

## ACKNOWLEDGEMENT

Apart from the efforts of myself, the success of any work depends largely on the encouragement and guidelines of many others. I take this opportunity to express my gratitude to all the people who have been instrumental in the successful completion of writing of this thesis. With great pleasure I take this opportunity to thank all of them.

First of all, I would like to express my heartfelt thanks to Prof. (Dr) Jyoti Prakash Tamang, my research supervisor and teacher who encouraged and stimulated me into this field. His excellent guidance and great ideas has immensely enriched this work. Besides, he constantly motivated me throughout my research period without which I would not have been able to complete this Thesis by this time. The joy and enthusiasm he has for his research was contagious and motivational for me, even during tough times in my Ph.D pursuit. Words will not be sufficient to express my gratitude to him fully. I owe my sincere thanks to him.

I sincerely acknowledge the financial support provided by Department of Biotechnology Technology, Government of India, for my Ph.D fellowship and research works.

I am thankful to Principal, all teaching and non teaching staff of Sikkim Government College for their vital cooperation and help.

I express my gratitude to Dr. Namrata Tamang, Associate Professor, Department of Zoology for all the encouragement and help in my work.

The members of Food Microbiology Laboratory who was abundantly helpful and offered invaluable assistance and support have contributed immensely to my personal and professional time. The group has been a source of friendships as well as good advice and collaboration. I express my sincere thanks to my seniors Shri Bimal Rai, Dr. Saroj Thapa, Dr. Hannah Yonzon, Dr Sailendra Dewan, Dr. Buddhiman Tamang, Dr. Arun Kumar Rai, Shri Rudra Mani Sharma, Dr. Jayshree Chakraborty and my junior Ms. Niki Kharel and lab attendant Shri Karma Bhutia for their selfless advice, help and support. The co-operation is much indeed appreciated.

I would like to extend my thanks to Dr. N. C. Talukdar, The Director in- Charge and Shri. Akbar Majid, Senior administrative officer, Institute of Bioresources and Sustainable Development (IBSD), Imphal, Manipur, for their great help and support. I cannot flip over without mentioning the name of Dr. K. Jeyaram (Scientist C), Shri Wahengbam Romi and the entire team of Microbial Resources Division, IBSD, for their selfless help and guidance in the molecular work I have accomplished. They shared their knowledge, their ideas, and numerous tips all of which culminated in the completion of this thesis.

I would also like to express my sincere thanks to Dr. Pulok Mukherjee, the director, School of Natural Product Studies, Jadavpur University, Kolkata, and Shri P. Venkatesh who have contributed their knowledge and skills for determining the

antioxidant activity of fermented soybean products. I am grateful to them.

My sincere thanks to Shri Joel Rai, Ms. Rosiamliana Colney, Ms. Lalrothangi Bawihthang, Shri Malsam Jwala and Shri Deepesh Rai, who have greatly helped me during my survey and collection of *bekang* samples from different places in Mizoram.

I wish to thank Shri Donboklang Marbaniang, Department of Environmental Sciences, Dr. Arun Chettri, Department of Botany, and Dr. Takhel Singh Sanjoy, Department of Chemistry, NEHU, Shillong, Meghalaya. They helped me gather the necessary data and information during my survey and collection of *turangbai* samples from Meghalaya. I truly thank and appreciate their selfless act.

I am indebted to my many friends who have given their heartwarming support when it was most required for providing a stimulating and fun environment in which to learn and grow. I duly acknowledge my heartfelt thanks to Shri Asit Chettri, Shri Karma Wongyal Bhutia, Shri Bibhushan Rai, Shri Punu Obed Lepcha, Shri Prashant Pakhrin, Shri Bipen Tiwari and Shri Hissey Lama.

The help and the indigenous knowledge showed by the villagers who are preparing the traditional soybean products in north-eastern part of India which provided me with the valuable information as the guidance of my thesis are duly acknowledged. Without the knowledge and skills, my work would not have been initiated. Thanks to all of them.

I would like to thank all the teaching and non-teaching staff of the department of Botany, Sikkim Government College for their

kind co-operation and encouragement which helped me in completion of this thesis.

Lastly, I express my deepest appreciation and loving thanks to the most special folks of all: my beloved parents, for their unseen blessings on me and my brothers Shri Chandan Chettri, Shri Pramod Chettri and Shri Pramit Chettri, who always inspired, encouraged and gave me moral and spiritual support in every trial that came my way. I owe my deepest thanks and gratitude to my sister-in-law Ms. Geetanjali Pradhan, my uncle Shri Dhiren Lama and my aunty Ms. Bishnu Kumari Rai and all family members for their prayers, support, motivation, advices and encouragement to overcome difficult situation during my entire academic programme.

Last but not the least, I wish to thank God, who gave me strength that kept me standing and for the hope that kept me believing that this effort would be possible one day.



**Rajen Chettri**

Date: 7<sup>th</sup> of June, 2012

Place: Tadong