# **CONTENTS**

TITLE		PAGE NO.			
ACKNOWLEDGEMENTS		iv			
ABSTRACT		v			
CONTENTS LIST OF TABLES LIST OF FIGURES LIST OF PTATES  Chapter Title		vi-vii viii ix x Page No.			
			I	INTRODUCTION	1-4
			II	REVIEW OF LITERATURE	5-9
			III	MATERIALS AND METHODS	10-19
				3.1 Description of study area	10
3.2 Duration	10				
3.3 Description of selected common water quality treatment chemicals and drugs	10				
3.4 Experiment Design	11				
	3.5 Ponds selection	11			
	3.6 Ponds preparation	11			
	3.7 Collection and Selection of fishes for research	12			
	3.8 Feeding	12			
	3.9 Water quality monitoring	13			
	3.10 Methods used for water quality analysis	14			
	3.11 Sampling of fishes	15			
	3.12 Analysis of Physical, chemical and production data	15			
	3.13 Harvesting	16			

# CONTENTS ( Cont'd )

Chapter	Title	Page No.
IV	RESULTS	20-32
	4.1 Water quality parameters	20-22
	4.1.1 Physical Parameters	23-24
	4.1.1.1 Temperature ( <sup>0</sup> C)	23
	4.1.1.2 Transparency (cm)	23-24
	4.1.2 Chemical Parameters	24-28
	4.1.2.1 pH (Hydrogen ion concentration)	24-28
	4.1.2.2 Total Alkalinity	25
	4.1.2.3 Dissolved oxygen (mg l-1) 4.1.2.4Nitrate-nitrogen (mg l-1) 4.1.2.5 Ammonia-nitrogen (mg l-1) 4.1.2.6 Phosphate-phosphorous (mg l-1) 4.2 Growth, Survival and Production Tilapia  4.3 Histopathological study of different organs of Tilapia (O. niloticus)	26 26-27 27 28 29-31 29-30 30 31
V	DISCUSSION	33-40
	<ul> <li>5.1 Water quality parameters</li> <li>5.1.1 Physical parameters</li> <li>5.1.2 Chemical parameters</li> <li>5.2 Fish production</li> <li>5.3 Histopathology</li> </ul>	34-37 34-35 35-37 38-39 39-40
VI	SUMMARY AND CONCLUSION	41-42
VI	REFERENCES	43-46

## **Project summary**

Title of the project : Determination on Efficacy of Selected Chemicals and

Drugs Used in Aquaculture practices in Bangladesh

**Implementing station**: Bangladesh Fisheries Research Institute,

Freshshwater Station, Mymensingh, 2201

**Researchers**: Dr. Momtaz Begum, SSO

Dr. A.HM. Kohinoor, SSO Md. Golum Sorower, SO Md. Motiur Rahman, SO

**Duration of the project**: 3 years (2010~2013)

Starting date : July 2010 Completion date : June 2013

### **Objectives**

• To determine the effect of chemical and drugs on pond productivity and fish production;

• To determine the effective dose of chemicals and drugs on fish production

• To observe the histopathological change in different organ of fish in treated pond..

• To create awareness among the fish farmers/entrepreneurs regarding the toxic effect of chemicals/drugs in aquatic environment

### **Budget summary**

Approved budget : Tk. 18,00,000.00

Fund released : Tk. 18,00,000.00

Expenditure : Tk. 18,00,00.00

Refund : Tk. 00.00