## LIST OF ABBREVIATIONS

% = Percent

xg = Relative centrifugal force

°C = Degree celsius

μ = Micro

ABTS = 2,2'-azino-bis (3-ethylbenzthiazoline-6-sulphonic acid)

DPPH = 1,1-diphenyl-2-picrylhydrazy

AMPs = Antimicrobial Peptides

B cell = B lymphocyte

CAT = Catalase

CC = Chemokine (C-C motif)

cDNA = Complementary DNA

CXC = Chemokine (C-X-C motif)

DBPH = Duck blood Protein hydrolysates

DEPC = Diethyl pyrocarbonate

DNA = Deoxyribonucleic acid

EDTA = Ethylenediaminetetraacetic acid

hr = Hour

Ig = Immunoglobulin

IgA = Immunoglobulin A

IL-1 = Interleukin-1

IL-6 = Interleukin-6

m = Milli

M = Molar

MAD = Malondialdehyde

min = Minute

mRNA = Messenger RNA

N.S = Not Available

NaCl = Sodium saline

## LIST OF ABBREVIATIONS (Continued)

NLRs = NOD-like Receptors (Nucleotide-binding Oligomerization

Domain-like Receptors)

OTUs = Operational Taxonomic Units

PAMPs = Pathogen-associated molecular patterns

PCR = Polymerase chain reaction

pH = Potential of hydrogen ion

PRRs = Pattern Recognition Receptors

q = Quantitative

qRT-PCR = Quantitative real-time PCR

RGR = Relative growth rate

RNA = Ribonucleic acid

RNase = ribonuclease

ROS = Reactive oxygen species

rRNA = Ribosomal RNA

SCFAs = Short-Chain Fatty Acids

SD = Standard deviation

Seq = Sequencing

SR = Survival rate

SOD = Superoxide Dismutase

spp. = Species pluralis

SUT = Suranaree University of Technology

T cell = T lymphocyte

TLRs = Toll-like Receptors

TNF $\alpha$  = Tumor necrosis alpha

WGR = Weight gain

β-actin = Beta-actin

MHC = major histocompatibility complex

 $O_2$  = Superoxide anion

 $H_2O_2$  = Hydrogen peroxide

## LIST OF ABBREVIATIONS (Continued)

O<sub>2</sub> molecular oxygen

Cu/Zn-SOD = Cytosolic

Mn-SOD = Mitochondria