

ACKNOWLEDGEMENT

“Gratitude is the memory of the heart, there is not a more pleasing exercise of the mind than gratitude”. It is a great pleasure for me to thank everyone who helped me in my Doctoral Thesis.

*Completion of this doctoral thesis was possible with the support of several people. I would like to express my sincere gratitude to all of them. It is with overwhelming sense of gratitude, I would like to thank my mentor and guide **Dr. N. Malathi, M.D.S., Vice Principal, Professor and Head, Department of Oral and Maxillofacial Pathology, Faculty of Dental Sciences, Sri Ramachandra University, Chennai,** for her valuable guidance, scholarly inputs and consistent encouragement I received to start this project on herbs. This feat was possible only because of the unconditional support provided by Madam. I am very grateful for her patience, motivation, enthusiasm, making her a great mentor. Her constant encouragement and words of kindness have helped me complete my thesis successfully. Madam, I am indebted to you and have no words to express myself.*

*I would like to thank my advisors **Dr. D. Sakthisekaran and Dr. D. Chamundeeswari** who have constantly encouraged me with their intellectual inputs. I owe a lot to **Dr. D. Sakthisekaran,** Former Professor and Head, UGC BSR Faculty Fellow, Department of Medical Biochemistry, IBMS, Tharamani as he has unfailingly attended several research meetings despite his busy schedule and has helped me complete a part of my project. A person with an amicable and positive disposition, Sir has always made himself available to clarify my doubts despite his busy schedules and I consider it as a great opportunity to do my doctoral programme under his guidance and to learn from his research expertise. Thank you Sir, for all your help and support.*

*I wish to place on record the efforts taken by **Dr. Chamundeeswari. D,** Principal, Faculty of Pharmacy, Sri Ramachandra University. She has helped me in technical aspect and has been a pillar of support*

for completing my thesis. Madam has been actively interested in my work and has always been available to advise me throughout my course.

*I would like to thank our beloved chancellor, **Thiru V.R. Venkataachalam**, for instituting the concept of research for dental clinicians and for giving me an opportunity to explore the field of research.*

*I would also like to extend my respectful gratitude to, **Dr. T. K. Parathasathy**, Professor of Eminence & Chief Advisor, **Dr. J.S.N. Murthy**, Vice Chancellor, **Dr. K.V. Somasundaram**, Dean of Faculties, **Dr. D. Kandaswamy**, Dean of Dental College, for their continuous support and encouragement.*

*I would like to thank **Dr. S. P. Thyagarajan**, Professor of Eminence and Dean Research, Sri Ramachandra University, Chennai, for his valuable guidance and encouragement throughout the study.*

*I owe sincere thanks to **Dr. Alan Mathew Punnose**, Assistant Professor (Research) for his training in cell culture and his constant inputs during the research work. My sincere thanks to **Mrs. Latha**, Lecturer, **Mrs. Indra**, **Mr. Naveen**, **Mrs. Sangeetha**, Laboratory technicians, Faculty of Pharmacy Sri Ramachandra University, Chennai, **Mrs. Elakiya**, **Ms. Ramya**, research scholars, IBMS, Tharamani, **Dr. Malaisamy**, University of Madras, **Dr. Karthik** Asthagiri Herbal Research foundation, **Dr. Narasimhan**, Asthagiri Herbal Research foundation, **Dr. Rengerajan**, **Dr. Malini**, V Clin Bio for their technical assistance and helping me in this study. I also thank **Dr. Kesavanarayanan** for his valuable inputs in thesis writing.*

*I take this opportunity to thank the **Indian Council of Medical Research** for approving our research project proposal and providing grant for conduct of the research work under the ICMR Talent Search Scheme (TSS) Fellowship. I also thank **Tamil Nadu Agricultural University** for providing me with the plant material.*

*I am heartily thankful to **Dr. H. Thamizchelvan M.D.S., Professor,** Department of Oral and Maxillofacial Pathology, Faculty of Dental sciences, Sri Ramachandra University, Chennai and specially **Dr. Sharada. T. Rajan, Reader, Dr. Sangeetha. N, Dr. Vidyah, Dr. Vijaya Nirmala, Dr. Mythily. S, Dr. Suganya. R, Senior Lecturers;** Department of Oral and Maxillofacial Pathology, Faculty of Dental Sciences, Sri Ramachandra University, Chennai, for their understanding, encouraging and personal guidance that has provided me good basis for this study.*

*I extend my sincere thanks to the **Central Research Facility, Sri Ramachandra University, Management of Sri Ramachandra University and the Library** for providing me the ample facilities.*

*I express a note of special thanks to my batch mate **Dr. Pooja Adtani,** my junior **Dr. Soumya** and my friends **Mr. Dinesh** and **Mr. Rajasekaran** for their support and encouragement throughout my course and during the preparation of this study.*

*Nothing goes complete without a supportive family. I am blessed with loving and co-operative family members who have understood my needs and stretched their maximum to help me complete this project. I dedicate this thesis to all my family members who have stood by me during my success and hardships. I would like to express my undying gratitude to **my parents and my in laws** for their encouragement and continuous support. I am truly indebted to **my husband** for his unflinching love and everything he has done for my progress in every stage of my research work. I extend my gratitude to **my son** for his unconditional love and co-operation to complete the study.*

*Last, but by no means least, I thank the **Almighty,** for giving me such a bountiful life with wonderful people around me and without his grace nothing would be possible.*