# "A Two Stage Extraction Model for Simultaneous Extraction of Essential Oil & Phenolics from Tulsi Leaves"

A

Dissertation

on

Submitted for Partial fulltime of the requirement for the award of degree of

Master of Pharmacy [Pharmacognosy]



Session 2020-2022

SUPERVISED BY
Dr. Vivekananda Mandal
(M.Pharm., Ph.D.)
Assistant Professor

SUBMITED BY Monika Chandrakar

M. Pharm. IV semester Enroll No.: GGV/20/06321 Roll No.: 20706007

DEPARTMENT OF PHARMACY,

GURU GHASIDAS VISHWAVIDYALAYA BILASPUR (C.G.)

(A Central University established by the Central Universities Act 2009 No. 25 of 2009)

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## DEPARTMENT OF PHARMACY, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)

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Tel. No. 07752-260027; Fax No. 07752-260148

#### FORWARDING CERTIFICATE

This is to certify that Ms. Monika Chandrakar &/o Mr. Hemant Kumar Chandrakar is a student of M.Pharm. IV semester in Department of Pharmacy (GGV) has submitted her project report entitled "A Two Stage Extraction Model for Simultaneous Extraction of Essential Oil & Phenolics from Tulsi Leaves" for the partial fulfilment of the requirement for the Degree of Master of Pharmacy (Pharmacognosy) at Department of Pharmacy, GGV Bilaspur (C.G.). She has completed her project work under the supervision of Dr. Vivekananda Mandal (Assistant professor)

I hereby forward her project report in M. Pharm. (Pharmacognosy) during the academic session 2020-2022.

Date: 9/11/2022

Place: GHUY, Bilaspun

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#### **CERTIFICATE**

This is to certify that Ms. Monika Chandrakar d/o Mr. Hemant Kumar Chandrakar student of M. Pharm. IV semester, Department of Pharmacy, (GGV) has submitted her project report entitled "A Two Stage Extraction Model for Simultaneous Extraction of Essential Oil & Phenolics from Tulsi Leaves" for the partial fulfillment of the requirement for the Degree of Master of Pharmacy (Pharmacognosy) at Department of Pharmacy, GGV Bilaspur (C.G.). She has completed her project report under my supervision.

I hereby forwarding her project report for the award of degree of M. Pharm. (Pharmacognosy) during the academic session 2020-2022.

I wish her every success in future life.

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## **DECLARATION**

I hereby declare that the project report entitled "A Two Stage Extraction Model for Simultaneous Extraction of Essential Oil & Phenolics from Tulsi Leaves" was done by me. The entire work was done with the guidance and suggestion received from my supervisor Dr. Vivekananda Mandal (Assistant Professor) at Department of Pharmacy, GGV, Bilaspur (C.G.). The same is submitted to Guru Ghasidas Vishwavidyalaya Bilaspur for the partial fulfillment of the requirement for the degree of Master of Pharmacy (Pharmacognosy).

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#### **ACKNOWLEDGEMENT**

I humbly and whole heartedly bow my head before Lord Almighty for blessing me all his grace to successfully complete my studies and research endeavour at Guru Ghasidas University.

It is a great pleasure to acknowledge my deepest thanks and gratitude to everyone who supported me throughout the course of thesis work. I wish to extend my sincere and heartfelt obligation to work all the personages who have helped me in this endeavour. Without their active guidance, help, cooperation and encouragement, I would not have made any progress in my project.

By the grace of Almighty, I take this opportunity to express my deep sense of gratitude to my supervisor Dr. Vivekananda Mandal, Assistant Professor, Department of Pharmacognosy, Department of Pharmacy, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) for providing me excellent guidance, motivation, encouragement and care throughout my research work. I am highly thankful to him for critical inputs, thought provoking suggestions during the progress of the work and writing of dissertation.

I am also thankful to Prof. Bharti Ahirwar Head of Department of Pharmacy Guru Ghasidas Vishwavidyalaya, Bilaspar (CG) for providing me the required facilities and also their timely words of advice, despite of their busy schedule.

I am thankful to, Dr. Arjun Patra, Dr. Bharti Ahirwar, Dr. Vinod D. Rangari and Dr.

Neelirose beck for their constant efforts and support throughout my project work and

post-graduation as well.

I would like to thanks all the non-teaching staff of the department for their contribution

and assistance.

I would like to thanks and express my gratitude to my seniors and friends, Mr. Kavi

Bhushan Chouhan, Mr. Souvik Mukherjee, Pragya Gupta, Kajal Lal, Sunil Sahu,

Altamash Khan and Prachi Agrawal who contributed in some or other way for the

success of this research work.

Now, Last but not the least; my unbound gratitude and affection drive to my beloved

parents Mr. Hemant Kumar Chandrakar and Mrs. Pushpa Lata Chandrakar for bringing

me up in the best of ways, for rendering me the best of education, for nurturing in me the

best of ideals. I am very happy to express my special appreciation and thanks to my

sisters Mrs. Pooja Chandrakar and Ms. Kritika Chandrakar for their limitless love,

affection and support.

Sincerely thanks to all.

Date: 09/11/2022

Place: Gray, Bilaspun

Monika Chandrakar

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