FIELD PRACTICE REPORT ON BRANCH CULTURE OF RED SEAWEEDS (*Kappaphycus cotonii*) AT DIFFERENT SALINITY LEVELS AT THE BUREAU OF FISHERIES AND AQUATIC RESOURCES REGIONAL MARICULTURE TECHNOLOGY DEMONSTRATION CENTER

by

MARINEL B. DELA CRUZ

Department of Aquaculture
COLLEGE OF FISHERIES
CENTRAL LUZON STATE UNIVERSITY
Science City of Munoz, Nueva Ecija
Philippines

2018

FIELD PRACTICE REPORT ON BRANCH CULTURE OF RED SEAWEEDS *(Kappaphycus cotonii)* AT DIFFERENT SALINITY LEVELS AT THE BUREAU OF FISHERIES AND AQUATIC RESOURCES REGIONAL MARICULTURE TECHNOLOGY DEMONSTRATION CENTER AT BRGY. LUCAP, ALAMINOS CITY, PANGASINAN

by

MARINEL B. DELA CRUZ

Undergraduate Field Practice Report presented to the faculty
of College of Fisheries, Central Luzon State University
in partial fulfillment of requirements for the degree

of

BACHELOR OF SCIENCE IN FISHERIES

Approved:

KARL MARX A. QUIAZON
Adviser

RODORA M. BARTOLOME
Critic

KARL MARX A. QUIAZON
Department Chairperson

CLAIRE SAMANTHA T. JUANICO
Field Practice Coordinator

Accepted:

RAVELINA R. VELASCO
Dean

Department of Aquaculture
COLLEGE OF FISHERIES
CENTRAL LUZON STATE UNIVERSITY
Science City of Munoz, Nueva Ecija,
Philippines

2018

BIOGRAPHICAL DATA

Personal Data

Name	Marinel B. Dela Cruz
Birthday	October 4, 1997
Birth Place	Brgy. Palusapis, Science City of Muñoz, Nueva Ecija
Address	Brgy. Palusapis, Science City of Muñoz, Nueva Ecija
Parents	Martiniano L. Dela Cruz and Rowena B. Dela Cruz

Educational Attainment

Elementary	Palusapis Elementary School Science City of Muñoz, Nueva Ecija
Secondary	Central Luzon State-Univesity Laboratory High School-Palusapis Science City of Muñoz, Nueva Ecija
Tertiary	Central Luzon State University Science City of Muñoz, Nueva Ecija

ACKNOWLEDGEMENT

The author would like to thank above all, our Almighty God for the protection. He never failed to show his love and mercy in the author's everyday life, providing her needs at all times. He never failed to guide the author, giving her the knowledge and wisdom she needed doing this paper.

To the author's parents, Mr. Martiniano L. Dela Cruz and Mrs. Rowena B. Dela Cruz for their financial, loving support and inspired her to work joyfully.

To my CLSU co-trainees and friends: Hanna Rose, Jennelle, Camille, Jomarie Shane and Abigail for always being there to support and make the author whenever there are difficulties during the training.

The author would like to acknowledge Dr. Karl Max A. Quiazon and Prof. Rodora M. Bartolome, his adviser and critic for being supportive in checking and improving the manuscript. To the OJT Coordinator, Ma'am Claire Samantha T. Juanico, for her boundless patience, consideration, useful pieces of advice and great perseverance in editing this paper.

To the staff of BFAR-RMATDEC for their warm welcome. To the technical staff of seaweeds, Sir Philip John Foronda, for extending his hands and knowledge to teach and support the trainees. For the memories shared the happy moments, the sorrowful ones and for everything.

MARINEL B. DELA CRUZ

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDIX TABLES

FIELD PRACTICE REPORT ON BRANCH CULTURE OF RED SEAWEEDS *(Kappaphycus cotonii)* AT DIFFERENT SALINITY LEVELS AT THE BUREAU OF FISHERIES AND AQUATIC RESOURCES REGIONAL MARICULTURE TECHNOLOGY DEMONSTRATION CENTER AT BRGY. LUCAP, ALAMINOS CITY, PANGASINAN [1/]

EXECUTIVE SUMMARY

The field practice was conducted at RMaTDeC Bureau of Fisheries and Aquatic Resources Region 1 at Barangay Lucap, Alaminos City, Pangasinan, from June 13, 2016 to July 22, 2016, a total working days of training. The aim of the laboratory is to supply planting materials to fisherfolks in the mass production of seaweeds and also responsible for culture, propagation and conservation of seaweeds. The center also serves as gene bank of seaweeds which helps to rehabilitate destroyed stocks during natural calamities. e.g. typhoon and disease outbreak.

The activities involved in seaweeds laboratory are sterilization of materials, sterilization of seawater, preparation for cleaning of seaweeds, cleaning the seaweeds, weighing of seaweeds, putting of samples in culture dishes with media, coding/labeling, preparation of culture media (AMPEP), filtration of seawater, preparation of desired salinity levels and monitoring water quality parameters (DO and temperature).

The strengths of the farm are good security and location of the different facilities, while the weaknesses of the farm are power interruption, and limited number of equipment in measuring water quality parameters like DO meter and refractometer.

[1/] Undergraduate Field Practice Report presented in partial fulfillment of the requirements for graduation with the degree of Bachelor of Science in Fisheries. Prepared at the Department of Aquaculture, College of Fisheries, Central Luzon State University under the supervision of Dr. Karl Marx A. Quiazon.

REFERENCES

Ask, El (2001) Creating sustainable commercial *Eucheuma* cultivation industry: the importance and necessity of human factor. Proceedings, 17th International Seaweed Symposium, Chapman ARO, Anderson RJ, Vreeland VJ, Davison IR (eds), Cape Town, 13–18

Doty M.S. (1973) Farming the red seaweed, *Eucheuma*, for carrageenans. Micronesia 9:59–73

Doty M.S. (1986) "Estimating returns producing gracilaria and eucheuma or line fams." Monogr. Bil 4: 45-62

Largo D.B., Fukami K., and Nishijima T., 1995, Occasional Pathogenic Bacteria Promoting Ice-ice Disease in the Carrageenan-producing Red Algae *Kappaphycus alvarezii* (Linn., 1758) and *Euchema denticulatum* (Solieriaceae, Gigartinales, Rhodophyta), Journal of Applied Phycology, 7: 545-554

M. Allayban, email, April 22, 2017

Parker H.S. (1974). The culture of the red algal genus *Eucheuma* in the Philippines. Aquaculture 3:425–439

http://www.hawaii.edu/reefalgae/invasivealgae.html

www.mesa.edu.au/marine_algae/default.asp