

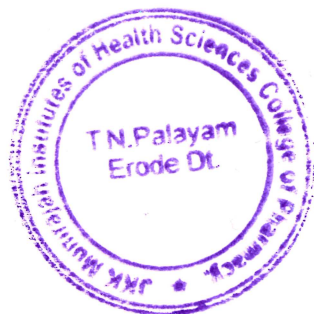


JKK MUNIRAJAH INSTITUTE OF HEALTH SCIENCES COLLEGE OF PHARMACY

(Approved by Tamil Nadu Govt. & Pharmacy Council of India - New Delhi, Affiliated to The Tamil Nadu Dr. M.G.R Medical University, Chennai)
Thookanaickenpalayam, Gobichettipalayam (TK), Erode (DT) - 638506, Tamil Nadu.

ACADEMIC YEAR 2021-2022

S. No	Title of Paper	Name of Authors	Name of Journals	Is it listed in UGC Care list
1.	Quantitative Phytochemical Analysis and Evaluation of In-Vitro Anti-Psoriasis Activity of Shoot on Eichhnornia Crassipes (Mart.) Solms Ayurvedic Medicated oil	Ms. M. Revathi	International Journal of All Research Education & Scientific Methods	Yes
2.	Formulation, Evaluation and Phytochemical screening of Shoot on Eichhnornia crassipes (Mart.) Solms Ayurvedic Medicated oil	Ms. M. Revathi	International Journal of Novel Research and Development	Yes
3.	Anti-fertility activity of zafirlukast, a cysteinyl leukotriene receptor antagonist in female albino wistar rats	DR. K. Abhenaya DR. J. Priya	International Journal of Pharmacology and Clinical Research	Yes




Principal

JKK Munirajah Institute of Health Sciences
College of Pharmacy, T.N. Palayam,
Gobi (Tk), Erode (Dt) - 638 506

Quantitative Phytochemical Analysis and Evaluation of In-Vitro Anti-Psoriasis Activity of Shoot on *Eichhnornia Crassipes* (Mart.) Solms Ayurvedic Medicated oil

Revathi.M^{1*}, Aijth Kumar.E², Dinesh.C², Kohila.M², Monisha.B², Vasudevan.G²

¹Assistant Professor, Department of Pharmacology, JKK Munirajah Institute of Health Sciences College of Pharmacy, T.N Palayam, Erode (D.T) - 638506, Tamilnadu.

²B.Pharm Final Year, Department of Pharmacology, JKK Munirajah Institute of Health Sciences College of Pharmacy, T.N Palayam, Erode (D.T) - 638506, Tamilnadu.

*Corresponding author E-mail - revathirace@gmail.com

ABSTRACT

Background: *Eichhnornia Crassipes* (Mart.) Solms is a free-floating perennial aquatic plant known as "aahayathamarai". This is used as anti-inflammatory, anti-oxidant, analgesic, skin whitening, sedative etc. so we may be considered as a anti-psoriatic activity. Ayurvedic medicated oil (Taila) was prepared by shoots of *Eichhnornia crassipes* due to studied quantitative phytochemical analysis and *in-vitro* anti-psoriatic activity by DPPH (2, 2 -diphenyl-1-picrylhydrazyl) radical scavenging assay.

Results: The presence of alkaloid and saponins possess the anti-psoriasis activity. The ayurvedic medicated oil *Eichhnornia crassipes* (Mart.) Solms shoots showed the significant DPPH % radical scavenging inhibition in 1:64 dilution (86.9%), when compared to that of standard trolox in 1:64 dilution (89.88%).

Conclusion: Ayurvedic medicated oil of shoots on *Eichhnornia Crassipes* (Mart) Solms have alkaloid and saponins possess the antipsoriasis activity and showed the significant DPPH radical inhibition.

Keywords: *Eichhnornia Crassipes* (Mart.) Solms, Ayurvedic medicated oil, DPPH, Standard trolox, Anti-psoriasis activity.

INTRODUCTION

Eichhornia Crassipes (Mart.) Solms is a free-floating perennial aquatic plant, family is pondeveriacae. *Eichhornia crassipes* is in the centre of each mature rosette of leaves rises broad stem, 6-10 glabrous leaves are arranged in basal rosettes, shiny and dark green. They have long, spongy and bulbous stalks, erect with distinctive swollen bladder like petioles and have purple black feathery, freely hanging roots. 6 and 4 lily-like flowers in violet colour consists of 6 petals. Simple capsule fruit containing in the region of 400 to 500 seeds. The nutritionally compounds like phenolic, flavonoids, alkaloid, sterols, terpenoids, glycosides and many other metabolites isolated from different parts of *Eichhornia crassipes* (Mart.) Solms. The plant is used as sedative, CNS depressant, analgesic, anti-epileptic, anti-psychosis, anti-anxiety, wound healer, anticancer, larvicidal, anti-oxidant, however till the date there have been no investigations supporting the anti-psoriasis property of this plant. Hence, aim of study evaluates the *in-vitro* anti-psoriasis activity on shoots of *Eichhornia crassipes* (Mart.) Solms ayurvedic medicated oil. Plant based anti-psoriasis ayurvedic medicated oil has been developed in recent importance in the global market. There are many plants which have not been so far subjected to scientific evaluation.

Ayurveda is the science of life treating mankind ancient time and its aims to treat the disease from its base. Acharya Charaka had described first primary dosage forms i.e. Swarasa (juice), kalka (paste), kwatha (decoction), hima (cold infusion) and planta (hot infusion) and mentioned them as panchavidhakasaya kalpana first time. Sneha kalpana may be defined as a pharmaceutical process to prepare oleaginous medicaments from the substances like kalka and drava dravyas in specific proportion by subjecting to unique heating pattern and duration to fulfill the certain pharmaceutical parameters according to the need of pharmacotherapeutics. Sneha kalpana are superior to other dosage forms due to its advantages increased absorption and bioavailability.

