## CHARACTERIZATION OF TARO STARCHES PREPARED BY DUAL CHEMICAL MODIFICATION USING ETHERIFICATION AND CROSS-LINKING AND THEIR EFFECT ON PROPERTIES OF SOUP

A thesis submitted to the Department of Food Engineering and Technology, Tezpur University in partial fulfilment of the requirements for the award of the degree of

## MASTER OF TECHNOLOGY IN FOOD ENGINEERING AND TECHNOLOGY

BY BIDYUT JYOTI HAZARIKA (FPL12012)

Approved by

(NANDAN SIT)

**SUPERVISOR** 

EXTERNAL EXAMINER

(M.K. HAZARIKA)
HEAD







(A Central University)
NAPAAM, TEZPUR – 784028
DISTRICT: SONITPUR, ASSAM, INDIA

**Dr. Nandan Sit Assistant Professor**Department of Food Engineering and Technology

CERTIFICATE OF THE SUPERVISOR

This is to certify that the thesis entitled "Characterization of taro starches prepared by dual chemical modification using etherification and cross-linking and their effect on properties of soup" submitted by Mr. Bidyut Jyoti Hazarika (FPL12012) to the Department of Food Engineering and Technology, Tezpur University in partial fulfilment of M. Tech. degree in Food Engineering and Technology is a bona-fide record of the investigations carried out by him under my supervision. To the best of my knowledge the report embodies an account for his own findings and no part of the thesis has been submitted previously anywhere for any degree whatsoever by either him or anyone else.

Place: Tezpur University

Date: 23.05. 2014

(Nandan Sit)

Supervisor

**DECLARATION** 

I hereby declare that the project work entitled "Characterization of taro

starches prepared by dual chemical modification using etherification and cross-

linking and their effect on properties of soup" was carried out by me at the

Department of Food Engineering and Technology, Tezpur University, Tezpur under

the guidance of Dr. Nandan Sit, Assistant Professor, Department of Food Engineering

and Technology, Tezpur University, Tezpur. This Project Report is being submitted

towards the partial fulfilment of the award of the degree of Master of Technology in

Food Engineering and Technology by Tezpur University, Napaam, Tezpur, Assam,

India as a part of the course curriculum.

I further declare that this project or any part of it has not been submitted

elsewhere for any other degree or diploma to any other University/Institute.

Bidyut Jyoti Hazarika.

Place: Tezpur University

(Bidyut Jyoti Hazarika)

Date: 23.05.2014

Roll No-FPL12012

**ACKNOWLEDGEMENT** 

I am overwhelmed to avail this rare opportunity to evince my profound sense

of gratitude and regard to my advisor Dr. Nandan Sit, Assistant Professor, Dept. of

Food Engineering and Technology, Tezpur University, Tezpur for his disciplined

attitude, inspiring and valuable guidance, authentic suggestions and soothing affection

time throughout the course of investigation and preparation of this manuscript.

With great sincerity, I extend my gratitude and thanks to Dr. M. K. Hazarika,

Head of the Department of Food Engineering and Technology, Tezpur University,

who helped me with every support throughout the study whenever I sought for.

I would like to thank all the faculty members, Department of Food

Engineering and Technology, Tezpur University, who directly or indirectly helped me

for successful completion of my project work.

I further express my sincere thanks to the Laboratory Assistant, Laboratory

Technician, Research Scholars and stuff members of this department for their help

throughout the entire project work.

Lastly I would like to thank my parents along with my family members and all

my classmates for their constant support for my success.

Bidyut Jyoti Hazarika.

(Bidyut Jyoti Hazarika)

Place: Tezpur

Date: 23.05.2014