

**STUDY OF PHYSICAL CHANGES AND HYDRATION
CHARACTERISTICS DURING STORAGE OF LOCAL RICE
VARIETIES OF ASSAM**

By

Arjun Majumder


FPT09011

**THESIS SUBMITTED TO THE
DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY
TEZPUR UNIVERSITY**


**IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF THE DEGREE OF**


**MASTER OF TECHNOLOGY
IN
FOOD PROCESSING TECHNOLOGY**

APPROVED BY


**(M.K. HAZARIKA)
PROJECT SUPERVISOR**


**(B. SRIVASTAVA)
PROJECT SUPERVISOR**


**(P.P. SRIVASTAV)
EXTERNAL EXAMINER**


**(S.C. DEKA)
HEAD OF THE DEPARTMENT**



DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY
TEZPUR UNIVERSITY

(A Central University established by an Act of Parliament)

Napaam, Tezpur - 784 028, Assam

Dr. Sankar Chandra Deka
Professor and Head

Email: sankar@tezu.ernet.in

Tel : +91-3712-275703

Mob : 94354-08396

Fax : 03712-267005/06

Date: 28 December, 2012

CERTIFICATE OF THE HEAD OF THE DEPARTMENT

This is to certify that Mr. Arjun Majumder (FPT09011), a student of the Department of Food Engineering and Technology, Tezpur University, Assam has successfully completed the project work entitled **“Study of Physical Changes and Hydration Characteristics During Storage of Local Rice Varieties of Assam”** as a partial fulfillment of M. Tech. degree in Food Processing Technology under the joint supervision of Dr. M. K. Hazarika, and Dr. B. Srivastava, Associate Professors, Department of Food Engineering and Technology, Tezpur University.

Place: Tezpur University

Date :

16/1/13


(Prof. S.C. Deka)



**DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY
TEZPUR UNIVERSITY**

(A Central University established by an Act of Parliament)

Napaam, Tezpur - 784 028, Assam

Date: 28 December, 2012

CERTIFICATE BY THE SUPERVISORS

I certify that the project entitled **“Study of Physical Changes and Hydration Characteristics During Storage of Local Rice Varieties of Assam”** submitted by Mr. Arjun Majumder (FPT09011) to the Department of Food Engineering and Technology, Tezpur University in partial fulfilment of M. Tech. degree is a bona-fide record of the investigation carried out by him under our joint supervision. To the best of our knowledge the report embodies an account for his findings and is valid for the purpose for which it is submitted.

Handwritten signature of Dr. M. K. Hazarika.

(Dr. M. K. Hazarika)
Associate Professor,
Supervisor

Handwritten signature of Dr. B. Srivastava.

(Dr. B. Srivastava)
Associate Professor,
Supervisor

Place: Tezpur University
Date:

DECLARATION

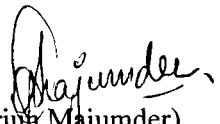
I hereby declare that the Project Work entitled “**Study of Physical Changes and Hydration Characteristics During Storage of Local Rice Varieties of Assam**” was carried out by me at the Department of Food Engineering and Technology, Tezpur University, Tezpur under the guidance of Dr. M. K. Hazarika, Associate Professor, Department of Food Engineering and Technology, Tezpur University and Dr. B. Srivastava, Associate Professor, Department of Food Engineering and Technology, Tezpur University, Tezpur.

This Report is being submitted as a Major Project Report for the partial fulfilment of M. Tech. degree in Food Processing Technology by Tezpur University, Tezpur.

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.

Place: Tezpur University

Date: 28.12.12


(Arjun Majumder)
FPT09011

ACKNOWLEDGEMENTS

I would like to extend to my heart-felt gratitude to my supervisors, Dr. M. K. Hazarika, Associate Professor, Department of Food Engineering and Technology, Tezpur University and Dr. B. Srivastava, Associate Professor, Department of Food Engineering and Technology, Tezpur University, Tezpur for their disciplined attitude, authentic suggestion with constructive criticism and soothing affection throughout the course of investigation and preparation of this manuscript.

With great sincerity, I extend my gratitude and thanks to Prof. S.C. Deka, HOD Department of Food Engineering and Technology, Tezpur University, who helped me with every support throughout the whenever I sought for.

I would like to thank all the faculty members, Department of Food Engineering Technology, Tezpur University, who directly or indirectly helped me for successful completion of my project work.

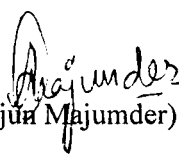
I further express my sincere thanks to the Laboratory Assistant, Laboratory Technician and staff members of this department for their help throughout the entire project work.

I would also like to express my gratitude and sincere thanks to Mrs. Archana Borah, SRF and Mr. Anjan Borah, Research Scholars, Department of Food Engineering and Technology for their support and encouragement throughout the entire project work.

I would also like to thank all my classmates, who has helped me some way or the other during my project period.

Lastly, I would like to thank God and my parents along with my family members for their constant support and affection for my success.

Place: Tezpur University
Date: December 28, 2012


(Arjun Majumder)