Psoriasis is a long lasting, noncontagious autoimmune disease characterised by raised areas of abnormal skin. These areas are red or purple on some people with darker skin, dry, itchy, scaly. Psoriasis is autoimmune inflammatory diseases, it develops areas in various body's part. There are various types of psoriasis like plaque psoriasis, guttate psoriasis, inverse



Formulation, Evaluation and Phytochemical screening of Shoot on *Eichhnornia crassipes* (Mart.) Solms Ayurvedic Medicated oil

Revathi.M¹, Aijth Kumar.E², Dinesh.C², Kohila.M², Monisha.B², Vasudevan.G².

Assistant Professor¹, B.Pharm Final Year².

Department of Pharmacology¹

JKK Munirajah Institute of Health Sciences College of Pharmacy, T.N Palayam,

Erode (D.T) - 638506, Tamilnadu.

Corresponding author E-mail - revathirace@gmail.com

Abstract

Background

Eichhnornia Crassipes (Mart.) Solms is a free-floating perennial aquatic plant known as “aahayathamara”. This is used as anti-inflammatory, anti-oxidant, analgesic, skin whitening, sedative etc. Ayurvedic medicated oil (Taila) was prepared by shoots of *Eichhnornia crassipes* (Mart.) Solms and studied organoleptic property, phytochemical analysis and physiochemical parameters such as acid value, saponification value, refractive index and specific gravity as per standard methods.

Results

Preliminary phytochemical analysis of fresh juice and ayurvedic medicated oil of shoots on *Eichhnornia crassipes* (Mart.) solms revealed the presence of various components like on carbohydrate, glycoside, flavonoid, alkaloid, saponins, tannin and steroids. All the physio-chemical parameters like acid value (1.683 mg KOH/g), saponification value (182.25 mg KOH/g), iodine value (30.37 I₂/100g.), refractiveindex (0.148), specific gravity (0.91 kg/m³) analysed were within the normal range.

Conclusion

Ayurvedic medicated oil of shoots on *Eichhnornia Crassipes* (Mart) Solms have alkaloid, flavonoid and saponins possess the various pharmacological activities. Physiochemical parameters such as acid value, saponification value, refractive index, specific gravity were within normal range. All the results showed the quality of the preparation is standard



International Journal of Pharmacology and Clinical Research (IJPCR)

IJPCR | Volume 4 | Issue 1 | Jan - Jun - 2020
www.ijpcr.net

Research article

Clinical research

ISSN: 2521-2206

Anti-fertility activity of zafirlukast, a cysteinyl leukotriene receptor antagonist in female albino wistar rats

*J.Priya¹, S.Kameshwaran², M.Sarbudeen³, K.Abhenaya¹, D.S.Asok Kumar³, S.Harshini⁴

¹Department of Pharmaceutical Chemistry, JKKMIHS College of Pharmacy, Gobi, Erode, Tamilnadu

²Department of Pharmacology, Excel College of Pharmacy, Namakkal, Tamilnadu

³Department of Pharmaceutical Chemistry, Excel College of Pharmacy, Namakkal, Tamilnadu

⁴Department of Pharmaceutics, Excel College of Pharmacy, Namakkal, Tamilnadu

*Address for correspondence: J.Priya

E-mail: priyajayabalan79@gmail.com

ABSTRACT

The present research was to test zafirlukast, a cysteinyl leukotriene receptor antagonist in female albino Wistar rats, for antifertility activity. The mated female rats were divided into four classes of six separate animals each. Group I – provided 1 per cent w / v CMC- water suspension and acted as a regular monitor. Class II, III and IV- obtained Zafirlukast 1 percent w / v CMC in water at a dosage of 1, 10 and 20mg / kg body weight (e.g., daily). On the 10th day of pregnancy, in semi-sterile condition, the animals underwent a laparotomy under a light ether anesthetic. The implants present on each ovary in both uterine horns and in the corpora lutea (CL) were counted. The animals were required to complete the gestation period (21-23 days), and they reported the number of litters born. The percentages of pre- and post-implantation failure were measured as well as the anti-fertility activities. As a result, the zafirlukast LOX inhibitor induced significant pre-implantation failure at dose levels of 20 mg / kg ($p < 0.01$) and anti-fertility activity at dose levels of 10 mg / kg ($p < 0.05$), 20 mg / kg ($p < 0.01$) relative to control group. Zafirlukast, a receptor antagonist with cysteinylleukotrienes, has 100 per cent anti-implantation efficacy in Wistar albino rats. It suggests that zafirlukast can be used as an antifertility agent following confirmation of its protection and effectiveness in humans

Keywords: Anti-fertility activity, Zafirlukast, Cysteinylleukotrienes receptor, Anti-implantation activity

INTRODUCTION

Anti-fertility agents are the agents in both males and females which prevent fertility by interfering with different normal reproductive mechanisms. Development of new methods / agents for controlling fertility and research in this direction is imperative particularly for developing nations. If

there was an ideal contraceptive, that contraceptive would be 100% effective, safe and easy to use; its effect would be reversible [1]. The growth of the world population has illustrated the need for new, inexpensive and secure contraception, or methods for maximum protection. Side effects of synthetics on normal and natural human bodies are far more

114

Principal

JKK Munirajah Institute of Health Sciences
College of Pharmacy, T.N.Palayam,
Gobi (Tk), Erode (Dt) - 638 506

