STUDYING THE IMPACT OF ADDING PROBIOTIC ON THE PRODUCTIVE PERFORMANCE OF BROILER STRAINS UNDER ENVIRONMENTAL CONDITIONS OF EGYPT

By

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B.Sc. Agric. Sc. (Technology and Management of Agriculture Projects),
Ain Shams Univ. (2011)

A Thesis Submitted in Partial Fulfillment
Of
The Requirements for the Degree of

MASTER OF SCIENCE
in
Agricultural Sciences
(Agriculture and Desert Areas Affected by Salinity)

Arid Lands Agricultural Graduate and Research Institute
Faculty of Agriculture
Ain Shams University

2017

Approval Sheet

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ABSTRACT

Emad Eldin Ahmed Fahmy Ali Ahmed Elshahed: Studying the Impact of Adding Probiotic on the Productive Performance of Broiler Strains Under Environmental Conditions of Egypt. Unpublished M.Sc. Thesis, Department of Poultry Production, Faculty of Agriculture, Ain Shams University, 2017.

The productive performance measurements were measured for broiler strains when probiotics added for the broiler diet and exposed to high temperature during the first week under environmental conditions of Egypt.

The study was aimed to investigate the effects of probiotic on growth performance and immunity competence (used PHA-P) for Ross strain in summer season. A total of 375 one day old Ross chicks, at 7 days old (Ross-500) broilers were randomly divided into 5 groups. The degree of temperatures of housing ere heled at 29 ±3°C and 68±3% relative humidity.

Control group fed the normal diet with normal environmental temperature and relative humidity. The weight gain and carcass traits (Carcass, thigh, dram and breast weight) were recorded to different treatment and control groups. The results reached that group fed probiotic were significant increase of weight gain and carcass traits as compared to the normal groups under high ambient temperature.

On the other hand, the immunity competence significant increase in groups fed probiotic compared to normal fed. The last results concluded that the probiotic is essential for the maintenance of broilers performance and immunity competence under heat stress condition.

Key words: Probiotic, Productive performance, immunity and Broiler

ACKNOWLEDGEMENTS

All thanks to **THE MIGHTY GOD (ALLAH)** for the continuous and persistent supply with patience and effort to produce this study.

I wish to express my heartfelt thanks to **Prof. Dr. Ahmed Galal El-Sayed** Prof. of Poultry Breeding, and Dean of Faculty of Agriculture, Ain Shams University for his supervision and scientific advices.

I am greatly in debt and most grateful to **Assistant Prof. Dr. Mahmud Yousef Mahrous Assistant Prof.** of Poultry Breeding, Faculty of Agriculture, Ain Shams University for his supervision and help in all stages of this work , in the field, encouragement and revision of the manuscript.

I would like to express my greatest gratitude to **Prof. Dr. Tarek Mohamed El-Afifi** Head of Research and Deputy of the Regional Center for Food and Feed, Ministry of Agriculture for her supervision and continuous help in all stages of this study.

My Sincerely thanks to **Prof. Dr. Nazmy Abdelhameed.** Professor and Vice President of Ain Shams University for his distinct kindness in giving me a lot of help, offering his experience, valuable advice and time from many preoccupations.

My Sincerely thanks to **Prof. Dr. Mohamed Masoud** Head of Research and Deputy of the Regional Center for Food and Feed, Ministry of Agriculture, for giving me a lot of help .

Deeply thanks to all the staff member of Poultry Production Department, Faculty of Agriculture, Ain Shams University, for their help me.

Deeply thanks to all the staff member of Regional Center for Food and Feed, Agriculture Research Center, Ministry of Agriculture, for their support and help me.

Last but not least, my great thanks and love to My Dear **wife Maha, Mother, wife's mother, My** kids **Ahmed**, **Eyad** and **Amged** and Sisters **Salwa**, **Enas, Doaa, Mohammed** for their encouragement, efforts, support and endless help throughout the whole work. .

In the end, many thanks for every one helped me in this study.

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LIST OF ABREVIATIONS

ADG	average daily gain
AGP	antibiotic growth promoter
ALT	Alanine amino transferase
AST	Aspartate amino transferase
BC	before Christ
BSA	bovine serum albumin
BSP	Bacillus subtilis-based probiotic
BW	Body weight
BWG	Body weight gain
CMI	cell-mediated immune
CP	Curd protein
dl	Deciliter
ED	experimental day
ELISA	Enzyme Linked Immuno Sorbent Assay
ESR	Erythrocyte Sedimentation Rate
FAO	Food and Agriculture Organization
FC	Feed Consumption

FCR	feed conversion ratio
g	Gram
GALT	gut-associated lymphoid tissues
GI	gastrointestinal
GLM	general linear models
GRAS	generally recognized as safe
H/L	Heterophil to Lymphocyte ratio
Hb	Heamoglobin
HS	Heat stress
IFP	Intermittent feeding programme
Ig	Immunoglobuline
IL	Interlukin
Kg	Kilogram
LAB	lactic acid bacteria
LBP	Lactobacillus-based probiotic
LBW	Live body weight
LDL	Low-density lipoprotein
LPS	lypopolisaccharides