacy, B.S. Abdur Rahman Crescent Institute of Science & Technology, Chennai. The lecture provided valuable insights into the role and applications of artificial intelligence in the pharmaceutical field. The programme was organized under the guidance of **Dr. S. Ganesan, Principal**, and **Sri G. Sundar, Chairman**. and The session was informative and beneficial to the students.



GUEST LECTURE ON “PHYSIOLOGY OF NERVOUS SYSTEM – NEURON TO BRAIN: AN OVERVIEW”

Our KG College of Pharmacy & Research Institute, Villupuram, organized a **Guest Lecture on “Physiology of Nervous System – Neuron to Brain: An Overview”** on **10th December 2025** for I – Year of B.Pharm., D.Pharm., and Pharm.D students at the Seminar Hall, KGCP&RI. The session was delivered by **Dr. Haja Nazeer Ahamed**, Professor, Crescent School of Pharmacy, B.S. Abdur Rahman Crescent Institute of Science & Technology, Chennai. The lecture provided a comprehensive understanding of the nervous system from neuron to brain. The programme was organized under the guidance of **Dr. S. Ganesan, Principal**, and **Sri G. Sundar, Chairman**. and The session was informative and beneficial to the students.



PARTICIPATION IN ISGCT 2025

KG College of Pharmacy and Research Institute. Actively participated in the **International Society of Gene and Cell Therapy Conference (ISGCT 2025)** held at **ICAR–NIANP, Bengaluru**. A total of **32 students and 3 faculty members** took part in the conference, gaining valuable exposure to recent advances in **gene and cell therapy research**. The event provided an excellent platform for academic interaction, knowledge enhancement, and research-oriented learning.



Bengaluru, Karnataka, India

Wjx5+5f2, Hosur Rd, Chennakeshava Nagar,
Adugodi, Bengaluru, Karnataka 560030, India

Lat 12.948573° Long 77.607054°

Friday, 12/12/2025 12:17 PM GMT +05:30

OUR FACULTIES RECENT PUBLICATIONS

**NEXT GENERATION RESEARCH & INNOVATIONS:
TRANSFORMING HEALTH SCIENCES
VOLUME-II**



DR. R. SAMBATHKUMAR

DR. C. KANNAN

DR. V. S. SARAVANAN

DR. P. BALAN

MR. S. RADHAKRISHNAN

ACADEMIC DECIPHER PRESS



38	TRADITION MEETS INNOVATION: A COMPARATIVE REVIEW ON BUCCAL AND 3D-PRINTED NITROGLYCERIN Naveen Kumar M*, Gobika K, Kanimozhi S, Santhoshini C, Dr. Parthasarathi S, Dr. Jothimanivannan C,	250
39	NAVIGATING INDIA'S MEDICAL DEVICE REGULATORY FRAMEWORK AND MATERIOVIGILANCE PROGRAMME Dr. Ganesan S, Senthil Kumar M, Thilak Kumar K, Magapriyadharshini R, Karpagavalli P, Boomika S	261
40	BRAIN COMPUTER INTERFACE: A SYSTEMATIC REVIEW OF PRESENT APPLICATION AND FUTURE DIRECTION S K Rajkumar, N Kalaimaran, M Bharat Waj, K Kalaiyarasan, S Mukesh	265
41	AI POWERED INNOVATION: CONTINUOUS GLUCOSE MONITORS FOR THE MANAGEMENT OF DIABETIC NEUROPATHY Dr. K Sonia, Dr. A. Jerad Suresh, Sai Saravanan.M, Supriya.S, Ayesha Shafeeqa J, Haleema Khizar Mohamed	270
42	CRISPR-Cas9 TECHNOLOGY: A TOOL FOR GENE EDITING AND THE FUTURE OF TREATMENT PROSPECTIVES K Sonia, A Jerad Suresh, Asmita Das*, B. Praagati, Kanidha. S	274
43	NANOPARTICLES MODIFIED DIALYZER MEMBRANE K. Suganya, R. Aswatha, N. Pargavi, S. Durgadevi	282
44	"AI POWERED INNOVATION: WEARABLE ARTIFICIAL DEVICES & KIDNEY" Suganya. K, Abinaya. H, Dharshana. T, Varsha. M	286
45	A SYSTEMIC REVIEW ON DIGITAL HEALTH ADVANCES IN EPILEPTIC CARE Buvaneshwari M*, Thrisha M, Preethi Zintha K, Peramaiyan V, Sumathi K, Rajkumar S.K	292
46	WEARABLE DEVICES IN HEALTHCARE: REVOLUTIONIZING REMOTE MONITORING AND PREVENTIVE CARE M K Sundar Sri, Lakshmi V, V Kumaresan, A. Aravindhan	295
47	POLO TECH SMART T-SHIRT: AN INTEGRATION OF FASHION AND PHYSIOLOGICAL MONITORING IN SPORTS REHABILITATION Geethanjali A. Raj Kumar S K, Nithya K. Venkatesan K.	299
48	"ADVANCING HEALTH SCIENCES THROUGH WEARABLE BIOSENSOR INNOVATION: A TECHNOLOGICAL PARADIGM SHIFT" D.Thatchayini, D.Merlin Shyla, M.Devadharshini, S.Gopika, A.S.Soundharya	303
49	AWARENESS AND UTILIZATION OF RATIONAL USE OF MEDICINE CONCEPTS AMONG COMMUNITY PHARMACISTS: A REVIEW Sundaravel's, Prakith Swami Dhas, Amirdhavarshini.S, T. S. Thirugnanam	310
50	MINIATURIZED IMPLANTABLE CARDIAC RHYTHM ACTUATOR	313



**THE REVIEW ON EFFECTIVENESS OF TAKING THE ANTHOCYANIN
ACTIVE COMPOUND FROM HIBISCUS ROSA-SINENSIS AND
ELLAGIC ACID FROM POMEGRANATE IN REDUCING THE
SYMPTOMS OF POLYCYSTIC OVARIAN SYNDROME**

**V. Dhanalakshmi, R. Guhan, S. Kaviya, A. Lokesh, G. Madhavan, P. Saranyadevi,
P. Surekha, J. Aruna***

Associate Professor, Department of Pharmacology KG College of Pharmacy & RI,
Asokapuri, Villupuram.

Article Received on 15 Dec. 2025,

Article Revised on 05 Jan. 2026,

Article Published on 16 Jan. 2026,

***Corresponding Author**

J. Aruna

Associate Professor, Department of
Pharmacology KG College of
Pharmacy & RI, Asokapuri,
Villupuram.

arunamuthu7627@gmail.com



How to cite this Article: V. Dhanalakshmi, R. Guhan, S. Kaviya, A. Lokesh, G. Madhavan, P. Saranyadevi, P. Surekha, J. Aruna*, (2026). The Review on Effectiveness of Taking The Anthocyanin Active Compound From Hibiscus Rosa-Sinensis and Ellagic Acid From Pomegranate in Reducing The Symptoms Of Polycystic Ovarian Syndrome World Journal of Pharmaceutical Research, 15(2), XX-XX.

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Pomegranate extract has demonstrated significant potential in supporting women's reproductive health, particularly in enhancing fertility, regulating the menstrual cycle, supporting pregnancy, and the managing polycystic ovary syndrome (PCOS). Its diverse bioactive compounds contribute to hormonal balance and promote regular menstrual cycles. The potent antioxidant properties of pomegranate extract help reduce oxidative stress, a key factor in impaired reproductive function and fertility outcomes. Evidence suggests that pomegranate extract may have a preventive effect against hormonal abnormalities associated with PCOS. This effect is primarily attributed to the presence of phytosterols and phenolic compounds, which help improve the metabolic and endocrine disturbances linked to the disorder. Hibiscus, a widely studied flowering plant, possesses significant therapeutic potential due to its rich phytochemical composition. The Anthocyanins and vitamin C found in hibiscus enhance its antioxidant capacity, helping to counteract the oxidative stress commonly observed

in PCOS. Additionally, hibiscus exhibits alpha-glucosidase inhibitory activity, suggesting a potential role in regulating blood glucose levels and reducing oxidative damage. together,



A Comprehensive Review Of Traditional Uses, Phytochemical Profile And Pharmacological Activities Of *Tridax Procumbens* Extract

¹Ezhilarasi D, ²Abishek A, ³Balaji A, ⁴Indhumathi D, ⁵Kathiravan V

¹Associate Professor., ^{2,3,4,5}Final Year B-Pharm

KG College of Pharmacy & RI, Viluppuram affiliated To the Tamil Nadu Dr. MGR Medical University, Chennai, Tamilnadu, India

*Corresponding Author:

D. Ezhilarasi

Associate Professor., KG College of Pharmacy & RI, Viluppuram affiliated To the Tamil Nadu Dr. MGR Medical University, Chennai, Tamilnadu, India

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Tridax procumbens Linn., a member of the Asteraceae family and popularly known as "Coat Buttons" or "Vishalyakarani," is a resilient perennial herb that has transitioned from being a common roadside weed to a significant subject of pharmacological interest. This review provides a comprehensive synthesis of the traditional ethnomedicinal uses, diverse phytochemical profile, and broad-spectrum therapeutic activities of *Tridax procumbens* leaf extract, based on literature analyzed through 2025. In the modern quest for sustainable therapeutics, the most profound medical breakthroughs often lie hidden in plain sight. *Tridax procumbens* Linn., historically dismissed by industrial agriculture as a resilient roadside weed, is currently undergoing a radical perceptual shift within the scientific community. No longer viewed as a mere botanical nuisance, it is emerging as a "biopharmaceutical factory" of immense complexity. This review systematically deconstructs the prevailing perception of this plant, repositioning it from a humble weed to a sophisticated source of life-saving secondary metabolites.

Keywords: NIL

Introduction

In the contemporary landscape of drug discovery, there exists a profound irony: while humanity scans the farthest reaches of the globe for novel chemical entities, some of the most potent biological architectures are found beneath our very feet. *Tridax procumbens* Linn., historically marginalized by the modern eye as a ubiquitous roadside weed, represents a paradigm of pharmaceutical untapped potential. To the casual observer, it is a persistent invader of cultivated lands; however, to the scientific visionary, it is a sophisticated "bio-factory" capable of synthesizing a complex array of secondary metabolites that challenge the efficacy of synthetic counterparts. The rhetorical weight of this plant is anchored in its cultural identity as "Vishalyakarani."

This title is not merely a label but a testament to a legacy of healing that predates the modern apothecary. For centuries, traditional intuition has recognized in *Tridax* a unique hemostatic sovereignty—an unrivaled ability to bridge the precarious gap between acute trauma and cellular recovery. As we stand at the precipice of a global crisis in antibiotic resistance and chronic inflammation, the imperative to validate ancient wisdom through rigorous molecular scrutiny has never been more urgent. The "green architecture" of the *Tridax* leaf, rich in synergistic flavonoids and phenolic compounds, offers more than just a remedy; it offers a blueprint for a more biocompatible future in medicine. By synthesizing traditional narratives with 21st-century phytochemical analysis, this review